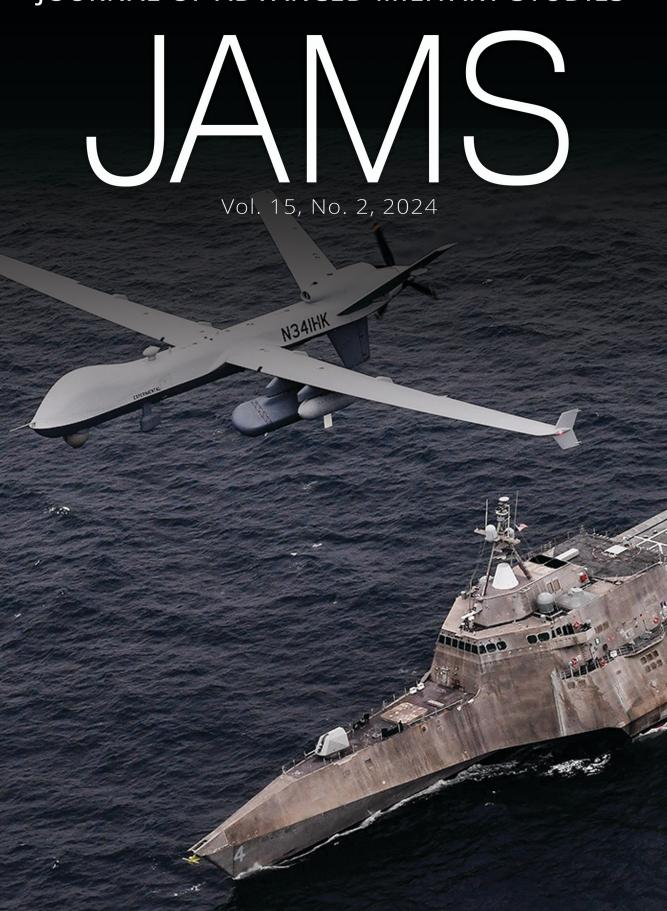
JOURNAL OF ADVANCED MILITARY STUDIES



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JAMS



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From the Editors

Marine Corps University Press is young by most standards for academic publishers. With 15 years behind us, our history is but a flash in the grand scheme of American military history. MCUP's mission—publish open-access, scholarly books and journals on military history/heritage and national security topics in order to support excellence in Marine Corps University's professional military education, to inspire debate, and to advance knowledge for a diverse community of scholars, U.S. and allied military leaders, and policy makers—ensures that our efforts are not only focused on preparing Marines to prevail in combat today but to succeed on the battlefields of the future.

So, on the eve of the Marine Corps' 250th anniversary, it should come as no surprise that this issue of the *Journal of Advanced Military Studies* (JAMS) honors the history of the Service with a discussion of amphibious operations and the evolution of military Services. The authors—including allies and partners of the United States—discuss amphibious operations from a variety of perspectives, including addressing rising and current threats such as China, the Houthis and their attacks from the Red Sea, historical analyses such as the Falkland Islands amphibious landings by the British, and Marine Corps concepts such as stand-in-forces and expeditionary advanced base operations (EABO). Allies such as Australia discuss their pivot to littoral operations to address current threats in the Indo-Pacific.

The upcoming 250th anniversary of the Marine Corps' founding is a prescient time to reexamine amphibious operations and current threats facing the Marine Corps, the United States, and allies and partners around the world. The Marine Corps has adopted several concepts to approach future threats, many of them captured in the 2020 *Force Design 2030*. Force Design 2030 aptly describes why changes are needed in the Marine Corps priorities for the future:

In light of unrelenting increases in the range, accuracy, and lethality of modern weapons; the rise of revisionist powers with the technical acumen and economic heft to integrate those weapons and other technologies for direct or indirect confrontation with the U.S.; and the persistence of rogue regimes possessing enough of those attributes to

threaten United States interests, I am convinced that the defining attributes of our current force design are no longer what the nation requires of the Marine Corps.²

The adoption of concepts such as EABO and stand-in-forces is encouraged to better prepare the Corps for future threats, in conjunction with increased partnerships with the Navy. Major Pat Hassett in his article "Bringing Clarity to Stand-in Forces" describes the interrelated concepts of EABO, stand-in-forces, and other concepts that are "required to operationalize these novel maritime concepts and to succeed in projecting maritime power in support of joint and coalition forces."

Similarly, Major Shaun Callan in his article "Fires from the Shore" provides the Army's perspective on needed changes and describes the Jointness required to implement changes necessary to adapt to current and emerging threats, particularly from the increasing threat of the People's Republic of China (PRC). He states, "The struggle to obtain, maintain, and exploit sea control during a campaign is an inherently Joint endeavor requiring a multi-Service, cross-domain application of firepower and maneuver." The PRC is a constant theme throughout this issue when addressing why changes are needed across the Department of Defense, and particularly the Marine Corps. Kerry K. Gershaneck—an expert in PRC political warfare—addresses how the PRC "has inextricably intertwined political warfare in its naval and maritime strategies to set the conditions for success in such a kinetic war." Furthermore, he stresses that the PRC, in the event of a conflict, will likely "conduct political warfare against the U.S. Marine Corps in combat operations."

Other adversaries are also discussed in this issue, such as the Houthis and North Korea. Alan Cunningham's article "Oceans Are Now Battlefields" discusses the emerging threat of North Korea's Navy against U.S. ally South Korea. He argues that "F[orce] D[esign] 2030 and FD 2045 . . . would serve to help the United States in countering North Korean aggression and serving as a beneficial deterrent to North Korean naval action against South Korea or other American allies in the region." However, he cautions that the United States must remain adaptable and flexible enough to respond to a wide range of possible conflicts and scenarios. Jonah Carlson takes a different approach when analyzing the Houthis in his article "Houthi Motivations Driving the Red Sea Crisis," using the "cultural topography method to analyze the culture of the movement and provide alternative motivations for the attacks, such as consolidating domestic support and crafting a strong national appearance." He argues that understanding the group's motivations will increase the chances of resolving the conflict:

[The Houthis] may desire to negotiate in the future to boost perceptions of its own legitimacy, which the movement seeks. Ansar Allah's

influence in Yemen is likely to continue to grow. Clever policy solutions to the Red Sea crisis will leverage a knowledge of Ansar Allah's internal culture, aspirational identity, and popular narratives to craft engagement strategies that reduce the domestic rewards Ansar Allah is garnering from Red Sea attacks.

This issue of JAMS, which analyzes amphibious operations and the evolution of military Services, therefore, explores the current and future operating environment from a variety of perspectives: Jointness between the Services, using new Marine Corps concepts such as EABO and *Force Design 2030*, examining the motivations and culture that drives adversaries in order to better resolve conflict, and how allies and partners are also heavily invested in how the United States and its Services deal with emerging and ever-changing threats around the world.

The Fall 2024 issue of JAMS is but one element in the anniversary spotlight readers can anticipate seeing from MCUP, Marine Corps University, and the U.S. Marine Corps. From 10 November 2024 throughout 2025, we join the nation in celebrating the semiquincentennial of the U.S. Marine Corps. Do not miss out on a moment and join the conversation. We look forward to your future participation as an author, reviewer, or reader. Find us online on our LinkedIn page (https://tinyurl.com/y38oxnp5), at MC UPress on Facebook, MC_UPress on X, and MCUPress on Instagram or contact us via email at MCU_Press@usmcu.edu.

Endnotes

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Maritime Militias

Disrupting Naval Operations in the Pacific Theater and the Case for Intermediate Force Capabilities in the Maritime Domain

Peter Dobias, PhD

Abstract: China aims to pursue national goals through a combination of political, diplomatic, and information maneuvering. With China's growing assertiveness against other countries in the Asia-Pacific region, the risk of a military conflict in the region is increasing. Drawing on the ideological importance of militias, during the last 10 years China heavily invested in building its fleet of maritime militias masquerading as fishing vessels. This article argues that in case of a conflict in the Asia-Pacific, these militias could be employed to interfere with the U.S. and allied forces and supply flow within and into the theater and disrupt naval and amphibious operations in the Pacific theater. While there are limited ways of engaging these forces below a lethal threshold, the intermediate force capabilities could provide the allied forces with a broader range of options, while imposing some cost and dilemmas on the adversary, and potentially contribute to the deterring of their use.

Keywords: maritime militias, naval operations, disruption, deterrence

Introduction

hina aims to pursue national goals through a combination of political, diplomatic, and information maneuvering (including employing diplomatic pressure, false narratives, and harassment of potential opponents)

Dr. Peter Dobias works for Defence Research and Development Canada as the strategic and operational analysis advisor to NORAD. His previous appointment was chief scientist, operational research and analysis; before that he was director, research and development combat in physical and virtual environment; head of land and operational commands operational research; lead of the maritime forces Pacific operational research; and the lead of Metrics Team at Afghanistan-Pakistan Center of U.S. Central Command. His research interests are complexity, deterrence, hybrid warfare, and intermediate force capabilities. https://orcid.org/0009-0006-3810-4931.

Journal of Advanced Military Studies vol. 15, no. 2 Fall 2024 www.usmcu.edu/mcupress https://doi.org/10.21140/mcuj.20241502001 rather than engaging in risky and expensive head-to-head physical confrontations. Their strategy involves the use of a multitude of military and nonmilitary means to confront opponents both before and during a conflict.¹

With China's growing assertiveness against other countries in the Asia-Pacific region, many of whom are U.S. allies, the specter of a military conflict in the region is increasing.² Hal Brands and Michael Beckley argue that, as the United States is awakening to the China threat and China's potential domestic problems are likely going to result in a growing gap between the United States and China, the world is entering a period of maximum danger in the late 2020s.³

During the last decade, leveraging "salami tactics"—or small, incremental changes of which none in isolation would cross U.S. and allied red lines—China succeeded in establishing hegemony over its maritime periphery, including militarization of the occupied land features in the Paracel and Spratly Island chains.⁴ Another line of effort that China is pursuing to secure its dominant position in the Western Pacific is its military modernization program aimed at "counter-intervention" or "area denial" to counter any prospective military intervention by the United States and its allies. China thus can hope to achieve fait accompli in regional conflicts (e.g., in Taiwan), and then use its area denial capability to prevent or disrupt a roll back by the U.S. and allied forces.⁵ Leveraging all instruments of national power (including hybrid, irregular means), China will likely attempt to achieve its objectives with the minimum escalation to minimize a risk of a major war with the United States.⁶

Irregular means have a long tradition in Chinese maritime strategy. Using Mao Zedong's strategic thought, Admiral Xiao Jinguang introduced the concept of sabotage warfare. This concept included employment of all available means to deliver a broad range of attacks against the enemy. A great importance was ascribed to covert actions and surprise attacks using deception to gain advantage over unsuspecting and unprepared adversaries. In continuation of this strategic thinking, the Chinese

[a]nti-access strategy combines military with nonmilitary measures in an effort to delay the arrival of U.S. and allied forces in a particular Asian theatre of operations, preclude or disrupt the use of regional bases that are critical to sustaining U.S. military operations, and hold off U.S. power projection assets as far from Chinese waters as possible.⁸

Consequently, drawing on the ideological importance of militias, China relies on these to supplement its military might. In particular, during the last 10 years, China heavily invested in building its fleet of notionally fishing vessels but were actually maritime militias so that now "there are three maritime forces in mainland China. The first is the CCP Navy, the second is the CCP

Coast Guard, and the third is the 'maritime militia'."¹⁰ While the United States generally considers only its Navy and Coast Guard as elements of national power, China is not as selective, and it has no qualms about using merchant and research vessels for nefarious activities such as intelligence collection and potentially minelaying—or using fishing vessels to enforce its excessive territorial claims. In other words, "if it floats and flies a Chinese flag, it is probably a part of Chinese sea power."¹¹ China currently employs the maritime militias to push their excessive territorial claims in the South and East China Sea, to harass and push away fishing fleets of other countries, and to obstruct navigation even outside of its claimed regions. The last point is particularly pertinent for the argument presented in this article. For example, China has used these militias, together with its coast guard, to hamper the Philippines' resupply of the Second Thomas Shoal through a combination of dangerous maneuvers, water cannons employed by the coast guard, and causing collisions between Philippines' and Chinese maritime militia vessels.¹³

This dangerous development currently favors China, as the United States and its allies have limited means of countering this behavior. The U.S. Navy, in general, does not respond militarily to civilian fishing vessels. However, China's employment of these vessels continues blurring the line between the military and civilian capabilities. In response to this development, in 1919,

outgoing Chief of Naval Operations Admiral John Richards warned his Chinese counterpart, Vice Adm. Shen Jinlong, that the United States was aware that China uses a militia fishing fleet to push its illegal claims in the East and South China Seas. Richards warned that the U.S. Navy would respond to aggressive acts by those ships as though they were part of the armed forces. ¹⁴

However, while justified, the use of force against notionally civilian vessels could result in an anti-U.S. narrative that China would be happy to push. Even in case of open hostilities between the United States and China, attacking unarmed vessels would easily lend itself to narratives that could undermine U.S. objectives in the region. It is easy to envision that in an aftermath of the use of lethal force against militia vessels, that a "broadcast by Chinese media outlets, [or] images of civilian death or suffering could swing political sentiment behind Beijing—not just in China, but among influential audiences elsewhere in Asia and in the international community." Hence, the United States would be potentially faced with a dilemma to either yield initiatives to these vessels, or to risk a hostile narrative undermining its interests in the region.

This article argues that in case of a conflict in the Asia-Pacific, China could go beyond the current use of these militias as a military tool, and that it could feasibly use these militias to disrupt allied force flow into the theater, as well as the naval sustainment operations within the first island chain, including around Taiwan. It can be anticipated that in the case of a conflict in the South China Sea that "Beijing will merge nonmilitary instruments of power into its defensive efforts by using diplomacy to augment Maoist active defense." This could be especially the case in the early stages of a conflict, when China might attempt to discourage or prevent U.S. participation without escalating to overt kinetic strikes against the U.S. targets. Alternatively, they can use the militias to provoke a U.S. or allied response against them and thus try to manipulate public opinion both domestically and globally. At present, the United States and allies have limited options short of lethal force to deal with this threat:

China is comfortable using post-Mahanian means (policing and projecting power ashore) for Mahanian (fleet battles) ends. A fishing trawler or coast guard cutter represents an implement of power politics as surely as a warplane or a hulking destroyer. For their part, U.S. naval officers find it hard to deal with white-hulled China coast guard cutters or maritime enforcement vessels trying to cement command of Chinese-claimed waters. Countermeasures for maritime militias embedded within the fishing fleet and working in conjunction with law enforcement ships are still harder to come by.¹⁷

Lack of options present a significant dilemma for the United States and its allies. Doing nothing means leaving all the initiative to the adversary. On the other hand, rapid escalation to lethal force may undermine U.S. strategic interests and provide China with the narrative advantage. However, there are emergent capabilities that could at least in part mitigate this threat at the tactical level without resorting to the use of lethal force, and thus provide the U.S. forces with expanded decision space.

The article is organized as follows. First, the importance and scale of sustainment for major combat operations is discussed, with several historical examples. Then several potential scenarios are presented. This is followed by a discussion of potential U.S. and allied countermeasures including using intermediate force capabilities.

Maritime Operations and Sustainment

Naval operations, due to the distances involved, present a significant sustainment challenge, both in terms of sustaining combat operations, and in terms of the flow of forces and supplies to the active theater from the homeland. At the same time, any disruption to the sustainment can significantly disrupt operations, as was obvious in early 2024 in Ukraine, where the lack of ammunition hampered Ukrainian defensive operations. It is estimated that a single Marine

Expeditionary Unit (MEU) will require almost 500 tons of supplies per day, with the majority being fuel and water.²⁰

World War II in the Pacific demonstrated many of the logistics and sustainment challenges that the U.S. and allied forces would face in case of another conflict in the Asia-Pacific region. As Fleet Admiral Ernest J. King put it:

The war has been variously termed a war of production and a war of machines. Whatever else it is, so far as the United States is concerned, it is a war of logistics. The ways and means to supply and support our forces in all parts of the world—including the Army—of course have presented problems nothing short of colossal, and have required the most careful and intricate planning. The profound effect of logistic problems is described elsewhere in this report, but to all who do not have to traverse them, the tremendous distances, particularly those in the Pacific, are not likely to have full significance. It is no easy matter in a global war to have the right materials in the right place at the right times in the right quantities.²¹

A prime example of the importance of logistics was the Battle of Guadalcanal. This battle was the first U.S. amphibious operation of the war and a critical test for both U.S. Marines and the Navy.²² Amphibious doctrine was developed in the interwar years by the U.S. Navy and Marine Corps, and Guadalcanal would be the Navy's first practical indoctrination into amphibious warfare. In the end, it became a battle of logistics: "For both the United States and Japan, logistics was the critical element and the outcome came down to our ability to keep Guadalcanal resupplied and Japan's inability to do so."²³ The Japanese inability to sustain their units made it impossible to conduct military operations, and the longer the U.S. forces resisted, the worse off the Imperial Japanese Army became. Their supply lines could only provide approximately 40 percent of the actual requirements.²⁴ Eventually, 75 percent of the Japanese casualties were a result of malnutrition and disease rather than of U.S. actions.²⁵

The high intensity operations will require large numbers of ammunition, missiles, and fuel. For example, Ukraine requires upward of 7,000 155mm shells a day to hold Russian forces.²⁶ During Operation Desert Storm, more than 14,000 tons of ammunition and 16,000 tons of fuel were needed daily by Coalition forces.²⁷ Given the volume of ammunition and fuel required to conduct major combat operations, any significant delays or disruptions of the sustainment fleet would have significant impact on the conduct of operations in the operational theater.

The easiest way of achieving such disruption is through kinetic strikes against the U.S. fleet and regional bases, in the same way Germany tried to strangle Great Britain or the United States strangled Japanese logistics in World

War II.²⁸ With the current long-range strike capabilities, these efforts might also include kinetic strikes against North America. However, such kinetic actions would be highly escalatory. While China may count on such strikes to undermine the U.S. national will to act in the Asia-Pacific theater, it must be certainly aware that they could also create significant national resolve not unlike in the aftermath of the Japanese strikes against Pearl Harbor.²⁹ Leveraging a variety of hybrid means to minimize the risk of escalation with the United States, China can disrupt U.S. force flow below the kinetic threshold. For instance, it could use cyberattacks against ports and bases, or it could put political or even military pressure on the countries hosting U.S. bases or providing support to U.S. sustainment. Using their maritime militias is one of the possible options, especially if, as discussed above, China is looking at the problem of sea denial holistically, combining military and nonmilitary means to achieve its objectives. 30 Especially in early stages, before significant U.S. military involvement, China might prefer using hybrid means to outright kinetic strikes against U.S. targets, and subsequent U.S. casualties, in the hope of discouraging a war with the United States. Even in the case of an actual conflict, China may try to create dilemmas for the United States with the objective of seizing the narrative and turning public opinion both internationally, and possibly even within the United States, against the continued U.S. involvement in the conflict. To achieve this, China, being an authoritarian regime with strong domestic control over the information environment, might be willing to sacrifice their militias to win the narrative globally.

Maritime Militias

The military use of civilian vessels during war is nothing new. States traditionally mobilized (requisitioned, commandeered or purchased) their merchant vessels (cargo ships, oilers, fishing trawlers) to support armed forces during armed conflict.³¹ The main difference between past mobilization of civilian vessels and the Chinese use of their militias is that China has mobilized fishing boats and fishermen in peace time and possibly will mobilize them in wartime in a peculiar manner.³² China's National Defense Law Article 22 also states that "the militia, under the command of military organs, shoulders the task of preparations for armed conflict and defense operations and assists in maintaining public order."³³

The maritime militia can be deployed in support of the PLA Navy (PLAN) defense operations and also sabotage and intelligence operations.³⁴ The scenarios below fall either in the first (defensive operations, e.g., a blockade), or the second category (sabotage, e.g., purposeful scuttling of a vessel or a false

accident). To preserve ambiguity, maritime militias operate disguised as private fishermen. This creates a problem for the United States and its allies of identifying whether the vessels are legitimate fishing vessels or Chinese government agents.³⁵ Understanding this ambiguity, and how China can leverage it, is important for the United States and its allies to better identify and attribute responsibility for potential Chinese hostile acts. Due to the wide implications of the threat these militias pose both in competition, crisis, or a conflict, it is no surprise that in recent years a broad range of analytical works addressed their origins, capabilities, potential modus operandi, etc.³⁶

These militias are notorious for their use in the South China Sea, often in conjunction with the Chinese Coast Guard. They played a major role in a number of incidents in Scarborough and Thomas Shoal.³⁷ This is because, "according to the Chinese rationale, the militia can be deployed to strengthen control of China's 'maritime territory' while avoiding the political and diplomatic ramifications that might otherwise be associated with military involvement."³⁸ As such, they provide plausible deniability, and enable PLAN (and by extension the PRC) to de-escalate by denying any official affiliation of these vessels. Yet, many regional actors often hesitate to challenge these vessels because of the fear of a forceful PLAN response.

However, their potential employment goes far beyond simple assertion of Chinese illegal claims through harassment of other countries' vessels. A study by the Center for Strategic and International Studies identified two distinct classes of maritime militia vessels designated as maritime militia fishing vessels (MMFV) and Spratly backbone fishing vessels (SBFV) that differ in their features and likely intended use.³⁹

The MMFV include features such as weapons storage facilities and large water cannons.⁴⁰ While less capable, SBFV do maintain some ability to integrate with military operations. They are required to participate in training and are expected to provide support to PLAN when needed.⁴¹ In fact, China's war planners are leaning hard on its militia as it dwarfs the regular navy, and it provides China's senior military leaders with a key support asset in a protracted conflict.⁴²

Apart from a support role, these militias could be employed in more active ways as an actual paramilitary force. For example, Shuxian Luo and Jonathan G. Panther identified a number of possible military ways of employing these militias, especially in a disruptive role (rather than presenting a kinetic threat):⁴³

 Even in limited numbers they can at the minimum inhibit some types of naval ship's operations, such as towed array and flight operations (thus by extension disrupt antisubmarine warfare).

- Reconnaissance support, especially given their low detection profile and the fact that they can pose as normal fishing vessels.
- Potentially even supporting mine-laying operations.⁴⁴
- Potentially helping PLAN in targeting adversary's naval vessels.

In the last two types of employment, they would qualify as combatants providing a broader range of options to challenge them.

Disrupting Sustainment

There are numerous ways in which the maritime militias could be used to disrupt allied sustainment, while leveraging their ambiguous status. This may create dilemmas for the allied forces, as they might need to decide between leaving initiative to the militias or countering them and risk potential backlash in the information environment. As discussed above, while it may be within the legal bounds to use lethal force against these militias, it may not be desirable as it could provide China and other U.S. adversaries with the narrative advantage. Below are four broad scenarios outlining some of the possible uses of maritime militias to disrupt sustainment operations. These scenarios are speculative and purposefully left generic. They are based on the observed Chinese actions against the Philippines in the South China Sea and considerations of major maritime accidents such as the ship collisions with bridges in Baltimore, Maryland, and Galveston, Texas—and how similar actions could challenge U.S. and allied freedom of action in contested waters. 45 The use of these scenarios was somewhat validated by the use of similar actions by the red teams in the two wargame series attended by the author that explored the options to counter hybrid threats to allied freedom of movement. 46 Among the actions the red team employed was an attempt to use a hijacked merchant vessel to strike a bridge, trying to ram a fishing vessel into a dock, and sinking several fishing trawlers in the mouth of a port.

Scenario 1: Passively Blockading Access Points

The civilian vessels can be used effectively to blockade key access points such as navigation channels, port entries, or even narrow straits. It is also possible to use them at sea, but in that case, they would be required in large numbers to avoid simply being bypassed. In the first scenario the militia vessels passively block naval ships. This could be done under the pretense of fishing, but in some cases the Chinese militia has been doing it openly (e.g., in the confrontation with the Philippines).⁴⁷ Such an approach could be very effective in navigation channels or narrow straits, where the militia vessels could leverage their shallower draft than large supply vessels. While in peacetime the blocking function of the militias is often executed in coordination or collaboration with the Chinese Coast

Guard, it is easy to envision the militia ships working on their own or within large groups harassing allied supply convoys.

For example, the militias could create a staggered line of trawlers actively fishing in a strait, ignoring any communications or warnings. If the naval vessels want to avoid a collision (that could be costly for the ship as well as the trawler) or getting the nets entangled in the propellers, they might have to wait until the fishing vessels clear the area. As they can possibly move back and forth, it could take hours or days. Even if legally justified, the narrative advantage that the use of lethal force against these notionally civilian vessels could still result in political pressures and hostile narratives. Furthermore, the use of lethal force might in fact make the situation worse, as the allied ships would need to deal with the wreckage or uncontrollable militia vessels as well as aiding the crew of these vessels.

The next scenario is similar but involves more aggressive militia behavior.

Scenario 2: Disrupting Navigation, Causing Accidents

Similar to the previous scenario, the militias can aggregate at key choke points. However, rather than being a passive obstacle, they can interfere with the naval convoys more aggressively. They can sail directly into the path of ships, potentially forcing them to change course or even cause accidents. They can ram the supply ships, trying to cause disorder and distraction. Such collisions could then be leveraged to spread misinformation, blaming coalition forces for the accidents.

Groups of militia vessels can swarm either individual ships or the convoy as a whole. Despite their individual vulnerabilities and limitations, the swarms have potential to overwhelm the abilities of the allied navies to effectively counter them. Multiple militia vessels can run into the way of larger supply ships with the specific intent of causing accidents. In some cases, they can employ water cannons to further distract the allied ships.⁵⁰ This could also be effective as a disruption during the resupply at sea (RAS) operations.

These two scenarios could also be more sinister. The militia vessels, either through passive interference with navigation, or through actively running into convoy lines, could cause distraction, background noise, and delays, all the while providing targeting data (as is mentioned above) that could be leveraged by PLAN to engage the convoy through military (kinetic) means.

The following scenario could apply to both choke points and points of embarkation and disembarkation.

Scenario 3: Armed Interference with Allied Operations

In this scenario there are two possibilities. The militias could target either the allied vessels or allied maritime facilities. They would be employed to penetrate

the defenses under the disguise of being a civilian vessel, and then would either directly ram the target, or they could use weapons and explosives to cause damage to either ships or to infrastructure.⁵¹ They could even employ maritime drones launched from trawlers, similar to how Ukraine uses such drones to attack the Russian fleet.⁵²

While such an employment would certainly cross the legal threshold that would allow the use of lethal force against them, by the time these civilian-like vessels would be identified as threats, it may be too late to prevent the attacks. Also, the lethal response may be taken out of context and provide narrative advantage to China, feeding its narrative of defending itself against aggression of others. The last scenario deals with the threat to ports and maritime infrastructure, rather than naval ships directly.

Scenario 4: Creating "Accidental" Obstacles (Direct or Indirect)

Accidents can cause significant obstacles to shipping, and the remediation or mitigation of problems they cause can take a long time. For example, the incident in March 2021 when the huge container ship *Ever Given* became wedged in the Suez Canal and closed the canal for six days, resulting in \$10 billion a day damage to the shipping industry. Such accidents could be replicated in diverse locations, including Suez, Panama, but also entrance to major ports such as San Diego, California. It does not have to be a fishing vessel. Large container ships or tankers may also serve such a purpose, in the latter case adding an environmental disaster to further complicate the remediation. And if one or a few ships are scuttled on purpose, while making it look like an accident, the delays could be in weeks to months till the problem is remediated.

Another option is to use fake accidents to damage/destroy port infrastructure, or even the land access routes. A large trawler, or another ship can be run into a dock or a pier, damaging it enough to render it unusable, or a ship approaching a port can be rammed into bridges as happened in Baltimore in March 2024.⁵⁴

While the militia vessels can be used directly to cause accidents, the fake accidents could also be caused by nefarious actors through cyberattacks against merchant vessels without their knowledge.

Countering the Threat: Enter the Intermediate Force

While in many, if not most scenarios, the allied forces could feasibly resort to lethal force; the militias, even if unarmed, impede military operations and arguably threaten the allied forces. However, just because something is legal does not mean it is prudent or desirable. While using lethal force may be legally justified, it can still serve Chinese propaganda, especially among nonaligned countries.⁵⁵ Any forceful action against a militia vessel by a naval ship, even if

justified, is likely to be condemned by the Chinese government as hostile and unlawful.⁵⁶

An additional problem that the militias present is their sheer number. Furthermore, many of the confrontations in the above scenarios are likely to happen over relatively short distances and often in the vicinity of other friendly or neutral vessels. Due to the short distances involved, many longer-range systems would not be usable; at the same time, decision and reaction times may be very short. That points to the need to expand capabilities to gain more time and space to counter these militias.

Since the militias can have a strategic effect on the outcome of a conflict in the Asia-Pacific region through potential delays and disruptions of the U.S. and allied force and supply flow into and within the theater, they could possibly be dealt with at a strategic level. Thomas C. Schelling discusses how the adversaries can manipulate risk to deter unwanted behavior.⁵⁷ In this case, the United States would need to increase the risk to the Chinese that the confrontation may get out of hand and have disproportional consequences beyond the immediate location of the confrontation. The Chinese planners need to understand that the employment of militias may have significant costs attached to it. For instance, the friendly forces may attack the home port of the militias, thus increasing the risk of an all-out war. Despite this risk, the Chinese may determine that it is worth the perceived benefits; for example, a delay in the arrival of forces or supplies by several days may provide the Chinese with a significant strategic advantage in a local conflict, and they may calculate that the United States would be hesitant to attack the Chinese homeland post fact. Therefore, the United States and its allies also require tactical capabilities to decrease the likelihood of the successful employment of these militias against the U.S. and allied naval vessels.

Such a role can be possibly fulfilled by intermediate force capabilities (IFC). The draft NATO IFC concept defines intermediate force (IF) as the force below lethal intent. The IF fills in the space between mere presence and intentional use of lethal force. Subsequently, the IFC were defined as active means of employing force below lethal intent. IFC means include nonlethal weapons (NLW), especially directed energy, cyber, electromagnetic warfare, information operations, and others (e.g., the use of special operations forces, stability policing, etc.).⁵⁸ While there are superficial similarities between non-lethal weapons and IFC, as shown above, IFC represent a much wider concept. For one thing, IFC development considers the wider strategic context in which these capabilities are expected to provide escalation management options and enhance deterrence. Furthermore, they exploit a full range of emergent technologies (i.e., cyber, directed energy, artificial intelligence) across domains, including the information environment.⁵⁹

The following proposed use of IFC is based on two wargame series conducted under the auspices of the NATO Science and Technology Organization. The first series was conducted as a part of Systems Analysis and Studies (SAS) 151.⁶⁰ The second series is more recent and has not been officially documented yet. However, some observations are incorporated here based on the direct observations and analysis of the wargame by the author. Since many of the discussed capabilities are developmental, the article does not address potential financial considerations and focuses on the operational benefits of IFC as the potential acquisition cost of many of these capabilities is currently unknown.

The required tasks in dealing with the maritime militia vessels include warning, stopping, or moving the vessels (either by acting against the vessels or against the crew), disrupting or suppressing the crew, disrupting the militia's communications and navigation, and disrupting operation of any weapon capabilities (lethal or nonlethal, such as water cannons) that the militias may have. At the same time, these tasks need to be completed in a manner that would provide the allied forces with the narrative advantage. 61

There are a number of directed energy NLW capabilities available or in development that could fulfill these tasks. To warn the militias at a distance, even if they turn off the radio, could be done via optical or acoustic warning devices. This could be done over relatively large distances. For example, the long-range acoustic device (LRAD) produced by Genasys can push clear acoustic warning or other sounds to ranges of 3,000-5,000m for larger systems; even the portable systems are effective to the line of sight of about 500m. 62 The laser dazzler, such as Glare LA-9/P used by the U.S. Navy, can now send a warning out to 4 km at night and 1.5 km during daylight; it can also suppress potential hostile action to ~500m.63 The blue force in the above-mentioned wargames used warning in conjunction with video recording to provide a counternarrative to the adversary's information operations proving that the adversary was the one initiating the aggression. If warnings go unheeded, the U.S. and allied forces could potentially use the LRAD playing unpleasant sounds alone or in combination with laser dazzler to push the militias out of the way. These capabilities might work in scenario 1 and 2; in any case, they would likely provide the narrative advantage to the allied navies.

While the primary purpose of LRAD or a laser dazzler would be a cognitive compliance of the crew—even the unpleasant sound or a bright light would in the end require willing compliance, as it could be possibly countered—there are other possible intermediate force capabilities that do not rely on the compliance and act either directly on the materiel (in this case vessels and their equipment) or in the counterpersonnel role, depending on physiological reaction.

The militia vessels could be slowed or stopped—and thus prevented from maneuvering into the way of the U.S. and allied vessels—through mechanical

or electromagnetic means. An example of a mechanical vessel stopping device is a propeller fouler such as the Running Gear Entanglement System, a compressed air-launched net with weighted loops. ⁶⁴ The net stops propeller propulsion by entangling its propeller. These would not only affect the speed but also the maneuverability of the militia vessels, which could be deployed from small boats or from the air, and thus would limit their ability to interfere with the main convoy. There are other developmental technologies that would enable covert deployment, providing the ability to interfere with hostile vessel movement without any negative narrative. They work similarly to the entanglement net but also affect water pump intakes. During wargaming, a covert employment of these mechanical vessels and vehicle stopping capabilities was often initially attributed to mechanical problems of the target, providing additional time to the blue force and providing them with tools to protect critical infrastructure from being rushed by the hostile vessels.

Radio frequency (RF) and high-powered microwave (HPM) could also be employed to slow or stop vessels and to interfere with their control and maneuverability. The main limitation of the RF systems is their range (in tens of meters). That would preclude their effective use from main platforms and the effect delivery would have to be through smaller mobile platforms. HPM capabilities, currently tested by the U.S. Navy, are longer range, and could be feasibly employed against both surface and aerial threats, including possible maritime and aerial drones launched by the militia vessels. However, the effectiveness of directed energy means against steel-hulled vessels may be limited.

The limitation of the vessel stopping devices is that they cannot be used to compel movement. Hence, they could be feasibly used in scenario 2 to prevent the militia vessels from approaching the convoy and could even be employed in scenarios 3 and 4 to protect approaches to critical points, especially if there is an intelligence indicating imminent threats. However, they could not be employed in scenario 1 as they would simply freeze the stationary militia vessels in place (not the desired objective). Another limitation, particularly applicable to the RF and HPM systems, is that they might have limited effects on steel hull vessels. They might still work on exposed navigation and control systems but are unlikely to affect ship engines directly.

The last IFC discussed here is the active denial technology (ADT). It is based on a millimeter wave beam, penetrating a very thin layer of skin and creating a feeling of unbearable heat with no actual damage. The technology relies on a physiological response to the heat; it is effective to approximately 1,000m. The employment of this technology would be against the crew. While it would be ineffective against the crew covered by the steel hull, it could be used to force the crew off the deck, and thus prevent any potential use of lethal or nonlethal systems mounted on the deck (e.g., water cannons, potential mounted machine

guns, or personnel-carried weapons), and thus be very effective in scenario 3. The ADT could also be employed against small vessels that expose the crew to the beam. During earlier wargaming, the blue force employed the ADT against exposed personnel on the deck, including deck gunners. It enabled them to counter hostile actions without resorting to lethal force, and to de-escalate a crisis situation while maintaining information advantage.⁶⁸

In the course of development of the NATO IFC concept, a series of wargames was conducted to explore potential uses of IFC in competition and crises. ⁶⁹ One of the wargames conducted to support the development of the NATO IFC concept looked specifically at a maritime scenario that is relevant for the discussion in this article. ⁷⁰ This particular scenario considered a complex, very tense security environment, in which any miscalculation or excessive use of force could lead to uncontrolled escalation. The hostile country and its proxy used maritime militias employing go-fasts and rigid-hull inflatable boats and other military vessels, as well as medium-size UAVs to impede a NATO maritime task force's navigation in a constrained waterway. ⁷¹ The wargame concluded that coalition vessels had limited time and space to deal with harassing

coalition vessels had limited time and space to deal with harassing vessels impeding navigation and air operations. Similar to scenario one, Red had the initiative when NATO did not have IFCs. However, NATO had the initiative with advanced IFCs, and Red's activities had less of an effect on the NATO mission.⁷²

This wargame also highlighted that

managing escalation at the tactical level (e.g., managing the threat of the use of force by the adversary's paramilitary units without resorting to lethal force) and extended decision-making space proved invaluable for strategic escalation management.⁷³

These observations reinforce the argument that while the IFC will not provide a silver bullet to all foreseeable interactions between Chinese maritime militias and allied vessels or protecting key infrastructure and key access points necessary for force flow and sustainment, they would expand the range of available options to the allied forces, would cause some dilemmas on the adversary, and could help steer the narrative in favor of the allied forces. Finally, they would telegraph U.S. and allied resolve and contribute to the increase of mutual risk of further escalation. Consequently, the use of intermediate force capabilities would enhance the deterrence of the further use of these militias.⁷⁴

Conclusions

In the last decade, China invested heavily in building their maritime militias, a paramilitary force masquerading as a fishing fleet. It was designed to create

ambiguity and serve as an extended arm of the Chinese government while providing it with plausible deniability.

In the case of a conflict in the Asia-Pacific, these militias could be employed to interfere with the U.S. and allied force and supply flow within and into the theater, and thus they would have the potential to disrupt military operations in the Pacific theater. Some of the possible scenarios include using the militias to block access points, directly interfere with navigation, sabotage, or feigned accidents. Because of their ambiguous status, China could leverage any use of force, particularly lethal force, against the militias for a strategic narrative painting the United States and its allies in a negative light, especially among nonaligned countries. This could undermine broader U.S. geopolitical influence and even undermine domestic support for a conflict.

There are limited ways of engaging these forces below lethal threshold. Deterring their use through raising the risk to both China and the United States could work. Intermediate force capabilities (a class of active means below lethal intent) could also help the U.S. and allied militaries to partially mitigate the threat and to counter the militias at the tactical level. Some of the possible means include long-range warning systems such as LRAD or a laser dazzler, vessel stopping capabilities, and countercrew systems such as the active denial technology.

While not a silver bullet, these capabilities provide the allied forces with a broader range of options, while imposing some cost and dilemmas on the adversary. Furthermore, these capabilities would provide a means of messaging the United States and allied resolve to China below the lethal thresholds, all the while increasing the risk of further escalation to both China and the United States, thus strengthening the deterrence and possibly discouraging a broader militia use. At the minimum, a gradual escalation would provide the U.S. and allied forces with the narrative advantage.

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Rescuing the Unreachable

Personnel Recovery and Resupply in a Contested A2/AD Environment

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Abstract: In a potential armed conflict between the United States and the People's Republic of China in the Indo-Pacific, sustainment of the Joint force is not assured. China's modernized antiaccess/area-denial (A2/AD) capabilities threaten sustainment lines of communication and challenge successful joint personnel recovery operations. This article examines the Joint operating environment through the lens of a historical case study, analysis of the current operating environment, and an assessment of the future operating environment—the next fight. The authors propose large quantity artificial intelligence (AI)-capable unmanned systems and a scalable force concept able to penetrate the A2/AD and recover and resupply the Joint force. Fielding new and existing technologies, continual doctrine refinement, and tailored wargaming is necessary to find and cover the gaps in our capabilities and be prepared to win the next fight.

Keywords: personnel recovery, contested logistics, sustainment, antiaccess/areadenial, A2/AD, expeditionary advanced base operations, EABO, Indo-Pacific

he potential for a direct conflict between the United States and the People's Republic of China (PRC) is driving the U.S. military to reconsider how the Joint force will fight and win a war in the Indo-Pacific

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region. Technology advances in the last 80 years since World War II undeniably shifted the character of modern warfare. China's military capacity and modernized antiaccess/area-denial (A2/AD) capabilities threaten sustainment lines of communication and impose risk to isolated personnel recovery operations. Sustainment of the Joint force in a modern-day war is not assured. This article examines the joint operating environment through the lens of a historical case study, analysis of the current operating environment, and an assessment of the future operating environment—the next fight. To address this issue, the authors propose large quantity artificial intelligence (AI)-capable unmanned systems and a scalable force concept able to penetrate the A2/AD and recover and resupply the Joint force. Fielding new and existing technologies, continual doctrine refinement, and tailored wargaming is necessary to find and cover the gaps in our capabilities and be prepared to win the next fight.

A Historical Perspective: Guadalcanal

The Pacific theater in WWII provides a comparative study of potential conflict with China. Specifically, the Guadalcanal campaign offers insight into the plight of U.S. military losses associated with executing personnel recovery in contested waters and resupplying units that become cut off from friendly forces.

During the Guadalcanal campaign, the U.S. Navy faced the staggering challenge of recovering sailors adrift in seas with swift currents, dangerous wild-life, and prowling enemy vessels. The Marine Corps faced a similarly desperate task of sustaining a growing force on shore who were always one lost naval engagement from being cut off from resupply. The Navy reduced casualties and provided consistent resupply because of sufficient freedom of maneuver and uncontested forward basing, which will likely be contested in a future conflict. Naval forces operating in the Pacific were perpetually concerned with being spotted from the air, surface, or subsurface, but being spotted generally required a human to see an enemy vessel. Radar was still new and not fully trusted by many senior officers. Even when spotted by radar, units had few options for an attack: move close enough to strike, deploy aircraft, or surface and fire torpedoes. This environment permitted high-value ships to act as screens for search and rescue vessels with a low risk to the force.

At the same time, the fleet made excellent use of its aerial lines of communication and aviation assets to ensure that sailors adrift were rescued and isolated forces were resupplied. In some cases, Consolidated PBY Catalina seaplanes could land on the ocean and provide emergency supplies like food, water, and life rafts to survivors as well as take on the severely wounded before departing. This avenue of rescue is unlikely to be available to modern forces due to the projected A2/AD zones and weapons engagement zones, which will restrict even the fastest platforms from providing relief. Current methods of aerial resupply

and medical evacuation (medevac) rely on the helicopter with its limited range and supply planes, such as the Lockheed C-130 Hercules, which will face the same A2/AD issues as surface vessels, further limiting commanders' options.

During the naval engagement, the Navy lost approximately 30 warships.² As many as 10,000 sailors were adrift; thousands were killed in action from active combat and water exposure, and thousands more were wounded, awaiting rescue.³ Many were saved by the quick action of personnel rescue teams and ad hoc rescue sorties performed by ships and aircraft in the area. They were successful because of their ability to operate in a reasonably uncontested environment.⁴

Landing craft available to forces in the Guadalcanal campaign were instrumental to the survival of many sailors who would have otherwise been forced to wait for their ships to limp back to a safe harbor. The landing craft were multirole vessels providing daring rescue to sailors adrift in Iron Bottom Sound while simultaneously providing medevac to wounded sailors aboard stricken vessels and running supplies from supply ships and warships alike to maintain the ground forces ashore. These vessels were an innovative medevac method, but were reliant on a mother supply ship, maritime superiority, and near shore operations, limiting their usefulness in a modern campaign against the PRC and negating their value in the event of cutoff forces.

Aerial lines of communications critical to sustainment were also largely unrestricted during the Guadalcanal campaign. Navy and Marine Corps air efforts to assist in the defense and resupply of Guadalcanal is well known. During the campaign, when supply routes became constrained, fast-moving destroyers moved the bulk of supplies to the island. These ships were armored enough to survive limited combat and quick enough to escape to open water where they could evade enemy forces more effectively. At times, even these vessels could not get close enough for landing craft to reach them, and the Marines were forced to rely on transport planes to provide enough basic survival supplies. In addition to resupply, these planes were also used to transport casualties back to their home bases.

Neither all-domain superiority nor secure lines of communication are assured in a modern war. A contemporary campaign in the Pacific will be against an adversary with formidable A2/AD capabilities and an exponentially expanded weapons engagement zone. Freedom of action will be severely restricted and will limit the United States' ability to effect personnel recovery and sustainment as it did during the Guadalcanal campaign.

The Indo-Pacific Operating Environment

Since the battle of Guadalcanal, the Indo-Pacific geography has remained the same. The region comprises more than 100 million square miles of predominantly maritime operational space. However, advanced technology and the

People's Liberation Army (PLA) modernization have changed the character of future conflict. Key terrain and assets can now be threatened at greater ranges through space, cyber, precision weaponry, and informational cuing.

Emerging PRC military capabilities pose a significant challenge to operations, especially in the South and East China Seas. The People's Liberation Army Rocket Forces (PLARF) possesses ballistic missiles capable of striking U.S. bases as far away as Guam and antiship missiles capable of targeting an aircraft carrier at sea.¹⁰ The PLA Navy (PLAN) currently has 355 ships, including surface combatants, submarines, amphibious ships, and auxiliary vessels; by 2025, this fleet is expected to grow to 420 ships. 11 The naval force is augmented by a large fleet of civilian-owned and operated vessels that serve a commercial and military dual purpose. Many Chinese fishing and other civilianowned small vessels augment PLAN operations as the PLA Maritime Militia (PLAMM).¹² The PLAMM has the potential to surge a significant number of vessels to support Chinese aims, with some estimates numbering the distant water fishing fleet at more than 4,600 vessels strong.13 A portion of the PLAMM is also capable of conducting mining and air defense missions. The PLA Air Force (PLAAF) possesses significant capability to employ fourth- and fifth-generation fighters, medium-range bombers, modern missiles, and precision munitions. 14 The PLAAF also operates an increasingly capable integrated air defense system and airborne- and space-based sensors. 15 Each of these PLA military services depends on cuing from one of three newly created PLA arms: The PLA Aerospace Force, Cyberspace Force, and the Information Support Force, which actively seeks to target and exploit vulnerabilities in U.S. space, cyber, and information activities. In a conventional fight, the Joint force cannot concentrate combat power without accepting mission-critical risks imposed by these integrated PLA systems.

U.S. victory in the Pacific during WWII was achieved by amassing overwhelming quantities of platforms compared to the Imperial Japanese Navy's fleet. In 1944, the U.S. Navy had 6,084 ships, compared to 381 combined combatants and auxiliaries in the current inventory. The Air Transport Command (ATC) operated Curtiss C-46 Commando, Douglas C-47 Skytrain, C-56, and C-84 aircraft, controlled a force of more than 3,700 total aircraft by 1945, and delivered more than 650,000 tons of cargo from 1942 to 1945 in support of the Burma theater alone. The Battle of Okinawa was supported by the most significant amphibious assault force in history, consisting of more than 1,600 vessels and supported by a robust fleet of cargo aircraft. The sheer quantity of assets available for both personnel recovery and logistics during WWII will be challenging to match in a modern campaign, even with ally and partner support.

The Next Fight: Personnel Recovery

Current combat search and rescue techniques are insufficient to cover the scale of expected casualties resulting from a kinetic war with the PRC. Some wargames suggest the United States may lose 2 aircraft carriers, 10–20 large surface combatants, and such tremendous aircraft losses to risk "running out" of fighter/attack aircraft in an initial campaign.¹⁹ The loss of two carrier airwings alone equates to roughly 400 pilots and flight officers; each replacement would require approximately three years of basic proficiency training and the combat experience lost would be invaluable and irreplaceable.²⁰ Future wargames should continue the conflict after the initial campaign to incorporate actions after a mass casualty or loss of contact events to validate the full impact on subsequent phases of operation.

Personnel replacements are a difficult challenge and range in size from a single-seat fighter pilot to a 5,000 person aircraft carrier. To maintain the initiative after the loss of a platform, personnel recovery and reutilization is the preferred method to reconstitute forces and continue fighting in lieu of training new replacements. Ingress to the downed aviators or sinking ships and egress to safety requires balancing both established and innovative technologies to mitigate additional losses of recovery personnel and high-value assets. An in-depth look at personnel recovery in a contested environment and new advances in unmanned systems follows.

To approach mainland China, U.S. forces must navigate multiple island chains through the Northern Pacific, Philippine Sea, Sulu Sea, and Java Sea while deceiving and avoiding A2/AD networks.²¹ The PRC's A2/AD systems are expansive but only one of many dangers in the region. Their advanced weaponry and buildup in the South China Sea, the Democratic People's Republic of Korea's ballistic missiles, Russian posturing in the Aleutians, and persistent violent extremist organization threats, all impact Joint force operations.²² The Joint force must press the offensive on land and at sea to achieve combat objectives. Doing so encroaches on the PRC's established surface and air missile weapons engagement and intelligence, surveillance, and reconnaissance (ISR) coverage, increasing the risk of additional casualties to recovery forces.²³ Between the PLAN, PLAMM, and China's Coast Guard, the PRC is expected to have more than 800 maritime platforms concentrated in the Western Pacific by 2030.²⁴ Modern tactics sending manned search and rescue assets to the scene will result in additional loss of life. To counter, the United States should forward deploy a combination of manned and unmanned personnel recovery systems.

Current manned surface initiatives involve an in-development light amphibious warship (LAW, renamed medium landing ship) and a combination of Service capabilities. Codi Mullen's Naval Postgraduate School master's thesis suggests that the Navy and Marine Corps integrated model for LAW and litto-

ral marine regiment is a potential solution to personnel recovery and resupply. LAW has sufficient capacity, but modeling leans toward recovery *or* resupply, not both. Also, production delays, speed, weather, and disaggregated operations may preclude LAW as a contested environment option. Mullen does, however, identify a requirement for an afloat command and control node as a means for execution. In Noble Vanguard 12-21, the Navy experimented with a mine countermeasures concept using an expeditionary sea base as an afloat base of operations supported by a littoral combat ship. The lessons learned from that exercise retooled with expeditionary sea base, littoral combat ship, and LAW have the potential to address larger scale recovery, but without local sea control and air superiority, the size and slower speeds make the ships and crews susceptible to loss by A2/AD defenses. The impact can be mitigated using low-cost, unmanned connectors.

Commercial unmanned systems mitigate the potential loss of life, but none are consolidated as a scalable military capability. Many people are familiar with the Northrop Grumman MQ-4C Triton and Northrop Grumman MQ-8 Fire Scout due to widespread news and social media coverage and their routine role in maritime operations; however, in 2022, the U.S. Navy's Fifth Fleet "conducted the world's largest unmanned maritime exercise to date involving ten nations and bringing more than 80 unmanned platforms together."27 The experimentation highlighted multiple commercial products with ISR applications. Of those, the Devil Ray T38 unmanned surface vessel resembles a medium-size speedboat and has the optimal capabilities of speed (71 knots), maneuverability (waypoint guided), and payload (4,500 pounds) tailorable to a smaller footprint personnel recovery mission.²⁸ In the air domain, AeroVironment Inc's SOAR glider is capable of autonomous flight and 500 pounds payload, with 18-30 stored on existing air mobility command platforms.²⁹ SOAR will not be able to recover personnel, but it will be able to provide sustainment and a low-cost targeting problem for adversaries until surface extraction. With existing technology, multidomain fielding and experimentation on a mass scale are required to validate capability.

Normalizing mass unmanned systems in the U.S. Indo-Pacific Command (INDOPACOM) to discern patterns of life anomalies similar to other areas of operation is needed. U.S. Fifth Fleet's commander, Vice Admiral Brad Cooper's vision in Central Command was to create a digital ocean, "a resilient mesh network with every partner and sensor collecting new data, adding it to an intelligent synthesis of around-the-clock inputs, encompassing thousands of images from the seabed to space, from ships, unmanned systems, subsea sensors, satellites, buoys, and other persistent technology." Central Command's model is supported by an information operations campaign focusing on maritime domain awareness and combating illegal regional activities. In the Indo-Pacific,

advocating for a similar "digital Pacific" with Association of Southeast Asian Nations (ASEAN) and Cooperation Afloat Readiness and Training (CARAT) partners, and the Oceania Maritime Security Initiative would create a broad network of systems supporting mutual security interests and humanitarian assistance/disaster response where those same passive sensors could vector in to assist short-notice personnel recovery.³¹

Guiding multiple unmanned systems to their destinations will require a resilient AI backbone. Service components have individual efforts underway to capitalize on AI, but no mature Joint architecture fusing the capabilities. Joint all-domain command and control (JADC2) is designed to interconnect sensors and integrate all the Service components to "tie every sensor to every shooter irrespective of service, domain, or partner," but it is still early in development.³² JADC2 is progressing through the Navy's Project Overmatch, the Army's Project Convergence, and Air Force's Advanced Battle Management System, with the Marine Corps experimenting with networked and sensing expeditionary advanced base operations (EABO).³³ A mature, fully integrated, and trusted AI mesh network is critical to personnel recovery and allows the use of similar concepts and platforms to bring rear sustainment forward.

The Next Fight: Contested Logistics

Current logistics support techniques must be revised to provide the quantity of supplies required during a kinetic war with the PRC. A large fleet of ships and planes enabled logistics support during WWII. More than 50 percent of the USN ship inventory, 3,140 ships, had a logistics focused mission to support the Pacific campaign.³⁴ The sheer quantity of ships and planes dedicated to logistics greatly enhanced the responsiveness and resiliency of lines of communication. In terms of logistics, quantity of assets produced quality support.

Today, the foundation of operational logistics support in the Indo-Pacific is a network of bases and stations that serve as nodes for force generation, protection, and sustainment. Notably, there are at least 10 main operating bases in the region that the PLA targets as significant operational logistics sites that must be neutralized in the event of armed conflict with the United States.³⁵ These bases are linked by military and civilian sea and air assets, with host nations enabling operational logistics by allowing the United States use of civilian infrastructure. The requirement for increased force dispersion to cope with adversary longrange and precision fires creates exterior lines of communication and increases the likelihood that PLA forces will interdict sustainment operations.

The Navy and Marine Corps developed operating concepts emphasizing distributed forces, integrated networks of sensors and shooters, and delivering massed fires on targets to overwhelm adversary capabilities.³⁶ The Marine Corps EABO doctrine describes how Marines will fight in a tactical scenario like the

one presented by the PLA in the Western Pacific and South and East China Seas. According to the EABO manual:

EABO is a form of expeditionary warfare that involves the employment of mobile, low-signature, persistent, and relatively easy to maintain and sustain naval expeditionary forces from a series of austere, temporary locations ashore or inshore within a contested or potentially contested maritime area in order to conduct sea denial, support sea control, or enable fleet sustainment.³⁷

The doctrine presents how dispersed Marine formations operating from temporary expeditionary advanced bases within the weapons engagement zone of an adversary will conduct sea denial, sea control, maritime domain awareness, forward command, control, communications, computers, combat systems, intelligence, surveillance, reconnaissance, targeting (C5ISRT), counter-C5ISRT, and forward sustainment to Joint forces and allies.³⁸

The employment of dispersed expeditionary advanced bases within littoral areas and along enemy shipping routes increases the risk of isolation. Under these conditions, the PLA could viably interdict the expeditionary advanced base lines of communications. Tactical formations such as EABOs are designed to have the capability to operate in isolation for extended periods; however, certain supply items such as ammunition, fuel, and critical parts must be continuously sustained.

Ammunition resupply is essential for distributed forces operating under EABO, but the characteristics of ammunition types required to support modern war make resupply challenging. The size, weight, and increasing rate of ammunition consumption in combat limit the throughput of resupply. For example, more bombs were dropped on North Korea during the Korean War than the amount dropped in the entire Pacific theater during WWII.³⁹ Similarly, twice the tonnage of bombs were dropped on targets during the Vietnam War in Vietnam, Laos, and Cambodia than in the European and Pacific theaters during the whole of WWII.⁴⁰ Since the advent of precision guided munitions in the late twentieth century, this type of ammunition has increasingly become the preferred solution to prosecute targets across the battlespace, including the Gulf War, Kosovo, Operation Enduring Freedom, Operation Iraqi Freedom, and many other operations across the globe.

Recent wargames, as well as lessons learned from sustained combat operations in Libya and Ukraine, have shown that the expenditure rates for precision munitions would likely be extremely high during combat operations against the PRC. A wargame conducted by the Center for Strategic and International Studies resulted in simulated Joint forces expending more than 5,000 precision munitions in three weeks of conflict, including 450 antiship missiles.⁴¹ Ukrainian

Figure 1. Notional concept of employment for maritime fires

Source: courtesy of Congressional Research Service, adapted by MCUP.

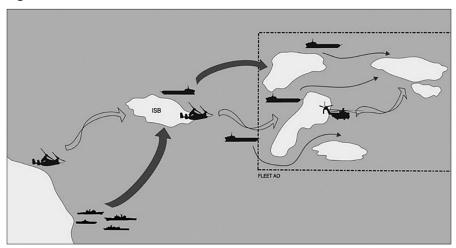
forces have expended more than 9,500 High Mobility Artillery Rocket Systems rockets in less than 12 months against Russian forces. ⁴² The increased emphasis in U.S. military doctrine on leveraging kill chains and kill webs to prosecute enemy targets sets the conditions for increased use of precision munitions. The likelihood is significant that precision munition resupply will be required for isolated forces.

Fuel is another indispensable sustainment requirement for isolated forces. Even low signature, small formations envisioned by EABO still require fuel to power generators and vehicles necessary for command and control and tactical weapon systems. Additionally, one of the missions of a sustainment expeditionary air bases is to function as a forward arming and refueling point (FARP). An effective FARP, by definition, requires both ammunition and fuel supplies.

Critical parts for high-tech weapons and command-and-control equipment are also vital. These complex "systems of systems" are made up of an array of interconnected electronic and mechanical components. Broken or malfunctioning parts often make the entire piece of equipment inoperable. For example, a faulty electronic component in the antiship Navy Marine Expeditionary Ship Interdiction System would significantly reduce the capability of a fires focused expeditionary air base. Critical repair components are often necessary to maintain or restore combat power.

The relative ease of sustainment may be underestimated, and the Joint force must consider how the expeditionary advanced bases will be reliably resupplied. Enemy action to block or interdict exterior lines of communication creates a distribution issue between an afloat sea base or another EABO. Even with flexible maritime connectors, a gap exists in tactical logistics distribution capability

Figure 2. EABO network



Source: official U.S. Marine Corps image, adapted by MCUP.

to cover the last tactical mile. Ships such as the light amphibious warship and other connectors/sea-basing platforms are expected to be pushed out of range and unable to provide sustainment to isolated forces. This problem can be addressed with an AI-enabled network of persistent autonomous unmanned systems. Nodes in the network would deliver supplies point to point or could form a relay where supplies are handed off from one type of node to another until the final point of distribution is reached. For example, an aerial unmanned system that picks up supplies at one point may hand off its cargo to an unmanned surface system to complete the journey to the isolated EABO. The network can react quickly because the nodes are distributed throughout the region and at the ready. AI enables command and control, dynamic tasking, and decision support and is the basis for the autonomous capability of each node, highlighting the ability to perform a task without human control.⁴³

AI-enabled logistics systems present optimized solutions to resupply problems involving mixed unmanned systems with machine learning. 44 This allows the persistent unmanned network to adapt to enemy interdiction and increase the probability of delivery success. 45 Terminal control of an approaching unmanned system can be executed by a person in the receiving unit guiding the system to a safe or alternate destination using a handheld device. 46

Autonomous unmanned systems could operate as individual systems or as a collaborative network.⁴⁷ The number of unmanned assets integrated into this AI-enabled network has no upper limit. Network scalability presents the possibility that hundreds of unmanned systems could be distributed throughout the area of operations. Command and control of these systems would require a level of resiliency to maintain situational awareness. The network would provide the

type of sustainment quality through quantity that enabled U.S. forces during WWII.

Conclusion

In a modern-day conflict in the Indo-Pacific, the primary limiting factor to executing effective resupply and personnel recovery for distributed forces is the quantity of transportation platforms capable of operating in contested air and sea domains. The current and forecast U.S. inventory of ships and aircraft capable of supporting resupply and personnel recovery is insufficient to sustain the Joint force and must be addressed. Fielding new and existing technologies, continual doctrine refinement, and tailored wargaming is vital. Large quantity AI-capable unmanned systems and a scalable force concept able to penetrate the A2/AD and recover and resupply the Joint force may be the solution to a significant capability gap. Doctrinal documents such as the Tentative Expeditionary Advanced Base Operations Manual and Distributed Maritime Operations recognize the gaps in these capabilities and the potential for unmanned systems to play a critical role in the solution but need to provide more meaningful detail. Additionally, wargame scenarios must expand to incorporate operations to rescue servicemembers after the loss of major assets or after a unit is cut off from consistent resourcing. As Mark Cancian, Matthew Cancian, and Eric Heginbotham state, "A war over Taiwan is not certain, but it is not unimaginable either; for that reason, wargaming such a conflict is important for developing US policy" and also identifying a requirements list that validates future capabilities and resourcing. 48 Experimentation with new technologies and doctrinal changes in robust wargame scenarios is imperative to adequately prepare the Joint force for the potential next fight in the Indo-Pacific.

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Land Power in the Littoral An Australian Army Perspective

John Nash, PhD

Abstract: The Australian Army is coming to terms with a new strategic direction set by the 2023 *Defence Strategic Review* (DSR), 2024 *National Defence Strategy* (NDS), and the Integrated Investment Program (IIP). This article considers how the Australian Army fits into this new direction as a littoral maneuver-focused force providing long-range strike capability. It examines concepts and analyzes how the Australian Army might be used in future scenarios: what it might be required to do in the maritime environment, whether it is contributing to sea control operations, sea denial, and/or intelligence, surveillance, reconnaissance (ISR). In addition, there is the maneuver component and how the Army might use the littorals of the Indo-Pacific as a maneuver space. This article seeks to generate discussion on how a modern land force might adapt to conflict and competition in the Indo-Pacific littoral.

Keywords: Australian Army, littoral, Indo-Pacific, Australian Defence Force, maneuver operations

Introduction



Dr. John Nash is an academic research officer at the Australian Army Research Centre and previously a researcher at the Australian War Memorial for the Official History of Australian Operations in Iraq and Afghanistan and Australian Peacekeeping Operations in East Timor. He was awarded a PhD from the Australian National University in July 2019. He is also a lieutenant in the Royal Australian Naval Reserve, with 9 years' full time and 10 years' reserve service. He was the inaugural winner of the McKenzie Prize for the Australian Naval Institute and Chief of Navy Essay Competition—Open Division, 2019. His most recent publication is the book *Rulers of the Sea Maritime Strategy and Sea Power in Ancient Greece, 550–321 BCE*, volume 8 in the series De Gruyter Studies in Military History, https://orcid.org/0000-0001-6525-5707.

Journal of Advanced Military Studies vol. 15, no. 2 Fall 2024 www.usmcu.edu/mcupress https://doi.org/10.21140/mcuj.20241502003 cused force ready to defend itself and its interests. Unsurprisingly, it highlighted the fact that Australia's most important geostrategic area of interest is the Indo-Pacific.1 This is not just a geographic descriptor, but as a notable Australian national security expert has illustrated, an important new construct that brings together a range of approaches in security and diplomacy.² For the Australian Army, there is clear direction on the way forward: "[The] Army must be optimised for littoral operations in our northern land and maritime spaces and provide a long-range strike capability." This was reinforced a year later in April 2024 with the release of the *National Defence Strategy* (NDS), which says that "Australia's Army must be transformed and optimised for littoral manoeuvre operations by sea, land and air from Australia, with enhanced long-range fires"; and the Integrated Investment Program (IIP), which details investment in the Army as an "Amphibious Capable Combined-arms Land System." Australia's defense strategy as outlined by the NDS is that of a "strategy by denial." It is designed to deter a potential adversary from taking action against Australia by signaling a credible ability to hold an adversary's forces at risk.⁶ Australia has always been a maritime nation in character, if not in outlook and temperament. The direction set first by the DSR and then reinforced by the NDS and IIP demands a maritime approach to Australia's strategy of deterrence by denial.

This article considers how the Australian Army fits into this new direction in strategy, namely, as a littoral maneuver-focused force providing long-range strike capability. This approach requires deep thought on what this force will be required to do in a strategic context.⁷ This necessitates an examination of concepts and how the army might be used in future scenarios: what might it be required to do in the maritime environment—contribute to sea control operations, sea denial, and/or intelligence, surveillance, reconnaissance (ISR)? Further, there is the maneuver component and this will entail examining how the army might use the littorals of the Indo-Pacific as a maneuver space. This is followed by an assessment of long-range fires and the opportunities and challenges of this unprecedented capability for the Army. Finally, there is the everpresent and always interesting, albeit quasi-speculative, look at autonomy and counterautonomy and how these new technologies might influence operations in the littoral environment. The Australian Army is very focused on the region, especially regarding how it can continue to build strong and enduring relationships with partners and allies. These relationships are an important focus area of army's research.8 More than anything, this article seeks to spur discussion on how a modern land force might need to adapt to conflict and competition in the Indo-Pacific littoral.

Background and Concepts

The Australian Army has a long history of conducting amphibious operations,

going as far back as the landings on New Guinea in September 1914, and the (in)famous Gallipoli landings of April 1915.9 The real test, however, came during the Second World War and the Pacific campaign. Here, the Australian Army was involved in large-scale amphibious operations across the Southwest Pacific Area (SWPA) under Generals Sir Thomas Blamey and Douglas MacArthur. The Australian experience in New Guinea and Borneo saw close cooperation and integration with U.S. forces at all levels, from Joint planning through to combat and logistics operations. 10 However, the experience of the Australian Army since the Second World War has been of little maritime character, with the exception of the East Timor intervention of 1999 and again in 2006. 11 Even then, the maritime component operated in an entirely permissive environment. In the wake of withdrawal from major combat operations in Afghanistan at the end of 2014, the Australian Army has since then begun a pivot toward future planning. 12 The army has never stopped thinking about its place within a maritime strategy, with concepts developed in the early 2000s on maneuver operations in the littoral environment (MOLE), and scholars such as Michael Evans pushing for a "Third Way" in Australia's strategy, bridging the gap between continentalist and naval strategies. 13 However, the DSR and NDS have centered the army's (and wider ADF's) focus on the maritime world of the Indo-Pacific with a new urgency and clearer direction.

As with all things concepts and doctrine related, definition often plays an outsized role in the conversations. The term *littoral* in a warfare/doctrine sense is quite vague. The most widely accepted usage of the term is that it is the area in which shore-based forces can exert influence at sea, and forces at sea can exert influence ashore.¹⁴ In this case, the main point of discussion/contention lies around the use of the terms littoral warfare versus amphibious warfare. Opinions range from them being synonymous to it being nigh on heretical to conflate the two concepts, while others decry littoral as no more than a buzzword describing operations that have been well-defined for centuries. Realistically, they are not the same, and the author would argue that amphibious operations fall under the broader term of littoral. In essence, all amphibious operations are littoral, but not all littoral operations are amphibious. 15 This is not to demote or downplay amphibious as a concept, but rather to highlight that the increasingly more integrated nature of warfare poses challenges to amphibious orthodoxy. Amphibious as it stands now is one-dimensional, in that the main conception of such an operation—be it a landing, assault, raid, or withdrawal—is focused on ship-shore-ship operations. This can be seen in Australian Maritime Doctrine and its definition of littoral maneuver as "the use of the littoral as an operational maneuver space from which a sea-based joint amphibious force can threaten, or apply and sustain, force ashore."16 Large amphibious operations like this will still be required in any future littoral operations. However, given the likely dispersed nature of warfare in a future littoral environment, it means that forces put ashore in an amphibious operation will need to interconnect to each other outside the scope of simple ship to shore connection. For instance, a dispersed force of Australian Army units across several littoral locations (or a U.S. Marine Corps Marine littoral regiment force, for that matter) inside an enemy weapon engagement zone may not have any supporting ships nearby. Such dispersed forces might then be reliant on intratheater sea and air movement with each other and with a centralized logistics hub. These nodes may themselves need to be mobile, again using only organic in-theater movement assets. In some cases, a land-based force may not have any organic movement assets.

One might think of the Guadalcanal campaign from August 1942 to February 1943 as a key example. It was a campaign described by Toshi Yoshihara as "an early manifestation of a modern joint campaign in which airpower, naval power, and ground forces each played a crucial role." After the initial U.S. Marine Corps assault on the island to secure the airfield, the battle became a contest in the three domains. The Marines were required to conduct close combat to defeat several Japanese offensives over the following months. This was to protect the vital airfield, Henderson Field, which provided the U.S. forces critical air support to interdict Japanese reinforcements. At the same time, these air forces could not fly at night, and the airfield was at risk of nocturnal bombardments by Japanese surface action groups, in turn requiring a covering force of U.S. Navy and Royal Australian Navy ships to prevent the airfield being taken out of commission by Japanese naval gunfire. 18 Both land forces—United States and Japanese—required constant logistics support from distant bases. It was arguably a far more contested sea and air environment than the other amphibious operations that would come later in the war. An important lesson that the People's Liberation Army (PLA) has taken from the failed Japanese campaign on Guadalcanal was the poor communication and poor command and control (C2) that existed between their land and naval forces.¹⁹ This C2 failure was at both the tactical and operational level. In these ways, one might consider the Guadalcanal campaign as a littoral campaign, which saw many amphibious operations conducted throughout, including an assault, resupply and reinforcement, and a withdrawal, as well as naval gunfire support (NGS). At all stages the land, sea, and air forces had to contend with the difficult environment of the Solomon Islands littorals, affecting everything from equipment—including radar degradation—through to locating and targeting enemy units as well as enabling effective C2 across the theater. Future operations in the littoral may look a lot like this.

When looking at how the Australian Army will change and adapt to this new direction, the first step is to determine what will not change. The Australian Army is the ADF's land force and the only force capable of engaging in close combat. This will remain its raison d'être in all environments, littoral or not. This is important when remembering an inescapable reality of the human environment: that sea and air nodes such as ports, airfields, and critical infrastructure such as undersea cable landings are on land. When thinking of the littoral, the army will need the ability to occupy or seize vital terrain and infrastructure from an adversary, for denial and/or control purposes. For this reason, the army is in the process of acquiring a new suite of land combat vehicles, including M1A2 Abrams, Boxer Combat Reconnaissance Vehicles (CRV), and AS21 Redback Infantry Fighting Vehicles (IFV).²⁰ These systems and others, such as the AS9 Hunstman Self-Propelled Howitzer (SPH), M777 howitzer, Sikorsky UH-60 Blackhawk, Boeing CH-47 Chinook, and Boeing AH-64 Apache, are all vital ingredients of the combined arms fighting system. 21 It is this system that will enable the army to "secure and control strategic land positions and provide protection for the ADF."22 Importantly, these are platforms and systems that offer interoperability and even interchangeability with U.S. forces, Australia's closest ally. All of these systems will be necessary in the littoral environment protecting key terrain and denying it to an adversary, or, in the highest intensity scenario, ensuring the land force can take such terrain from an enemy.

Occupying key terrain may, however, only be one part to control or denial operations. As part of this there may be a forward presence, potentially in Australian offshore territory such as Christmas or Cocos Keeling Island, or in the region in support of allies in north Asia, such as the Philippines for example. Once established, a unit will need to defend itself and project power at a distance with Precision Strike Missile (PrSM) armed HIMARS. Denial of key terrain and the possibility of high cost imposition are important elements of a denial strategy. In this sense, the army will need to maneuver to enable fires, again for control or denial purposes in the sea and air domains. Key to all of this is the ability to maneuver in the littoral space.

Littoral Maneuver

First and foremost on the army's priority list is the ability to conduct littoral maneuver by sea, air, and land. This is a somewhat nebulous term, but clarification can be found in the language of the DSR: "littoral operations in our northern *land* and *maritime* spaces." The future army will not be expected to use the sea as a mere highway, but as a tactical and an operational maneuver space. In conjunction with organic rotary wing assets, the Royal Australian Navy (RAN) and the Royal Australian Air Force (RAAF), the Army's new watercraft will provide it hitherto unknown mobility. These new littoral maneuver vessels—medium and heavy—will give the army the ability to conduct both intra- and intertheater sea lift, a capability that had been lost with the decommissioning of the last of the RAN's landing craft heavy (LCH) in 2014 and a

step-change over the legacy landing craft, mechanized (LCM-8, or Mike boat) craft currently operated by army. However, while the RAN operated six LCH's and the Army 15 of the much smaller LCM-8, the future Army will receive 18 landing craft medium and 8 landing craft heavy.²⁵ The new vessels will thus be more numerous, have longer ranges, and be able to carry vastly more personnel and materiel. The Australian Army will soon operate a fleet of ships larger than many regional navies.

A key issue in this is dealing with distance, specifically, the very long ranges a force or forces will face when operating in the Indo-Pacific area. This includes potentially long distances from the national support base. The Australian territory of Christmas Island is 1,500 nautical miles (nm) from Darwin, or 1,400 nm from Perth; Guam is more than 2,700 nm from Darwin; and even Townsville to the Solomon Islands is around 970 nm. ²⁶ More than just movement between points on a map, littoral maneuver will almost certainly involve moving in and out of an enemy weapons engagement zone (WEZ). There are of course different WEZs for different weapons systems. Moreover, risk can be factored into WEZ incursions: it seems unlikely that a foe would expend exquisite and expensive munitions like an antiship ballistic missile (ASBM, for instance, a DF-26) on a landing craft heavy or medium. This is of course a risk-based calculation: a single landing craft heavy carrying a battle group well might justify targeting. It is also not to say that such units will operate alone. These Australian Army ships will need to integrate their operations with the RAN and RAAF in order for the other two services to provide effective escort. As the then chief of army, Lieutenant General Peter Leahy, wrote in 2003: "Land forces require the support of the RAN and the RAAF for strategic lift, air defence, communications, logistics and supporting fires."27 While new acquisition such as the National Advanced Surface-to-Air Missile System (NASAMS), PrSM, and large amphibious vessels will change certain dynamics, military operations in the littoral will remain firmly a Joint endeavor.

As seen in the Guadalcanal example, the Australian Army will need to maneuver in the littorals in several different ways. While doubtful any force will be storming the beaches akin to Normandy or Tarawa, it is reasonable to assume a force put ashore in a contested environment will swiftly face opposition once landed. Either way, opposed or unopposed, future amphibious operations will need to focus on ship-to-shore connections and logistics. However, there will be more to it and the truest sense of littoral maneuver will be the use of maritime areas as an operational maneuver space. A useful example of this comes from Operation Husky, the Allied invasion of Sicily in July–August 1943. Weeks after the initial landings had lodged the main force on Sicily, the U.S. Seventh Army under General George S. Patton conducted several operations along the north coast, utilizing naval forces to outflank German defensive positions in

order to cut off their retreat toward Messina. A combat force was loaded onto landing craft from the shore—not at sea—and then landed behind German lines. While not decisive, these operations were demonstrative of how a land force utilizing organic naval lift assets could conduct operational maneuver.²⁸ This is the operational maneuver space that Australian doctrine already considers, but not restricted to the aforementioned sea-based construct it clings to.

In a future operating environment, a land element will no doubt require agility, including the potential to move through the littorals—by sea, land, and air—to occupy an important position for denial or strike purposes. This might follow on from an initial amphibious lodgment into an area of operations. For instance, an allied force might ensure a window of access through a weapons engagement zone into a particular area of operations to enable an amphibious task group (ATG) of amphibious assault ships (LHD) and landing craft medium and heavy entry to land a combined arms battlegroup element. The major amphibious ships could then depart, leaving the medium and heavy vessels as lower signature organic sealift assets. Depending on the window available in the WEZ, it might only be that the ATG has enough time to land the battlegroup in one or two positions, as fast as possible, and then depart, analogous to the Guadalcanal operation of late 1942. From there, the land force can disperse as required across the area of operations. Potentially included in this force are RAN assets required for traditional amphibious operations, such as mine clearance divers and deployable geospatial and hydrographic teams, based not from the sea, but the land. This is an even greater consideration as the ADF reestablishes the ability to conduct naval mining, as a land force might be employed to deliver such a denial capability in the littoral environment.²⁹ In all cases, this stretches the bounds of what has been "traditional" in amphibious operations.

Long-Range Fires

The Australian Army will soon see an enormous shift in its ability to conduct long range precision strike. The introduction of HIMARS, along with the PrSM, will give the army great reach against both land and maritime targets.³⁰ As per the *Integrated Investment Program*, the Australian Army will be acquiring 42 HIMARS as part of the land component of its long-range strike regime.³¹ Moreover, the Australian Army has taken delivery of the first of its NASAMS.³² This allows the army to contribute to integrated air and missile defense beyond the short range and point defense air defense it was previously only capable of achieving.

None of this, however, is of much use without a robust ISR and C2 network. It may be, as many have argued, that anything on the surface of the sea can no longer remain hidden and that the surface of the ocean has thus become transparent.³³ It is an entirely different thing for this to remain the case in a

degraded ISR environment, and it is certainly not the same as being able to target something on the ocean. The maritime spaces of the Indo-Pacific are large, environmentally complex, and full of maritime traffic, from the largest container ships down to the smallest of fishing vessels and pleasure craft. Without accurate and timely targeting information, a ship at sea remains no more vulnerable than it did 100 years ago. This is not to minimize the threat posed by land-based strike systems, but merely to highlight that the weapons systems are but one piece of the puzzle. Without the ability to find and track a vessel, and to then relay accurate targeting data from sensor to effector, then there is no strike ability. Hence, it is both an ISR and a C2 problem.

Two terms are often used to refer to the concept of land-based fires used to deny the maritime environment: antiaccess/area-denial (A2/AD) and a maritime precision-strike regime. The idea of A2/AD is essentially that of denying access to a theater as well as denying the use of that area to enemy forces, including sea denial.³⁴ A mature maritime precision-strike regime has been defined by Andrew Krepinevich in an influential 2014 report as "a state in military affairs when the major maritime competitors have advanced ISR as well as precision-strike capabilities all linked together to form a battle network."35 As this indicates, A2/ AD (or precision maritime strike) consists of more than just possession of antiship cruise missiles (ASCMs), ballistic missiles, or any other one-dimensional capability. ASCMs are an antiair warfare problem, not an A2/AD problem; uncrewed surface vessels are a surface warfare or force protection problem, not an A2/AD one. It will not be enough for an Australian Army land force to merely possess batteries of HIMARS with PrSM. They will need to be integrated with RAN and RAAF assets to ensure multiple threat vectors against a hostile force. As Jack Watling and others have outlined, in order to be effective, A2/AD needs to be able to draw data from multiple and overlapping sensors that can then feed this as targeting information into weapons systems.³⁶ In this way, an A2/ AD is a system involving multiple domain threats with persistent and reliable ISR and targeting available to multiple effectors, be they ground, air, and/or sea-undersea based and crewed or uncrewed. A common operating picture will be of primary importance for such a system to be maximally effective.

The efficacy of long-range strike organic to land forces has potentially changed, in part, due to the calculus of modern maneuver warfare. Conventionally, a land force would fire to maneuver; now a land force will often find itself maneuvering to fire.³⁷ This has most recently been seen in the Russo-Ukrainian War where Ukrainian formations have been maneuvering to ensure fire positions for long range strike at key Russian targets, often to great effect. The most effective way to threaten ships at sea is to do so from multiple threat vectors. Land forces working in concert with ships and aircraft can hold enemy ships at risk by maneuvering for advantage to threaten from the land. This is why the

Australian Army needs mobile land and maritime forces: landing craft carrying HIMARS armed with PrSM, integrated into a coalition common operating picture, for instance.

It should go without saying that logistics is critical to all military operations, but especially in the dispersed environment of the Indo-Pacific. Moreover, one of the key potential advantages of a land-based, long-range strike force is magazine depth, something highlighted by the Australian chief of army when discussing the potential contributions of land power in the Indo-Pacific.³⁸ The nature of vertical launch systems aboard modern warships means they can carry many more missiles than ever before, but with the trade-off of needing to return to a suitable port facility in order to reload. In contrast, the pods for a HIMARS are easily air portable and the HIMARS system is designed for easy reload. Again, there is a trade-off, and the idea of a land force having a superior magazine depth only works with a good logistics chain or when in or near to the national support base.

Australian maritime space is vast, encompassing an area abutting the Indonesian Archipelago down to Antarctica, and from Cocos Keeling Islands in the Indian Ocean to Norfolk and Lord Howe Islands in the Pacific. A concept that does not get much consideration in discussions of A2/AD or land-based maritime strike is maritime domain awareness (MDA). Usually thought of in the context of peacetime operations, MDA will be of immense value in any conflict scenario. The rather broad definition of MDA as per Australian Maritime Doctrine describes it as "the effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or environment of a nation."39 Essentially, MDA is concerned with continuous monitoring of the maritime environment, from natural and environmental phenomena to the patterns of life of the human users of the sea, be it commercial shipping, fishing, recreation, gas/oil exploration, piracy, or military. Looking at a map it is easy to see the blue space of the Indo-Pacific and think of empty ocean when in fact that maritime space is littered with commercial shipping, fishing fleets, and offshore infrastructure. Finding and targeting something in such an environment is far from straightforward or easy. An important information set will include data of the local patterns of life. In essence, effective MDA in peacetime and competition will allow for better situational awareness and better targeting discrimination during conflict. In the case of the Australian Army, this will require an integrated ADF and an interagency approach with such organizations as Maritime Border Command (MBC).⁴⁰ Australia's maritime jurisdiction is the third largest in the world at 8.2 million square kilometers, with 8,222 islands and one-half the population living within 7 km of the coast. 41 This is the ADF's prime area of interest, and with such a large coastline and coastal population the army will have a key role

to play protecting critical on- and offshore infrastructure. Hence, MDA will consider proper situational awareness.

Beyond Australian waters, strengthening cooperation with allies and partners in monitoring the maritime spaces of the Indo-Pacific would establish a substantially better picture of the littoral environment. In the case of conflict, the army will have a baseline of information for what the space looks like normally to establish what might be abnormal. Again, while usually associated with peacetime constabulary operations and maintaining good order at sea, MDA has great potential to aid both navies and land forces in future conflict in the littorals when integrated into a coalition common operating picture (COP).⁴²

Autonomy and Counterautonomy

One of the more vexing problems facing militaries around the globe, in all operating environments, is that of remote and autonomous systems (RAS), especially the proliferation of numerous and cheap unmanned aerial systems (UAS). This is a twofold problem, encompassing the effective use of these systems, as well as countering their use by an adversary. As the confluence of land, sea, and air, the littorals will no doubt see the proliferation of different systems in all domains. The Australian Army is exploring all options through the Robotic and Autonomous Systems Implementation & Coordination Office (RICO), part of Army Headquarters' Future Land Warfare branch. The Australian Army is transforming to embrace new technology, from optionally crewed vehicles to quantum sensing and communications and artificial intelligence (AI)-enabled decision making.

The littoral sees a different environment for uncrewed systems than that of a pure land domain. Small, cheap first-person view (FPV) drones will surely be part of any future conflict, either for attack or for reconnaissance. They will be common in the land domain, but their utility out to sea will be very limited given their short ranges and endurance. They will also be operating in a vastly different physical environment to places such as Ukraine, the Middle East, or Armenia-Azerbaijan. The jungle environments of many places in the Indo-Pacific will not be suitable for such UAS. Not only will they be unable to operate in thick jungle canopy, but sensors will be severely degraded by the reality of a hot, humid environment of thick jungle foliage and near constant rain during much of the year. Camouflage and the use of decoys have made a resurgence in warfare, brought back into stark relief as both sides of the Russo-Ukrainian conflict have engaged in widespread usage of decoys, with great success on the Ukrainian side. 44 The use of camouflage and decoys in such an environment will be essential in taking advantage of what is already a difficult ISR environment: a very old yet still effective form of passive defense and perhaps the very first step in countering at least some

UAS in the littoral environment. It will also complicate what is already a complex ISR picture.

Nevertheless, UAS will proliferate and need to be employed and countered beyond what is being seen in current conflicts. As discussed above, the distributed nature of operations in the littoral will require a robust logistics system. This will be in all things, from guided weapons and explosive ordnance, through to food, medical supplies, and spare parts. Combined with additive manufacturing abilities, it may be that RAS can help distribute critical supplies in the field. This is something the Marine Corps is already looking at with its Medium Autonomous Resupply Vehicle—Expeditionary Logistics (MARV-EL) program, a capability that is of great interest to the Australian Army.⁴⁵

Likewise, the use of autonomous sea and undersea assets will open new possibilities in defense and in offense. As with UAS, remote maritime vessels could be used for a range of different tasks, from ISR through to resupply and as weapons platforms. Much has been made of Ukraine's success in attacking the Russian Black Sea Fleet with unmanned surface vessels (USVs), and indeed the success of these attacks has been significant on the Russian Navy's ability to operate in the Black Sea. 46 The key point to remember is that the Indo-Pacific is a substantially different operating environment than the Black Sea, both operationally speaking and in the physical sense. The Ukrainian attacks have originated from home territory and thus with the full support of the national support base behind them, rather than being forward deployed. This matters both for the availability of support services as well as the physical challenges of launching an attack: the 14 February 2024 attack on the Russian landing ship Tsezar Kunikov (BDK 64) required 10 USVs. 47 Moreover, the small boat threat to surface vessels is far from a new one and navies will adapt to these uncrewed suicide boats. 48 What they do represent is a potential avenue of attack that—combined with other threats such as antiship missiles and mines—complicate an adversary's defensive calculations. Indeed, the introduction of a sea mine capability into the ADF bolsters Australia's ability to deter an adversary. Such a capability requires delivery platforms, and the use of USVs or even unmanned underwater vessels (UUV) operated forward from an Army/combined Army-RAN unit in the land domain is another potential avenue to extend the range of this deterrent effect.

Way Ahead

The Australian Army is rapidly evolving into a littoral force, with many new capabilities that will be in service by the end of the decade, many even sooner. It will become far more integrated with the other services—the Royal Australian Navy and Royal Australian Air Force—as well as with partners and allies in all domains. Crucially, this includes both the U.S. Marine Corps and the U.S.

Army. Much of the above may seem to be simply a catalog of new capabilities, a list of new gadgets, and the promise of transformative technology. This alone is not evolutionary: it is the new ways in which the Army is developing as a littoral force and is integrating into the rest of the ADF that will see it develop new capabilities.

With a mind to maneuvering in the littoral and the capability to strike at distance as part of the integrated ADF, the Australian Army will have a key role to play in Australia's strategy of deterrence by denial. This article outlines part of the beginning of that journey: the intellectual recognition of what needs to be done, but also of the breadth of possibilities that will come from embracing the littorals as the army's future operating environment. This journey of transformation will not happen alone, and it is with partners and allies that Australian land forces will maintain their sharp edge in competition or conflict. All of the military services will need to transform to realize this potential. Doing so will enable the Australian Army to generate land power and enable the Joint force to protect Australia's national interests, in peace and in war.

Endnotes

- National Defence: Defence Strategic Review (Canberra: Australian Government, 2023), 6, 27.
- 2. Rory Medcalf, *Contest for the Indo-Pacific: Why China Won't Map the Future* (Melbourne, AU: La Trobe University Press, 2020), 3.
- 3. National Defence, 7.
- 4. National Defence Strategy (Canberra: Australian Government, 2024), 58; and Integrated Investment Program (Canberra: Australian Government, 2024), 53.
- 5. National Defence, 7.
- 6. National Defence Strategy, 22.
- 7. A topic the author discusses in the introduction for the *Australian Army Journal* 19, no. 2, an edition focused entirely on the concept of littoral maneuver and what this means for the future of Australian Army. *Australian Army Journal* 19, no. 2 (November 2023): vii–xvii. In line with focusing on the transformation of the Australian Army as a military force, geopolitical and strategic discussions are omitted from discussion here—topics such as forward basing into the region and other such important issues. For a brief background, see *National Defence Strategy*, 11–13; see also, for an interesting discussion on what the People's Republic of China (PRC) is doing in the Pacific, Cleo Paskal, "Island-Hopping with Chinese Characteristics—What the PRC Is Doing in the Pacific Islands, Why It Matters, and Why the Time Has Come to 'Block and Build'," *Naval War College Review* 76, no. 4 (Autumn 2023): 75–105.
- 8. For example, see the Australian Army Research Centre's recent publications: Abdul Rahman Yaacob, Gatra Priyandita, and Sylvia Laksmi, "Southeast Asia's Security Landscape: Lessons for the ADF," Australian Army Occasional Paper No. 17, Australian Army Centre, 2023; and Michael O'Keefe, "Australian Defence Force International Engagement and Re-engagement with Fiji," Australian Army Occasional Paper No. 18, Australian Army Research Centre, 2023.
- 9. The 1914 landings in New Guinea were under the umbrella of the Australian Naval and Military Expeditionary Force (AN&MEF), which was led by naval infantry, supported by the lesser trained Citizen Militia Force (CMF) Troops who had been hastily assembled and volunteered for overseas service: CMF soldiers were not allowed to serve

- overseas. For more details, see David Stevens, *In All Respects Ready. Australia's Navy in World War One* (South Melbourne, AU: Oxford University Press, 2014), 32–34, 53–67.
- 10. There are numerous works on these campaigns. For a more recent look, viewing these operations through a contemporary lens, the *Australian Army Journal* 19, no. 2 contains several articles: Dean on pp. 1–24, Crawley on pp. 62–88, Richardson on pp. 89–118, and Zimmerlie on pp. 178–237. For more comprehensive works, see Peter J. Dean, ed., *Australia* 1943: The Liberation of New Guinea (New York: Cambridge University Press, 2013); and Peter J. Dean, ed., *Australia* 1944–45: Victory in the Pacific (New York: Cambridge University Press, 2015).
- 11. On this, see Craig Stockings, *Born of Fire and Ash: Australian Operations in Response to the East Timor Crisis 1999–2000* (Sydney: University of New Wales Press, 2022); and William Westerman, "Entry by Air and Sea: The Littoral Challenges of Operation ASTUTE, 2006," *Australian Army Journal* 19, no. 2 (November 2023): 119–53.
- 12. Australian operations in Afghanistan and Iraq from 2001 to 2014 are the subject of a four-volume official history series (on which the author of this article worked) in conjunction with the two-volume series on operations in East Timor, 1999–2012. These volumes will be released in the next few years.
- 13. For instance, see Peter Leahy, "A Land Force for the Future: The Australian Army in the Early 21st Century," *Australian Army Journal* 1, no. 1 (2003); and Michael Evans, "The Third Way: Towards an Australian Maritime Strategy for the Twenty-first Century," Army Research Paper No. 1, Australian Army Research Centre, 2014.
- 14. Milan Vego, "On Littoral Warfare," Naval War College Review 68, no. 2 (2015).
- The author is grateful to Mr. Rohan Todd in the Australian Army's Force Design Division for this nice turn of phrase, expressed during an AARC-run wargaming session, 2–3 May 2024.
- Emphasis added. Australian Maritime Doctrine (Canberra: Royal Australian Navy, 2010), 198.
- Toshi Yoshihara, Chinese Lessons from the Pacific War: Implications for PLA Warfighting (Washington, DC: Center for Strategic and Budgetary Assessments, 2023), 39.
- 18. For an overview of the naval actions during the campaign, see Craig Symonds, *World War II at Sea: A Global History* (New York: Oxford University Press, 2018), 295–311, 337–47, 363–72.
- 19. Yoshihara, Chinese Lessons from the Pacific War, 44.
- This includes 75 M1A2 SEPv3 Abrams tanks, 29 M1150 Assault Breacher Vehicles (ABV), 17 M1074 Joint Assault Bridge (JAB) vehicles, 13 M88A2 Armored Recovery Vehicles (ARV), 211 Boxer 8x8 CRVs in five different variants, and 129 Redback IFVs. Integrated Investment Program, 54–55.
- 21. Integrated Investment Program, 53–55.
- 22. National Defence Strategy, 40.
- For a more detailed example, see Andrew Carr and Stephan Frühling, "Forward Presence for Deterrence: Implications for the Australian Army," Australian Army Occasional Paper No. 15, Army Research Centre, 2023.
- 24. Emphasis added. National Defence: Defence, 7.
- 25. Integrated Investment Program, 54. While industry partners have been announced, detailed specification of these craft have not been released. See Ben Felton, "Austal, Birdon Secure Australian Landing Craft Contract," Naval News, 23 November 2023.
- 26. Darwin to Guam via the Wetar Strait. These vast distances into the Indo-Pacific operating area are also why the RAN acquiring nuclear-powered submarines is such a significant acquisition. The speed and endurance of nuclear propulsion will see RAN submarines able to reach and stay in the area of operations far quicker and for far longer than is the case with conventionally powered submarines.
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- 28. For more on this, see John Nash, "Amphibious Audacity. Littoral Manoeuvre during the Sicily Campaign July–August 1943," *Australian Army Journal* 20, no. 1 (2024), 18–42, https://doi.org/10.61451/2675065.

- 29. Integrated Investment Program, 2024, 35.
- Australian Government, "Australia on Track for Missile Manufacturing and Increasing Long Range Strike Capability," press release, 16 January 2024.
- 31. Integrated Investment Program, 44.
- 32. Australian Government, "Army's First Live-Fire of Advanced Surface-to-Air Missile System," press release, 18 November 2023.
- 33. While it is specifically concerned with tracking SSBNs, the thrust of the article is that future technology means "that the oceans are, in most circumstances, at least likely and, from some perspectives, very likely to become transparent by the 2050s." Roger Bradbury et al., *Transparent Oceans?: The Coming SSBN Counter-Detection Task May Be Insuperable* (Canberra, AU: ANU National Security College, 2020).
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- 35. What in Soviet military theory was referred to as a *reconnaissance-strike complex*. Andrew F. Krepinevich, *Maritime Competition in a Mature Precision-Strike Regime* (Washington, DC: Center for Strategic and Budgetary Assessments, 2014), 12.
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- 37. The author is grateful for insights provided by the director of the Australian Army Research Centre, Col Anthony Duus, and to LtCol Leo Purdy at the Australian Defence Force Academy for this insight, again during an AARC wargaming session.
- LtGen Simon Stuart, "A Conversation with the AUKUS Army Chiefs on Land Power's Contribution to AUKUS Pillar 2," Center for Strategic and International Studies, 11 March 2024, YouTube video 1:02:53.
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- 40. Maritime Border Command is already an interagency organization, led by a RAN rear
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Reconnaissance-Strike Tactics, Defeat Mechanisms, and the Future of Amphibious Warfare

B. A. Friedman

Abstract: Professional discussions of tactics tend to revolve around debates over "strategies" of maneuver versus attrition, ongoing discussions of revolutions in military affairs, and proposals for new concepts of operation. What these discussions are really about though is tactics, specifically what kind of tactics are appropriate for the modern operating environment. Active-duty practitioners have little time to think deeply about tactics due to the intense demands of training to execute doctrine, which are codified tactics that have worked in the past but may not be sufficient to adapt to changing and uncertain situations in combat. Fortunately, with a little focus on tactics we can cut through the hype as all of these ideas have been circling around the identification of the modern tactical regime: reconnaissance-strike tactics. This article first reviews the current debate about maneuver versus attrition tactics and propose that, instead, the advent the reconnaissance-strike regime demands a more sophisticated examination of tactical principles applied against defeat mechanisms. Lastly, it examines implications for amphibious warfare and the Marine Corps generally. Keywords: tactics, maneuver, attrition, reconnaissance-strike tactics, amphibious warfare

rofessional discussions of tactics tend to revolve around debates over "strategies" of maneuver versus attrition, ongoing discussions of revolutions in military affairs, and proposals for new concepts of operation. The first two have been in vogue to varying degrees since the 1990s and their

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utility has degraded as there is no clear distinction between maneuver and attrition and there is little reason to doubt that a new regime has emerged and matured around precision-guided munitions. The latter has produced a cottage industry of allegedly new forms of warfare based on technology that may or not reach full operational capability and frequent descriptions of "game changers" that make extant tactics obsolete.

What is lost in discussions overly focused on technology is the fundamentals of tactics. Strategy can only ever achieve what tactics can deliver. The Russian armed forces went into the Russo-Ukrainian War with more sophisticated and updated doctrine, more advanced weaponry, a massive materiel advantage, and numerical superiority in terms of both personnel and platforms on land, in the air, and at sea. But the Ukrainians outmatched it all at every turn by outclassing the Russians tactically.

Active-duty practitioners have little time to think deeply about tactics due to the intense demands of training to execute doctrine, which are codified tactics that have worked in the past but may not be sufficient to adapt to changing and uncertain situations in combat. To understand how amphibious operations will evolve, one must first consider the tactical regime under which they will be executed. Fortunately, with a little focus on tactics one can cut through the hype as all of these ideas have been circling around the identification of the modern tactical regime: reconnaissance-strike tactics. This article will first review the current debate about maneuver versus attrition tactics and propose that, instead, the advent of the reconnaissance-strike regime demands a more sophisticated examination of tactical principles applied against defeat mechanisms. Then, it will lay out broad implications for amphibious warfare.

The False Choice: Attrition versus Maneuver

Most discussions of tactics will eventually come down to the debate between attrition warfare and maneuver warfare, such as that found in *Warfighting*, Marine Corps Doctrinal Publication 1.¹ This dichotomy, however, has led to a great deal of confusion, and theory is only useful if it enables clarity. The word maneuver implies that the concept describes the action of maneuver forces such as infantry and armor units, which was never the intent of John Boyd's conception nor of the application of it in *Warfighting*. Labeling the opposite of maneuver warfare "attrition warfare" also implied that maneuver warfare lacks attrition or is intended to defeat an opposing force without attrition, which was also never the intent. Additionally, it turned attrition into a dirty word.

Franz-Stefan Gady and Michael Kofman examined the ongoing Russo-Ukrainian War through the lenses of attrition and maneuver. However, the tactics they describe as attrition could just as well be described as maneuver. They describe Ukraine's actions like this: Broadly in line with the theory of manoeuvre warfare, the Ukrainian armed forces did seek to degrade the Russian forces' physical, mental and moral cohesion by targeting critical support systems such as command-and control nodes and supply depots. In practice, though, this was primarily accomplished by attrition and mass fires rather than by manoeuvre and precision strike. Ukrainian artillery has often operated on its own, and offensive manoeuvre has yielded mixed results against a prepared defence with a high density of forces. It is the combination of traditional fires and repeated ground assaults that set the stage for offensive Ukrainian operations.²

They stress that the intentional attrition of Russian forces facilitated later maneuver by the Ukrainian armed forces.³ So is that attrition or is it maneuver? The answer is that it is both. Using traditional fires and ground assaults to cause attrition and facilitate maneuver is perfectly in line with maneuver warfare principles and can also be considered attrition. Amos Fox has taken on the concept of maneuver more directly, arguing in the *RUSI Journal* that the technology of the reconnaissance-strike regime (described below) has rendered it "dead" because maneuver forces can be detected and targeted.⁴ But the "maneuver" in maneuver warfare does not exclusively mean the movement of forces in space but has a much broader definition. Fox also describes tactics such as flanking attacks and penetrations as "non-manoevre tactics," which does not match with other conceptions of what maneuver warfare means. What is maneuver and what is attrition are increasingly in the eye of the beholder, rendered useless by decades of misconceptions and misuses.

This is not the fault of these excellent analysts but rather the fault of the terms themselves; they are too loose and too intermingled to offer clear insights. They are not distinct enough concepts to support rigorous analysis. To be fair, there is a disclaimer in *Warfighting* that styles of warfare are a spectrum and that pure attrition and pure maneuver does not exist. While true, these two tactical theories of victory have only caused confusion. It is time to move beyond them, not just because of this confusion but because the technology and tactics of the twenty-first century open up more tactical theories of victory than these.

The Revolution in Military Affairs and Reconnaissance-Strike Tactics

The revolution in military affairs (RMA) was an idea, popular in the 1990s and early 2000s, that a major discontinuity in the character of warfare had occurred or was about to occur. This belief grew out of an examination of future trends overseen by the Office of Net Assessment (ONA) and written by Andrew Krepinevich, an effort begun in 1991. The report was later declassified and pub-

lished in 2002, just as the Global War on Terrorism pulled the Department of Defense into a focus on counterinsurgency.

Predictive analysis inevitably gets some things wrong, but the report got a lot of things right. One thing it predicted correctly was tactical trends. Few paid attention to this success though. ONA is interested in strategy by nature, and by framing the conclusions in such a way as to make them seem more strategic and revolutionary, the conclusions about where tactics were headed were obscured. The more revolutionary promises of the RMA, such as the end of "fog of war," never came to pass, but the more grounded tactical trends did. Some of the tactical conclusions presented in that paper that have since turned out to be true are:

- A greater reliance on rapidly acquiring, processing, and disseminating information, especially targeting data
- Proliferation of space-based and unmanned intelligence, surveillance, and reconnaissance (ISR) systems
- Increasing operational tempo
- The proliferation of precision-guided munitions with increasing range and lethality
- The "hider-finder" competition and the need for greater signature management
- Increasing growth and proliferation of non-kinetic capabilities such as electronic warfare and cyber warfare
- Simultaneous vice sequential operations
- A greater emphasis on firepower rather than the acquisition of territory⁵

Some other tactical conclusions, such as the increasing importance of non-line-of-sight weapons over line-of-sight weapons, are likely to be true as well. One major theme that the report emphasized and was subsequently ignored by the Department of Defense was that the potential of these tactical trends could only be exploited through organizational fusion: military units must be organized to exploit the potential of information-age technologies. Simply purchasing the technology would change little.

The Center for Strategic and Budgetary Assessments revisited the topic in 2010. This yielded another group of conclusions including increased vulnerability for both stealth and naval platforms, the growing importance of space and cyberspace, and the vulnerability of large-scale surface forces on land and sea to reconnaissance-strike complexes employing pervasive intelligence, surveillance, and reconnaissance platforms to provide the information requirements of precision-strike munitions. These conclusions have come to pass and just as it is time to move tactical theory beyond the simplistic maneuver versus attrition

dichotomy. It is also time to move beyond debates about the maturation and proliferation of an RMA and examine how it can be exploited.

A maturation of the debate over the RMA is necessary to move discussion past the technological aspects of it. As Krepinevich rightly noted in the above cited report, tactical regimes are not created by technology but rather new forms of military organization that exploit it. The transition from one tactical regime to another is never marked merely by the appearance of new weapons or new capabilities, but rather by the appearance of new ways of organizing forces to exploit new weapons or capabilities. Military history knows these organizations by name: the Greek phalanx, the Roman legion, the French *chevauchee*, the Napoleonic *corps de armee*, the German panzer corps, and the Marine Air-Ground Task Force. All of these units were newly organized to combine the arms of a specific tactical regime into a singular unit for a wide array of mission sets.

Tactical Regimes

A tactical regime is characterized by the arms available to military forces, the ways in which they are combined, and the interaction between those arms and the units that employ them. For centuries, combined arms revolved around the combination of light infantry, heavy infantry, light cavalry, and heavy cavalry. Which of these arms was dominant changed over time, but the tactical regime stayed the same. Siege weaponry was too poorly developed and too logistically cumbersome and thus became a thing unto itself. After the gunpowder revolution, however, more possibilities emerged.

Line of Battle Tactics

The development of gunpowder weapons caused combined arms to revolve around infantry, cavalry, and artillery. Line of battle tactics developed where infantry forces acted in formation as a base to support and be supported by cavalry and artillery. Characterized by the need to concentrate infantry with muskets and later rifles in massed formations to effectively employ them, making tactics a matter of choosing from among a few possible formations with associated advantages and disadvantages. Infantry was supplemented by cavalry, which was best employed as a maneuver force based in the line of battle that it could use as protection. Artillery, then only available as a direct-fire weapon system, was similarly vulnerable by itself, and therefore better used in concert with infantry. Light, dispersed infantry was best employed to support the line of battle.

Naval tactics also followed the line of battle logic during this tactical regime, except that the destructive power of ships was almost wholly concentrated in the cannons a ship was able to mount. The most famous method was "crossing the T," which consisted of maneuvering the line of battle to a position

perpendicular to the opponent's line of battle, enabling the massing of fires on one point while preventing the opponent from massing fires at all.

Armor-Infiltration Tactics

The technology of small arms continually developed until line of battle tactics froze in 1914, necessitating the emergence of new tactical regime to overcome them. The author has termed this *armor-infiltration tactics* in line with the development of storm or penetration tactics later in World War I.⁸

The advent of armor on both land and sea was one factor that ended line of battle tactics. Infantry, highly vulnerable to armor, indirect-fire artillery, close air support, and machine guns, was best used to exploit the actions of armor forces, which could more easily contend with those threats. Line of battle tactics only remained relevant in the defense where fortifications could be used as protection. In the offense, infantry forces developed infantry infiltration tactics to mitigate the effects of machine guns and indirect fire artillery. Aircraft largely took over the functions of cavalry: reconnaissance, screening, and striking targets of opportunity.

Armored battleships dominated the sea during this regime, although the aircraft augmented them in much the same way that cavalry augmented the line of battle and aircraft augmented armored forces: through reconnaissance, screening, and, where possible, striking. Crossing the T, successfully used by the Imperial Japanese Navy to destroy the Russian Black Sea Fleet at the Battle of Tsushima in 1905, remained relevant into this regime until the striking power of battleships was replaced by aircraft and the torpedo. Once that occurred, naval tactics became more about positioning aircraft carriers to more efficiently pursue aerial tactics.

Once air-to-air tactics became possible, tactics in the air resembled infiltration tactics: bombers attempted to get through air defenses either by themselves or escorted by air-to-air fighters performing the exact same reconnaissance and screening tasks that cavalry used to perform. The ideas of early airpower theorists such as Guilio Douhet almost entirely revolved on this infiltration dynamic between bombers, their escorts, and air defense.

Reconnaissance-Strike Tactics

The new regime is reconnaissance-strike tactics (RST). This regime developed first at sea; naval aviation replaced the naval gun but was quickly augmented by precision-guided missiles. Although naval warfare became rare, ships that sank due to enemy action in the late twentieth and early twenty-first century did so because they were struck by missiles, not gunfire or bombs. Air warfare also came to be dominated by the missile, whether air-to-air, air-to-surface, or surface-to-air defense systems. The People's Liberation Army's antiaccess/

area-denial (A2/AD) system, for example, is nothing more than the fusion of numerous missile-based platforms with intelligence, surveillance, and reconnaissance (ISR) platforms to supply them with the necessary information. It is this fusion of ISR with digital networks to feed information to precision-guided lethal and nonlethal platforms such as electronic warfare and cyber systems that characterize the reconnaissance-strike regime and warfare for the foreseeable future.

This emergent practice is sometimes referred to as the precision-strike regime, but reconnaissance-strike better captures the dynamics. Precision-strike weapons platforms are fueling these new tactics, but the ability of these weapons to strike precisely is entirely dependent on the reconnaissance and counter-reconnaissance capabilities of the combatants. A precise weapon is useless without the information and processed intelligence that enables them. A focus on the lethality of weapon systems ignores the necessary ISR infrastructure that enables their employment.⁹

None of this is to say that any staple of one tactical regime does not remain relevant and present in future regimes: even massed rifle fire could still be lethally effective in certain circumstances today. These tactical regimes merely describe the primary tactics that military and naval forces sought to exploit on the battlefield. However, just because some of the tactics of one regime remain in the next does not mean a military force wedded only to those tactics can survive: an opponent exploiting the latest regime will easily outmatch a force wedded solely to the old. In 1939, France had a large professional army still built around line of battle tactics, but it was destroyed by the Wehrmacht using armor-infiltration tactics. In 1991, the armor-infiltration equipped Iraqi Army was largely dismantled by U.S. Navy and Air Force aerial reconnaissance-strike tactics before anything else happened. The ongoing Russo-Ukrainian War is another example. The Ukrainian Army is exploiting reconnaissance-strike tactics to maul a Russian Army that might have conceptualized newer doctrine, but clearly remained unable to execute it.

There is thus no strict line in terms of when a tactical regime is created. For example, U.S. Army lieutenant general George S. Patton created not one but two nondoctrinal staff organs to manage information in the Third Army in 1944. While they coordinated with the G-2, they were not part of it, therefore serving as an information warfighting function alongside the intelligence warfighting function to drive the Third Army's tactics. Military innovation is never a straight line progressing from established practice to new ideas, but a process that ebbs and flows and even regresses as warfare changes. Moreover, Carl von Clausewitz tells us that every war will have its own character because political, geographic, technological, social, cultural, and a myriad other factors—although primarily politics—will determine the best mix of tactics for a

given conflict, writing that "each period has its own peculiar forms of war, its own restrictive conditions, its own prejudices." Occasionally, however, innovations and new technology emerge and trigger widescale changes in practice, producing discontinuities between traditional and innovative methods.

All these tactical regimes are forms of combined arms: ways that militaries combine and coordinate different tactics made possible by the technology of the time. New innovations do not sweep away legacy tactics, instead they are additive. There are no true revolutions in military affairs in the sense of the word that means a complete replacement of an existing system. Emergent forms of combined arms evolve as an extension of the previous system rather than replacement of it.

The Modern System

One such emergent phenomenon is the modern system. The armor-infiltration regime and the reconnaissance-strike regime comprise what Stephen Biddle calls the modern system. The modern system is defined by the key offensive elements of "cover, concealment, dispersion, small-unit independent maneuver, suppression, and combined arms integration." In terms of defense, the modern system privileges "the same exposure-reduction tactics of cover, concealment, dispersion, suppression, combined arms, and independent small unit maneuver that modern system attackers require, albeit adapted to the particular problems of the defense." Biddle's analysis confirms many of the tactical predictions made by the RMA advocates who examined the potential of the reconnaissance-strike regime.

Moreover, this system applies equally to conventional and irregular forces—another distinction that is increasingly meaningless—as the technologies that enable the modern system to proliferate to every strategic actor. The modern system will drive actors toward what Biddle calls "midspectrum warfare": a style of warfare midway between Napoleonic style strategies of annihilation and their opposite—strategies of exhaustion. Midspectrum warfare emphasizes mobility, concealment, dispersion, and depth to mitigate the effects of the reconnaissance-strike regime and is highly dependent on the "complex interaction among mutually dependent specialists." These are simply two different terms for the same emergent phenomenon, which will create identical demands for both "conventional" and "irregular" combatants. Given the parity in technology and weaponry, advantage will increasingly come from people instead. Military forces must be able to effectively train the personnel and staffs that can execute more effective concepts of operation that exploit the modern system better than their opponents, or they will fail.

The armor-infiltration regime and the reconnaissance-strike regime should be treated together, as the latter has not yet made the former obsolete. Yet, they have made analytical distinctions between both maneuver and attrition and between conventional and irregular largely moot. This is a fact aptly captured by Biddle's modern system and midspectrum warfare. The use of reconnaissance-strike systems by both sides in the Russo-Ukrainian War has not invalidated the need for armored maneuver and unguided artillery, the latter of which has caused around 80 percent of the casualties in the conflict by some reports. Nor has either side strictly employed maneuver or attrition tactics nor conventional and unconventional tactics. The emergent reconnaissance-strike regime therefore is additive and has not swept away all the components of previous regimes even as it has swept away meaningful distinctions between legacy terms.

That validation also allows the tactical regime identified by Krepinevich 38 years ago to be defined with greater precision. Reconnaissance-strike tactics are defined as the use of advanced intelligence, reconnaissance, and surveillance assets fused with precision-strike munitions and information-related capabilities to identify and create opportunities for maneuver forces. Intelligence, reconnaissance, and surveillance complexes "pull" lethal and nonlethal fires, the effects of which are subsequently exploited by maneuver forces. This is similar to the concentration of artillery and maneuver forces at one or few points for armor-infiltration tactics, but because of the potency of modern munitions, must be performed without that concentration in space. The proliferation of the necessary platforms and their pervasive use by state and nonstate actors demands that all forces adopt the cover, concealment, dispersion, suppression, combined arms, and independent small unit maneuver methods identified by Biddle and also achieve concentration in time.

Referring to this regime as precision-strike fails to convey the importance of the information processing function that drives this regime as it focuses solely on the characteristics of munitions. Precision munitions are useless without the information necessary to target them. The critical component of reconnaissance-strike combined arms is the digital architecture, unit organizations, and staff processes that facilitate the rapid acquisition, analysis, dissemination, and exploitation of accurate information between ISR platforms, precision strike platforms, and information-related capabilities like electronic and cyber warfare. To perform these tactics well, military forces must master the planning, preparation, synchronization, and sustainment of those tactics through operational art. The core of this regime is not the physical parameters of weapon systems, but the nonphysical processing of information through platforms, networks, and staffs of the combatants.

Combined arms in the reconnaissance-strike regime will thus be less dependent on the individual characteristics of platforms. A platform-centric force with superior technology in terms of munitions, range, and rate of fire may well be handily defeated by a more network-centric force with inferior platforms that are fused together in such a way to facilitate the rapid acquisition, analysis, dissemination, and exploitation of information better than the opponent. The U.S. military flirted with choosing a more network-centric doctrine in the early twenty-first century. That shift is no longer a choice but an imperative.

This is playing out in Ukraine as this article is written. The Russian Army, well-equipped and numerically superior but wedded to traditional hierarchical command and control networks and armor-infiltration doctrine is being mauled by a much smaller Ukrainian Army that is not. The right mix of reconnaissance-strike tactics and operational art trumped the technological and numerical superiority of the Russian armed forces. At least initially, Ukraine is benefiting from the donations of superior Western platforms. Notably, when Ukraine attempted a more traditional armor-infiltration style offensive in the summer of 2023, it was not as successful as its earlier reconnaissance-strike style tactics, although many other factors contributed.¹⁷

Combined arms will change under the reconnaissance-strike regime as well. While the traditional combination of maneuver, fires, and armor will remain, the relationship between them will change, as noted above. Additionally, more arms will join the fray. The legacy lethal platforms will be augmented by non-lethal information-related capabilities like electronic and cyber warfare, which will provide battlefield effects in addition to information and reconnaissance functions.

Forms of Reconnaissance-Strike Tactics

Despite their eventual failure in Ukraine, it was the Russians that first conceptualized this regime. Their conception gives the idea its name and led to the analysis performed by the Office of Net Assessment cited above. The Russians developed reconnaissance-strike and reconnaissance-fires complexes. The reconnaissance-strike complexes integrate and employ long-range, high-precision fires, and the reconnaissance-fires complex integrate and guide surface-to-surface artillery fires from Russian artillery units. In Russian terminology, a complex is akin to a task force of different platforms, units, and personnel designed around a certain function. In this case, fires. They combine various sensors and observation platforms—the reconnaissance part—networked together that directly feed data to fires platforms (the strike part).

In 2008, Russia began reforming its military to take advantage of these concepts. These reforms included streamlining command hierarchies, employing fewer but better trained units, and increasing the professionalization of Russian servicemembers.¹⁹ In terms of maneuver forces, the Russian Army reformed around the battalion tactical group with more fires and armor than previous structures.²⁰ These concepts and the updated force design initially performed well in Syria and the initial invasion of Ukraine in 2014, but since the larg-

er-scale invasion of Ukraine in 2022, they have largely collapsed as the Russian military could not employ or sustain them at scale. While they may have gotten the initial form and reorganization correct, the Russian armed forces lack the human capital—especially in the form of highly trained and empowered non-commissioned and company grade officers—necessary to execute such complex tactics well.

The People's Liberation Army and Reconnaissance-Strike Tactics

The PLA's concept for how it will organize itself to fight as an informatized force is systems confrontation warfare, sometimes called system-of-systems warfare. The central tenet of this concept is that warfare is "no longer a contest of annihilation/attrition between opposing military forces, but rather a clash between opposing operational systems . . . an enemy can be defeated if its operational system can be rendered ineffective or outright unable to function through the destruction or degradation of key capabilities, weapons, or units that compose the system."²¹ Much like maneuver warfare, the PLA will not seek to just destroy the opposing force but instead will target capabilities that tie that force together and enable it to operate as a cooperative system (hence systems confrontation warfare). For this to work, the PLA believes it has to achieve information "superiority" or "dominance" so it can ascertain how an opposing force is arrayed and which key components can be attacked to disassemble or disaggregate it. Once a system is so disordered, the now individual noncooperative components can be attacked and overwhelmed at will. Hence, information warfare is central to the PLA's entire operating concept, and its main effort for its own force design efforts.

The PLA has designed joint staffs around this concept. Rather than organizing them by service component or by the traditional functions of S-1, S-2, S-3, etc., the PLA has broken all those stovepipes and organized high-level staffs around reconnaissance-strike tactics. The five "component systems" of these staffs are: 1) the reconnaissance-intelligence system that collects information, prevents the adversary from collecting information, and provides situational awareness to the entire force; 2) the information confrontation system that employs electronic and cyber capabilities to both collect on and disrupt the adversary's systems; 3) the command systems, which provides command and control and decision assistance to PLA commanders; 4) the firepower strike system, which is the units that act based on intelligence gained by the other components including long-range precision fires but also maneuver forces from across the PLA services and domains; and 5) the support system, which provides enabling functions like logistics, sustainment, medical support, and maintenance to the whole. This "operational system" will reside at the equivalent of Joint task force level but is clearly organized around winning the information warfare fight and

executing reconnaissance-strike tactics. Lastly, these component systems may be task organized. Once stood up, a headquarters may have only some of these component systems in combination depending on the task.

Of note, these component systems roughly correspond to the four steps of the OODA loop—observe, orient, decide, and act—with the exception of the support system. The reconnaissance-intelligence system observes information, the information confrontation system orients that information within the system (and tries to disorient the adversary system), the command system decides, and the firepower-strike system acts. It is far too early to say whether this cybernetic way of organizing for reconnaissance-strike tactics is effective or not given that it has not been tested in combat, but it is clearly an attempt to achieve a new network-centric organizational construct adapted to the modern system.

While systems confrontation warfare describes how the PLA intends to organize their high-level staffs for modern warfare, systems destruction warfare lays out how the PLA intends to attack another modern force. Systems destruction warfare "seeks to paralyze the function of the enemy's operational system." ²² It is intended to create the same kind of operational paralysis as described in Warfighting by disaggregating the enemy's ability to work as a cooperative system-of-systems. It does so by targeting four prioritized types of targets through both kinetic and nonkinetic means. The highest priority targets are those that will disrupt the ability of the adversary to transmit information. These include anything from communications to sensors to servers and command and control nodes. If successful, the adversary is "information isolated." ²³ The second priority is "essential elements." An essential element will most likely be defined by the type of enemy the PLA is facing. The essential element of an artillery unit is its cannons, for example, so those targets would be struck next. The third set of targets is "operational architecture." 25 This term is also unclear, but it might be referring to the logistics and mobility infrastructure required to move and support forces around the battlespace such as heavy vehicles, airfields, connectors, and ports. Lastly, PLA writings refer to attacking the adversary's "reconnaissance-control-attack-evaluation" process. 26 This could mean attacking any remaining C4ISR capability or directly attacking the opponent's OODA loop, or even the destruction of headquarters staffs.

In this way, the PLA intends to employ reconnaissance-strike tactics against a prioritized set of targets to render an opponent deaf, blind, mute, and paralyzed. It is about attacking vulnerabilities, which creates opportunities that enable the attack of more vulnerabilities. Both systems confrontation warfare and systems destruction warfare are built around the core idea that warfare in the information age will be information-centric, making information processing both a strength and a potential vulnerability. Systems confrontation warfare exploits that fact by organizing PLA forces to foster fast, accurate, and reliable

information acquisition, analysis, and dissemination while systems destruction warfare turns the necessity for information into a vulnerability for the enemy by directly attacking their ability to use it. While U.S. forces tend to have separate processes for ISR, targeting, and fires run by separate cells in separate staff sections, which are—in theory—fused later, the PLA designed a fused process for reconnaissance-strike tactics and then built an integrated staff around it.

These concepts can also shed light on the PLA's A2/AD system. In reality, the system is nothing more than a coastal defense system capable of reconnaissance-strike tactics. The PLA repurposed older coastal defense concepts, married them to reconnaissance-strike tactics, and applied it to their maritime operating area.

A closely connected concept for PLA recon-strike tactics is integrated network and electronic warfare (INEW). This concept fuses cyber and electronic warfare capabilities to identify and target enemy forces. The PLA's strategic support force (SSF) centralized these two capabilities and is meant to provide that information to PLA operational forces, although since this article was written the PLA has reorganized again and disbanded the SSF, splitting it into an aerospace force, a cyberwarfare force, and an information support force.

Moreover, the PLA's doctrine is a combination of principles from both maneuver warfare and attrition warfare. It can be summarized as a maneuver warfare like focus on asymmetries and critical vulnerabilities married to an attrition warfare style centralized command and control philosophy. It is further evidence that these terms have largely become meaningless.

These concepts reflect a PLA-wide focus on reconnaissance-strike tactics, recently termed multidomain precision warfare, for roughly the last 15 years.²⁷ The PLA is thus significantly ahead of the United States when it comes to conceptualizing, integrating, and institutionalizing reconnaissance-strike tactics. The PLA's A2/AD system is already operational and threatens the ability of U.S. forces as currently designed to project force in the Western Pacific. This is not to say the United States cannot catch up. Each of the Services is tackling the problem in its own way.

U.S. Army multidomain task forces (MDTF) most closely resemble a Soviet reconnaissance-strike/fires complex. Like the Russian version, the MDTF marries an artillery brigade to electronic and cyber warfare platforms for sensing and targeting. However, it is unclear which if any U.S. partners would be willing to host such a large organization or if they can be sustained in a contested environment.²⁸ The intended platforms that the MDTF will employ are also significantly outranged by PLA rocket force assets that, in a conflict, will have far less of a logistics burden as they will be operating from their home bases.²⁹

The components of combined Joint all-domain command and control

(CJADC2) may in effect produce the necessary network connectivity to enable RST across the Joint force. The Navy's component, Project Overmatch, promises a networked battle capable of the fusion of capabilities through rapid information acquisition, analysis, dissemination, and exploitation necessary to execute RST.³⁰ However, the Navy will need to organize task forces far more around the missile than the carrier air wing to provide precision strike at relevant ranges.³¹ The Air Force's Advanced Battle Management System and the Army's Project Convergence seek to achieve similar sensor-to-shooter fusion. Additionally, the Air Force concept agile combat employment (ACE) may enhance the Air Force's ability to complicate adversary force efforts to target its airframes and infrastructure, slowing down adversary RST while simultaneously retaining the ability to prosecute them. Bombers, especially the new Northrop Grumman B-21 Raider, and Navy ships equipped with vertical launching systems (VLS), will be a primary kinetic component of the joint force's total reconnaissance-strike complex.

These efforts are mostly in the conceptual or experimental phase and so far do not add up to true integration or institutionalization of recon-strike tactics. Efforts will be held back by the conceptualization of these tactics as "kill chains" and "kill webs." These concepts are inherently platform-centric, they are focused on depicting the systems and platforms necessary to detect, track, prosecute, and evaluate a singular target. Kill chains are stripped of the all-important context in the form of doctrine, organizations, and the humans that must actually perform all the steps of the chain in combat. They are highly reductionist attempts to impose linearity on the inherently nonlinear phenomenon of warfare. In essence, kill chains fail to depict the reality of U.S. forces as a complex adaptive social system facing an opposing complex adaptive social system, not just a wire diagram of connected technology. The PLA's conceptualization and integration of reconnaissance-strike tactics through its system-of-systems doctrine, which organizes high-level PLA staffs around the information requirements of modern tactics, is therefore more sophisticated and is driving all their modernization efforts.

While the efforts of advanced militaries to create forces capable of RST get the most attention, nonstate actors are also capable of employing them. Unlike armor-infiltration tactics, which required a large and modern economy to support them, the proliferation of precision-guided munitions and digital communication devices around the world, the necessary hardware for RST, is widely available. If married with effective "software" in the form of tactical employment, a nonstate actor can compete at least at a limited scale with a more advanced state actor. Hezbollah in Lebanon and the Houthis in Yemen at least have the necessary capabilities to prosecute a form of RST. Hezbollah stymied the Israeli military in Lebanon in 2006 with distributed teams employing

precision-guided munitions and the Houthis have attempted to strike U.S. Navy ships offshore but were unable to penetrate the ship's defenses.

Despite this effort at conceptualization, it is not clear that any military force has reached true doctrinal and organizational institutionalization. Each can perform RST in limited scale or in certain favorable situations, but as of yet they dominate no specific force. Instead, military forces remain in conceptual and experimental phases. Practice in actual combat remains limited enough to prevent a full revolutionary transition. A survey of recent conflicts indicates that military forces are beginning to execute reconnaissance-strike tactics, but are not sure how best to exploit them at scale.

Perhaps the most creative application of reconnaissance-strike tactics thus far was the Taliban's lightning campaign to seize Afghanistan in the spring of 2021 as U.S. forces withdrew. Lacking the technological components of the reconnaissance-strike regime, the Taliban instead focused on a yearslong influence operations campaign to turn Afghan Army commanders and leadership. This provided the reconnaissance component by evaluating which Afghan units would resist and which would not. This also included the "strike" component by turning those commanders that were willing to defect or adopt nonresistance. This enabled the Taliban to focus "maneuver" forces on units that might or would resist. The campaign was an example of focusing reconnaissance-strike tactics on the decapitation defeat mechanism, further discussed below.³²

The Nagorno-Karabakh War demonstrated the potency of reconnais-sance-strike tactics in the defense through the application of unmanned aerial vehicles and long-range fires against the destruction defeat mechanism. Both Azeri and Armenian forces attempted repeated concentrations and offensives, most of which were ineffective. The Armenians lacked unmanned aerial vehicles and their air defense was extremely poor, enabling the Azeri to wreak havoc with long-range fires. However, at the Battle of Shusha, an outnumbered force of most light infantry Azeri troops was able to defeat a numerically superior Armenian force employing armored vehicles with antitank weapons and long-range fires spotted by unmanned aerial vehicles.³³

Lastly, Russia tested its reconnaissance-fires complex in Syria but, when Russian forces attempted to employ it in Ukraine at large scale, they failed to make the system work against a determined and well-equipped enemy. As of the time of this writing, Russian forces capable of the concept are largely gone and the battalion tactical groups no longer exist.³⁴

In sum, the technology that drives reconnaissance-strike tactics is fully proliferated and increasingly democratized and thus available to any actor. However, there has yet to emerge proven models for how to employ them at scale and how they can provide a reliable defeat mechanism.

Reconnaissance-Strike Tactics and Defeat Mechanisms

In an article for *Parameters*, Dr. Frank Hoffman tried to cut through the noise of constant debates over maneuver and attrition by refocusing the debate on defeat mechanisms. Hoffman laid out four defeat mechanisms. These defeat mechanisms are dislocation, destruction, disorientation, and degradation.³⁵ This conception is superior to the simplistic maneuver versus attrition construct and provides the tactician with a conceptual goal toward which to apply tactical tenets such as mass, maneuver, and firepower.

In the context of the reconnaissance-strike regime, the defeat mechanism provides a way to prioritize targets for reconnaissance-strike tactics depending on the effect the commander seeks to achieve. To seek dislocation, for example, RST can be applied to fix and immobilize enemy forces to render them vulnerable to positional maneuver, achieving dislocation. One side may use RST to target adversary command and control nodes with precision fires while employing electronic warfare to disrupt maneuver unit communications to prevent them from immediately reforming connections, achieving degradation. To these four, however, we must add two more.

Degeneration is a defeat mechanism that can be achieved by targeting the opponent's logistics and sustainment capabilities. The reconnaissance-strike regime has magnified the ability of actors who employ such platforms to contest the lines of communication of an opposing force and to target supply and ammunition magazines that were once easily kept out of the fray. The Ukrainian armed forces have employed this schema to great effect, targeting the supplies and lines of communication of an already shaky and overstretched Russian logistics pipeline.³⁶

Decapitation, which a number of authors have written about before, can be achieved by targeting the opponent's leadership. Some adversary forces may heavily depend on high-level and/or centralized leadership to operate. Ukraine has also employed this defeat mechanism, taking advantage of the poor company-grade officer and noncommissioned officer leadership of the Russian military by targeting high level command posts for destruction.

These defeat mechanisms are tactical theories of victory, just like attrition warfare and maneuver warfare are two different tactical theories of victory. However, reconnaissance-strike tactics enable more targeted and tailored theories of victory than just maneuver or attrition. Tacticians and staffs should instead evaluate an enemy force against which defeat mechanisms are the most appropriate for them. Multiple defeat mechanisms can be employed at a time but conceptualizing them in this way will assist commanders in weighing and supporting certain defeat mechanisms over others, depending on the threat.

Applied effect Defeat mechanism Fix and degrade Dislocation adversary forces to Reconnaissance-strike tactics achieve positional Destruction Reduce or eliminate Reconnaissance-strike tactics the number of adversary forces Deceived or Disorientation misunderstood Reconnaissance-strike tactics situational awareness Degradation Reduced or degraded command and control Reconnaissance-strike tactics and cognitive understanding Degeneration Reduced logistics capability and supply Reconnaissance-strike tactics capacity Decapitation Elimination Reconnaissance-strike tactics leadership

Figure 1. Defeat mechanisms and how reconnaissance-strike tactics can be employed to achieve them

Source: courtesy of author, adapted by MCUP.

Exploitation

Yet, calling these concepts tactical theories of victory or defeat mechanisms is a bit of a misnomer; nothing can guarantee victory or defeat, nor will their application always produce these effects. Rather, what they will produce is an opportunity for exploitation. Almost any opposing military force, rocked by an effective attack, will recover if given the time and space to do so. Clausewitz stressed that an engagement, as a means to an end, must be followed up by a pursuit—or exploitation—to achieve a decisive effect.³⁷ As ever, the key to a victory is the exploitation actions that will prevent the time and space necessary for an adversary to recover from the engagement.

The effects achieved by the defeat mechanisms are all ephemeral: most warfighting organizations will be able to adapt to them, some in short order. Therefore, an opponent can only be truly defeated if the effects achieved by reconnaissance-strike tactics employed against defeat mechanisms are exploited. This exploitation will take on different forms according to domain.

Land forces are suited to dislocation, destruction, and disorientation. Once one or more of these effects are achieved and the opposing ground forces are unable to act in concert, maneuver forces can then exploit that disability through more traditional attacks against vulnerable weak points, flanks, gaps, degraded, or retreating opposing forces. This is an inversion of the previous tactical regime where planning focused on projected decision points for maneuver forces, which were in turn supported by fires. Under the reconnaissance-strike regime, reconnaissance-strike tactics will be focused on acquiring targets for long-range

precision fires platforms. Maneuver forces will then advance based on the effects of those fires. In some cases, "pushing" exploitation forces against preplanned axes of advance may give way to battle damage assessments that "pull" maneuver forces against points made weak by the effects of reconnaissance-strike tactics. The Ukrainian armed forces are already adapting to these changes in just this way, attacking Russian defensive lines on multiple axes to threaten lines of communication via long-range precision fires, a clear example of maneuver supporting fires.³⁸

Naval forces are suited to act in much the same way, although the means of reconnaissance-strike tactics will be greater since subsurface forces can ably perform this mission. Naval reconnaissance-strike tactics will also focus on dislocation, destruction, and degradation to reduce and degrade both opposing surface and subsurface forces as well as shore-based antiacces/area-denial systems covering key maritime terrain such as lines of communication, ports, straits, etc. This is aptly described by the late Captain Wayne Hughes as achieving the ability to "attack effectively first." Once sea control is achieved, naval forces will have additional defeat mechanisms available such as degradation of the opponent's society through commercial blockades, although degradation of the opponent's naval logistics through blockades or other means is always a possibility for naval forces.

Air forces will have the most options for exploitation. Air forces will use reconnaissance-strike tactics for disorientation and degradation of air defense and air-to-air platforms to achieve localized and temporary air superiority. Once that is achieved, air forces are extremely suited to enable and perform reconnaissance-strike on behalf of naval and land forces, contributing to even more defeat mechanisms or enabling follow on exploitation. Lastly, the air superiority achieved can further be exploited through destruction of not just enemy forces but infrastructure and industrial networks to achieve degradation at a wide scale. Air forces can also exploit their inherent range and precision to pursue decapitation mechanisms against opposing forces and opposing political leadership.

Space forces are relatively nascent but may someday involve space-to-space reconnaissance-strike tactics with an aim toward space control. For now, space forces are perhaps the most potent enabler of reconnaissance-strike tactics conducted by air, naval, and land forces. Surveillance satellites are one of the prime innovations that are driving the transition from armor-infiltration to reconnaissance-strike tactics as they are so critical to driving the acquisition of targets and the guidance of precision-guided munitions.

Airborne and amphibious forces, as inherently cross-domain forces with limited capacity for sustainment, will have more limited capacity for RST at scale but will be uniquely suited to conduct reconnaissance-strike tactics to

enable other forces and exploit the effects of other forces. The Marine Corps is already leaning into this development through the reconnaissance-counter reconnaissance mission of stand-in forces. Given the ability of peer components to exploit reconnaissance-strike tactics themselves to achieve degradation against follow-on forces and their logistics, the ability of airborne and amphibious forces to rapidly project force across domains will make them extremely valuable, especially when employed to exploit defeat mechanisms achieved by air and naval forces.

While cyber and electromagnetic warfare are usually broken out in their own domains, the fact is that all the forces above will have to use both cyber and electronic warfare to acquire the information necessary for reconnaissance-strike tactics, deny it to the opponent, and employ them as strike mechanisms. Breaking them out into their own discrete domains will prevent this necessary integration across all forces.

Of course, these are just generalities. Different opponents will have different strengths and weaknesses and therefore will present different threats and opportunities for reconnaissance-strike forces applied against defeat mechanisms.

The key to implementing RST is not buying better or more platforms. It is not even conceptualizing how the required systems can be used in the future. The key is organizing military forces to efficiently and effectively integrate them into a combined arms concept. The important part of any combined-arms system is not the arms part but the combined part and combination comes through effective organization.

Staffs at every echelon will likely need to be organized around the targeting process as their primary function, instead of treating it as a bolt-on or ad hoc board as they do now. The fusion of intelligence, surveillance, and reconnaissance data, information-processing, and kinetic and nonkinetic strike systems is too complex, dynamic, and important to continue treating as an afterthought. The U.S. military will have to organize units that marry intelligence, surveillance, and reconnaissance platforms, long-range precision fires and effects, and the authority to employ them in one unit. They must be organic, not distant enablers or even attachments. These methods of employing low density capabilities were sufficient for the armor-infiltration regime but will not remain so for the reconnaissance-strike regime.

Implications for Amphibious Warfare: The Next Force Design

The advent of the reconnaissance-strike regime creates a number of vulnerabilities for amphibious forces. First, the sea and air control necessary to execute large-scale amphibious assaults from offshore will be disrupted at best and completely negated at worst. Amphibious forces will have to operate further

offshore and move faster than ever before, necessitating a focus on amphibious raids rather than assaults. 40 Second, once amphibious forces are engaged in an amphibious operation, the necessary naval assets will likely not be able to stay in place and support them during execution, unless amphibious raids can first disrupt adversary control of the shore and the seaward space first. Third, the traditional amphibious assault method of massing amphibious forces at a single point and then expanding outward will be extremely risky, necessitating smaller-scale and more distributed operations first to enable a window of opportunity for one to occur.

Fortunately, the Marine Corps has already addressed many of the vulnerabilities created by the advent of the reconnaissance-strike regime through *Force Design 2030*. First, amphibious warships are more vulnerable to precision fires than they have ever been, necessitating the diversification of amphibious platforms, namely the landing ship medium acquisition. Second, shedding the logistics intensive M1A1 Abrams tanks and converting some cannon artillery units to rocket artillery reduces the Marine Corps dependencies on theater sustainment, which will be impossible in the early stages of a Pacific war. The M1A1 has also become vulnerable to the exact types of RST weapons that have proliferated around the world. Third, a renewed focus on distributed operations in doctrine and through the expeditionary advanced base operations and standin forces concepts will mitigate the vulnerabilities of traditional approaches to amphibious warfare. Fourth, it enhanced its ability to assist the Navy by acquiring systems and munitions that can contribute to sea control in a variety of theaters.

These efforts were all well-founded, based on years of analysis and development, and vital for the Marine Corps to remain capable of meeting its responsibilities to the Navy and the rest of the Joint Force. While mitigating the vulnerabilities of the reconnaissance-strike regime was necessary, the Marine Corps must now turn to exploiting the potential of the reconnaissance-strike regime during the late 2030s and 2040s time frame.

The top priority of that effort is already being addressed: the Marine Corps is pursuing strike technologies to enhance the firepower of Marine infantry. However, this does not just mean getting newer weapons into the hands of Marines. It means a bottom-up driven effort to experiment with such weapons and equipment like drones and then feed the resulting tactical insights into doctrine. This should be fast-tracked by creating a temporary office tasked with interviewing Marines as they experiment with new weapons and then providing the resulting analysis directly to Marine Corps Combat Development Command for implementation in doctrine.

The Marine Corps should resist any temptation to get sidetracked into an effort to standardize a new infantry squad, platoon, company, or battalion.

As Marine veteran H. John Poole pointed out in his recent book *Advanced Tactics in America*, standardization of infantry combat units and drills disables the creativity and innovation necessary to develop tactics as new problem sets emerge. ⁴¹ Marine Corps infantry units should be task-organized depending on their assigned mission, area of responsibility, and role within the MAGTF, allowing their commanders to design and equip to task rather than to a standard institutional model.

The exploitation of robotics should be another high priority. The Marine Corps should pursue an "augment the Marine, don't replace the Marine" philosophy when it comes to the exploitation of robotics, but it must do so to the greatest extent possible at the greatest speed possible. Peer adversaries and friendly partners like Ukraine are already outpacing the Marine Corps in terms of exploiting robotics. The Marine Corps should partner with the Navy to develop the platforms and tactics to turn amphibious warships—when not embarking Marines—into robotic systems motherships.

Third, in the 2040s the Marine Corps must invest in a long-range, fast-attack landing vessel like the Swedish Navy's Stridsbat 90 HS that depends on speed and range for protection. The M variant of this vessel would allow 20 Marines to be landed on an opposing shore. A vessel of this type is necessary to increase the Marine Corps' ability to execute amphibious raids to destroy and disrupt shore-based anti-ship missiles and sensors, clearing the way for follow-on forces in medium landing ships or launching from amphibious warships.

Fourth, the Marine Corps must develop the MAGTF information group into a full-fledged information combat element. Information is the lifeblood of precision-strike weapons and reconnaissance-strike tactics. Without accurate data, none of it works. Therefore, it is incumbent on the Marine Corps to develop an information combat element tasked with attacking adversary command and control and kill chains while feeding and protecting those of the MAGTF itself. As the reconnaissance portion of the reconnaissance-strike regime becomes as much about signals, electronic, and cyber as physical reconnaissance, the MAGTF needs a subordinate element tasked with and empowered to fight the reconnaissance-counterreconnaissance fight. This would enhance the Marine Corps' ability to employ the degradation defeat mechanism, among others.

Last, the strongest asymmetric advantage the United States has against any adversary is its ability to form and sustain coalitions. For the Marine Corps, this means more security cooperation than ever before and, as a stand-in force, it means combined irregular warfare. The Marine Corps used to be the leader among U.S. Service branches when it comes to combined irregular warfare. From the Banana Wars to the combined action platoons of Vietnam, the Marine Corps has a long history in executing this mission and executing this mis-

sion well. But, it has largely abandoned that tradition except for the air-naval gunfire liaison company community. The Marine Corps can recapture this tradition by codifying the experience of military transition teams in Iraq and Afghanistan and writing a new *Small Wars Manual*, built on lessons old and new. A new *Small Wars Manual* would serve as the guide for Marines participating in combined irregular warfare, whether forward as a stand-in force and elsewhere in training or the limited wars likely to occur during great power competition.

Conclusion

Leaders should be wary of the tyranny of the present when it comes to examining the lessons of the ongoing Russo-Ukrainian War. However, the war has also validated many long-standing predictions. It should be viewed not as the beginning of something new but rather the culmination of a number of trends, all of which have been examined extensively. Viewed in that light, the lessons may indeed be more reliable than most conflicts. T. X. Hammes has noted that the Russo-Ukrainian War has demonstrated both continuity and change in warfare. The "game-changers" he described are the Ukrainian use of integrated command and control, pervasive surveillance and reconnaissance, and massed precision fires. ⁴² In other words, Ukraine has managed to execute reconnaissance-strike tactics and Russia has not. Older tactics and the traditional platforms of the armor-infiltration regime are not obsolete, but the reconnaissance-strike regime offers additional tactical possibilities that effective military forces will exploit. This conclusion matches the prescient analyses by Krepinevich and Biddle mentioned above.

What *is* obsolete are simplistic depictions of tactics as either "maneuver" or "attrition." So, too, is the definition of tactics as either "conventional" or "irregular." Recognition that the proliferation of emergent technology does not obviate but instead interacts with more traditional platforms and produces a more complex regime of new tactical possibilities, which calls for a more sophisticated theoretical framework.

The above framework linking the component parts of reconnaissance-strike tactics with Hoffman's concept of defeat mechanisms offers a critical framework for thinking about tactics on the modern battlefield that can help tactical commanders and operational staffs bridge the gap between codified doctrine and the dynamics of a rapidly changing battlefield. The emergence of reconnaissance-strike tactics is ongoing but advanced enough to conclude that its emergence will continue. This does not mean that the platforms, tactics, and concepts of the previous regime are obsolete. Rather, it means that the interactions between these platforms and tactics must be reevaluated in the context of the reconnaissance-strike regime.

Services must design their forces for the tactical regime they are in. For am-

phibious forces, this means the use of longer-range fires to protect ship-to-shore movement, the use of longer-range and faster connectors, and a more diverse array of surface platforms able to disperse combat power at sea and concentrate only for the assault phase of an amphibious operation. It means a greater focus on amphibious raids over amphibious assaults.⁴³

Finally, just as tactical thought should not focus solely on technology, neither should force design efforts. Success in the modern system is more about the organization of highly trained staffs and teams that in turn coordinate the tactics made possible by emergent technology in a combined arms manner. EABO and SIF are examples of applications of this concept for specific forces and situations, but the Marine Corps lacks a capstone concept that governs how these concepts and forces will work in concert with traditional ones.⁴⁴ Some have called for a revision of Warfighting, but as a philosophy it is still the core ethos of the organization and that should not change. Rather, this indicates that it is Marine Corps Operations, MCDP 1-0, which should be revised to serve as a doctrinal forcing function to tie emergent and legacy tactics together. Such a revision would describe new tactics made possible by the reconnaissance-strike regime and Force Design 2030, which capabilities and tactics from legacy regimes should be maintained, and how to use them to serve as defeat mechanisms against adversaries, moving beyond traditional discussions of attrition versus maneuver.

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Bringing Clarity to Stand-in Forces

How Operational Art and Science Provide the Linkage between Stand-in Forces, Expeditionary Advanced Base Operations, and Reconnaissance/ Counterreconnaissance Operations

Major Pat Hassett, USMC

Abstract: The U.S. Marine Corps' 2021 *Concept for Stand-in Forces* (SIF) "describes how forward-postured, steady-state forces operating in contested areas—capable of transitioning rapidly from competition to crisis to conflict and back again—can create a strategic advantage. This concept explains how Marines can operate effectively with allies and partners from within a contested area." Yet confusion pervades because the Marine Corps organized to perform sustained ground combat operations at the expense of core Title X requirements. The new concepts called SIF—expeditionary advanced base operations (EABO), and reconnaissance/counter-reconnaissance operations (RXR)—articulate potential employment options for Joint force commanders to accomplish regional and threat-focused responsibilities. Doctrinal components of operational art provide linkage between SIF, EABO, and RXR. This framework illuminates the links required to operationalize these novel maritime concepts and to succeed in projecting maritime power in support of Joint and coalition forces.

Keywords: stand-in forces, SIF, expeditionary advanced base operations, EABO, reconnaissance/counter-reconnaissance, RXR, operational art

constellation of new concepts called stand-in forces (SIF), expeditionary advanced base operations (EABO), and reconnaissance/counter-reconnaissance (RXR) articulate novel employment options for Joint

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Journal of Advanced Military Studies vol. 15, no. 2 Fall 2024 www.usmcu.edu/mcupress https://doi.org/10.21140/mcuj.20241502005 force commanders. These concepts were created to address the challenges of the People's Liberation Army's (PLA) mature precision strike regime and the PLA Navy's substantial naval power.² A Marine Corps, optimized for sustained ground combat operations resulting from the Global War on Terrorism, compounds this confusion in effectively organizing and executing these constellation of concepts.³

The Marine Corps is transitioning back to its U.S. Code Title X purpose to "provide fleet Marine forces . . . for service with the fleet in the seizure or defense of advanced naval bases and the conduct of such land operations as may be essential to the prosecution of a naval campaign."4 The novel maritime concepts of SIF, EABO, and RXR support this Title X responsibility. However, the connective linkage for these concepts remains amorphous and unclear. The muddying of orientation, context, and purpose challenges Joint force commands and planner's ability to organize and employ these new maritime concepts, at the scale and speed required to achieve victory. The concept of stand-in forces (SIF) is best viewed as the overarching operational concept under which EABO and RXR actions nest. Doctrinal components of operational art, specifically objective analysis, theater geometry, and methods of combat force employment provide illustrative guidelines for the effective employment of these novel maritime concepts. Greater clarity, built on a widely informed doctrinal operational art foundation and inductive reasoning, enables the employment of these maritime concepts and enhances the opportunity for the United States and partnered nations to achieve victory in future combat operations against the PLA.

This article examines the art and science of organizing and employing operational combat forces in the maritime domain at the conceptual and operational levels. The detailed tactical and technical employment of weapons and systems is a continuously researched and assessed dimension of this topic but is beyond the scope of this article. This article provides clarity by defining the orientation and context to employ the constellation of new concepts in practice for the Joint force commander. What is needed is an overarching operational concept to create a more complete and practical vision linking SIF, EABO, and RXR, and by extension, a more valid model to deter PLA actions or win in conflict.

Hypothetical Vignette

The central adversary challenge is the trinity of three key aspects. The PLA retains the first-mover advantage. The PLA enjoys an 86-nautical mile distance between mainland China and its strategic objective of Taiwan.⁵ The PLA, at present, possesses a significant relative combat power advantage in the strategic, operational, and tactical levels of war with surface vessels, subsurface vessels, mature precision strike regime, and air power that collectively tip the scales in favor of the PLA.⁶

Method of Military Levels of War **Physical Space Combat Force** Objective **Employment** Multiple Campaigns in a Single or Multiple Theater(s) of War Global Strategy eater-Strategic Theater of War SIF Campaign Theater of Major Operation Objective (Land, Maritime) Single Area of Operations **EABO** Operational Major Operation (Land, Maritime, Air) Objective Tactical Combat Zone (Sector) Major or Mino **Tactical Action** RXR ctical Objectives

Figure 1. Arrays SIF, EABO, and RXR along an operational art framework

Source: the Maritime Advanced Warfighting Course course, modified by the author.

To provide helpful context to understand the SIF concept relating to EABO and RXR, a hypothetical vignette is offered. The Chinese Communist Party (CCP) directs the PLA to execute the reunification invasion of Taiwan. Numerous strategic warnings are likely, though the time between the CCP decision to execute a reunification and the operational maneuver of combat forces remains uncertain.⁷ PLA rocket forces execute a Joint firepower strike at key strategic and operational targets in and around Taiwan.8 Nearly simultaneous to this strike, the PLA Navy (PLAN) maneuvers to establish a naval blockade around Taiwan. Multiple Renhai surface action groups depart from naval bases in mainland China, cross the 86-nautical mile Taiwan Strait, and effectively establish working sea control around their objective, isolating Taiwan. Figure 2 depicts this hypothetical naval blockade closing around Taiwan in preparation for amphibious connectors to transit the strait and land in Taiwan. PLAN forces isolate Taiwan from external influence by positioning naval forces between Taiwan and the Senkaku, the Ryuku, and the Babuyan Island chains.9 U.S. Indo-Pacific Command (USINDOPACOM) becomes the Joint task force headquarters and leads the Joint and coalition response. The commander, U.S. Pacific Fleet is assigned the responsibilities as the combined Joint force maritime component commander. As an expeditionary task force, III Marine Expeditionary Force (III MEF) provides forces to establish EABs in Miyako (Ryuku

Mainland China amphibious staging areas

Chinese live-fre exercises

Potential invasion routes

Potential invasion beaches

Potential invasion beaches

TAIPET Strait

Ouangzhou

Namri o Taiwan

Tojiwan

Figure 2. This map illustrates conceptual PLAN force deployment from mainland China and the blockade of Taiwan

Source: courtesy of author, adapted by MCUP.

island) and Batanes (Northern Philippine archipelago) and conduct sea denial to prevent the total closure of the PLAN naval blockade and buy time and space for the Combined Force Maritime Component Commander (CFMCC) to counterattack the PLAN in key locations throughout the first island chain.¹⁰

However, as III MEF activates the alert contingency Marine Air-Ground Task Force (ACM) formation tethered to a short-notice strip alert in Okinawa, critical challenges emerge. ¹¹ To airlift the required EAB forces, weapons, and command and control architecture into positions of operational significance, III MEF must rely on theater mobility from across the Joint force. Regrettably, the demand for intratheater lift exceeds the Joint force capacity as the crisis develops.

To maneuver 250 miles into the southern Ryukus and 500 miles into the Batanes Island group from Okinawa, III MEF dedicates all operational Lockheed Martin F-35Cs to execute offensive and defensive counter-air missions. All available III MEF-assigned Lockheed C-130s Hercules launch to establish refueling tracks for the waves of Bell Boeing MV-22 and Sikorsky CH-53 Sea Stallion flights of EAB forces, as well as the F-35C flights attempting to penetrate the maritime operations area around Taiwan. Shortfalls arise as tasking to concurrently support deploying the large Maritime Strike Tomahawks and Naval Strike Missiles, required for the EABs to function, overwhelms the available capacity of C-130s. Reconnaissance and special operations forces are unable to

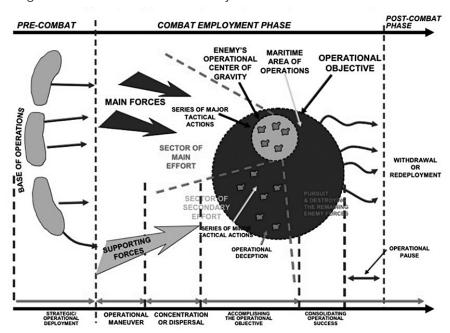


Figure 3. This image depicts a conceptual model of naval operational movement and geometries relative to a notional objective

Source: Milan N. Vego, *Joint Operational Warfare: Theory and Practice* (Newport, RI: U.S. Naval War College), adapted by MCUP.

execute operational preparation of the environment in support of III MEF and CFMCC within the maritime area of operations because of the parallel challenge of gaining access once the combat phase has begun. No Joint enabling fires and command and control systems exist precrisis to enable expedient prosecution of adversary targets. Little focus is given to how these forces will sustain in geographically isolated positions throughout the first island chain following the initial break-out from Okinawa.

Ultimately, III MEF is unable to pulse combat power in the form of EABs into the maritime area of operations around Taiwan due to the offensive combat power of the Renhai surface action group surface and air defense systems, as well as the layered mature precision strike regime network arrayed across the Chinese coast, and the unmitigated and persistent subsurface threat. The time, space, and force challenges to pulse combat power into this area prove to be a Joint forcible entry operation, beyond III MEF's combat power projection capability and capacity. The tyranny of distance associated with deploying from Okinawa and mainland Japan's exterior position into interior positions of operational significance proves insurmountable.

The conceptual model depicted in figure 3 is a legacy framework in which

planners typically envision EABOs. This model illustrates a naval power projection wherein EAB forces, as supporting forces (light gray arrow), conduct operational maneuver, forcible entry, and dispersal, and then enable main effort forces (dark gray arrow) to act on the adversary's center of gravity. Unfortunately, this framework to employ Marine EABs and RXR forces has critical deployment and employment limitations in the future fight. This model is predicated on EAB forces forcibly entering positions of operational significance after the combat employment phase has begun. 12 The PLA's mature precision strike regime, air, surface, and surface assets collectively impede III MEF and Joint aviation connectors from delivering the requisite number of Marines, fires systems, command and control structures, and sustainment into the first island chain's positions of operational significance, during combat. The preponderance of open-source analysis of PLA combat potential makes this legacy model for projecting naval power invalid for the future fight. JFCs and planners require an alternative but doctrinally based approach to organize and employ novel maritime concepts against the PLA in the future. If EABs and RXR forces did not need to forcibly deploy into positions, they could support the main forces (dark gray arrow) from prepositioned locations of operational significance. In this manner, SIF as an overarching operational concept links tactical EAB and RXR forces and provides the model to deter the PLA and to win in combat.

Defining Concepts

Understanding new concepts as part of a larger maritime domain fight and using approved definitions and tasks is essential to gain a vision of their applicability in an operational art framework. SIF, EABO, and RXR are complex and poorly understood, particularly due to their novel and emergent nature. A clarified understanding of each concept's definition and its potential tasks enables planners to visualize a valid model for employment. To this end, refined descriptions of SIF, EABO, and RXR operations are provided.

Stand-in forces are "lethal, low signature, mobile, relatively simple to sustain forces designed to operate across the competition continuum within a contested area as the leading edge of a maritime defense-in-depth and as a proactive offensive combat potential enabling naval power projection." SIF seeks to disrupt the plans and operations of an adversary by establishing well before crisis events occur. Depending on the situation, SIF is composed of novel or conventional formations of Marines, Navy, Coast Guard, special operations forces, interagency, and allies and partners. A Concept for Stand-in Forces articulates 10 specified tasks for SIF, the most important of which are: deterring adversaries, completing fleet and Joint kill webs, denying adversary freedom of movement at key maritime chokepoints, and seizing and controlling key maritime terrain in support of sea denial operations. 15

Expeditionary advanced base operations are a form of expeditionary warfare that involves the employment of mobile, persistent, and relatively easy-tomaintain naval expeditionary forces. 16 EABOs operate from a series of austere positions ashore within a contested maritime area to execute or facilitate sea denial efforts.¹⁷ The Tentative Manual for EABO pronounces 12 key tasks EABs can perform, with the most important being denying key maritime terrain, executing surface warfare operations, executing air and missile defense operations, and executing strike operations.¹⁸

RXR operations use the full range of collection methods to gain information about the activities, composition, and disposition of an adversary to support commander decision-making.¹⁹ Counter-reconnaissance seeks to prevent adversaries from doing the same to friendly forces and includes all deliberate efforts taken to disrupt the adversary's ability to observe a force, area, or place.²⁰ In emerging maritime concept vernacular, RXR is a single activity to gain an informational advantage over the adversary.²¹ RXR uses sensors across domains, enabling subsequent analysis and exploitation for maritime and Joint formations, as well as enabling targeting and the execution of operations while simultaneously degrading the ability of the adversary to do the same.²² Naval scholars may equate RXR to the concepts articulated by Captain Wayne Hughes in the seminal work Fleet Tactics and Naval Operations, as scouting and antiscouting operations.²³

Given these definitions of SIF, EABO, and RXR, inductive analysis using select elements of operational art illustrates how SIF emerges as the overarching concept that unites the constellation of new concepts.

Operational Art Framework Applied to Novel Maritime Concepts

Operational art provides valuable insight into understanding how to best organize and employ military forces. Joint Operations, Joint Publication 3-0, describes operational art as the "cognitive approach by commanders and staffs supported by their skill, knowledge, experience, creativity, and judgment, to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means."24 Key elements of operational art used here are objective analysis, theater geometry, and methods of combat force deployment and employment.

Objective Analysis. Objective analysis is an informative method to add structural linkage to SIF, EABO, and RXR. Tactical, operational, and strategic objectives are distinguishable by the scale and significance of the objective.²⁵ Major tactical objectives include destroying an adversary surface group or seizing and holding a large naval base, port, or airfield complex.²⁶ Major tactical operations achieve operational objectives.²⁷ In maritime warfare, an operational objective is often to obtain sea control at a position of operational significance, to destroy or neutralize a portion of the adversary maritime fleet, or to seize and hold a large island or strait. ²⁸ Operational-level actions achieve theater strategic objectives. ²⁹ Accomplishing theater strategic objectives drives a significant change across the theater of war. ³⁰ A theater strategic objective in a maritime theater of war may be to defend a nation or state or to sever adversary control of a strategic objective. A national objective requires multiple intermediate steps typically expressed as military strategic or theater-strategic objectives. ³¹

Using these characteristics of tactical and operational objectives, a useful scaffolding of SIF, EABO, and RXR emerges. EABOs generally seek to achieve tactical objectives through tasks such as sea denial of specific maritime terrain or supporting air and missile defense in a localized area. These objectives rank EABs as major or minor tactical-level operations that can achieve tactical and potentially operational objectives depending on the physical size and significance of the sea denial area and the adversary formation.

RXR requires similar narrow geographical spaces and orients friendly scouting against tactical-level adversary formations. Tasks of gaining an informational advantage over adversary surface vessels through the use of sensors, enabling targeting through off-boarded collections, and degrading the scouting or collections of the adversary highlight RXR as tactical-level action. RXR actions by themselves are tactical and accomplish tactical objectives. Linked together across time and space, RXR actions can seek to contribute to operational-level effects depending on the significance and scope of collections.

SIF tasks are broader spatially than RXR and EABO, across theaters of operation or a theater of war, and orient on adversary operational formations. Tasks such as completing fleet and Joint kill webs, denying adversary operational formations the freedom of movement around multiple maritime chokepoints, and securing multiple key contested maritime objectives in support of broader sea denial and/or sea control are operational-level actions. This then implies that employing SIF is an operational-level action and illustrates the hierarchy of SIF as the overarching concept orchestrating the tactical actions of EABO and RXR.

Theater Geometry. A similar analysis using the operational art element of theater geometry is instructive for SIF, EABO, and RXR. Theater geometry refers to the principle geographic and spatial elements of a military area relative to friendly and adversary positions, bases of operations, the distances between, the decisive points contained therein, and lines of operations and communications that connect and sustain forces between bases and their objectives. Eve to evaluating these elements are not only their characteristics, but also their relative positions and distances from each other expressed by operational factors of time, space, and force. Theater geometries are critical in articulating the operational idea and are central to effective campaign design.

Applying theater geometry analysis to SIF, EABs, and RXR further clarifies the relationship between these concepts. EABs require the ability to establish a formation in an advanced or forward position relative to the adversary. EABs are predicated on a formation, organized for the tasks described above, establishing at an intermediate base of operation or forward position where it can threaten or hold adversary vessels at risk. The critical challenge of EABO is how an EAB establishes in forward positions, given the challenge of physically deploying the formation, establishing the requisite line of communication for command and control and fires architecture, and sustaining the formation once deployed in an advanced area separated through long geographic lines of sustainment.

RXR presents similar challenges in theater geometries. Tactical-level RXR formations must exist in advanced or forward geographic positions to accomplish their critical tasks to scout, sense, and make sense of the environment. Gaining placement and access to these areas from an exterior position through the spatially distant lines of operations is often characterized by the *tyranny of distance*, inherent to the USINDOPACOM area of responsibility. Gaining requisite geometries is an unparalleled challenge during a crisis, as illustrated by the earlier vignette.

SIF presents a creative solution to answer the physical and spatial theater geometry challenges of EABO and RXR. SIF forces execute operations *within* a contested forward area as a leading edge of a maritime defense-in-depth and with the credible combat potential to transition into offensive naval operations. Inherent to SIF is the requirement to physically position at forward intermediate bases of operation or areas and distribute throughout key maritime terrain before and throughout a crisis. Much like Houthi forces operating in the vicinity of the Red Sea, once an SIF has gained favorable theater geometry, with prepositioned weapons, command and control, and sustainment, it is incredibly challenging to dislodge.³⁵

SIF cannot rely on gaining placement and access during the crisis; SIF forces must establish within central or interior positions during the precrisis phase. SIF reduces the immense challenge III MEF encounters when, during crisis, forces attempt to break out from Okinawa and maneuver to positions of operational significance. With this perspective, SIFs obviate the challenges of EABs deploying to intermediate bases across long lines of operation, because SIFs inherently preposition in these locations. In the same manner as Houthis, SIF forces can organize formations to perform key tasks at expeditionary advanced bases, as the military situation requires. It is fair to identify that, in addition to forces existing at these locations, the requisite weapons systems and command and control architecture must also exist at these locations, under the blanket of SIF. As SIF forces operate in central positions relative to the adversary, they innately sustain the placement and access required for RXR scouting,

collections, and counter-reconnaissance operations. This is not to imply that gaining these positions in precrisis is easy or simple. Gaining a physical position is always complex and nonlinear, particularly in the challenging political and security environment of USINDOPACOM. Ultimately, prepositioning EAB and RXR forces as SIF reduces the challenges of theater geometry during conflict. Therefore, SIF is best envisioned as the overarching linkage over EAB and RXR forces.

Methods of Combat Force Employment. Another helpful element of operational art to understand the association between SIF, EABO, and RXR are methods of combat force employment. The root of this element is that the larger the scale of the military objective and the larger and more diverse the force requires more time and more complex methods of combat force employment.³⁶

Methods of combat force employment distinguish SIF, EABO, and RXR. Along the sliding scale of scope, complexity, and force diversity, RXR is the simplest form of combat force employment, as compared to EABOs and SIF. RXR formations might be a small team of signals intelligence collection professionals who use technical systems to passively detect adversary formations in congested maritime spaces. RXR forces may be human intelligence teams that develop and cultivate operational preparation of the environment in critical port or littoral spaces essential for subsequent phases of combat operations. RXR forces may also be larger, more overt forces that employ actively emitting radar systems to gain and maintain custody of adversary naval formations in support of naval or Joint targeting, or simply generate deliberate deception effects. Regardless, the actions of an RXR force principally fall within the tactical level of war.

EABO forces are generally larger formations than RXR forces. EABO formations seize and hold austere, temporary locations ashore and execute or facilitate sea denial. Sea denial in these combat zones or areas of operation entails a sufficient number of mobile, long-range antiship cruise missiles capable of holding adversary surface forces at risk. These formations likely involve Marine infantry companies and/or batteries, organized to maneuver through assigned littoral and land zones locally, while avoiding detection and adversary targeting. The tactical actions of an EABO are more complicated than those of RXR formations, yet EABOs lack the large-scale complexity, the size (in number), and the diversity of force capabilities required of SIF to effectively target, strike, and degrade adversary maritime formations wholesale. Though the effects of EABO weapons systems may influence spaces between 500–1,000 nautical miles, the execution of EABs as tactical operations is likely confined by their organic mobility to combat zones or areas of operation of 10s or 100s of miles. This again articulates EABO as a tactical level of war action.

SIFs are characterized by a much higher degree of complexity, diversity, and size than EABs and RXR. SIFs again are composed of Marine, Navy,

Coast Guard, special operations forces, interagency, and allied and partner forces. These forces are organized operationally across vast geographic distances, throughout the FIC, and imply integration with and reliance on CFMCC and the Joint/coalition force sustainment and command and control. SIF can organizationally provide the command and control of EABs and RXR formations, however, the inverse is inapplicable. The operational factor of time further distinguishes SIF, as SIF requires time, much more so than the execution of EAB and RXR tasks. SIF conventional formations persist in time far beyond tactical-level EABs and RXR forces and endure regardless of whether EABOs and RXR tasks are being executed. EABO and RXR formations execute minor and major tactical operations, in pursuit of tactical and sometimes operational objectives during phases of major operations, likely in weeks or months. SIF operations are better expressed as major operations, executed by naval and combined forces for the duration of a conflict, across months or years, in pursuit of operational objectives and sometimes theater strategic objectives. This analysis places SIF into the operational level of war.

Referring back to the hypothetical vignette provided, based on this revised clarity of SIF, an alternate scenario can be envisioned. Far before the strategic warning of a Taiwan invasion, maritime combat forces (SIF) array throughout the first island chain in critical positions such as Miyako (Ryukyu Islands) and Batanes (Northern Philippine Island Chain). These forces preposition antiship cruise missile weapon systems, Joint-integrated command and control networks, and diverse and resilient sustainment to persist across noncontiguous zones for a long duration. The physical personnel rotationally cycle through these locations, but the SIF persists organizationally. Unfortunately, the PLA is undeterred and their strategic goal of invading Taiwan begins, as PLAN surface forces depart mainland China. Their theater strategic objective becomes clear: isolate Taiwan from external support. However, in this alternate scenario, RXR forces contribute to operational and strategic indications and warnings via robust multidisciplined collections networks and systems throughout the first island chain. CFMCC assigns SIF elements in Batanes the major tactical objective of neutralizing adversary surface vessels entering the key maritime chokepoints between Batanes and Taiwan. Other SIF elements form EABs in Miyako to seize and hold this key terrain, execute sea denial actions, and prevent adversary surface vessels from establishing a total blockade around Eastern Taiwan. These major tactical operations achieve CFMCC's initial operational objective of sea denial east and south of Taiwan. As SIF operations persist, CFMCC gains time and space to pulse combat power into the first island chain and, together with the SIF, begins to neutralize the adversary fleet, accomplishing CFMCC's theater strategic objective to prevent the isolation of Taiwan by a naval blockade.

Analysis using an operational art framework reveals RXR and EAB operations achieve tactical objectives and can enable operational objectives that nest within SIF operational and theater strategic objectives. SIF inherently exploits advantageous theater geometry precrisis, versus a reactive Joint forcible entry operation to deploy EABs. RXR and EABO are best explained as task-organized formations, seeking to accomplish minor or major tactical actions (battles, engagements, or strikes), nested within the SIF, during a major operation. Combat force employment explains SIF as a major operation undertaken by Joint or coalition forces at the operational level of war.

The layering of SIF, EABO, and RXR, through the framework displayed in figure 1, enables Joint force commanders and planners to envision, organize, and employ maritime combat formations to accomplish CFMCC objectives. This framework illuminates the connective linkage required to operationalize these novel maritime concepts, and given the hypothetical vignette described earlier, to succeed in projecting maritime power in support of the Joint and coalition force.

Alternate Perspective

One could say that the Service-oriented writers of these concepts disagree with this operational art-based linkage and point to the versatility and synergistic effects that SIF, EAB, and RXR propose. This perspective may offer that, when employed simultaneously as *equal and parallel* concepts, like strands of DNA, SIF/EABO/RXR are intrinsically and mutually reinforcing to each other. This parity of concepts may then cumulatively generate tempo, shock, and surprise to put the enemy off-balance and wrest decision advantage from the adversary, creating time and space to decisively employ the Joint force.

Conflicting tentative manuals and service articles have muddied the very clarity required for JFCs to plan and employ these maritime concepts. The tentative manual for EABO states that "A Concept for Stand-In Forces and A Functional Concept for Maritime Reconnaissance and Counter-reconnaissance . . . describe how Marines will be positioned forward at expeditionary advanced bases (EABs), shoulder-to-shoulder with our allies and partners, leveraging all-domain tools as the eyes and ears of the fleet and Joint force."³⁷ This evinces an amorphous role of RXR and SIF as synonymous concepts while conflating the level of war in which each concept is executed. One could deduce from the tentative manual for EABO that EABs are simply the capabilities at a location, while SIF is the force employed for these actions, both being equal in level of war and in objective orientation.

This blending of concepts has created the very confusion that inhibits Joint force commanders and planners from envisioning the utility of SIF, EABO, and RXR. The Marine Corps has yet to codify how these concepts would simulta-

neously exist as peer-level or parallel actions. Yet, the rationale for this opacity is reasonable. Service-oriented concept writers seek to articulate the maximum potential utility of these new concepts and enable continued fleet experimentation, as well as future employment options. Unfortunately, massing these novel maritime concepts into an ill-defined amalgamation has created confusion that obstructs the viability of these concepts' employment today.

Military Services can articulate these novel concepts in any vernacular they choose. But, as with any assigned or operationally controlled forces, the Servicearticulated employment concept is simply a starting point. Geographic combatant commanders and Joint force commanders always retain the authority and the obligation to employ assigned or operationally controlled forces in the method they deem most appropriate and practicable within their geographic areas. Within USINDOPACOM and relative to a Taiwan-based scenario, the aforementioned operational art framework illustrates the most feasible, acceptable, complete, and suitable vision for organizing and employing SIF, EABO, and RXR concepts. At this juncture, Joint force commanders and planners must organize formations and employ forces for specified objectives within their geographic areas. To best achieve this end, the doctrinal components of operational art, specifically objective analysis, theater geometry, and methods of combat force employment illustrate valid models to organize and employ the novel maritime concepts of SIF, EABO, and RXR.

The SIF concept is best viewed as the overarching operational linkage within which EABO and RXR actions nest. Through the doctrinal components of operational art, illustrative guidelines for the effective employment of these novel maritime concepts become clear. Stand-in forces, employed precrisis, with advantageous theater geometry, and aligned to appropriate objectives, can execute tactical RXR and EABs actions before and during a crisis and propel maritime forces to win in combat.

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Houthi Motivations Driving the Red Sea Crisis

Understanding How Ansar Allah's Strategic Culture Goes beyond Gaza and Iran

Jonah Carlson

Abstract: Ansar Allah, known as the "Houthi movement," has conducted attacks on ships transiting the Red Sea since October 2023. This event is now known as the "Red Sea Crisis." Classifying Ansar Allah as merely an Iranian proxy, or categorizing its actions as a mere response to the conflict in Gaza and support for Hamas, inadequately explains these attacks. This article uses the cultural topography method to analyze the culture of the movement and provide alternative motivations for the attacks, such as consolidating domestic support and crafting a strong national appearance. The article concludes that Ansar Allah's attacks on the Red Sea are more motivated by the belief they will yield pragmatic and material benefits for the movement rather than ideological or cultural overlap with Palestine or Iran.

Keywords: Israel, Red Sea, Gaza, Hamas, Yemen, Houthi, Iran

ince October 2023, Ansar Allah, also known as the "Houthi movement," has conducted drone and missile strikes on various ships traversing the Red Sea, significantly disrupting global shipping. This event has become known as the "Red Sea Crisis." While one may attempt to quickly categorize Ansar Allah as merely another Iranian proxy group or a militant group responding to the ongoing conflict in Gaza, this understanding is inadequate to explain both Ansar Allah's ongoing aggression and the potential for future action. Rather, a more complete vision of Ansar Allah understands it as a Yemeni national

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movement with deep domestic and regional interests that are distinct from current events in Gaza. As a result of these interests, the group is likely to continue its attacks against ships traversing shipping routes near the Middle East regardless of an outcome to the Gaza conflict.

Ansar Allah leadership advertises a robust connection between maritime attacks and the plight of Palestinians in Gaza. Between October 2023 and April 2024, Ansar Allah leadership posts and newspaper publications focused most of their rhetoric on this connection. As Ansar Allah spokesman Mohammad Abdul Salam put simply on X, "The attacks in the Red Sea are related to the war in Gaza." An examination of the internal culture of Ansar Allah, however, reveals a more complicated set of motivations for the movement's military aggression, many of which will persist beyond a resolution of the Gaza conflict. Based on this research data, this article argues that the war in Palestine is not the primary motivator for the movement's attacks on the Red Sea. Rather, sympathizing with the Palestinian cause is being employed as a cultural signal for Yemenis and others in the Middle East with the aim of bolstering support for Ansar Allah, both domestically and across the region.

While the conflict in Gaza provides Ansar Allah with a pretext for its attacks, its motivations for orchestrating attacks on the Red Sea and aggravating the United States predate and far exceed the current Israel-Palestine conflict. Palestine acts as a cover for Ansar Allah to pursue its will to craft a powerful Yemeni nation and combat the perceived enemies of that nation, such as the United States. Ansar Allah's leadership sees the United States as the world's "Greatest Satan," an exploitative and imperialist state that threatens the Yemeni people and sees the Middle East as a playground for military escapades. Accepting Ansar Allah's Gaza rational as an explanation for the group's attacks encourages an inaccurately narrow lens on the movement's decision making and invites miscalculations regarding the group's perception of victory and end goals for aggression.

Methodology: Cultural Topography

The research that underpins this article was conducted via the cultural topography method. This method, developed by Jeannie L. Johnson and Matthew T. Berrett, codes data from primary and secondary sources to identify critical cultural traits that influence the behavior of actor groups. Primary sources informing the research include 83 articles published by *Al-Masirah*, an Ansar Allah-controlled Yemeni newspaper, during a four-month period; 112 posts published on X by Mohammad Abdul Salam, spokesman for Ansar Allah; and educational material, both formal and informal, for children and young adults acquired from Ansar Allah by Itam Shalev between 2015 and 2019. These primary sources have been combined with a variety of secondary sources, includ-

ing both Western and non-Western reporting and analysis of the Red Sea Crisis and Ansar Allah, declassified military intelligence data from the U.S. Defense Intelligence Agency and third-party analyses of Iranian military contributions to the movement, and reports on the history, demographics, and public opinion of Yemen and its citizenry.²

Al-Masirah articles were acquired in English translation on the Al-Masirah website, Salam's posts on X were translated using the website's built-in translation feature, and educational material was translated by Itam Shalev as part of a project with Impact-SE.³ The sources selected primarily reflect the identities, norms, values, perceptual lens, and motives of Ansar Allah's elite, which will be referred to in this article as "Ansar Allah," rather than most of the group's fighting force. The perspective of the elite offered here will be most useful when combined with work by other scholars examining Ansar Allah's non-elite forces and other Yemeni groups.

Research within the cultural topography method is conducted using a modified form of Grounded Theory, employing four primary categories: identity, norms, values, and perceptual lens.

- Identity entails traits the group in question aspires to and applies to itself.
- Norms entail both accepted and expected modes of behavior within the group.
- Values entail behaviors or material possessions that increase the status of a group member.
- Perceptual lenses entail the filter through which a group determines its worldview and "facts" about other groups.⁴

The approach recognizes the inadequacies of purely realist and rational frameworks in explaining actor behavior, both inside and outside of the security space. While rationality often plays a key role in decision making, such rationality is bounded by culture. The influence of culture has been historically downplayed by analyses related to intelligence, defense, or other forms of security both at national and subnational levels.⁵

When utilizing the cultural topography method, however, it is also important to recognize when cultural factors are insufficient to explain the behavior and motivations of a group. Culture is not the end-all-be-all of behavior. The constructivist perspective of cultural topography is designed to supplement, not supplant, the realist perspectives that place a greater emphasis on material interests. For instance, as will be discussed later in the article, the data that informs this article does not support the idea that cultural traits are the primary motivation for Ansar Allah's cooperation with Iran. Beliefs do not unite Iran and the Houthis: arms and enemies do. While this article primarily focuses on the

importance of culture in understanding the Red Sea Crisis, it will necessarily include the operational realities that inform Ansar Allah's decision making as well.

Understanding Culture and Policy as "Mutual Constructions"

The cultural topography method is used to conduct a thorough examination of how culture influences actors' behavior and outcomes. This directionality—viewing culture as an agent shaping policy—is necessary for a holistic "all source" assessment of problem sets and is thus far systematically understudied in U.S. security spaces.⁶ Conversely, however, one must also examine how behavior and policy capitalize on and transform culture. Johnson and Berrett are critical of perceiving cultures as static entities. Acknowledging this criticism, one should recognize that culture does not simply influence policy, but policy also influences culture over time; the two are, to borrow parlance from Colin Flint, "mutually constructed."⁷

Mutual construction can be observed in the rhetoric, behavior, and cultural traits of Ansar Allah. While Ansar Allah's behavioral policy is motivated by critical cultural factors such as Yemeni national identity and a siege mentality that encourages resisting perceived oppressors, the movement's elites also capitalize on other cultural preferences and motivators found among their Yemeni base and use those motivators to justify their behavior and reinforce the legitimacy of their strong position in the country. Rhetorical support for the Palestinian cause is an example of one such cultural preference, justifying Ansar Allah's action on the Red Sea despite a weak relation between the ships the movement claims to target and the ships it actually attacks. All policy and rhetoric carry with it a level of ideological power that transforms what behavior is deemed acceptable. Culture does the same to policy, shaping which policies are deemed acceptable or overreaching. Ansar Allah's rhetoric carries a level of ideological power and attempts to utilize the identity and perceptual lens of the wider Yemeni population to reinforce the policies underpinning the Red Sea Crisis.

Literature Review

Utilizing the cultural topography method in this research article provides a unique perspective on the motivations and current behavior of Ansar Allah. As will be observed in this section, most work discussing the movement published within the last decade focuses heavily on the connection between the movement and Iran. As a result, the relationship between Iran and Ansar Allah will be the subject of much of this literature review. However, while this article investigates Iranian contributions to Ansar Allah's operational realities, it primarily examines the group's behavior as being motivated by internal factors. Additionally, while earlier works on Ansar Allah place focus on the movement's sectarian religious identity, this article examines the current iteration of Ansar

Allah's internal culture, which has evolved and taken on distinctive qualities beyond the Shi'ite identity of the movement's founders.

Literature providing analysis of Ansar Allah, both from traditional academic sources and works designed for policy audiences, can be divided into two categories: works from before the outbreak of the Yemeni Civil War and works from after that conflict began. Scholarship predating the conflict typically puts an emphasis on Ansar Allah (though the movement did not use that name at the time; the name "Believing Youth" was still partially used, though some publications simply referred to the movement as "rebels") as a religious movement with political motivations and ideological values associated with Zaydi Shi'ism.8 Little mention is made of Iranian contributions to the movement's efforts, and when these are mentioned, a connection between the two parties was considered either minimally evidenced or to not involve the provision of arms. 9 Cooperation between Iran and Ansar Allah was considered a noncrucial factor in analysis even in the years just before the Arab Spring. Jack Freeman, for example, wrote as late as 2009 that "because of the abundance of weapons in Yemen, [Houthi] insurgents have no need for that type of support." Furthermore, Christopher Boucek asserted in 2010 that "a Saudi-Iranian regional rivalry is not playing out in Saada" and that if there was any connection between Iran and Ansar Allah, it likely involved only minimal funding.¹¹

Since the outbreak of the Yemeni Civil War, the discourse has evolved to adapt to new realities. Most scholarship and policy writing make some reference to Ansar Allah's role as a participant in a proxy conflict between Saudi Arabia and Iran. A majority of analyses have reduced the previously important nature of the movement's Zaydi identity, swapping it for explanations focused on political ambitions, both domestic and foreign, and dropping culturally focused approaches in favor of more realist ones. Significantly less importance is put on religion and other cultural factors in examinations of the movement written following 2011. What remains debated by scholars is the extent to which Iran is involved in shaping Ansar Allah's actions, as well as the extent of the interplay between their actions.

The spectrum of perspectives on Iranian involvement is extremely varied. Take Uzi Rubin, for example, who asserts that Ansar Allah's strikes on Saudi Arabia are "camouflage" by which Iran can conduct war; he draws little distinction between what makes one attack from Yemen "Houthi" and another "Iranian." On the other end, Marxist scholar Jude Kadri makes almost no note of Iranian influence or contributions to Ansar Allah in her analysis of the Yemeni Civil War, instead suggesting that the group's military actions against the Saudi coalition are a response to "imperialist" forces, like the United States and Saudi Arabia, attempting to reduce Yemeni sovereignty. Most work from other scholars draw conclusions between these two spaces, determining that

an interplay of both Ansar Allah's and Iran's interests and capabilities help explain the nature and extent of Ansar Allah's action during the war. Furthermore, many authors agree that cooperation between the movement and Iran is driven merely by an overlap of interests rather than ideological common ground. Though acknowledging that ideological overlaps "may follow in time," Elisabeth Kendall put it most plainly in 2017: "It seems likely that the Houthis have a pragmatic attitude towards Iran. They are willing to accept help in their fight as long as it suits them." 16

This article agrees with scholars such as Kendall who assess that Iran-Houthi cooperation is the result of both group's pragmatism and aims to avoid merely restating this hypothesis. Rather, the research presented here provides a constructionist view of Ansar Allah that demonstrates the boundaries of cultural influence on the movement's behavior and policies, and vice versa. Thomas Juneau wrote in 2021 that Ansar Allah's influence had grown so significantly over the course of the Yemeni Civil War "that it is now possible to refer to Houthi foreign policy." This article contributes to that line of thinking by supplying the cultural factors that are most prominent in developing and signaling that policy.

Ansar Allah's New Cultural Priorities Supplant Purely Religious Goals

Much literature has been published recounting the history of the "Houthi movement," and as a result this article will avoid spending much time on the subject. However, a cursory view of the evolution of the movement is worth-while from the perspective of cultural topography, as the movement's history exemplifies how the priority of cultural traits shifts over time, known within the methodology as "flux."

The Houthis can trace their genesis back to an earlier movement known as "Believing Youth," which began in the early 1990s. This movement had express cultural aims: to bolster both the cultural and political influence of Zaydi Shi'ism within the newly reunited Yemen. ¹⁸ To understand the need for that revival, one must look back to the 1960s. Despite being a minority in Yemen, comprising roughly a third of the country's population (with the remainder of the population being Sunni Muslims), the Zaydi Shi'ites of Yemen held immense political influence over the country for most of its history. ¹⁹ Zaydi imamates intermittently controlled parts of the country for nine centuries. Their overthrow in a revolution in 1962 led to the formation of the Yemen Arab Republic in the north and resulted in a civil war that split the country in two for most of the remainder of the century. ²⁰

Believing Youth hoped to revive that influence following Yemen's unification. Despite the newly crowned president of Yemen, Ali Abdullah Saleh—who

would impose authoritarian rule over the country for nearly 30 years—being a Zaydi, Believing Youth found themselves increasingly dissatisfied with his level of support for increased Zaydi influence.²¹ That dissatisfaction only grew more apparent once Hussein al-Houthi joined the movement.

The growing radicalism of Believing Youth during al-Houthi's membership demonstrates the influence he had on the group's ideology. Saleh, perceiving al-Houthi and the increasingly militaristic movement as a threat, had al-Houthi killed by government forces in 2004.²² At this point, Believing Youth evolved into a full-fledged insurgency against Saleh's government. Much of the ensuing fighting took place in the country's north, in and around the city of Sa'ada. Hussein Al-Houthi's brother took over leadership, cementing the family's influence over the movement, which by that point had become so powerful the movement could be recognized by the family name alone.²³ He continues to lead the organization today.

In 2012, the Arab Spring launched Yemen into revolution, which resulted in the overthrow of Saleh's regime and collapse into civil war. It is around this time that the Houthi movement took on an official name, Ansar Allah—"Supporters of God." Since the outbreak of the war, Ansar Allah has attempted to coercively consolidate its power over Yemen. The movement took over the capital of Sana'a in 2014, and since have only expanded their influence, today controlling a land area containing roughly 80 percent of the country's total population. Ansar Allah's cultural motivators and signaling have evolved over this period as the result of newfound influence and responsibility. Zaydi Shi'ite revivalism, while almost certainly still a factor in elite thought, has fallen to the backburner after decades of conflict both internal and external. This root cultural identity has been supplanted by cultural traits more politically charged: namely, Ansar Allah's identity and perceptual lens as Yemen's defender against imperialist siege, and their position as the leaders of the burgeoning Yemeni nation.

Nationalism, Resisting Foreign Influence Stronger Motivations for Maritime Attacks than Palestine

Ansar Allah has repeatedly used the ongoing conflict in Gaza as a signaling device with which to cover its action on the Red Sea. Multiple attacks exemplify how Ansar Allah is willing to attack ships indiscriminately, without regard for national origin or relation to Israel, contrary to their claims. While Ansar Allah leadership likely feel some culturally motivated sympathies toward Palestine themselves, their rhetorical focus on the conflict primarily disguises the critical cultural factors that motivate continued action on the Red Sea: namely, bol-

stering the nation of Yemen under Ansar Allah's leadership while deterring the "Greatest Satan"—the United States—and its allies that resist the movement militarily.

Palestine Used as Cultural Signal—Message Resonates with Yemeni Public, Iranian Benefactors

Sympathies toward Palestine are founded in large part on regional identities. The shared Arab and Islamic identities between Yemen and Palestine are frequently brought to light by Salam in spokesman posts. These shared identity traits are also used to critique Arab states, such as Saudi Arabia and the UAE, deemed as insufficiently aligned with the Palestinian cause. These states are also the perceived aggressors against Ansar Allah in the Yemeni Civil War. In one scathing example from 5 November 2023, Salam declared a state of "Arab apostasy" due to lack of regional support for the "Al-Aqsa Flood," the title given to Hamas's attacks orchestrated on 7 October. Al-Masirah articles also hearken to this shared Arab and Islamic identity and emphasize shared values that emerge as a result of these identities. Critiquing neighboring states on this issue helps Ansar Allah appear to stand in a place of moral authority, unlike the states that capitalize upon these shared regional identities to a lesser extent, which seem comparatively out of touch.

As a result of these shared identities, the focus on Palestine comes with political benefits for Ansar Allah. Polling across the Arab world indicates that a majority of individuals in the region "have become certain that there will be no possibility for peace with Israel" or doubt the possibility of future peace.²⁸ Additionally, more than half of those polled thought that the United States was the biggest threat to peace and stability in the Middle East in relation to the Gaza conflict.²⁹ Yemeni support for the Palestinian cause is evident in Salam's posts: while the number of attendees is almost certainly misreported by Salam, video evidence shows the presence of thousands of Yemenis in Sana'a protesting the ongoing conflict, backed by non-Houthi reporting.³⁰ Holding this pro-Palestinian position rallies Ansar Allah's political and ideological base around a contemporary issue and increases Ansar Allah's potential to garner support domestically. Bolstering this support is the goal of the movement's signaling: one must remember that Ansar Allah is a movement which, while having already accumulated great influence within Yemen, is still fighting a civil war and is not internationally recognized. Garnering support by leveraging shared cultural values is one method by which to increase perceived legitimacy, both abroad and at home.

Ansar Allah's support of Palestine also comes with tangible benefits outside of domestic support. Palestine and Ansar Allah both share a common adversary,

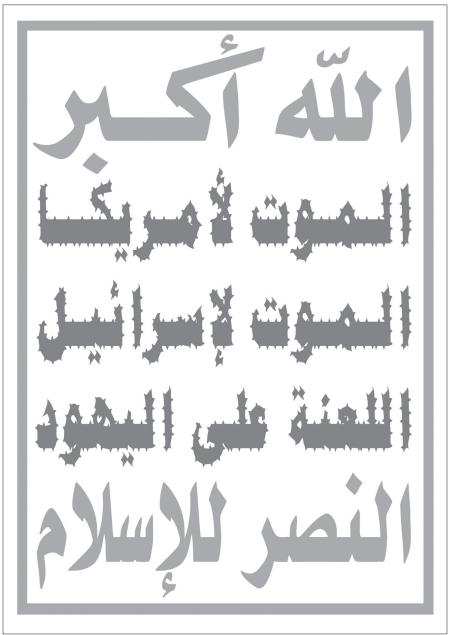
Israel, with a major regional benefactor: Iran. All of Iran's major adversaries—the United States, Israel, and Saudi Arabia being the most notable—overlap with the adversaries of Ansar Allah. The extent of this overlap in adversaries, combined with the military support received, appears to have heavily contributed to the perception of Ansar Allah as an Iranian proxy, especially among Western news sources. Yet, Ansar Allah is not merely pandering to Iran. Rather, Ansar Allah's signaling is a tool used to acquire the capabilities necessary to promote a stronger Yemeni nation and deter the perceived enemies of Ansar Allah, and thus boost Yemen's strength. The precise nature of the Houthi-Iranian relationship will be further explained in later sections.

Cultural Motivators: Fighting "Greatest Satan" and Building Domestic Legitimacy, Support

Ansar Allah uses the relationship between the United States and Israel to justify its military actions on the Red Sea as solidarity with Palestine, both in Al-Masirah articles and spokesman posts. However, anti-American sentiment on the part of Ansar Allah not only predates the current conflict in Gaza by at least a decade, it is also a central element of the movement's worldview. This perceptual lens can be seen in youth educational material distributed by the movement between 2015 and 2019, in which America is specifically described as the "Greatest Satan," undermining the security of not only Yemen but its neighbors.³¹ From this "Greatest Satan" position, the United States is accused of playing the role of puppet master over Ansar Allah's other enemies. The United States is described as the puppet master of Israel, or Israel as the protegee of America, in posts by Salam and in educational material.³² This "Greatest Satan" framework is also used to articulate sectarian differences between Ansar Allah and the Sunni extremist movements that make up their enemies. The United States is described as the mastermind behind the Islamic State: educational material describes the group as the product of American intelligence and Salam's posts depict the movement as being "American-manufactured." 33 Ansar Allah's anti-American sentiment is perhaps most obvious in a portion of the group's motto, which, in red lettering, states simply: "Death to America." The slogan was popularized by Iranian Supreme Leader Ruhollah Khomeini following the Iranian Revolution of 1979, indicating some agreement between the two on their anti-American sentiments. However, the movement adopted this part of the slogan after the U.S. invasion of Iraq in 2003, demonstrating how U.S. action itself has played into the creation of the "Greatest Satan" perception.³⁴ In sum, from Ansar Allah's perspective, the totality of threats faced by Yemenis can trace their roots back to America.

This perception of America as the "Greatest Satan" hyperbolizes a more common perception rooted in Yemen's recent history. Tensions between Ye-

Figure 1. Ansar Allah's slogan. The text reads: "Allah is the Greatest – Death to America – Death to Israel – A Curse upon the Jews – Victory to Islam"



Source: courtesy of RuneAgerhus, adapted by MCUP.

men and Saudi Arabia have encouraged this negative perception of the United States. Saudi Arabia has been viewed as a constant meddler in Yemeni politics, reaching well before the Yemeni Civil War, and has also been a uniting factor for Yemenis.³⁵ The United States, as an ally in Saudi Arabia's coalition and a key

supplier of weaponry, is likely not viewed as a neutral actor by many Yemenis affected by the conflict, especially those in Ansar Allah controlled regions, where the most airstrikes have occurred.³⁶

Saudi intervention in the civil war has upended lives across the country and driven Yemenis to back Ansar Allah. In 2022, a survey conducted by Resonate! Yemen and the Public International Law and Policy Group showed that more than one-half of Yemenis polled described the security situation constructed by Ansar Allah as "good" during the previous year. That is not to say the Yemenis polled were entirely pleased with Ansar Allah's governing position—many raised concerns regarding their ability to voice dissent against the movement, claiming that Ansar Allah's governance was a detriment to "individual security." Yet, despite these concerns, Ansar Allah's approach was perceived as a way to escape the "lawlessness" produced by the civil war and coalition airstrikes.³⁷

The perceived cruelty of the Saudi-led coalitions efforts against Yemen is evidenced across Ansar Allah's educational material, demonstrating the extent to which anger and opposition to foreign actors involved in the Yemeni Civil War has become a cultural narrative among the elite. Materials not only directly call out the involvement of Saudi Arabia, the United Arab Emirates, and the United States in the conflict but also paint vivid pictures of the destruction they have caused. Brutal images of bodies killed in airstrikes, both real and illustrated, are displayed with sorrowful captions.³⁸ At the same time, educational material calls for a response to these actions. Multiple comic strips call for both youth and adults to fight this aggression against the "motherland," simultaneously promoting the perception of a Yemeni nation united against foreign siege.³⁹ These educational materials serve as a call to action that compels young Yemenis affected by the war to join Ansar Allah's ranks. They inflame the anger many Yemenis feel about the destruction of their country and the extent of foreign influence in what began as a domestic conflict. Then, the materials provide a potential method by which Yemenis can not only save themselves and their families, but also their country: fighting the foreign aggressors, including the "Greatest Satan" that backs them economically and militarily. This fighting is promoted as a cultural value within Ansar Allah and helps produce a loose "anti-imperialist" identity. Similarly, Ansar Allah promotes an "anti-imperialist" identity among both its own forces and Yemenis within its area of governance: the education material it disseminates includes guides such as how to properly deter the aggression of "imperialist" and "colonialist" powers while also stipulating that it is the duty of Yemeni men to fight such forces. 40 Ansar Allah's current action on the Red Sea is an actualization of this identity, capitalizing on the cultivated value of resistance and the perceptual lens that frames the United States, allied Western powers, and neighboring states as oppressors.

Non-Gaza Motivators: Bolstering the Yemeni Nation, Encouraging Iranian Military Contributions

This examination of the evolution of the internal culture of Ansar Allah, and the militant narratives it is cultivating in the wider Yemeni population, indicate that an outcome to the conflict in Gaza in the short- or medium-term is unlikely to encourage Ansar Allah to stop its attacks against ships on the Red Sea. While Palestine plays an important role in helping Ansar Allah signal to both domestic and international audiences, the group's action is ultimately driven by a combination of domestic interests and cultural motivators outside of the Gaza context. In addition to the cultural will to fight the "Greatest Satan" and other foreign forces, Ansar Allah aspires to make Yemen a recognized regional player; they perceive the country as a "rising underdog" with the influence to reshape the geopolitical landscape of the Middle East. This concept is repeated in articles published by *Al-Masirah*, as well as in spokesperson posts made by Salam. To continue promoting this perception of the Yemeni nation as rising in influence, Ansar Allah will continue to draw international and domestic attention through orchestrating attacks.

Thus far, Ansar Allah perceives its actions on the Red Sea as immensely successful. The group has stifled global trade through the Suez Canal, with shipping through that route dropping by more than 50 percent in 2024 compared to a year earlier. Articles from *Al-Masirah* celebrate the effect of the action on Yemen's adversaries repeatedly, sometimes focusing only minimally on the additional Palestinian context. The success in disrupting global shipping and undermining the interests of the "Greatest Satan" give Ansar Allah an increased level of legitimacy—not as a legitimate government, per se, but as a force to be taken seriously in both domestic and international contexts. Through its Red Sea action, Ansar Allah demonstrates that its irregular warfare tactics can go toe-to-toe with some of the world's most formidable militaries. This promotes Yemen's image as an influential state, further cultivating the "underdog" nationalist identity and motivating disruptive action outside of the Palestinian context.

This desire for increased recognition and legitimacy as a regional actor is further evidenced by the types of vessels that Ansar Allah selects to target, which extend beyond those related to the conflict in Gaza. Both Salam's posts and articles published by *Al-Masirah* claim that the movement is only targeting ships with association to Israel, the United States, and the United Kingdom. However, reporting from the Red Sea dismisses this claim. Ships with no recognizable connection to the aforementioned states, including a Barbados-flagged ship, a Palau-flagged ship messaging the presence of Syrian sailors, and a Chinese-owned oil tanker called *Huang Pu*, have been targeted. An analysis

provided by the U.S. Congressional Research Service states that the movement's attacks "have not appeared discriminate or linked to stated demands." Additionally, the movement will simply lie about targeting certain vessels. For example, the movement claimed to attack an American vessel known as *Ocean Jazz* in January 2024, a claim which the United States denied, noting that the ship made a safe transit through the Red Sea. Such a claim indicates that signaling that the movement is fighting against the "Greatest Satan" is equally important as actually doing so.

A glance at the ships targeted by the movement indicates no concrete pattern. Ships without a direct connection to Israel appear to be targeted at random. Given that attacks on Red Sea vessels are described as part of both a pro-Palestinian and pro-Islamic mission and thus receive domestic support, the random attacks that accompany attacks against vessels with more obvious relations to Israel likely amount to a militaristic form of attention seeking.

The previously mentioned Chinese-owned oil tanker Huang Pu exemplifies the indiscriminate nature of Ansar Allah's attacks. Toward the end of March 2024, both Russia and China struck a deal with Ansar Allah that would avoid having their ships attacked in exchange for "political support." 46 Yet the current state of this deal is unclear, as just a few days after Bloomberg reported the deal, U.S. Central Command (CENTCOM) reported that Ansar Allah attacked Huang Pu. 47 It remains unclear whether Ansar Allah was aware of the ownership of this vessel, but their willingness to strike it without careful vetting further demonstrates how Israel and Palestine are not the primary motivators of the Red Sea attacks but instead serve as a useful cultural disguise that provides justification for the strikes to the movement's audiences. 48 While keeping up their anti-Israeli rhetoric, Ansar Allah builds popularity domestically by repeatedly flexing its muscles on the water, whether against U.S. and Israeli-associated vessels or not. The attacks on the Red Sea have proven popular domestically, boosting the number of fighters recruited by the movement.⁴⁹ For Ansar Allah elite, the specific targets of attacks are unimportant, so long as the attacks display regional influence and improve domestic legitimacy.

Iranian Support Significantly Improves Ansar Allah's Military Capabilities

Ansar Allah has dramatically increased its military capabilities during the course of the Yemeni Civil War. Their ability to conduct military action outside of Yemen's borders has likely never been easier or more cost effective. This growth is the result of Iranian provision of support and supplies in missile and UAV construction. Deconstructed antiship parts are shipped or smuggled into Yemen and then fully rebuilt for use in Ansar Allah attacks. Evidence points to

parts produced in Europe being smuggled into Iran and then provided to Ansar Allah.⁵⁰

The most effective method of Houthi attacks appears to be the use of one-way unmanned aerial vehicles (UAVs) laden with explosives. The Yemeni Civil War has produced an extensive, successful record of Ansar Allah UAV attacks against Saudi Arabian targets. The movement's Qasef-1 and Waid-1 models, with ranges of 200 km and 900 km, respectively, are sufficient to conduct strike missions on Red Sea targets. Longer range capabilities, such as Waid-2, are capable of covering most of the Middle East and striking targets in countries such as Israel. The most capable of the movement's missiles have similar potential ranges and have already been tested against Israel in a recent attempted attack on Eliat. The first fatalities on the Red Sea were the result of Ansar Allah's ballistic missile attacks on the cargo ship *True Confidence*, which killed three people. While evidence exists that suggests Ansar Allah is developing its own production capabilities, Ansar Allah remains beholden to Iranian design. Nearly the entirety of Ansar Allah's antiship arsenal are near-identical copies of Iranian models.

Ansar Allah, Iran Relationship Motivated by Shared Interests, Not Shared Culture

This formidable support on the part of Iran has advanced Ansar Allah from a relatively ragtag rebel group to a serious force not only within Yemen but regionally. When the movement took over Sana'a in 2014, what they inherited from the Yemeni military was largely old, Soviet-designed weaponry.⁵⁸ Iranian-supplied and designed capabilities now allow Ansar Allah to launch explosives to the very edges of the European Union.⁵⁹ Ansar Allah recognizes the importance of this military aid in allowing the movement to better pursue its own ambitions and cultural preferences. It therefore remains likely to continue backing its Iranian benefactor both rhetorically and militaristically. While Salam's posts and articles from Al-Masirah largely keep the relationship between the movement and Iran hush-hush—with Salam's posts denying the existence of Iranian supply lines assisting the movement in one X post and Al-Masirah denying the movement's position as an "Iranian proxy"—Ansar Allah has also overtly praised or participated in pro-Iranian action.⁶⁰ In the wake of Iran's attack against Israel on 13 April 2024, an Ansar Allah spokesman from the movement declared it a "legitimate act." A press release from Israel also indicated that Ansar Allah directly participated in this round of strikes with their own ballistic missile and UAV capabilities. 62 Vocal participation in these attacks further signals to Iran that Ansar Allah is an ally worthy of receiving further support.

The cooperation seen between Iran and Ansar Allah is the result of overlapping interests and the "win-win" material outcomes that result from their symbiotic relationship rather than shared cultural identity and values. While Salam's posts made brief mention of Ansar Allah's position in the "axis of resistance" in the wake of the 7 October attacks, few other cultural or ideological connections are articulated in rhetoric. Ultimately, while the two parties have similar interests in the region currently, the cultural motivators for those interests are different. Yemeni nationalism is a significant cultural motivator for Ansar Allah, one that the Iranian elite do not share. In contrast, literature on Iranian strategic culture places a greater emphasis on the Shi'a Islamic identity of Iran and the country's own nationalist and self-preservationist desires. The cultural link between the two states is not strong enough to deter actions that further their own interests and cultural preferences. Ansar Allah pursues actions that simultaneously align with Iranian interests while furthering the movement's own cultural preferences: this includes both continuing strikes on the Red Sea and participating in attacks, whether successful or not, against Israel.

Ending the Crisis: Airstrikes Insufficient to Halt Ansar Allah

While strikes against Ansar Allah's capabilities have the potential to slow the rate of their attacks on the Red Sea, military engagement at current levels is unlikely to encourage the group to cease such action and may instead encourage later retaliation. Saudi Arabia's recent rounds of negotiation with the movement provide an example of how Ansar Allah is experiencing recent cultural flux, reducing its focus on solely resisting "imperialist" enemies to promoting a strong Yemeni nation, increasing its focus on domestic legitimacy. Furthermore, the negotiations outline how de-escalating violence can potentially lead to successful diplomacy.

The Current State of Play: Civil War Cooling, Ansar Allah Strengthening

Important, first, is to recount the current state of play. As of April 2024, fighting within Yemen has significantly cooled compared to the 2010s. This is the result of United Nations brokered ceasefires and ongoing rounds of negotiations between Ansar Allah and its adversaries. While ceasefire agreements within Yemen have proven fragile and are only somewhat upheld, their repeated implementation have assisted in reducing the extent of the fighting. A notable element of the negotiation process is the discussions between Saudi Arabia and representatives of Ansar Allah, which began in 2022. The on-and-off conversations culminated in the visit of representatives of Ansar Allah to Riyadh in September 2023.

Despite the cooling state of the war within Yemen's borders, Ansar Allah

continues to execute military action on the Red Sea. Airstrikes conducted on Houthi targets by the United States and United Kingdom appear thus far generally ineffective at deterring further attacks. It is too early to determine the long-term effects of such action: U.S. military officials claim that Ansar Allah's capabilities may be declining, reducing the pace of their attacks.⁶⁹ Ansar Allah, meanwhile, continues to claim attacks against Red Sea vessels.⁷⁰ Between the beginning of the Red Sea Crisis and May of 2024, attacks against ships increased roughly linearly despite retaliatory strikes beginning in February.⁷¹ Meanwhile, the effect on global shipping remains acute: passage through the Suez Canal remains reduced, significantly affecting schedules.⁷²

Saudi Arabia Negotiations Provide Potential U.S. De-escalation Framework

While airstrikes against Ansar Allah's capabilities may reduce their ability to conduct strikes on the Red Sea in the near term, they fail to strike at the identity-value combination that encourages the group to undertake future strikes. Since at least 2015, Ansar Allah has cultivated an identity of Yemenis as a people betrayed and oppressed by their neighbors and other adversaries.⁷³ Simultaneously, the group has promoted armed aggression against these perceived oppressors as a cultural value. This identity-value combination encourages potential recruits to participate in armed resistance against the ongoing siege orchestrated against Yemen. An identity rooted in a sense of betrayal and oppression will not disappear if capabilities are destroyed by airstrikes; more likely, airstrikes will accentuate the identity-value combo that encourages recruits and elite alike to take military action against their perceived oppressors. Attempts to debilitate this identity-value combination using force, trying to "break the will" of the opponent, may backfire. A decade of conflict appears not to have shattered Ansar Allah's resolve but rather those of everyday Yemenis, leading to the growth of Ansar Allah's total numbers and a national tolerance for—or, at least, an inability to—resist internal extremism.⁷⁴ Rather than discourage extremist behavior, excessive military strikes may instead breed the conditions for future extremism.

As a result of the "Greatest Satan" perceptual lens, the United States will struggle to make much diplomatic headway with Ansar Allah regarding the Red Sea Crisis without invoking the assistance of a third party. Even with the assistance of a third party, the stability of a diplomatic resolution is unclear. While Russia and China's previously mentioned negotiations with the movement demonstrate the ability to bring Ansar Allah to the table, the attack on *Huang Pu* shows that Ansar Allah's word is not their bond.⁷⁵

Recent efforts by Saudi Arabia, however, may provide an example of how the United States can proceed. The rounds of negotiations between Saudi Arabia and Ansar Allah are a noteworthy example of flux on the part of both parties. First, it demonstrates the willingness of Saudi Arabian officials to recognize Ansar Allah's influence in Yemen and to approach negotiations with an understanding of the movement's near-term permanence. Second, the willingness for Ansar Allah to negotiate with Saudi Arabian officials—who Salam surprisingly described as "our brothers" in a spokesman post related to the negotiation demonstrates that the movement's motivations related to strengthening itself domestically and appearing as Yemen's protector may outshine its motivations to resist its "imperialist" neighbors militarily. Fostering a stable state will be a crucial step for Ansar Allah to secure its legitimacy in Yemen and cultivate the image of safeguarding the nation. This demonstrates a further evolution in Ansar Allah's internal culture. Core values driving decision-making are shifting away from the ideological domain, deterring "imperialist enemies," and now emerge most strongly from the national domain, strengthening the nation and the movement's place within it. The on-and-off ceasefire rounds seen since 2022 likely contribute to this flux, demonstrating how Ansar Allah can pursue its aims without relying on armed tactics.

While strikes against the movement's capabilities may slow the pace at which they can fight, they fail to encourage Ansar Allah to negotiate with the United States. Additionally, strikes run the risk of promoting an image of instability within Yemen's borders, which not only pushes Yemenis toward supporting the movement but also feeds the cultural values and perceptual lens its leadership promotes, including the need to resist foreign adversaries militarily. Prolonged military action by the United States and allies ultimately plays into the hands of Ansar Allah and encourages Yemenis to subscribe to its cultural signaling. Gradually slowing the rate of strikes against Ansar Allah targets may provide an opportunity for the United States to leverage the influence of a third party, such as Oman, to outline a pathway for Ansar Allah to pursue its domestic agenda without significantly disrupting U.S. and global economic interests on the Red Sea. Ansar Allah may desire to negotiate in the future to boost perceptions of its own legitimacy, which the movement seeks. Ansar Allah's influence in Yemen is likely to continue to grow. Clever policy solutions to the Red Sea Crisis will leverage a knowledge of Ansar Allah's internal culture, aspirational identity, and popular narratives to craft engagement strategies that reduce the domestic rewards Ansar Allah is garnering from Red Sea attacks and amplify the positive international recognition Yemen receives when engaging in diplomatic negotiations.

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Oceans Are Now Battlefields

How the U.S. Navy and Marine Corps Can Counter North Korea's Navy in an Evolving Age

Alan Cunningham

Abstract: The North Korean armed forces are one of the main threats in the Asian geographic region and consistently have been a thorn in the side of Western allied Asian nations and the United States. In such a conflict with the North Koreans, the United States would, alongside others, take a lead role in countering North Korean naval forces. Taking into account the *Force Design 2030* and *2045* battleplans devised by the U.S. Navy and Marine Corps, it is imperative to explore how the United States could work to combat North Korean forces in the near future. With the *Force Designs* and stated modernizations and improvements being performed in sea-based warfare, there is much more to do to make a strong military force that can strike against the North Koreans.

Keywords: U.S. Navy, U.S. Marine Corps, North Korea, *Force Design*, amphibious operations

Introduction

hroughout world history, a country's power and might depended on a strong navy. From the ancient world to modernity a strong naval force has always been key in becoming dominant over regional and international commerce and trade, maintaining the upper hand in armed conflicts, and overall showcasing one's military and political might.¹

While the U.S. Navy is still a formidable naval power, the perception of them being the strongest, greatest naval player around has dwindled in recent years. During the past few years, it has become the view of some military officials

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and academic observers that the U.S. Navy is still "very much a product of the war in the Pacific" continuing to be reliant on aircraft carrier technology while also having superior lift capabilities "[allowing] for the transport of firepower, fuel, food, and other cargo needed to sustain distant combat operations."²

Meanwhile, the Democratic Republic of North Korea's (DPRK) Korean People's Navy (KPN) has grown in both size and capability. North Korea's military in total is the fourth largest in the world with the KPN having a substantial submarine fleet alongside experienced servicemembers if being "under-gunned and largely antiquated." Naturally, this poses a significant threat to the Republic of Korea (ROK) Navy, a stalwart American ally in the East China Sea region, but also to Japan and Taiwan. While the South Korean Navy will always have their focus on their longtime adversary to the North, they have begun designing their fleet to counter threats in the Sea of Japan and total Indo-Pacific region. A

With the problems inherent in the U.S. Navy and Marine Corps, including the strategic, personnel, and modernizing issues that have arisen during the past decade and more, it is important for the United States to determine how to best defend their strategic interests and allies against a robust and dedicated enemy naval force.

The Capabilities of the KPN

For most of the KPN's history, their overall goal has been directed against the South Korean government and military, armed with an overall total goal to reunify the Koreas under one banner, the banner of a totalitarian socialist state. As such, in the past 70 years, North Korea has consistently and continually improved and expanded their military capabilities.

Historically, North Korea's military forces were considered superior to those of South Korea's in the late 1950s and into the 1960s though the dissolution of the Soviet Union, a primary economic and military benefactor combined with "decades of accelerated South Korean economic growth" have resulted in the South outpacing the North in most terms of ground, naval, and aerial warfare. The ROK Navy specifically has an extensive surface warfare branch, a well-developed shipbuilding industry, and policies aimed on innovating their forces and bettering their maritime capabilities and, into the twenty-first century, focusing on improving their amphibious warfare and coastal defense operations.

While South Korea's armed forces, in total, are superior, North Korea's Navy still has some advantages, namely in their submarine fleet. In 2000, it was the general consensus that North Korea's submarine fleet was comprised of 35 "decentralized . . . outdated and slow" submarines which were capable of "inshore defense operations" but unequipped for any "sea control or denial and antisubmarine operations." As of 2020, North Korea has doubled their submarine fleet and, in spite of age, the submarine fleet is highly capable at

"[conducting] secret raids and infiltration missions" while continually improving their ability to launch ballistic missiles (potentially with nuclear capability) from afar. In 20 years, North Korea's submarine fleet has drastically improved and has become a key part of their maritime strategy to counter South Korean naval forces, civilian merchant vessels, and control the East Sea.

North Korea's naval forces have also found much success in running "asymmetrical operations" against the South Korean Navy using a combination of conventional surface warfare vessels and mini/midget submarines alongside locally made civilian ships repurposed for intelligence gathering, coastal defense, or mine warfare. Furthermore, given North Korea's endless search for nuclear superiority, the state's arming of submarines with nuclear weapons would pose a serious threat to South Korean sovereignty, the whole of the Indo-Pacific, and make the North Koreans' ability to make war against the South more effective. ¹⁰

In a larger geopolitical and geographical context, however, China clearly would be the most dominant and serious military force. Whether there is a larger or substantial conflict in the South China Sea, the Yellow Sea, or the East China Sea, China would undertake efforts to be seen as a superior naval and military force. Nonetheless, the North Korean Navy, out of their desire to be taken seriously as a major geopolitical power in the region and by the United States, they would pose serious problems for South Korea, not in the sense of an invasion being probable, but rather that any kind of all out naval conflict would likely be prolonged and difficult given South Korea's reliance on imported fuel and their current lack of an aircraft carrier.¹¹

In any kind of conflict in Korean waters, the United States Navy would be a dominant force as history has shown and public statements have confirmed time and time again.¹² It is highly probable the United States would commit a mass of naval forces to defending South Korea from a substantial Northern attack.

Redesigning the U.S. Navy and Marine Corps

From a policy perspective, the United States certainly desires to counter North Korean aggression and operations that threaten regional stability and security.

The Annual Threat Assessment of the U.S. Intelligence Community produced in February 2023 by the Office of the Director of National Intelligence, the main organization responsible for integrating all U.S. intelligence activities, the intelligence community as a whole found that North Korea remains a significant geopolitical threat to the United States and its interests by way of improving and expanding their nuclear and missile capabilities. The 2022 National Security Strategy developed by the Joseph R. Biden administration further advocated for continuing diplomatic overtures with North Korea alongside countering nuclearization and any further missile production. Countering North Korean

aggression and military development remains a key aspect for U.S. policy going forward and the U.S. Navy will be at the forefront of any deterrence strategy.

Since 2020, the U.S. Navy and Marine Corps have been undergoing substantial changes to the way they conduct warfare through Force Design 2045 (FD 2045) and Force Design 2030 (FD 2030), respectively. The Marines' FD 2030 aims to "transform [the Corps'] traditional models for organizing, training, and equipping the force to meet new desired ends" in coordination with the Navy's own plans, specifically intending for the Marine Corps to become a "stand-in force [of] small but lethal forces" operating across all areas of maritime defense, being highly mobile, better attuned to existing supply structures, and produce a reduced signature on the battlefields of the sea, air, and land. 15 The Navy's FD 2045 looks to build on the "four foundational priorities [of] readiness, capabilities, capacity, and sailors" envisioning a hybrid fleet "more than 350 manned ships, 150 large, unmanned surface and subsurface platforms, and approximately 3,000 aircraft." The greatest addition to this new battle plan for the Navy is the addition of unmanned surface and subsurface platforms, highlighting and indicating a need to integrate military technology deeper into the armed forces and national defense systems of the United States. Such a redesign is ambitious and not without its criticisms.

Looking first at FD 2030, the greatest concern from prior service leadership and defense experts was that the Marine Corps would back away "from its traditional focus on combined arms and global engagement" in addition that FD 2030 "is too focused on the Western Pacific, undermines traditional combined arms operations, makes the Marine Corps too small, and relies too heavily on unproven operational concepts." This has been best stated in an oped piece for *The Hill* by Terrence R. Drake and Charles E. Wilhelm, the former assistant commandant of the Marine Corps and commander of U.S. Southern Command, respectively, who wrote "A nation without the capability to respond globally to emerging threats risks wider wars, not only with peer competitors but with a host of other secondary actors that are intent on attacking United States sovereignty and interests in areas other than the Western Pacific." 18

As far as being overly focused on global security as opposed to looking at geopolitical threats, in a commentary for *War on the Rocks*, then Commandant of the Marine Corps, General David H. Berger, indicated that China posed the greatest threat and that FD 2030 would work to largely counter the Chinese threat, being mentioned the most in his piece.¹⁹

The main criticism about FD 2045 has been focused largely on cost. Some have found that other plans (developed by the Hudson Institute, labeled the "Hudson Proposal"), which built off FD 2045 were "more affordable than the Navy's plan by gradually rebalancing the fleet to incorporate more smaller, less-expensive ships and fewer large multimission combatants." From a stra-

tegic perspective as well, the Hudson Plan's proposed fleet of unmanned and manned vessels

would generate more numerous and diverse effects chains compared to today's Navy, improving the force's adaptability and imposing greater complexity on enemy decision-making . . . would deliver more offensive munitions from vessels and aircraft over a protracted period, and defend itself more effectively using distribution, shorter-range interceptors and electric weapons . . . [and enhance] the fleet's amphibious, logistics and strategic sealift capacity . . . [resulting] in a Navy that can help the joint force prevail across a range of potential scenarios, including the most challenging ones such as an attempted Chinese attack on Taiwan.²¹

Elected officials have also noted the lack of budget consistency in FD 2045 as well as arguing that the plan should be able to rapidly integrate unmanned vessels "to support maritime intelligence, surveillance, and reconnaissance, bring more munitions to a given theater, and fulfill a variety of other missions."²²

With further updates to both the FD 2030 and the FD 2045, it is apparent that the design overall intends to better counter geostrategic threats in the Indo-Pacific region, moving away from conventional and accepted strategic thought processes, and better be able to interact with the modernizing, technologically changing world.

External and Internal Challenges Facing the U.S. Navy and Marine Corps Redesign

While the FD 2030 and FD 2045 deals with the strategic areas of the U.S. Navy and Marine Corps, improving supply systems, reorganizing the fleet in total, and better improving readiness, it is also important to note the external and internal challenges beyond these strategic, strictly military affairs, that pose roadblocks to how the U.S. Navy and Marine Corps implement FD 2030/45.

Naval officers, active duty and retired alike, have called attention to their belief that the United States has lost command and strategic superiority of the world's waterways.²³

The Council on Foreign Relations has described in detail how China has engaged in a decades-long modernization of their naval forces, now becoming the largest naval force in the world and posing a serious threat to American and international security efforts.²⁴ Official U.S. Department of Defense (DOD) studies showcase the heavy strategic challenges the U.S. Navy faces from China while experienced Naval officers and academics highlighted the Chinese threat to American and Taiwanese security.²⁵ Finally, the U.S. Government Accountability Office (GAO) and numerous others have highlighted the serious sustain-

ment and more general national defense problems plaguing the entire military Service, including a lack of qualified personnel and training to budgeting and derelict aircraft.²⁶

The recruiting crisis being experienced by the entire U.S. armed forces also has been affecting the U.S. Navy in particular, while the "nominations and promotions" of hundreds of military officers severely damages military readiness, posing massive internal struggles to any national defense and military readiness strategy.²⁷ Some of these, namely the desire to counter China, better defend America's waterway superiority, and better sustain forces in the field, are being addressed by the *Force Designs*, even though this may not have appeared readily apparent when the plans were first initiated.²⁸ But other factors, such as the recruiting and retention crisis and the political challenges to U.S. military appointments, are still factors that serve to harm the U.S. military and the national defense framework of the United States.

On top of this, a new U.S. Navy and Marine Corps force must be willing and able to counter any threats from North Korea's brown water navy against South Korea and Japan.

Countering North Korea amid Force Designs 2030/2045

The benefit with both FD 2030 and FD 2045 is that they make a strong push and focus on the Indo-Pacific region. While FD 2030 focuses largely on countering Chinese aggression, this is quite understandable given China is the primary near peer adversary in the region and is substantially more advanced (economically, militarily, cyberspatially) than the North Koreans.

In spite of the criticisms laid upon the FD 2030 and 2045, both serve to put an emphasis on the Indo-Pacific that will affect how the U.S. Navy and Marine Corps would respond to a North Korean incursion or attempts to control the waterways and heighten tensions around South Korea. Some have found that, under FD 2030, the Marine Corps would become better able to share intelligence and information with Indo-Pacific allies and, using smaller reconnaissance units with unmanned trucks equipped with antiship missile launchers, could offer "new means of disruption." Writing in the Asian focused security magazine *The Diplomat*, the author, a research intern with the Stimson Center, found that in the context of Japanese maritime and geopolitical security against China

the USMC's means of diverting enemy forces for fleet maneuvers is innovative and complements Japan's capabilities [as well as] developing naval components of one of the United States' most capable allies in the region, given shared concerns over amphibious operations and protection of Japanese island territory . . . Force Design 2030 focuses on

balancing the power of an increasingly capable China with allies that complement U.S. strategy by taking opportunities to expand cooperation . . . [it] is both innovative and necessary for the unique challenges the U.S. and its allies face in Indo-Pacific region and elsewhere.³⁰

While this piece focuses on Japan in the context of a Chinese threat, this can readily be applied to North Korean activity against both Japan and South Korea. The entire purpose of FD 2030 is to enhance global cooperation with allies in the Indo-Pacific and better improve information sharing operations among the United States and its allies. This would better allow the South Korean military and government access to timely, up to date, and accurate intelligence on North Korean activity in addition to Chinese activity in the region. As well, given North Korea's contesting of islands under the control of both South Korea and Japan, some of FD 2030's recommendations for refocusing the Corps on smaller reconnaissance units equipped with new antiship technologies would prove effective in countering North Korea's lesser naval force.³¹

This being said, both FD 2030 and FD 2045 provide plans and a framework in which North Korea could also be countered. This is one of the benefits of *Force Design 2030* and *2045* in that the focus on Indo-Pacific and countering China actually serves to improve relations with the South Korean and Japanese governments and their militaries and can help to counter North Korea's aggression along the waterways.

However, it cannot be understated that this policy of using military weapons and increasing a presence against the North Koreans should be taken with care. It is well shown that taking a hard military line against the North Koreans without any kind of diplomatic overture or policy is ineffective and would only serve to push the North Korean government away and increase nuclearization and tensions between the two nations.³² The U.S. Navy and Marine Corps, in going forward with FD 2030 and 2045 should take note of this and heed that the "preemptive use of military force . . . be considered only when there is high confidence that a large-scale attack by the North is imminent.³³ In a time when North Korea is also actively forcing military encounters, it is important that the United States respond tactfully and in consideration with all aspects of their policy to counter North Korean activity.³⁴

Instead, actively containing nuclearization efforts, putting human rights and humanitarian aid at the forefront of any North Korean policy, and maintaining an open diplomatic dialogue as well as formulating a military policy of deterrence against the North Koreans is perhaps the only way in which to ensure stability in the region and work in concert with American interests in the Indo-Pacific geographic region.³⁵

Conclusion

The intent and aims to modernize, innovate, and adapt the U.S. Navy and Marine Corps to the changing world is a valiant and important mission. As the world sees military technology innovate on a level and scale unparalleled in human history and witness, U.S. adversaries develop their own methods for obtaining serious equipment and weaponry. It is important that the United States defend its own borders, keep up to date on military equipment, and defend our neighbors and geostrategic risks as possible.

With North Korea, the country is innovating militarily and continuing their decades-long desire to be taken seriously and seen as a formidable power in the Indo-Pacific and more localized geographical region. This likely will not stop under a new leader or government and will continue. As such, a policy of containment, denuclearization, and strong diplomatic policy must be continued alongside a form of military deterrence against North Korean activities.

FD 2030 and FD 2045, in spite of much of the well-meaning and valid criticism laid against these force designs, would serve to help the United States in countering North Korean aggression and serving as a beneficial deterrent to North Korean naval action against South Korea or other American allies in the region. In this new age of geopolitical conflicts and crises, which takes a radically different stance from previous U.S. military engagements focusing on counterterrorism and insurgencies, these force designs would serve the U.S. Navy and Marine Corps well in countering North Korea. But it must be performed in a way that "[takes] stock of those changes and ensur[es] that the U.S. Marine Corps [and U.S. Navy] has enough depth and flexibility to respond to a wide range of contingencies."³⁶

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Fires from the ShoreSupporting the Fight for Sea Control

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Abstract: The struggle to obtain, maintain, and exploit sea control during a campaign is an inherently Joint endeavor requiring a multi-Service, cross-domain application of firepower and maneuver. Maritime strikes from the land domain provide a critical offset to the People's Republic of China's (PRC) growing strength at sea and enable Joint force maneuver in the Western Pacific. To have a meaningful impact on the People's Liberation Army Navy's (PLAN) surface action groups and contribute to a Joint force objective to gain sea control in the Western Pacific as part of a coordinated campaign, the U.S. Army's maritime strike capability must be aggregated into effective salvos by the supported maritime component commander. If deterrence fails in a strategically near future, naval operations in the Western Pacific will need to incorporate the U.S. Army's multidomain task forces and their maritime strike capability to defeat the PRC's antiaccess, area-denial (A2/AD) strategy.

Keywords: sea control, Joint force maneuver, multidomain, U.S. Army, People's Republic of China, PRC, People's Liberation Army Navy, PLAN, antiaccess/area-denial, A2/AD

he struggle to obtain, maintain, and exploit sea control during a campaign is an inherently Joint endeavor requiring a multi-Service, cross-domain application of firepower and maneuver. Extended firing and sensing ranges provide opportunities to integrate land-based fires into the Joint force maritime component commander's concept of operation to gain, main-

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tain, and exploit sea control. Maritime strikes from the land domain provides a critical offset to the PRC's growing strength at sea and enables Joint force maneuver in the Western Pacific. To have a meaningful impact on the People's Liberation Army Navy's (PLAN) surface action groups and contribute to a Joint force objective to gain sea control in the Western Pacific as part of a coordinated campaign, the U.S. Army's maritime strike capability must be aggregated into effective salvos by the supported maritime component commander. If deterrence fails, naval operations in the Western Pacific will need to incorporate the U.S. Army's multidomain task forces and their maritime strike capability to defeat the People's Republic of China's antiaccess/area-denial (A2/AD) strategy.

Army forces can provide the JFMCC with an antiship capability in the Western Pacific through persistent presence, rotational forces that develop alliance structures and networks, and in creating targeting dilemmas for the PLAN. Achieving the effective delivery of aggregated salvos capable of penetrating the air defenses of a PLAN surface action group necessitates active integration. Aggregating land and sea based operational fires to gain sea control will require integration of Army multidomain task forces into the JFMCCs antisurface warfare (ASuW) concept of operations. Fully tapping into the delivery of combat power ashore to achieve sea control will require appropriate support relationships and active integration across services in the human and technical domains.

Sea Control and Landpower

History is replete with examples of naval forces fighting to obtain an acceptable level of sea control to enable a Joint landing force or to blockade an adversary and break their will from the sea. The British naval theorist Julian Corbett said it succinctly: "The object of naval warfare must always be directly or indirectly to secure command of the sea, or to prevent the enemy from securing it." The fleet exists to gain, maintain, and exploit sea control for the Joint force through naval operations in maritime campaigns.

Coordination between maritime and land forces is critical to achieve Joint force operational objectives. This synergy is best exemplified in Joint operations, where the acquisition of sea control facilitates the projection of power onto land. Admiral William F. Halsey's victory at the Battle of Cape Engano enabled the requisite sea control to permit General Douglas MacArthur's invasion at Leyte Gulf, exemplifying the importance of maritime operations to influence events ashore.² Land forces have also exerted influence on maritime operations. The destruction of the Athenian fleet by the Syracusans in 413 BCE during the Peloponnesian War demonstrated the vulnerability of an isolated fleet.³ Similar themes emerge when studying Japan's assault on the Russian Port

Arthur fleet during the Russo-Japanese War, demonstrating the importance of a fleet's freedom of maneuver.⁴ Limitations in range and observation capabilities have hampered the ability of forces ashore to significantly impact the conduct of operations for obtaining and maintaining sea control, and the changing character of war is providing new opportunities to affect maritime operations from across the spectrum of warfighting domains.⁵ The advent of integrated longrange sensing and fires should broaden the Joint force's definition of the fleet and what forces should be employed to gain sea control in the course of a major operation or campaign. Sea control may still be a prerequisite for achieving major operational objectives, but it is no longer a single service effort, particularly in the Western Pacific.

PLA Modernization

The People's Liberation Army Navy's modernization threatens the U.S. Navy's ability to exercise sea control and project power in the Western Pacific. Analysts suggest that the PRC aims to develop its navy to function effectively within an antiaccess/area-denial framework to deny the U.S. Joint force operational access in the Western Pacific.⁶ A PRC counterintervention strategy would serve to dissuade the United States from involvement in a potential conflict within China's near seas, particularly concerning Taiwan or other Chinese excessive territorial dispute claims.⁷ If deterrence fails, China's objective would be to postpone or diminish the impact of U.S. intervention forces.⁸ In pursuit of this objective, the PLAN has hastened the construction of dozens of naval vessels to outfit their force with the necessary capability to support an A2/AD strategy.⁹

The rapid increase of PLAN surface combatants is particularly concerning and presents a serious threat to the U.S. Navy's ability to ensure access for the Joint force in the region. The PLAN is currently on pace to deliver 440 battle force ships by 2030, significantly enhancing their capability to exercise sea control within the first island chain (FIC) and conduct regional sea denial. The modernization of the PLAN and other forces across the PLA, including the People's Liberation Army Rocket Force (PLARF), that are critical to executing A2/AD operations presents the Joint force with an operational dilemma. Attacking the PLA's A2/AD operational construct in the Western Pacific requires innovative concepts and employment considerations by the Joint force that includes land-based fires as a method of disrupting PLAN attempts to exercise sea control.

Gaining Sea Control and Army Operational Fires

Land-based fires are highly survivable, dispersible, and present unique targeting challenges. The PLA's A2/AD system aims to counter the U.S. Joint force's strengths in both air and maritime domains with secondary objectives of ob-

structing space and cyber capabilities.¹¹ General Charles A. Flynn, commander of U.S. Army Pacific, points out the clear offset for the PLA's relative strength is the use of landpower due to the nature of "distributed, networked, meshed, reloadable, lethal or nonlethal ground forces." By enabling preconflict operational access, land forces armed with antiship missiles (AShM) facilitate the JFMCC's efforts to hold PLAN assets at risk and mass forces from multiple domains to gain, maintain, and exploit sea control in the Western Pacific if necessary.¹³

To gain sea control in support of operational objectives in the Western Pacific, the Army's rotational M142 HIMARS and SMRF platforms provide the JFMCC with a persistent presence within the first island chain to strike targets at sea. Persistent forward presence enables the rapid employment of Army missiles in support of gaining sea control within the first island chain. Additionally, rotational Army fires forces deepen ties with partners and allies and increase the likelihood of employing Army fires in support of a crisis in the maritime domain. Finally, Army operational fires platforms can serve as a "fleet-in-being" that complicates PLA targeting and expands the decision space for the JFMCC in working to gain sea control.¹⁴

Persistent Presence and Joint Interior Lines

Forward presence enables the rapid employment of Army missiles in support of gaining sea control within the first island chain. A major lynchpin of the Army's strategy in the Pacific is the development of Joint interior lines. Persistent presence in the first island chain enables the Joint force to retain key terrain and flow forces within forward interior lines to respond to regional crises. Noted by Professor James Holmes, the Army provides the Joint force with the capability to retain key terrain in the region and deny freedom of maneuver to the PLA. 16

Over time, this concept will include the buildup of Army fires platforms and requisite ammunition, storage, and protection across sites in the region. Persistent presence of Army AShM prevents the PLAN from executing a fait accompli against Taiwan by holding their naval assets at risk and preventing the rapid maneuver over the Taiwan Strait necessary for them to achieve their most sought-after strategic goals. Alberto Palazzo of the University of New South Wales theorizes that the future of naval warfare can be likened to the no-man's land of World War I, comparing the sailing of ships and combatants into an enemy's weapon engagement zone or net of A2/AD systems as the modern equivalent of frontal assaults into machine gun fields of fire. Army operational fires operating within joint interior lines flips the dynamics of the PLA's A2/AD approach by emplacing a web of land-based fires assets capable of restricting PLAN maneuver in the first island chain and enabling the

110°E 120°E 130°E 140°E 150°E 500 1,000 Kilometers First Island Chain 250 Second Island Chain 1,000 Miles 500 250 Sea Control 40°N 40°N N. KOREA Sea of Yellow Sea Japan IAPAN KÖREA CHINA -30°N 30°N Iwo Jima' 20°N 20°N SOUND Philippine Sea Mariana: Islands Paracel PHILIPPINES VIETNAM 10°N 10°N MALAYSIA Celebes Sea 0 0° Papua New Guinea 130°E 140°E

Map 1. Joint interior lines and sea control

Source: map of first and second island chain created by Peter McPhail, illustration by author, adapted by MCUP.

JFMCC to generate combat power to gain sea control at the time and place of their choosing.

Setting the Conditions for Operational Access

Rotational Army fires forces deepen ties with partners and allies and increase the likelihood of employing Army fires in support of a crisis in the maritime domain. There are numerous recent examples where the U.S. Army uses exercises in the region to develop operational access. On Amami Island within the Ryukyu chain, U.S. Army HIMARS and the Japan Ground Self-Defense Forces Type-12 antiship missile batteries engaged in routine combined training as part of the enduring army-to-army exercise known as Orient Shield. ¹⁹ The Army elected to leave several of the launchers in place instead of redeploying them back to their home station at Joint Base Lewis-McChord, Washington, in 2021. ²⁰ The U.S. Army's relationship with the JGSDF is an example of the critical role army to army relationships play in ensuring operational access in the theater. A Rand study on conflict access in the Indo-Pacific found that increasing peacetime access requests could increase the likelihood of their approval by a partner during conflict. ²¹ Persistent presence, exercises, and army-to-army integration is critical to assuring operational access in the Western Pacific and setting the conditions to support pulses of naval combat power reinforced by Army operational fires to roll back PLAN sea control. ²²

Army Fires as a Fleet-in-Being

Concealed within intricate terrain for enhanced survivability, Army operational fires can serve as a "fleet-in-being" that complicates PLA targeting and expands the decision space for the JFMCC in working to gain sea control. Army forces positioned forward and dispersed pose a considerable operational scouting challenge for the PLAN and PLARF. The PLAN and PLARF are not equipped or trained to detect, engage, or neutralize distributed, lethal, reloadable ground forces.²³ Put simply in a U.S. Army chief of staff white paper in 2021, "Land forces are hard to kill."24 Land forces are resilient and highly mobile, able to rapidly reposition along land-based nodes to fire and maneuver, upsetting PLAN and PLARF targeting efforts.²⁵ Disrupting targeting efforts precludes the PLA from making decisions at speed necessary to rapidly achieve operational objectives.²⁶ Mobile and dispersed Army antiship units in the FIC, simply through their presence, can serve as a "fleet-in-being" and degrade PLAN decision making.27 Difficult to find Army land-based AShM enable the JFMCC to hold PLAN surface assets at risk, creating decision uncertainty while generating combat power to conduct pulses back into the weapons engagement zone and strike enemy surface combatants with massed salvos.

Recommended Locations for Army Antiship Missiles

Extended munitions ranges enable flexible positioning of Army operational fires assets in support of JFMCC sea control operations in the Western Pacific. While specific ranges are classified, Army requirements for the Strategic Mid-Range Fires system capable of delivering Tomahawk, Maritime Strike Toma-

hawk, or the SM-6 specify the ability to be able strike targets between 483 and 2,736 kilometers away, filling the gap between the HIMARS' borne PRsM family of missiles and the Long-Range Hypersonic Weapon system currently under development. Admiral Aquilino (USINDOPACOM) outlined his vision for a distributed force posture in the Western Pacific under four "clusters"; Guam, Japan, Philippines, and Australia. The Army should continue to develop their relationship with the JGDSF to expand opportunities for employment of SMRF units forward, particularly in the Ryukyu Islands. The Army should also explore basing options in the Philippines from Enhanced Defense Cooperation Activity (EDCA) sites, which could provide additional value for forward basing with improved sustainment and rearming facilities to improve Army magazine depth. Both allies benefit from an archipelagic landscape that enables the dispersal of missile launchers across a broad geographic space, further complicating PLA targeting efforts.

The partnerships fostered by the Army can enable the Joint force to base and project power into the maritime domain from key locations in the first island chain. While the PRC continues building islands and bases in the South China Sea, the United States and its allies have effectively contained them within the first island chain.³¹ Political efforts to expand basing to the Solomon Islands may enable the PRC to break out of the Western Pacific, but in the current state, the Army holds the key terrain from which it can distribute AShMs that can strike at operational ranges.³²

The Multidomain Task Force and Antiship Capability

The multidomain task force represents the Army's key strategic effort for striking targets at sea and holding high-value Chinese naval assets in the Western Pacific at risk. Defined by the Army chief of staff in 2021, multidomain task forces are considered "theater-level maneuver elements designed to synchronize precision effects and precision fires in all domains against adversary anti-access/ area denial (A2/AD) networks." The capability to conduct cross-domain fires by an organic Army unit provides the JFMCC with credible, persistent forces to enable maneuver of naval task forces.

The Strategic Mid-Range Fires System

The Strategic Mid-Range Fires System, also known as the Typhon Battery within the Long-Range Fires Battalion of the multidomain task force, is the core of the Army's maritime strike capability. The SMRF utilizes a ground-based Mk70 Vertical Launch System (VLS) derived from the U.S. Navy Mk41 system for deploying Standard Missile-6, Tomahawk Land Attack Missiles, or the Maritime Strike Tomahawk, enabling forward positioned batteries in the Western

Pacific to hold PLAN combatants at risk and engage adversary surface vessels.³⁵ U.S. Army Pacific currently fields two SMRF batteries with a third expected to be employed in the coming years.³⁶

What the Army lacks in salvo quantity, it makes up for with its rapid reloadable capability. While an Arleigh Burke Flight IIA houses 96 VLS cells compared to the 16 VLS cells in a SMRF battery, a SMRF battery with enough Maritime Strike Tomahawk or SM-6 missiles stored in its operational area provides greater magazine depth over the course of an operation or campaign. A U.S. Navy destroyer surpasses the VLS capacity of a SMRF battery by six times, but its inability to reload cells or reconfigure for land attack, antiair, or antiship missions once departing port constrains the JFMCC and imposes limitations on magazine depth. In an environment where sea control's highly temporal nature is prominent, magazine depth and reloadability are vital considerations for executing sea control operations.

To deliver effective fires against the PLAN's primary surface combatants, the Army must fully integrate the SMRF Battery into the planning and execution of the JFMCC's ASuW operations, starting with regional exercises.³⁸ Recent theater security cooperation exercises have included several single and multi-Service sinking exercises. During Rim of the Pacific 2022 (RIMPAC), the Joint force conducted two separate multi-Service sinking exercises off the coast of Kauai in the Hawaiian Islands to demonstrate its ASuW capability. The U.S. Navy coordinated a Joint and combined multi-Service sinking exercise, coordinating ships and aircraft from multiple allies and partners in an AShM salvo to destroy the decommissioned ex-USS Rodney M. Davis (FFG 60). 39 The U.S. Army's 1st Multi-Domain Task Force and the Japanese Ground Self-Defense Force combined AShM fires from HIMARS and Type-12 surface to ship missiles to destroy the decommissioned ex-USS Denver (LPD 9). 40 The 2023 Balikatan Joint multi-Service sinking exercise with a Joint and combined force of U.S. Army HIMARS, Philippine land-based artillery and missiles, and U.S. Navy Joint Strike Aircraft represents a step forward in connecting the Joint and combined kill chain. However, reporting from the Balikatan exercise suggests substantial room for improvement, revealing that mission success merely involved passing grid coordinates from sensor to shooters. 41 Striking targets deep in the maritime terrain will require target tracking and effective command and control to successfully employ land-based fire salvos in conjunction with naval assets. Going forward, the incorporation of multidomain task forces and SMRF batteries are essential in these exercises, either in a live or constructive role. This inclusion enables maritime component commanders to synchronize ASuW fires seamlessly across multiple domains, including land. Much like the Army coalesces combat power around a combined arms approach, the Navy orients forces through distributed maritime operations to

tip the scales of relative combat power and ensure AShMs find their target and deliver effects.

Salvo Model and Land-based Antiship Missiles

Taking the Right Lessons from the Moskva

The sinking of the Russian Black Fleet flagship the *Moskva* in April 2022 represents a hallmark moment in the debate on the influence of land-based fires to conduct sea denial and sea control operations. Two Neptune AShM launched from mainland Ukraine struck the *Moskva* in the Black Sea approximately 65 nautical miles south of Odessa. The *Moskva* sank the next day, under tow attempting to reach port in Sevastopol.⁴² Proponents of land-based antiship capability point to the *Moskva* as an inflection point in naval warfare, highlighting the frailty of large capital-intensive ships against lower cost, replenishable land-based AShM.

While the sinking of the *Moskva* held strategic significance for the Ukrainians, one should exercise caution when attempting to identify major changes in naval warfare. The Neptune missiles fired at the Moskva are based on a Soviet-era cruise missile body, upgraded by the Ukrainians domestically.⁴³ With a range of up to 200 miles, Neptune missiles are sea skimming, subsonic cruise missiles adapted to fire from land-based platforms. 44 Dmitry Filipoff of the Center for International Maritime Security argues that "as a general rule of thumb, any alert and modern warship larger than a corvette should be able to hold its own against a salvo of only eight subsonic anti-ship missiles, or else the warship can hardly justify its cost."45 Expert analysis concluded that a combination of poor training, limited defensive awareness, and disruptive sea states caused the *Moskva* to fail to fire any antiair weapons in its defense. 46 The noteworthy sinking of the Moskva warrants consideration as an exceptional event within the literature of land-based missile capabilities for sea denial or the facilitation of a fleet's sea control operations. As outlined below, a modern warship, equipped with a trained crew and appropriate defensive awareness, will demand a significantly larger salvo to guarantee a strike, possibly necessitating multiple strikes to incapacitate the ship.⁴⁷

Army Fires and Modern Missile Combat

Although the Army's operational fires delivery platforms may enjoy distinctive regional operational access, maintain continual engagement with allies and partners, and offer unique employment capabilities, the integration of land-based AShM batteries into a maritime concept of employment is imperative for enabling effective sea control operations. Successful Army antiship fires must leverage the concept of aggregation to enable missile salvos to achieve decisive effects. AR Retired Captain Wayne Hughes's missile salvo equations form the

Figure 1. Salvo model of modern missile combat

$$\Delta A = \frac{\beta B - a_3 A}{a_1}$$
, $\Delta B = \frac{\alpha A - b_3 B}{b_1}$

where:

A = number of units in force A.

B = number of units in force B.

 β = number of well-aimed missiles fired by each B unit.

 α = number of well-aimed missles fired by each A unit.

 a_1 = number of hits by B's missiles needed to put one A out of action.

b₁ = number of hits by A's missiles needed to put one B our of action.

 a_3 = number of well-aimed missiles destroyed by each A.

b₃ = number of well-aimed missiles destroyed by each B.

 ΔA = number of units in force A out of action from B' salvo.

 ΔB = number of units in force B out of action from A's salvo.

Source: courtesy of author, adapted by MCUP.

foundation of understanding pulsed naval operations in an AShM dominated environment. 49

Figure 1 is the formula for Hughes's model of modern missile combat. Figure 2 is a representation of Hughes's missile salvo equation in which a theoretical SMRF battery is able to fire first against a surface action group of three generic PLAN surface combatants. In this theoretical scenario, each surface combatant can defeat six inbound missiles from the SMRF unit per salvo. This assumption is based on the surface action group detecting the high-altitude flight profile of an SM-6 at range or the lower speed Maritime Strike Tomahawk being acquired within the surface action group's engagement envelope. The surface action group can deploy a combination of surface to air missiles, close in weapon systems, electronic countermeasure systems, and decoys to defeat the missile salvos. This defensive combat power value can vary depending on the surface action group's defensive awareness, command and control, and other factors. 50

Figure 2. Salvo model representation of SMRF Battery strike on PLAN Surface Action Group

$$\Delta B = \#$$
 of PLAN surface combatants out of action from an SMRF battery salvo

$$\Delta B = \frac{[4(4)] - [6(3)]}{2} = -1 \text{ (no ships out of action from SMRF salvo)}$$

Source: courtesy of author, adapted by MCUP.

Hughes's equation demonstrates the importance of integrating SMRF antiship fires into the maritime concept of employment. The capability to strike an enemy surface combatant may impact PLAN decision making but cannot alone ensure an effective strike without integration into a larger maritime force. An Army multidomain task force is capable of orienting and delivering antiship fires but the example above representing a SMRF battery attacking a PLAN surface action group demonstrates a critical fact of salvo-based maritime warfare and the ability to impact the fight for sea control.

Assembling salvos from multiple domains and along multiple time horizons disorients enemy surface action groups and complicates their air defense posture. It is not enough for the multidomain task force to find the enemy surface action group first while the striking elements of the SMRF battery remain concealed; it will need to work cooperatively with the JFMCC to assemble a salvo of pulsed missile combat power with enough volume of fire to overwhelm the PLAN surface action group's air defenses. The precise volume, timing, and overlap of land-based, air-launched, ship-fired AShM is beyond the scope of this discussion.⁵¹ The key takeaway is that while the U.S. Army has the capability to strike targets at sea, multidomain task forces will require integration into U.S. Navy salvo patterns if they hope to effectively hold PLAN surface combatants at risk.

Integrating Army Fires into the JFMCC Sea Control Operations

Fortress Fleet as a Model

Assembling a Joint salvo that can penetrate a surface action group's air defenses requires effective command and support structures between multidomain task forces ashore and the JFMCC afloat at both the operational and tactical levels. Fortress fleets, derided by naval theorist Alfred Thayer Mahan in the aftermath

of the Russo-Japanese War as "radically erroneous," may provide a useful construct for imagining how a land force would enable the maneuver of a naval force. 52 Mahan's stinging critiques were based on his belief that fortress fleets being inherently defensive in nature, flew in the face of the necessity for firepower and maneuver to dominate in the inherently offensive maritime environment. Fortress fleets, once confined to the range of their supporting coastal artillery, take on a new framework when considering the context of extended sensing, increased weapons ranges, and joint operations. Akin to a modern coastal fortress, Army land-based maritime strike capability could make true again the adage coined by Lord Horatio Nelson, "a ship's a fool to fight a fort." 53 Modern "forts" rely not on high walls and coastal artillery fire against naval combatants, but dispersion, camouflage, and maneuver to protect from adversary engagements. Effective command and control between the land-based antiship units and U.S. Navy combatants at sea can enable this historically defensive construct to transition into an operation to gain sea control. Transitioning from simply tactical coordination, fortress fleets supported by land-based multidomain task forces can strike effectively first at operational ranges and in close coordination with tactical naval commanders. Fortress fleets demonstrate the utility in placing land-based fires in direct support of a maritime commander to enable the delivery of a Joint salvo capable of penetrating enemy air defenses.

C2 Structure

In the context of coordinating multiple task forces within a single maritime area of operations in a broader Joint operational area, the Joint force maritime component commander assumes the role of officer in tactical command. Subordinate task forces adhere to the composite warfare commander structure, delineating roles and responsibilities for concurrent offensive and defensive operations within their respective operational zones. Meanwhile, the JFMCC acting as both the maritime operational commander and in a tactical role as the officer in tactical command, strategically concentrates ASuW capabilities across the Joint force to effectively execute sea control operations throughout the maritime operations area.

The JFMCC's Maritime Operations Center, straddling the operational and tactical levels of war, is the key functional cell to integrate antiship fires across the maritime area of operations. Within the Maritime Operations Center, the Fires Element is responsible for developing and publishing tactical procedures to "define how other component assets join (check in) and operate in their naval operations." The Maritime Operations Center Fires Element is task organized to conduct deliberate and dynamic targeting as well as operational planning and may also include a Tomahawk Land Attack Missile cell "for expertise for operational-level planning and targeting." Employing the subsonic Maritime

Coordination Cell
Liaison/Coordination

CUTF - Commander Joint Task Force

JFLCC - Joint Force Maritime Component Commander

JFLCC - Joint Force Maritime Component Commander

SMRF - Strategic Mid Range Fires

MCC - Joint Force Maritime Component Commander

MDTF - Multi-Opmain Task Force

CTF - Commander Joint Task Force

LRFB - Long Range Fires Battalion

SMRF - Strategic Mid Range Fires

MCC FE - Maritime Operations Center Fires Element

MDTF - Multi-Opmain Task Force

CTF - Commander Avaul Task Force

SuWC - Surface Warfare Commander

Figure 3. Multidomain task force integrated into JFMCC C2

Source: diagram by author, adapted by MCUP.

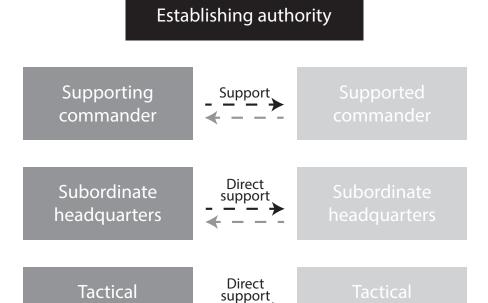
ADOC - All Domain Operations Center

Strike Tomahawk in particular may require in-flight target updates via satellite communications networks to enable aggregation of salvos over longer time horizons to synchronize subsonic, supersonic antiship fires. Firing SM-6 and Maritime Strike Tomahawk from the SMRF will require in-flight updates both through the Tomahawk Strike Network and the Aegis Weapon System via a ship radar or Northrop Grumman E-2D Advanced Hawkeyes in flight. The Maritime Operations Center Fires Element is the optimal coordination cell to establish and implement operating instructions with an Army multidomain task force that is capable of delivering fires in the surface warfare fight. To ensure timely and accurate antiship fires, the Joint force maritime component commander must integrate the extended ranges of the SMRF within the multidomain task force, distributing Army land-based fires delivery across subordinate task forces to enable pulses of combat power to achieve sea control.

Direct Support Relationship

The Joint force commander should designate a direct support relationship for Army multidomain task forces to the maritime component command when the Joint force maritime component commander is the Joint force commander's main effort in a particular phase or stage of an operation. *Maritime Operations*, JP 3-32, provides for this construct by designating the maritime component commander as the supported commander for operations in the maritime domain at large. Support relationships are a powerful command relationship in terms of generating overmatch in a particular domain. A 2017 best practices study by the Joint Chiefs of Staff notes that support relationships can "provide the authority and basis for interdependence, and are often the most appropriate

Figure 4. Horizontal support relationships improve operational agility



GCC/JTF

Source: image from *Insights and Best Practices Focus Paper*, 14.

unit

in today's complex operational environment."⁶¹ The supported commander "is given access to supporting capabilities and has the authority to provide general direction, designate and prioritize missions, targets, or objectives, and other actions for coordination and efficiency (to include requesting liaison and directing of reporting requirements)."⁶² Figure 4 shows how support relationships are most effective when the supported and supporting commanders clarify appropriate parallel relationships to down trace units to enable rapid integration by horizontal subordinate elements. While commanders may typically be more comfortable with a command relationship, a support relationship provides the maritime component commander with adequate ability to leverage multidomain task force fires in support of sea control operations. Simply assigning a support relationship is insufficient to enable aggregation of missile salvos across domains. Task forces should integrate with the JFMCC across the human and technical mediums.

From a human perspective, the maritime component headquarters should receive liaison officers into the fires element from both the multidomain task force and the long-range fires battalion with expertise in maritime strike. Liaison officers can provide advice and planning expertise to the maritime head-quarters and enable integration as required between the multidomain task force and the surface warfare commanders across the task forces operating in the maritime domain. Maritime component liaison officers should be sent to integrate into the multidomain task force's All-Domain Operations Center to monitor the multidomain task force's operational requirements to the land component commander and look for windows of opportunity to synchronize joint maritime strike in support of sea control operations. Pulses of combat power must be synchronized between the supported and supporting elements to enable the JFMCC to gain sea control and seize opportunities in the maritime domain.

Technical integration is particularly critical to enable the effective aggregation of salvos at range. A SMRF battery equipped with Maritime Strike Tomahawk aggregating fires with a surface action group employing SM-6 and Harpoon requires careful timing, missile flight planning, and launch sequencing to ensure salvos aggregate effectively against an enemy surface group. Post-launch, operators may need to update targets in flight to direct land-based missiles against over-the-horizon enemy ships. Establishing redundant and resilient networking will require connecting national, operational, and tactical level sensing to missiles in flight to achieve effects. Employing missiles over the horizon in denied, disrupted, or degraded space environment presents a challenge to employment and may increase the required volume of missiles in a salvo to achieve an effect against an enemy surface action group. The U.S. Navy is well versed in countering these challenges to inflight control and can provide technical, tactical, and operational expertise to integrating Army land-based forces.

Conflicts between Operational Control to Land Component Commander and Direct Support to the Maritime Component Commander

A reasonable tension that may impact the multidomain task force's ability to support Joint force maritime component commander's sea control operations is the multimodal nature of the SMRF battery. The SMRF battery's ability to strike both targets at sea and targets ashore will create tension between the joint force land component commander and the joint force maritime component commander. While the Joint force maritime component commander conducts operations to gain sea control, the Joint force land component commander will be conducting simultaneous operations to flow ground forces into the JOA and shape enemy actions in the land domain. Limited multidomain task force fires delivery platforms positioned in the Western Pacific to support both land and maritime operations will create a dilemma for the Joint force commander in determining if multidomain task force support to the maritime component de-

Table 1. Seven field artillery inherent responsibilities

Army direct support relation- ship	Answers calls for fire in priority from:	Has as its zone of fire:	Furnish- es fire support team (FIST):	Furnish liaison officer:	Is posi- tioned by:	Has its fires planned by:	Estab- lishes comms with:
SMRF	1. JFMC	Maritime	N/A	LNO to	MDTF	JFMCC	JFMCC
	2. MDTF	AO		JFMCC			MDTF
	3. JFLCC			MOC			theater
							FE

Source: Fire Support and Field Artillery Operations.

tracts from the land component's ability to flow in forces and conduct shaping fires in the land domain.

To resolve this tension, operational level commanders should seek guidance from the tactical level. *Fire Support and Field Artillery Operations*, Army Field Manual 3-09, delineates six principles for executing Army fire support. ⁶⁶ Commanders must prioritize the weighting of artillery assets to the main effort and avoid placing them in reserve. Joint force operational objectives should drive the apportionment of fires to either the land or maritime component by phase and in accordance with the joint prioritized target list. The Joint force, aiming to gain sea control and project power ashore during a major operation or campaign, cannot afford to keep SMRF batteries' antiship capabilities in reserve.

The land and maritime component commands must also reach mutual understanding on what "direct support" entails in responsibilities from both the supporting and supported command. *Fire Support and Field Artillery Operations* provides a format for detailing the seven field artillery inherent responsibilities in Army support relationships. ⁶⁷ Table 1 is an example of how to clarify responsibilities and provides a starting point for formatting support relationship guidance from the Joint force commander to the maritime component commander and the land component commander to reduce conflict and ensure unity of effort. ⁶⁸ Mutual understanding between commanders sets the conditions for success to enable the JFC through the JFMCC to gain sea control in concert with land-based Army fires.

Conclusion

The integration of Army operational fires into the joint force maritime component commander's concept of operations is essential for achieving and main-

taining sea control in the Western Pacific. By leveraging the capabilities of the multidomain task force and their maritime strike capability, the Joint force can counter the PRC's antiaccess area-denial strategy and project power in the maritime domain. However, successful integration requires not only the aggregation of operational fires but also the integration of human and technical elements across land and sea domains. Through effective collaboration, interoperability, and coordination through a direct support relationship, the Joint force can leverage the full spectrum of its capabilities to achieve its objectives in the complex and contested maritime environment of the Western Pacific.

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China's "Second Battlefield"Political Warfare in Combat Operations

Kerry K. Gershaneck

Abstract: This article addresses how the People's Republic of China (PRC) will conduct political warfare against the U.S. Marine Corps in combat operations. The PRC has inextricably intertwined political warfare in its naval and maritime strategies to set the conditions for success in such a kinetic war. If the PRC perceives that political warfare alone will not achieve its goals, it threatens to achieve them through armed conflict, which may result in U.S. Marine Corps operations as a counter. This article examines key aspects of PRC political warfare in combat operations, to include a brief historical overview; goals, objectives, strategies, and tactics employed; targeting of U.S. and allied combat units, military base communities, and overseas Chinese; and the likely progression of political warfare operations throughout the combat campaign.

Keywords: political warfare, cognitive warfare, three warfares, united front, active measures, gray zone operations, hybrid warfare, People's Liberation Army, Chinese Communist Party, People's Republic of China, People's Armed Forces Maritime Militia, China Coast Guard

Introduction

olitical warfare is defined as "the employment of all the means at a nation's command, short of war, to achieve its national objectives," as explicated in a 1948 policy planning memorandum that prepared the United States to fight and ultimately win the Cold War. The concept of political war-

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fare is not new to the People's Republic of China (PRC), spanning thousands of years, but the PRC has used it to achieve notable strategic victories in recent years—victories accrued not necessarily without struggle but won without fighting major kinetic warfare. Declaring sovereignty over the South China Sea and militarizing manmade islands there is one such significant victory, achieved after years of preparation that ensured "a feckless global response," according to former U.S. assistant secretary of defense Wallace C. Gregson. Further, the combined failure of the United States, Australia, and other democracies to combat well-reported PRC political warfare against the Solomon Islands location of the storied Battle of Guadalcanal of U.S. Marine Corps World War II fame—has allowed the PRC a security pact with Honiara, which allows the "rapid and unopposed acceleration of the transformation of the Solomons into a (PRC) power projection base." Effectively, the PRC has now bypassed the first and second island chains that had long provided a defensive barrier to PRC expansionism. These victories provide the PRC's rapidly expanding amphibious fleet the means to implement the PRC's aggressive naval strategy, which includes assertion of illegal claims to the West Philippine Sea, South China Sea, and East China Sea and setting the conditions for a successful amphibious assault against Taiwan.1

Despite such success, if the PRC's rulers perceive that political warfare alone will not deliver the results desired, they threaten to achieve their goals with combat operations. In fact, Xi Jinping has strongly signaled that he is preparing for kinetic war. For example, PRC propaganda organs began reporting in May 2020 that, after three decades of Beijing espousing peaceful reunification with Taiwan, CCP policy no longer called for "reunification" to be peaceful and that military force remains "a final solution." In Xi's speeches to the National People's Congress (China's parliament) and the Chinese People's Political Consultative Conference (China's top political advisory body), he directed his cadres to prepare for war in terms such as "dare to fight" and "prepare to undergo the major tests of high winds and waves, and even perilous, stormy seas." One key indicator of war preparation is vastly increased military coercion against Taiwan, but there are other strong indicators as well. These include a 7.2 percent increase in the PRC's defense budget (which has doubled during the past decade), new military readiness laws, new air raid shelters in cities across the Taiwan Strait, and a new national defense mobilization structure to more easily mobilize reservists and replenish combat troops in the event of war. To quote seasoned Washington Post columnist John Pomfret and former deputy national security advisor Matt Pottinger, "If Xi says he is readying for war, it would be foolish not to take him at his word.²

A PRC combat operation would likely be a deliberate attack undertaken without a formal declaration of war, consistent with the PRC's past invasions

of other nations. Also, a seemingly inadvertent war might result in violent gray zone/hybrid warfare at sea by maritime forces such as the China Coast Guard (CCG). For example, CCG water cannon attacks on Philippine vessels that have injured (and risk killing) Filipino sailors have been called "an act of war" by Armed Forces of the Philippines chief of staff Romeo Brawner.³ Such attacks may provoke an armed response. Regardless of the spark that ignites a war, in a war the PRC's fight for public opinion will be its "second battlefield" according to retired U.S. Navy captain James E. Fanell, an expert on PLA doctrine and capabilities.

This article examines key aspects of PRC-Chinese Communist Party (CCP) party-state political warfare in combat operations, to include a brief historical overview, and likely goals, objectives, strategies, and tactics employed.⁴ Also addressed are conceptual pillars; narrative shaping; the roles of the three warfares, united fronts, the PLA, active measures, gray zone operations, and hybrid warfare; targeting of allied combat units, military base communities, and overseas Chinese; the likely progression of political warfare operations throughout the combat campaign; and recommendations for the U.S. government in general, and the U.S. Marine Corps in particular, should begin preparing to combat the PRC's foreseeable wartime political warfare.

Historical Overview

The Chinese Communist Party (CCP) employed a wide range of political warfare operations to defeat the Nationalist government (Kuomintang, KMT) from the 1920s through the Chinese Civil War and the KMT's retreat to Taiwan in 1949.5 Once the PRC was established in 1949, it used political warfare to support numerous military operations internally and externally. These include the 1950 Korean War intervention, its 1951 annexation of Tibet and crushing of the Tibetan uprising in 1959, its seizure of East Turkestan (Xinjiang) in 1960 and subsequent continued subjugation of that region, its attacks against the Republic of China (Taiwan) during the First Taiwan Strait Crisis in 1954-55 and the Second Taiwan Strait Crisis in 1958, its combat operations in northern Burma in 1960–61, the 1962 Sino-Indian War, its combat support of Communist forces across Southeast Asia during the Vietnam War from 1965–75, the 1969 Sino-Soviet Union border conflict, its 1974 seizure of Vietnam's Paracel Islands, its invasion of Vietnam during the 1979 Sino-Vietnamese War, its 1988 attack on Vietnam's Spratly Islands, its 1994–95 occupation of the Philippines' Mischief Reef and 1996 naval skirmish there, its firing of ballistic missiles during the Third Taiwan Strait Crisis in 1996, its 2012 seizure of Scarborough Shoal from the Philippines and current aggressive actions in the West Philippine Sea, its 2017 standoff with India and Bhutan, and periodic kinetic skirmishes with India from 1967 through today.

An example especially pertinent to the present-day assessment is the 1962 Sino-Indian War. Journalist/historian Bertil Lintner reports that leading up to the 1962 Sino-Indian War, the CCP undertook "a five-year masterpiece of guile . . . (It) played on Nehru's Asian, anti-imperialist mental attitude, his proclivity to temporize, and his sincere desire for an amicable Sino-Indian relationship." Consistent with stratagems derived from the Warring States period, the CCP lulled India's leadership into a false sense of complacency. India paid heavily for that complacency, writes Lintner, "when the PLA came storming across the Himalayas in October 1962." India was humiliated militarily and politically as the PRC seized 38,000 square kilometers of territory.

Another example pertinent today is the CCP's political warfare leading up to and during the Korean War, a war in which the U.S. Marine Corps played a central role. From the 1920s, Mao Zedong envisioned his Communist revolution in China to expand globally. He wrote, "We must unite with the proletarians . . . and liberate the nations and the peoples of the world." One country Mao wanted to "liberate" was the Republic of Korea. Accordingly, Mao and Joseph Stalin, ruler of the Union of Soviet Socialist Republics (USSR), approved Kim Il Sung's June 1950 invasion of South Korea and supported it initially on the political warfare and logistics fronts. When United Nations forces successfully counterattacked in September, spearheaded by the U.S. Marine amphibious assault at Inchon, and drove the Communist Democratic People's Republic of Korea (DPRK) forces into the far north, deep in the peninsula, Mao and Stalin supported Kim with combat forces as well. Soviet pilots flew North Korean aircraft against UN forces while Mao provided the DPRK so-called Chinese People's Volunteers. By 1953, Mao had committed a peak of 1.35 million Red Army troops. To garner internal and foreign support, the CCP initiated a global political warfare campaign. Internally, the CCP used every means to generate hatred of the "U.S. imperialists" among the Chinese people while encouraging nationalism and self-confidence. Cartoons and posters portrayed President Harry S. Truman and UN forces commander General Douglas MacArthur as "serial rapists, bloodthirsty murderers or savage animals." Loudspeakers persistently blared slogans and speeches to encourage those in China and those in occupied Korea "to hate, curse and despise the imperialists."8

The 1st Marine Provisional Brigade and Marine Aircraft Group 33 were rushed into battle in the first desperate weeks following the 1950 North Korean invasion and stabilized the decimated U.S. Eighth Army's fragile front lines at Pusan. They skillfully executed the daring amphibious assault at Inchon to reverse the North Korea attack and demonstrated conspicuous gallantry during the bitter battles of the Chosin Reservoir withdrawal. As the war dragged on for three years, most of it in stalemate and seemingly endless negotiations to end the fight, the Marines in Korea were subjected to relentless PRC political

warfare propaganda attacks. Much of the propaganda reflected Communist ideology, urging the United Nations forces to "escape their capitalist masters" and as the war dragged on the propaganda themes focused on deterring the Marines from fighting with the hint that truce talks were making progress and the fighting would soon end. The Chinese forces used pamphlets and loudspeakers to try to demoralize the Marines, but with little effect.⁹

Simultaneously, the CCP used its Korean invasion to begin an internal political warfare campaign aimed at suppressing so-called reactionaries in the PRC. Historian Frank Dikötter summarizes this brutal suppression, called "the Great Terror," as follows:

Less than a year after liberation came a Great Terror, designed to eliminate all the enemies of the party. Mao handed down a killing quota of one per thousand, but in many parts of the country two or three times as many people were executed, often on the flimsiest of pretexts. Entire villages were razed to the ground. Schoolchildren as young as six were accused of spying for the enemy and tortured to death. Sometimes cadres simply picked a few prisoners at random and had them shot to meet their quota. By the end of 1951, close to 2 million people had been murdered.¹⁰

The Chinese people were not the only ones to suffer brutal CCP treatment for political warfare purposes during this era, of course. During the Korean War, approximately 75,000 UN and South Korean soldiers were captured by PRC and North Korean forces. Some of these prisoners of war (POWs) were secretly sent to the PRC and the Soviet Union for intelligence and other exploitation, but most remained in Korea. These POWs were both the subject of and subjected to political warfare that often amounted to egregious war crimes. It included torture and execution as a means to extract false confessions to be used in international propaganda campaigns. It also included coerced indoctrination that constituted physical and psychological torture. Political indoctrination was standard daily fare, as the Chinese attempted to produce a long-lasting change in the basic attitude and behavior of the prisoner.

The 221 Marines captured by the Chinese and North Korean military forces in Korea endured malnutrition, forced labor, and other acts of cruelty, as well as systematic efforts to coerce them into participating in a propaganda campaign. In July 1951, Chinese forces assumed control of the UN POWs, and took a different approach to the POWs than American prisoners had experienced in previous wars. According to Marine Corps records,

In this war, unlike the earlier ones, prisoners served as pawns in an ideological contest in which the Chinese and North Koreans tried to convert them to Communism or, failing that, to force them to make

statements that would further the Communist cause in its world-wide struggle against capitalism. The methods of conversion or coercion varied from unceasing lectures extolling Communism to threats and torture, with the harshest treatment meted out for acts of resistance. By using these techniques, the prison staffs sought a variety of objectives that included maintaining order, persuading prisoners to embrace Communism, obtaining military information, or extorting confessions to alleged war crimes, statements designed to turn worldwide public opinion against the United States. By 1952, the enemy was focusing in particular on forcing captured fliers of all the Services to confess to participating in germ warfare. ¹³

Some captured Marines were able to escape, while others invented fictitious statements that would ease the pressure on them by creating an illusion of cooperation. Despite brutal Chinese treatment during captivity, 197 Marines survived captivity and returned in Operation Big Switch.¹⁴

In a campaign that foreshadowed the PRC's 2023 political warfare campaign alleging that the United States was directing Taiwan to establish a secret biological weapons laboratory, as well as Sino-Russian disinformation regarding the COVID-19 global pandemic that began in 2020 and the PRC-Russian allegations of U.S. biological warfare activities in Ukraine following Russia's March 2022 invasion of that country, the USSR and PRC cooperated in the 1949–50 timeframe to fabricate similar allegations. This campaign falsely alleged the United States was testing biological weapons on the Inuit populations in Alaska, in collaboration with the former chief of Japan's wartime biological weapons program for use against China. 15

Further, during the Korean War, the Soviets, Chinese, and North Koreans collaborated on a global disinformation campaign alleging that the United States was conducting bacteriological warfare by airlifting insects infected with microorganisms carrying diseases such as the bubonic plague, anthrax, cholera, and encephalitis. They doctored the evidence by creating two fake zones of contamination. In concert with the Warsaw Pact and other allies, PRC propaganda outlets orchestrated outrage around the globe. They publicized "confessions" from American POWs, and widely quoted gullible foreign visitors to Chinese exhibits documenting the alleged war crimes. In Prague, the CCP cultivated Western leftist and pacifist sympathizers who amplified their claims in Western media. Leading international academics, clergy, and journalists were co-opted by this campaign. Supposed experts sent on "fact finding" visits to China were not allowed to actually investigate the biological warfare allegations: their role was merely to lend credence to the PRC's allegations by parroting the fabricated stories on Chinese soil.¹⁶

Beijing did not care that the preponderance of evidence and of scholarly opinion outside the PRC refuted the biological warfare allegations. From its perspective, this political warfare campaign was remarkably successful. Like many other subsequent PRC political warfare campaigns, it blended overt propaganda and the recruitment of credulous foreign authorities to amplify CCP talking points, it seeded doubt and suspicion regarding the U.S. and UN forces, and it enhanced the CCP's domestic and international standing at the expense of its enemies. Internally, the campaign mobilized the Chinese people behind the CCP and, as important, it eroded residual goodwill toward America built up over years of alliance in the war against Japan. Further, it sharpened divisions in Western countries between the political right and left over the nature of the CCP regime and of American power in the world. The CCP exploited every rift to weaken from within allied resolve to fight the war.¹⁷

Wartime Political Warfare Goals

In wartime, the CCP will seek to achieve four primary political warfare goals: preserve friendly morale; generate public support at home and abroad; weaken an enemy's will to fight; and alter an enemy's situational assessment.¹⁸

Conceptual Pillars

Key conceptual pillars that underlie PRC political warfare leading up to and during combat operations:¹⁹

Follow top-down guidance: Unity of effort is key. Political warfare will be aligned with the CCP's larger national strategy.

Strike first: Two key conceptual pillars that underlie PRC political warfare leading up to and during combat operations are to folllow top-down guidance and to strike first. A preemptive first strike will have a significant impact on opposing forces' unit cohesion and material readiness, as well as a psychological effect that will, in turn, possibly cause the opponent's withdrawal or collapse. An action by a target country that instigates a PRC first strike need not be military. Such a trigger could be a perceived slight, diplomatic miscommunication, or statement by a government official that upsets the CCP. A first strike provides the PRC tremendous advantages in planning and executing political warfare operations: the first to broadcast generally dominates the airwaves, framing the narrative and subsequent debate, and defining the parameters of subsequent coverage.²¹

Shaping the Narrative

To shape the narrative, the PRC will take three key actions:²²

Establish the PRC's version of the incident: Whichever side gets its

story out first has the public opinion advantage. Accordingly, statements for public release, to include polished products for broadcast, online, and print dissemination, will be prepared in advance.

Issue a statement of principles for resolution of the incident: PRC officials will use these principles at the start of any negotiations to set rigid parameters for the discussions to come and as the benchmarks for a minimally acceptable resolution that meets CCP goals.²³

Shut down unofficial but normal information channels: The CCP will quickly establish information control and dominance of the media in order to continuously shape the ensuing debate. U.S. senior officials, journalists, and academics often complain that their Chinese counterparts refuse communication once a crisis begins, but this is the CCP's standard procedure. For example, in the August 2022 crises Beijing generated over the visit to Taiwan by U.S. Speaker of the House of Representatives Nancy Pelosi, the PLA refused to answer senior U.S. military officials calls and canceled important forums such as the China-U.S. Theater Commanders Talks.²⁴

The Three Warfares

The three warfares are a PLA construct and are central pillars of PRC political warfare. The warfares establish a perceptual preparation of the battlefield. Notably, PLA strategic literature particularly emphasizes their role in subduing an enemy before armed conflict breaks out: consequently, the PRC has employed them to successfully shape the South China Sea and Pacific Islands to support its naval strategy. The three warfares are media/public opinion warfare, psychological warfare, and legal warfare/lawfare.²⁵ PLA officers begin employing the three warfares early in their careers and continue as they rise in rank. They study the concept in depth in texts on military strategy, including the PLA Academy of Military Science and PLA National Defense University editions of Science of Military Strategy as well as teaching materials such as An Introduction to Public Opinion Warfare, Psychological Warfare, and Legal Warfare. Through study of history and war games, senior CCP and PLA officials learn to employ the warfares to manipulate an adversary's cognitive process both prior to and during a conflict, and how to target national and theater command structures and forward deployed units. They gain important expertise in undermining the legitimacy of opponents' positions in a conflict and undermining the willingness of other nations to support opponents.²⁶

United Front Work

In a wartime situation, the CCP will aggressively engage its united front apparatus worldwide in support of its political warfare. Australian academic Clive

Hamilton writes that a vital external united front task is to "recruit elites." 27 To this end the PRC targets foreign government officials at all levels and elites in the worlds of business, the media, academia and think tanks, politics and lobbying, and the overseas Chinese community. In contemporary combat operations, the PRC will replicate what it did in the Korean War: aggressively engage *United Fronts* globally as well as Overseas Chinese and *foreign enablers*. ²⁸ As examples of the CCP's foreign enablers in the United States, the New York Times reports they include leftist organizations such as Code Pink and other "murky" nonprofit organizations. Many foreign enablers have supported Communist activities for decades and are well known, but many appear with new names.²⁹ For example, groups engaged in protests in San Diego against the 2024 Rim of the Pacific (RIMPAC) exercise included a combination of new and old groups such as the International Cancel RIMPAC Coalition, Resist NATO, Palestine Youth Movement, Resist U.S. Led War, BAYAN USA, International Migrants Alliance, and Union del Barrio. These groups condemned U.S. alliances with Japan, South Korea, and the Philippines as well as support for Taiwan, and protested the RIMPAC exercise as an effort to "contain and isolate China." In their "People's Summit" at University of California San Diego and on the streets of San Diego they portrayed China's military aggression in Asia as mere attempts to defend itself against U.S. aggression.³⁰

The United Front Work Department (UFWD) oversees "a sprawling infrastructure of Party agencies, and organizations linked to the Party" and UFWD work "is the responsibility of every Party member." Every CCP agency is tasked with engaging in united front activities, as are all PRC government departments and local authorities. Further, PRC-based businesses and foreign businesses affiliated with China's state-owned enterprises and joint ventures will be engaged to support wartime objectives. In addition, political warfare operatives will pressure countries invested in the Belt and Road Initiative (BRI) and the Digital Silk Road (DSR) to support (or not oppose) the PRC's war effort.

United front strategy calls for co-opting international organizations, such as the United Nations, the World Health Organization (WHO), the International Committee of the Red Cross (ICRC), and the International Criminal Police Organization (Interpol). United front operations also target environmental NGOs and other activist groups, some of which have been compromised by PRC funding and influence.³³ Hence, the PRC will utilize its leverage with these international organizations, NGOs, and activist groups to further its wartime objectives and distract attention of opponents and undermine their response.

PLA Political Warfare

To support its political warfare the PRC draws on the resources of "the Party, the Chinese state, the PLA, and the private sector in China, as well as on

Chinese companies abroad" in what is called the party-state-military-market nexus.³⁴ One example of the PLA's role is its massive military intimidation of Taiwan in the form of its combat aircraft incursions into Taiwan's airspace and circumnavigation of the island by flotillas of naval combatants. The PLA is conducting significant air combat, missile attack, amphibious assault, and logistics exercises as well. While these exercises are preparations for war, they are also psychological warfare operations intended to terrorize, demoralize, and divide the population of Taiwan and erode its sense of security.³⁵ The PLA's coercion and psychological terror extends to threats of nuclear attack to terrorize countries like Japan to make them conform with CCP demands.³⁶

Another example of a PLA psychological terror campaign is its operations against India's forces during the 2017 confrontation on the Doklam plateau. The PLA template was to trumpet its plans to attack India if it does not acquiesce to Beijing's demands. The plans were conveyed through propaganda platforms such as *China Daily*, with relentless threats such as "the countdown has begun (for) all out confrontation." The PLA attempted to intimidate leaders and soldiers with videos showing military exercises in Tibet, not far from the Indian border, and military equipment and materiel were moved closer to the front line to indicate preparations for war. Further, propagandists revived memories of India's devastating defeat in the 1962 Sino-Indian War to demoralize Indian soldiers. Beijing will likely employ similar diverse narratives and strategies against adversaries during wartime.³⁷

In addition to the PLA's overt coercion and intimidation capabilities, its Political Work Department (PWD) is responsible for liaison work, which augments traditional diplomacy and formal military-to-military relations. These PWD relations are "the most important aspects of international relations." The PWD establishes and facilitates the activities of a wide range of friendship and cultural associations such as the China Association for International Friendly Contact (CAIFC). The role of CAIFC is to co-opt foreign elites, to include senior active-duty and retired military officers and executive assistants supporting senior civilian and military officials. CAIFC has reaped significant victories, such as when a former U.S. vice chairman of the Joint Chiefs of Staff wrote a guest editorial for a major publication to support the PRC against Taiwan and allegedly lobbied for Huawei's entry into U.S. markets. The PLA will utilize those co-opted by CAIFC during wartime operations. ³⁹

PLA forces will support combat operations by employing media and psychological warfare forces for subversion, propaganda, disinformation, misinformation, and cyberattacks. Difficult-to-attribute cyberattacks will be combined with social media warfare that it will conduct along with the PRC's so-called netizens and 50 Cent Army. As part of civil-military fusion, the PLA will likely employ criminal gangs affiliated to assist its cyber warfare.⁴⁰ These attacks will

be designed to distract, deceive, demoralize, and paralyze the actions of opponent governments, combat forces, and general publics. The operationalization of psychological warfare with cyber is key to this strategy. ⁴¹ Central to this effort, particularly regarding a Taiwan-related contingency, is its subordinate 311 Base (also known as Unit 61716, the Public Opinion Warfare, Psychological Warfare, and Legal Warfare Base) in Fuzhou, along with the extensive resources of the PLA News Media Center. ⁴²

Active Measures, Gray Zone Operations, and Hybrid Warfare

In combat operations, the PRC will employ active measures just as it does in peacetime, to include sabotage, kinetic attacks, terrorism, bribery, discredit operations, deception, subversion, blackmail, kidnapping, counterfeiting, forgery, street violence, assassination, false flag operations, and destabilization of foreign governments. For example, retired U.S. Marine colonel Grant Newsham, an expert on political warfare, assesses that fifth columnists and special forces will use tracts of land PRC-affiliated buyers have obtained near American military installations in the United States and Japan to attack those installations and to "shred" operational forces deploying to combat from them.⁴³

Another CCP active measure is to take hostages, primarily to ensure compliance with its demands and to deter an adversary's potential response. Hostage taking is not a new concept, but the PRC is especially adept at so-called hostage diplomacy. Many democracies woke up to this fact during the 1,000-day ordeal of the two Michaels in the 2018–21 timeframe. Two Canadian citizens working in the PRC were taken hostage by the PRC to pressure Canada to not comply with a U.S. extradition request for Huawei executive Meng Wanzhou, who the United States alleged was engaged in widespread illegal activities. The PRC held the two Michaels in jail for nearly three years, until it got the results it wanted. "China was sending a message not just to Canada, [if you] don't toe the line the way Beijing has instructed you to do, [it will] kidnap your citizens," said Margaret McCuaig-Johnston of the University of Ottawa. 44 Currently the PRC has "wrongfully detained" more than 200 U.S. citizens who are held on "exit bans" in prisons and detention centers, some persecuted for religious reasons and others "likely victims of geopolitics," according to human rights groups. 45 In wartime, the CCP's opportunities and rewards for taking Americans and citizens of allied and friendly countries hostage expand exponentially.

As part of its maritime strategy, the PRC is heavily engaged in gray zone operations and hybrid warfare in the West Philippine Sea, South China Sea, East China Sea, and increasingly the Western Pacific Ocean. It will likely expand both operations dramatically in preparation for hostilities. Gray zone and hybrid warfare operations involve military and paramilitary forces that operate

below the threshold of war but in combat operations the PRC will employ them to distract, deceive, and attack opponents. Beijing wields formidable maritime forces for these missions: the PLA Navy, the China Coast Guard (CCG), and the People's Armed Forces Maritime Militia (PAFMM), as well as a massive global fishing fleet. The PLAN is numerically the largest navy in the world, with more than 370 ships and submarines, including more than 140 major surface combatants, according to a 2023 Pentagon report. Working closely with the PLAN is the CCG, the largest maritime law enforcement fleet in the world with perhaps more than 700 vessels that include more than 150 patrol vessels of more than 1,000 tons and 50 patrol combatants of 500 tons. Working in tandem with both is PAFMM, a military reserve force with, at times, roughly 200 vessels operating across the South China Sea alone on a daily basis. The Pentagon reports the PAFMM "plays a major role in coercive activities to achieve the PRC's political goals without fighting" and has engaged in combat operations during past decades. 48

Together, the CCG and PAFMM "flood the zone" in the South and East China Seas, according to the Center for Strategic and International Studies. With a continuous and overwhelming presence, the CCG and PAFMM conduct missions such as violently obstructing the Philippines resupply of its military personnel aboard the BRP Sierra Madre (LT 57) on the Second Thomas Shoal and coercing countries such as Vietnam to cease drilling for oil in their waters. Often the PRC vessels turn off their automatic identification system (AIS) data transmitters to make tracking them difficult. ⁴⁹ In the lead up to hostilities, the PRC may increase CCG, PAFMM, and fishing fleets vessels in contested waters to create confusion and dangerous congestion. As previously discussed, these vessels may spark conflict when, for example, an opposing South China Sea claimant such as the Philippines, Vietnam, or Japan responds. ⁵⁰

Further, just as the Soviet Union armed fishing trawlers with weapons such as torpedoes during the Cold War to attack NATO naval forces before and during hostilities, these ostensibly nonmilitary PRC forces may carry clandestine firepower to attack and destroy U.S. and allied forces. In a wartime situation, it is likely that these supposedly noncombatant PRC vessels will attack both military and civilian shipping and aviation in international waters. These attacks may include ramming of opponents' vessels and using lasers to blind pilots of opponents' civilian and military aircraft, as well as electronic warfare and kinetic attacks. Such attacks by supposed noncombatants will elicit lethal response, with resultant lawfare complications.⁵¹

Beijing will also likely engage in gray zone and hybrid warfare actions like those used by Russia in its 2014 annexation of Crimea and its 2022 invasion of Ukraine. 52 The PRC's employment of proxy armies, such as the United Wa

State Army and Kokang Army in Myanmar, is one example of these types of warfare.⁵³ For example, in a Taiwan or SCS conflict, the Communist New People's Army (NPA) in the Philippines, which has *party-to-party* relations with the CCP, would likely be encouraged and supplied to conduct operations to undermine allied war efforts. It is also likely that radical terrorist and organized crime organizations that interact directly with the PRC and CCP, such as those in Japan that violently attack U.S. and Japanese military facilities, will be encouraged to attack military installations and critical infrastructure.⁵⁴

Target: Overseas Chinese

During wartime, the PRC will rely heavily on its united front operations that target China's global diaspora for co-option and recruitment. Although a very large proportion of these people have been resident in their "new" countries for generations, have gained full citizenship rights, and are fully integrated into their societies, the CCP sees them as subject to PRC law and orders them to assist in intelligence collection and political warfare operations.⁵⁵ One target set is ethnic Chinese-Americans or Taiwanese-Americans, whom Beijing regards as both "more accessible (via Chinese-language communications) and more amenable to the PRC's influence."56 To ensure narrative dominance in the overseas Chinese communities, the CCP has invested tremendous resources into taking control of Chinese-language media in foreign countries to both influence and control its diaspora. According to P. Charon and J. B. Jeangene Vilmer, Beijing "seeks to control the Chinese-language outlets abroad, which has proven so successful that the CCP now effectively enjoys a near-monopoly among them, and it also seeks to control the mainstream media."⁵⁷ Countering the CCP's massive effort to co-opt the Chinese diaspora will be particularly sensitive, but it is vitally important to recognize and combat it.

It is clearly foreseeable that prior to and during the armed conflict, some overseas Chinese will be coerced or enticed to spy for the PLA and Ministry of State Security (MSS). Under the PRC's legal system, "all Chinese citizens and companies (operating in China or Chinese companies abroad) must collaborate in gathering intelligence." Those targeted by the PRC include members of the U.S. military. While the UFWD and MSS target overseas Chinese in general, the PLA targets foreign military personnel of Chinese descent. A Rand study concludes that in a conflict "one of China's first targets of disinformation on social media will be ethnic Chinese U.S. military officers and service members" along with the servicemembers' extended families and friends as indirect vectors to reach U.S. troops. A recent example of persons of Chinese descent assisting PRC espionage is the arrest in early August 2023 of two U.S. Navy petty officers who allegedly provided the PRC classified information to assist the PLA defeat U.S. forces in Asia. According to U.S. prosecutors, the mother of one of the

petty officers "encouraged him to keep helping the Chinese intelligence officer because it might get him a job someday with China's Communist party after he leaves the U.S. Navy." 60

It is important to note that, according to the Center for Strategic and International Studies (CSIS), nationality is a more important factor than ethnicity in the PRC's success in recruiting intelligence and other covert operatives in the United States. The CSIS report examines 224 publicly reported incidents of Chinese espionage against the United States from 2000 to 2023 and states this number does not reflect the full scope of Chinese espionage incidents. Still, if reflective of reality, the report is useful in that it concludes roughly 90 percent involved PRC citizens but only about 10 percent involved "non-Chinese actors," to include Americans of Chinese descent. Per the report, "Chinese nationals who come to the U.S. to work or study are fertile ground for recruitment. Often they intend to return to China or have close family members resident in China, making them more susceptible to coercion. In contrast, Americans of Chinese descent are very unlikely to be recruited."61 Nevertheless, those recruited to serve the PRC based on appeals to the ethnicity, such as former CIA case officers Jerry Chung Shin Lee and Alexander Yuk Ching Ma, have done significant damage to U.S. national security.⁶²

Several factors complicate combating the CCP's co-option, coercion, and recruitment of overseas Chinese. Globally the PRC is aggressively coercing and enticing overseas Chinese to act as espionage and influence agents, and one study indicates that in nearly 600 PRC-related espionage cases worldwide, 90 percent of those involved were ethnic Chinese. Nevertheless, U.S. law enforcement and intelligence agencies are not permitted to consider ethnic Chinese (to include Chinese-Americans) as possible greater security threats due to "racial profiling" concerns. Counterintelligence officials fear "profiling" concerns will hamper espionage and influence investigations by U.S. counterintelligence and law enforcement agencies during combat operations. The CCP is well aware of concerns within the United States about the perception of racial profiling of Americans based on Chinese ethnicity. If, during hostilities, investigations of ethnic Chinese do become public, they will likely be used by the PRC for lawfare, psychological warfare, and media warfare purposes.⁶³

Target: Military Base Communities

In addition to overseas Chinese communities, in Taiwan the CCP will target communities near military facilities. Its operatives will attempt to disrupt and degrade military operations from those bases in advance of and during the conflict. The operatives will use rumors, disinformation, and other tactics that have proven effective in those countries. Base-hosting communities may also be targeted in Australia, Singapore, the Philippines, the United States, and Pacific

Island nations hosting (or potentially hosting) U.S. forces. According to one Pacific Island national leader, the "wholesale subjugation of the region to Chinese rule [is] underway."⁶⁴

Disinformation campaigns, combined with protests organized by the CCP and its enablers, will

strive to shut down operations by generating popular opposition; create an impression that the military is engaged in covering up accidents, crimes, or military setbacks; sow doubt about the wisdom and necessity of undertaking military operations in the face of Chinese opposition as a way to degrade morale; or encourage broader political opposition to decisions made in Washington, D.C., including by striving to split any allied war effort.⁶⁵

Political Warfare Progression in Combat Operations

The PRC will conduct political warfare operations before, during, and after any hostilities that it initiates. On a daily basis, the PRC routinely engages in united front and propaganda work—such as narrative-shaping, public opinion management, and information warfare that includes disinformation campaigns—against Taiwan and other target countries. Prior to hostilities, it will greatly accelerate those operations. ⁶⁶ One key objective will be to obscure its naval combat operations and supporting maritime actions by the CCG, PAFMM, and fishing fleet to deceive the United States and its allies. Further, PRC propaganda organs will sensationalize PLAN successes and cover up its failures as part of both internal and external psychological warfare operations.

The PRC will seize the initiative in the opening phase of an armed conflict by striking the first blow, which gives it tremendous political warfare advantages. First strikes come in different forms, some overt and some deceptive. As Colonel Grant Newsham writes, prior to initiating major combat operations, the PRC will likely conduct difficult-to-attribute and false flag attacks and sabotage. The mission will be to destroy key systems such as ships and aircraft and facilities such as fueling and transportation hubs before it initiates major combat operations. To cover its tracks, the PRC will likely use social media warfare and other political warfare tools to deceive the United States and allies regarding who executed the attack. Part of the political warfare-related pre-attack sabotage will include acts such as cutting internet cables to the target country such as Taiwan in order to block the world from seeing what is about to happen and to better shape the narrative of "inevitable PRC success" globally.⁶⁷

Prior to initiating combat operations, PRC political warfare will support strategic deception operations designed to confuse or delay adversaries' defensive actions until it is too late to effectively respond. This deception will be particularly important to protect its naval deployments aimed at annexing Tai-

wan or destroying the U.S. Seventh Fleet at sea. Once armed conflict ignites, the CCP will coordinate political warfare activities to support—and sometimes conceal—its conventional, gray zone, and hybrid warfare operations. Deception will be conducted through propaganda and controlled-foreign media outlets as well as through the use of united front organizations. The CCP will publicize false or misleading reports and ruses, such as false reports of surrender of national governments and/or forces, and atrocities and other violations of international law. Other reports will likely focus on alleged civilian casualties, environmental damage, racial discrimination, and other issues that will cause division.

One likely ruse the PRC might employ in its disinformation and deception operations is for the PRC to covertly establish "an interim government" with pro-PRC elements cooperating from within Taiwan, according to Dr. Ying Yu Lin. This bogus "interim government" would announce that it has taken over the military and replaced the current government. A vast array of PRC and pro-PRC platforms would be used to widely disseminate the announcement. Such an announcement, regardless of its legitimacy, "could create considerable turbulence and even reduce the will of the military to fight. . . . Such measures are meant to disrupt people's will to rebel and to reduce the willingness of other countries to intervene. In such a scenario, the media—not military might—is likely to become the final winning factor."

As part of the PRC's worldwide political warfare campaign, united front organizations and surrogates will aggressively engage elites and other key influentials in opponent countries, as well as in regional countries affected by the hostilities and those globally with the ability to impact the outcome. Diplomacy, economic persuasion and coercion, and active measures will play major roles in this effort. Key goals will be to generate support for the PRC's war objectives, to create confusion and paralyze decision making, and to initiate actions such as protests and peace rallies to confuse debate and stymie response. All party-state media organizations and platforms will be engaged, to include co-opted foreign media and fake accounts on foreign social media platforms similar to the CCP's subversive campaign against the 2019 Hong Kong democracy protests.⁷¹

In its lawfare operations, the PRC will conjure up law—or use bogus law—to justify its reasons for initiating hostilities, which will be amplified globally via its media warfare organs. Through these lawfare and media warfare attacks, the PRC will attempt to justify its aggressive actions as legally valid. For example, a leading CCP-directed publication, *Global Times*, is a significant international propaganda publication as it is published in English, routinely runs articles such as "U.S. Military Ramps up Activities in S. China Sea, Risking Conflicts: Report." Articles such as this seek to establish justification for PRC military action against U.S. forces for operating with the South China Sea, which PRC

illegally claims as its own under its contrived "Nine-Dash Line" claim. As with many similar articles, this 22 March 2024 article warns that "the US' increasingly aggressive military activities targeting China will inevitably lead to strong countermeasures by the Chinese People's Liberation Army." Such legal and media warfare attempts to not only intimidate the United States: it also seeks to psychologically undermine key audiences globally by creating doubts among adversaries, neutral nations or "fence-sitters" who have not yet chosen to support one side or another, and the broader international community about the justification of the actions of the PRC's opponents.

Beijing will conduct its strategic psychological warfare by integrating psychological attacks and armed attacks and executing them on the offense and defense at the same time. Once combat commences, psychological warfare will be closely integrated to intensify the efficacy of conventional attacks while seeking to continuously strike first to seize the initiative. The PLA will aggressively employ psychological operations to demoralize and dissuade opposing forces, to make them doubt the value of the fight and the judgment of their officers and civilian leaders, and to terrorize them. Against senior national leadership in Taipei, Washington, Tokyo, Manila, and NATO countries, the goal will be to disrupt decision making.⁷³

Part of the CCP's strategic psychological warfare will be to terrorize the target country's population into submission. In, for example, a Taiwan invasion, this terror campaign will range from raining missiles down on unprotected civilian population areas to terror attacks by PLA special forces, Taiwan fifth columnists, and pro-CCP criminal gangs such as Bamboo Union. Anticipated attacks such as shooting up schools, playgrounds, police stations, and bus stops are foreseeable, and would have a tremendous impact on Taiwan society and government.⁷⁴ It is foreseeable such attacks will be launched in the United States and allied and other supporting nations as well.

Overseas Chinese—particularly those in the armed forces of their home countries—will be specifically targeted for UFWD, MSS, and PLA support, whether through enticement, intimidation, or co-option. In one likely scenario, they will be encouraged (or directed) to undermine and obstruct the allied war effort, to include antiwar and other protests designed to influence elected officials and policy makers. Such subversion will also include creating division within adversary populations by intentionally exposing pro-PRC elements in the military ranks to generate racial distrust and animosity and demoralize the force.

As the PLA engages in kinetic combat against enemy forces, the PRC will employ all of its resources to confuse, divide, and demoralize its enemies at the national and operational levels. These efforts will include cyberattacks and propaganda exploitation of such activities as labor union strikes, protests and

demonstrations, and acts of sabotage and terrorism. These activities may occur spontaneously in targeted countries, but more likely they will be directed by Beijing intelligence and political warfare apparatchiks. Widespread media coverage of these actions will be part of a larger effort to subvert public support for any response to PRC's aggression.

Prisoners of war (POWs) will play prominently in the PRC's wartime propaganda and other political warfare operations, in ways similar to the CCP's exploitation of them in the Korean War. For example, POWs taken by the PLA will likely be subject to intense indoctrination, some will be coerced into false confessions of contrived atrocities and other violations of the law of war, and others will profess their refusal to fight against the PRC on moral grounds. The PRC's propaganda will be amplified globally by united fronts, PRC-owned or controlled foreign media, and the CCP's well-groomed foreign surrogates.

Hostages will also play a key role. As discussed previously, in a wartime situation any citizens of countries the PRC is fighting—or even those noncombatant countries the PRC wants to compel to act in certain ways—are subject to being taken hostage. In a situation where the citizens are located in territory the PLA occupies, these citizens (like the military POWs in PLA hands) will be particularly vulnerable to PRC political warfare exploitation. Of particular concern, it will be quite easy for the CCP to apprehend foreigners residing in the PRC who can be exploited as useful hostage diplomacy pawns to deter response to PRC aggression and/or to end the conflict on the CCP's terms.

In areas occupied by the PLA, Beijing will quickly impose a great firewall to censor and control the narrative as well impose ruthless Xinjiang-style repression. As happened in Afghanistan after it fell to the Taliban in August 2021, citizens and foreigners living in the PLA's newly occupied zones will have no electronic means to communicate their status or to report on the activities on the occupying forces. Legitimate reporters and representatives from reliable international organizations will be barred from entering, but party-state media and perhaps some co-opted foreign media will be allowed in, as in Xinjiang. The CCP will employ a wide range of political warfare strategies and tools successfully employed in Tibet, Hong Kong, and Xinjian to pacify and reeducate the people in Taiwan or other annexed territory. Although most of the world will have no visibility of what the occupying forces are doing behind the barbed wire, the 2019 release of the PRC's secret "China Cables" and the early 2020 release of the "Xinjiang Police Files" as well as reports from the UN, Amnesty International, Human Rights Watch, and the U.S. government of gross atrocities and brutal repression provide the likely template. If the CCP's present practice in Xinjiang is prologue, the CCP will impose political warfare tools such as mass incarceration, torture, systematic rape, forced indoctrination, summary execution, and genocide.⁷⁵

The PRC will utilize its powerful leverage within the United Nations and other international and nongovernmental organizations to obstruct alliances against it in those forums, as well as to pursue disinformation campaigns such as allegations of war crimes and the organizations' charters. Beijing's representatives hold many top-level management positions in international organizations now, and its close alignment with Russia, Iran, North Korea, and others ensures that it will use these venues to censure, discredit, distract, and demoralize the countries it is fighting. Beijing will target for political warfare attack not only countries with which it is involved in direct combat operations, but also those countries that support its adversaries in any manner. These attacks may take the form of economic sanctions or psychological terror operations the PLA conducted against India during the 2017 confrontation on the Doklam plateau, as well as threats of nuclear weapons attack against countries such as Japan and Australia.

Negotiations to end the conflict will form another backdrop for political warfare ploys. In addition to threats, the PRC will dangle the possibility of negotiations in hopes of restraining allied response similar to stalling tactics in previous wars. It will delay, frustrate, and create useful propaganda that serves political warfare objectives in a manner reminiscent of the experience of the strategies and tactics the CCP employed to negotiate the 1953 Korean War armistice. Concurrently, the CCP will work closely with longtime friends of China in the United States, such as the U.S. China Business Council, to lobby for the United States and target countries to accept the PRC's terms for ending the conflict.

The political warfare campaign, designed to rally support for the PRC's actions and undermine its adversaries' will and capabilities in the armed conflict, will continue during and after combat operations, regardless of the operation's duration and success.

Conclusion and Recommendations

This article provides a brief overview of how the PRC will conduct political warfare during wartime and other combat operations, with specific focus on its relationship to PRC maritime and naval strategies. The PRC's political warfare in peacetime is unprecedented in scope and threat and has often proven markedly successful; in wartime it will be ramped up to an even greater degree. Consequently, it is vitally important that U.S. national security leaders in general, and U.S. Marine Corps leaders in particular, better understand this clearly foreseeable threat and prepare to combat it.

To this end, the Marine Corps—with its rich history in understanding this complex threat as reflected in *The Small Wars Manual* and its success in Vietnam with Civic Action Programs—should encourage research into, and organize

wargames specifically focused on, PRC political warfare in wartime operations against operational forces and home bases. The Commandant of the Marine Corps should task Marine Corps University to take the lead on this research to fully assess the political warfare threat and to propose required countermeasures and capabilities.

In addition, the Commandant should direct the immediate establishment of the Marine Corps' own systemic education and training programs to ensure understanding at all levels regarding the PRC's political warfare threat. Unlike during the Cold War with the Soviet Union, there is no evidence that the U.S. government has a comprehensive national strategy to confront and defeat PRC political warfare such as the ultimately successful political warfare strategy initially promulgated by George Kennan. In partial consequence, U.S. government education and training institutions no longer formally teach about PRC political warfare. Further, there appears to be no initiative to institute such education and training. As one key indicator, in early 2023 the Department of Defense published its Strategy for Operations in the Information Environment, which emphasizes the need to integrate public affairs as "a key component of OIE across the competition continuum" with operations, civil affairs, defense deception, and other disciplines.⁷⁷ Yet, during the following year, there has been no follow up to ensure the education of public affairs officers and senior enlisted met this objective: the curriculum at the Defense Information School still fails to prepare the DOD's premier strategic communicators with any foundation on China's political warfare goals, objectives, strategies, and tactics.⁷⁸ A search of curriculum at National Defense University and the various war colleges and senior-level courses depicts a similar lack of focus on the existential PRC political warfare threat. In stark contrast, countries allied with the United States such as the Philippines and the Republic of Korea conduct counter-PRC political warfare courses for their government organizations, as well as civil society.

With strong, agile leadership, the Marine Corps can quickly develop and initiate counterpolitical warfare courses to orient key audiences to critical aspects of PRC political warfare and how to counter it. By doing so, the Marine Corps would fulfill a vital national security niche that has been effectively ignored in U.S. national security strategy and operational practice.

A notional five-day Introduction to PRC Political Warfare course, aimed at the operational forces and Expeditionary Warfare School levels, might cover the following topics:

- History, theory, doctrine, and practice of PRC political warfare
- Political warfare terminology
- The political warfare threat to operational forces, bases, and communities
- Political warfare mapping

- How to fight back: defensive and offensive strategies
- Legal, law enforcement, and counterintelligence implications
- Contemporary PRC political warfare campaigns and case studies (Northeast Asia, Pacific Islands and Mid-Pacific, Southeast Asia, and the United States)
- News media and social media warfare
- Interagency and friendly/allied coordination
- Civil society engagement

Meaningful study of PRC political warfare requires a broad curriculum of extended duration, longer than the five-day Introduction to PRC Political Warfare course proposed. Ultimately, Marine Corps University should incorporate such in-depth curriculum into its courses and programs. Extended courses should be embedded in the Marine Corps War College, Command and Staff College, College of Enlisted Military Education, and School of Advanced Warfighting. These courses should focus and study and research on national-level political warfare-related objectives, policies, organizing principles, strategies, campaign plans, and legal frameworks from a U.S. and friendly/allied perspective, as well as from the PRC perspective. Higher-level education courses at MCU should focus on the operational-strategic aspects of the fight. Notional content should include the following:

- Hostile political warfare problem research and analysis
- Friendly political warfare-related strengths, weaknesses, opportunities, and threats
- Counterpolitical warfare campaign objectives, duration, themes, messages, and audiences
- Strategies, tactics, and messages and the tools necessary to convey them
- Counterpolitical warfare evaluation criteria and tools
- Coordination with allies, partners, and civic society

The higher-level courses should culminate in student development of a country-specific counterpolitical warfare campaign plan or comprehensive supporting campaign plans. Assuming participation from foreign students in the courses, when appropriate courses should provide students the opportunity to discuss unique political warfare challenges they face in their home countries and exchange lessons learned and best practices. All courses should also include practical application tabletop exercises, during which students develop solutions to hostile political warfare campaigns and operations in a warroom environment.

Endnotes

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Selecting San Carlos The Falklands War, 1982

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Abstract: During the Falklands War in 1982, the United Kingdom conducted an amphibious landing to repossess the Falkland Islands from the invading Argentinians. The Falkland Islands naturally possess thousands of miles of shoreline and more than two dozen suitable beaches for an amphibious landing with several in close proximity to the United Kingdom's primary objective of Stanley. However, British forces landed in the San Carlos Water, a bay across East Falkland Island miles from their objective all the while short of tracked vehicles and helicopter transports and pressured by the approaching onset of the Southern Hemisphere's winter. This article analyzes why British task force planners selected the San Carlos inlet for an amphibious assault and what parameters and events bound or persuaded planners to make their final decision. This article contributes to the operational analysis historiography of the Falklands War by examining the reasoning of selection and further supplements the historiography on the British way of war with regard to amphibious operations.

Keywords: United Kingdom, Argentina, Falklands War, Falkland Islands, amphibious operations

Introduction

t the start of the Falklands War, the United Kingdom was in a gradual process of demobilization of military assets such as advanced warning radar systems aboard ships or aircraft and amphibious warships, landing craft, and materiel necessary for amphibious operations in mass. Even after the grand amphibious operations that took place on the many fronts of World War II, and the usage of such methods of warfare as late as the Suez Crisis in 1956, the question over the continuation and necessity of marine amphibious

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forces was consistent and gaining momentum in the British Parliament up to the last decade before the Falklands War.¹ The nuclear age along with nuclear weapons put into question the idea of amphibious expeditionary forces as they are slow and seemingly predictable and findable targets and subject to annihilation from a single tactical nuclear weapon. Nuclear weapons development and output among the superpowers rose exponentially since their inception leading up to the Falklands War. And the United Kingdom was no exception as its own inventory of nuclear weapons grew to 500, its highest ever.² Despite this heavy arsenal and the three decade long successful deterrence the United Kingdom waged in support of North Atlantic Treaty Organization (NATO), the junta of Argentina chose to go to war against the United Kingdom.

The Falklands War revealed that the probability of an island war fought conventionally against a regional power in the nuclear age while one of the belligerents obtained nuclear weapons can still exist. The United Kingdom still possessed amphibious trained units and some equipment, though at the start of the conflict, they were hastily assembled. The British lacked war plans of this war scenario even though diplomatic conflict over the Falklands sovereignty was consistent in the twentieth century. Due to a lack of troopships, amphibious warships, and the need for further training, the British lost time at sea restowing and rehearsing at Ascension Island for an amphibious operation that was difficult but not entirely unfamiliar to others it had conducted in the past.³ The British were also not equipped in full when they departed the United Kingdom. Their early departure required a major airlift of supplies to Ascension Island, putting stress on the Royal Air Force.⁴ Further hindering landing planners was the lack of general understanding of amphibious operations among all staffs involved in the British task force. These symptoms contributed to limited options on where and when to land on the Falklands.⁵ Even so, their success in planning, landing, and ending the conflict before weather forced diplomacy over action emphasizes the advantages and necessity of possessing and maintaining modern amphibious forces.

The Falklands War began on 2 April 1982, with the Argentinian invasion of British territories in the South Atlantic and lasted until 14 June of the same year. Operation Corporate was the code name for all British military operations in the Falklands War. Strategically, retaking the Falklands was a grand amphibious operation, although it depended entirely on the British Royal Navy's ability to obtain and maintain control of the sea. The journey from the United Kingdom to the Falklands was more than 8,000 nautical miles. Furthermore, the Falklands are more than 3,000 nautical miles from the nearest British base at Ascension Island. On top of that, the task force faced challenges from the available technological resources of the time as well as time itself, for the Southern Hemisphere was soon approaching winter.

During the nearly seven weeks in transit, the British task force was at sea restowing or training at Ascension Island as well as in transit to the Falklands. Ultimately, the Argentinian military surrendered to British forces on East Falkland Island following their amphibious invasion at San Carlos to reclaim the territory. The amphibious landing at San Carlos on East Falkland was the only major landing by the British during the Falklands War. The landings occurred early on 21 May 1982, less than two months into the war. British commanders debated the proper landing site for their forces to mount an amphibious assault to retake the Falkland Islands group from the occupying Argentinians.

Thousands of kilometers of shoreline exist on the Falklands, providing dozens of accommodating sites for amphibious landings.⁶ Many of these landing sites had defenses while others remained undefended. Many were close to Britain's military objective of Stanley, while other sites were far away or on different islands altogether. Why did the British task force planners select the San Carlos inlet as the suitable area for an amphibious landing in the invasion of East Falkland? British task force planners selected the San Carlos inlet to assault East Falkland Island because it was a lightly defended landing area with an acceptable beach, had suitably protected anchorage for landing force vessels, had the best natural surrounding features to reduce the risk of counterattacks and aerial threats, and was still within an acceptable distance to their final objective of Stanley.

This article will first briefly describe the Argentinian invasion followed by the British government's response. The British government successfully laid out the political objectives and parameters by which the conflict would be fought, and this enabled task force planners to begin searching for the best landing area. The author then describes the current situation and obstacles that faced the British task force and briefly describes the intelligence situation. Following this, the article includes the Argentinian defense, the landing force, and the Argentinian air situation to contextualize and show the factors that partially affected the planner's elimination process. From here, the article examines why San Carlos inlet was the site that suited the needs and desires of the British task force best by describing the beach and landing areas, anchorages, surrounding landscapes security, the inlets protection from aerial threats, and its general proximity to Stanley.

Argentina Invades

After decades of rising tensions over the sovereignty of the Falkland Islands, the Argentinians decided to reclaim the "occupied" territory by military force. Reports from the South Georgia local government reveal that Argentinian military action began as early as 19 March, with the firing of shots and the raising of Argentina's national flag on the island.⁷ By 28 March, three groups of warships left

THE FALKLANDS (MALVINAS) 1982 Argentinia British Portsmouth **EUROPE** 5-6 April Falklands Task Force sails Washington Gibralta Atlantic North Ocean **AFRICA BRAZIL ASCENSION** Task Force Base ARAGUA South // Atlantic Ocean URUGUAY **CHILE ARGENTINA** Distances from airbases to Falklands; Atlantic Conveye 1. Ascension Island 6000 KM Sunk 25 May 2. Trelew 1070 KM 3. San Julian 780 KM 4. Rio Gallegos 800 KM Falkland Islands 700 KM 5. Rio Grande HMS SHEFFIELD South GEORGIA General Belgrano SOUTH SANDWICH ISLANDS Sunk 2 May Total Exclusion Zone Argentina invades the **SCALE OF MILES** Falklands on 2 April and 1000 1500 South Georgia on 3 April 1982

Map 1. Route and distances of the British task force

Source: map courtesy of West Point Atlases Online, adapted by MCUP.

the Argentinian mainland, with plans to capture the Falkland Islands.⁸ Sailing from Puerto Belgrano, the Argentinian naval landing forces took five days to reach the Falklands. With the islands' territorial defense force comprising fewer than 200 British military personnel, the Falklands quickly fell to Argentina on the morning of 2 April.⁹

British prime minister Margaret Thatcher addressed the House of Commons on 3 April. Thatcher stated that the Falklands were still British territory, and no amount of military aggression can change that fact. Thatcher informed the house that some British naval units were already at or putting to sea immediately, and others gathering, stating that "the Government have now decided that a large task force will sail as soon as all preparations are complete." The first launched naval units in the task force comprised of aircraft carriers, destroyers, frigates, and support ships, which left England as soon as 5–6 April. The remaining task force units, comprised of troopships and other supply vessels, left England no later than 9 April. The British task force joined forces with more British warships originating from Gibraltar and sailed together south to Ascension Island.¹¹

Political Objectives and Parameters

Before the British task force engaged with Argentina's military in the South Atlantic, the British government succeeded in establishing its political objectives for the war and listed a set of preconditions required in the naval and aerial theater of war before any landing could take place on the Falkland Islands. On 11 April, commander of the South Atlantic Task Force, Admiral Sir John Fieldhouse, sent a tentative list of directives to the senior leadership along with the task force. Among these were commander carrier/battle group, Rear Admiral Sandy Woodward; commander amphibious task force, Commodore Michael C. Clapp; and commander landing force, Brigadier Julian Thompson. The directives stated that the task force was to "(a.) Enforce Falkland Island exclusion zone., (b.) Establish sea and air superiority in Falkland Island exclusion zone., (c.) Repossess South Georgia., [and] (d.) Repossess Falkland Islands." Priority stressed subject (b.), while subjects (b.) and (c.) were on the same time scale. Furthermore, Fieldhouse advised Clapp and Thompson that they should "do the utmost to avoid an opposed landing."

Commodore Clapp states that neither he nor General Thompson intended to plan for an opposed assault. Clapp states that an opposed assault "is not our way of doing things and is not usually the more successful" option unless large-scale overkill is the intention or deemed acceptable. ¹⁵ An opposed landing was also undesirable by the British due to the limited size of their available forces. The British soon realized they required more men to invade the Falklands at their discovery that the Argentinians had reinforced their garrison from 3,000

to at least 8,000 by 16 April. The rule book of amphibious operations states that the assaulter should have a three-to-one superiority over the enemy. By 16 April, the British landing forces were still outnumbered by a ratio of two-to-one. These ratios would likely not be present at the actual landing site. However, a campaign to end the war required more men.

On 17 April, Admiral Fieldhouse flew to Ascension Island and stated to a briefing room of nearly 100 naval and land force officers aboard the carrier HMS *Hermes* (R 12) that "if diplomacy failed," the task force "could depend on absolute political support for its operations." This assurance enabled commanders to operate at their own discretion and allowed for operational planning to begin. With this in mind, Clapp added a fifth task to the list. He stated that the task force needed to get as far south as swiftly as possible. Clapp's concern for reaching the Falkland Islands as soon as possible was shared by all commanders in the task force.

The British Task Force Situation

The greatest natural concern to the fleet was the rapid approach of winter in the Southern Hemisphere and the expected environmental problems that come with the season. Thompson states that the majority of warships would face equipment failure by mid-to-late June. Thompson adds that any limitation to the sustainability of the navy would "have a profound effect on the land battle," as well as reduce the overall time for pre-landing reconnaissance.¹⁹ The logistics of maintaining the task force for any protracted amount of time in the South Atlantic, being so far away from the United Kingdom or from their nearest base at Ascension Island, was difficult and unsustainable. The lack of current intelligence the British possessed of the Argentinians on the Falkland Islands was troubling and made planning difficult.²⁰

Intelligence was mainly limited to reconnaissance missions by air or by special forces ground teams. Information on Argentina's military and inventories from partnering nations such as France and the United States came to the task force, but information on Argentina via ground sources was still inadequate.²¹ Woodward describes that British intelligence on the Falklands had "very considerable ignorance—our intelligence had never been targeted on Argentina and, since the Falklands had never been thought a likely battleground, our knowledge of the seas around was absolutely minimal."²² And special forces operations did not start on East Falkland until May.²³ A British government paper, written 26 April, states that if the fleet were at all passive in the South Atlantic, they were then vulnerable to storms, enemy aircraft, enemy submarines, distance to friendly bases, declining morale, declining battle fitness, and illness.²⁴ Task force commanders then established the window for mounting an amphibious landing as soon as 16 May and no later than 25 May.²⁵

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Map 2. Battle of the Falkland Islands

Source: courtesy West Point Atlases Online, adapted by MCUP.

Menendez's Defense

Task force planners were correct in assuming the defenses around Stanley were significant enough to inflict severe casualties and possibly thwart a British landing. Argentinian land forces commander general Mario Menendez's first defense priority focused on where the British were going to land. Menendez figured they would land on East Falkland either at Cow Bay north of Stanley or Port Fitzroy just south of Stanley and possibly Low Bay on the southeast coast of Lafonia. The greatest blow to his forces would be a direct assault on Stanley. In light of this, Menendez formed his defensive strategy into a static zone defense centered around Stanley. The number of plausible landing beaches made it impossible for the Argentinian defense to mine and erect landing defenses as well as defend every beach at the water's edge. An Argentinian brigade and marine battalion defended Stanley, with the remainder of Menendez's forces displaced around the rest of the islands. A total of nearly 13,000 Argentinian troops defended the Falklands, of which three-quarters garrisoned the Stanley region.²⁶

The Landing Force

Twelve amphibious ships, some as auxiliary vessels and not warships, comprised the landing force. The 12 amphibious ships were the command assault ships HMS Fearless (L 10) and the HMS Intrepid (L 11), the small landing ships RFA Sir Galahad (L 3005), RFA Sir Geraint (L 3027), RFA Sir Percivale (L 3036), RFA Sir Tristram (L 3505), and RFA Sir Lancelot (L 3029), the royal auxiliary ships RFA Stromness (A 344) as a stores-ship and RFA Fort Austin as a helicopter carrier, and the requisitioned troopships of SS Canberra, MV Norland, and MS Europic Ferry. The plan was for the three troopships to sail right into landing positions with the other amphibious landing ships, a venture not foreseen on their departure from England.²⁷ By the final days of planning, seven warships would escort the amphibious landing force. The escorts comprised the destroyer HMS Antrim (D 18), Type 22 frigates HMS Brilliant (F 90) and HMS Broadsword (F 88) for antiaircraft defense, and general-purpose frigates HMS Ardent (F 184), HMS Argonaut (F 56), HMS Plymouth (F 126), and HMS Yarmouth (1745).²⁸ Fearless and Intrepid each weighed 12,000 tons. The smaller five landing ships weighed just more than 500 tons. The Stromness displaced the most, weighing 16,000 tons, and the destroyer and frigate weights varied from 2,800 to 5,500 tons.²⁹ The landing force, with its protection, traveled at 12 knots maximum, giving Woodward and Clapp concern.³⁰ The minimum draft the landing ships required was 26 feet. Task force planners needed the landing force to sail into landing positions safely, have suitable depths for proper anchoring, and have shelter from submarines. Many landing areas did not meet these criteria.

Argentina's Air Situation

At the start of the conflict, the Argentinian Army, Air Force, and Navy each had aircraft deployed to the Falklands for its defense. Only light-attack aircraft and aerial transports were deployed on the Falklands as part of its defense. Argentinian high-performance aircraft used in the war originated from bases on the Argentina mainland. Argentina's Air Force operated 82 combat aircraft of this caliber. The most important of these were "thirty-two American A-4 Skyhawks, twenty-four Israeli Daggers, and eight French Mirage IIIEAs."31 The Argentina Navy added eight Douglas A-4 Skyhawks and five French Dassault-Breguet Super Etendards to the list of high-performance aircraft. Argentinian Navy Skyhawks were the only aerial force coming from the sea from their only carrier, ARA Veinticinco de Mayo (V 2). The Super Etendards were the only aircraft fitted with the Exocet AM39 antiship missiles. The remaining aircraft fired mostly unguided 500 pound and 1,000 pound bombs.³² Ninety-seven percent of the aerial inventory of Argentina was operational during the war.³³ The Etendards and Veinticinco de Mayo were the greatest threats to the task force in the eyes of the British.³⁴ The Argentinians also used, ironically, English Electric Canberra

medium bombers, though these were slow and lacked the abilities of the modern harrier and regarded as an insignificant threat to the British task force.

The capabilities of Argentinian aircraft significantly limited their usage during the war. Argentina's Dagger and Dassault Mirage aircraft lacked refueling capabilities and could not loiter. Conversely, the Skyhawks and Etendards had refueling capabilities. However, the Argentinians had only two Lockheed Martin KC-130 aerial refuelers.³⁵ On the Falkland's, none of the outlying airfields could support high-performance aircraft, and the runway at Stanley was deemed too short and too dangerous when wet to operate larger aircraft.³⁶ Even with their limited operational capabilities, Argentinian aircraft possessing Exocet missiles posed the most lethal threat to the British task force.

The Exocet AM39 was a low-flying sea-skimmer missile capable of being fired from aircraft, warships, or a coastal defense platform. Both the British and the Argentinians possessed these weapons, though the Argentinians possessed only five AM39s for their five Super Etendard aircraft. Argentina also had six destroyers and frigates fitted with Exocet ship-to-ship missiles.³⁷ However, it was the aerial version that inflicted the most damage on the British task force and was the worst threat to anchored landing ships. Exocets had the technological advantage of homing in on targets without human guidance. An example of this came on 4 May. Argentinians launched two Etendards to attack the British carriers in the task force. The aircraft flew low to avoid radar detection and would fly up periodically "to allow their radars to search for targets." Once in range, Argentinians had no idea if they had fired on a destroyer or a British carrier. The attack resulted in the destruction of the destroyer HMS *Sheffield* (D 80). The Argentinian pilots fired on the first available target and struck the picket line of warships instead of the intended carriers.³⁹

The air-to-surface Exocets fired from Argentinian Super Etendards changed the tactics of the entire war. Woodward writes, "despite all of our defensive systems, one had got through and demolished one of my three Type 42 destroyers without even exploding." Three of the five Exocets remained in the inventory of Argentina, according to British intelligence at the start of the war. Therefore, Woodward concluded that he may yet lose another ship or possibly two. And Woodward placed higher protection and protocols around his carriers and increased their distance from known Argentinian Exocet threats. Embracing the reality of the weapon's capability, task force planners focused on selecting a landing site that completely neutralized the Exocet threat.

By the time the task force reached the South Atlantic, the airfield at Stanley was repeatedly bombed and partially damaged by Avro Vulcan bombers and later on by task force fighter-bombers. Throughout the aerial and naval campaign leading up to the assault at San Carlos, several airfields and Argentinian installations received air strikes and naval bombardment in an attempt by the

British to achieve air superiority and weaken the Argentinian strong points for the coming landing force. One of the airfields on Pebble Island was directly targeted and neutralized by British special forces to relieve the aerial threat as well as reduce Argentina's radar capacity at the northern entrance of the Falkland Sound. The airfield had 10 attack aircraft comprised of 6 FMA IA 58 Pucarás and 4 Beechcraft T-34 Mentors. One Short SC.7 Skyvan utility aircraft was also on the airfield. British special forces successfully destroyed all 11 aircraft in what is known as the Pebble Island Raid. Argentina was soon able to replace some of the lost aircraft but with a reduction to the total Argentinian Air Force on the Falklands as well as Argentina's capability from Pebble Island. This would later benefit the approaching landing force as well as the anchored vessels in San Carlos from aerial bombardment.

Elimination Process

Argentina is west of the islands, roughly 400 nautical miles from the westernmost tip of the islands to the nearest continental coastline of South America. The Falklands consist of an area of nearly 4,700 square miles. Approximately 2,500 statutory miles of coastline exist on the islands. The three main land masses are West Falkland, East Falkland, and Lafonia. Lafonia is part of East Falkland but connects only by a narrow strip of land at Goose Green and Darwin. West Falkland is separated from the others by the Falkland Sound. The sound's width stretches from 15 to 30 miles between the two island groups. Hundreds of smaller islands form around the three larger ones. The islands are semi-mountainous, ranging from sea level to the highest point of 2,312 feet. The terrain on all islands has many low hills, large rocky outcrops, and many areas of bogland. The islands are void of foliage, providing no cover for vehicles or foot soldiers. The coastline possesses dozens of harbors and inlets. Argentinian defenders estimated that 30 of the islands' beaches were suitable for an amphibious landing.

Clapp interpreted the directive that stated the plan was to repossess the Falklands as meaning an invasion on East Falkland as well as a landing close to Stanley. Thompson agreed, and they decided early in the planning process to discard ideas of landing anywhere other than the north half of East Falkland Island. Landings at Stevelly Bay, Fox Bay, and Port Howard on West Falkland were pushed for by Admiral Woodward but ruled out for reasons discussed further on. Landings on Lafonia were also ruled out for similar reasons. Among British planners was Major Ewen Southby-Tailyour. Southby-Tailyour possessed extensive "encyclopedic" knowledge, as described by Clapp, of the Falkland Islands and its beaches from his many yacht excursions of the islands. Southby-Tailyour's memory supplemented hydrographic charts, and he provided a shortlist of beaches on East Falkland worth looking at. Planners decided

that there were 19 beaches plausible for a landing on East Falkland.⁵⁰ Clapp and Southby-Tailyour reduced the list by half. Their list included "Volunteer and Cow Bays, Berkeley Sound, Salvador Inlet, North Camp (referencing all beaches on the north-west shore of East Falkland), Darwin, inlets off the Choiseul Sound, and San Carlos."⁵¹

The two staff groups of Clapp and Thompson eliminated several beaches on the north half of East Falkland due to either their lack of width, slope, expected traction for landing vehicles, or by the erected obstacles of the Argentinian defense. The selected beach or beaches required gradients suitable for landing craft or Mexeflote boats. Clapp states that the beaches had to fit a brigade-size landing into as many as four areas, and at least one of the beaches needed a large and flat space for a "beach support area." All of the beaches needed suitable traction and exits for infantry, tanks, and other vehicles to proceed inland.⁵² Beaches with sand dunes, cliffs, or high tussocks were not suitable and eliminated.⁵³ Woodward argued that the beachhead must include the possibility of constructing an airstrip out of the terrain should his carriers remain at a permanent level of high-risk of attack.⁵⁴ However, Woodword's criteria were not prioritized by Clapp or Thompson due to the difficulty of such a venture.⁵⁵

The planner's initial intention was to hit the northeast coast of East Falkland so that they would look down topographically onto Stanley from the north and west. Any attack from the south or southwest would mean the "breasting up" of British forces to the main defensive lines of the Argentinians. The planners avoided this approach entirely.⁵⁶ They also avoided a direct assault at Port Stanley so close to the Argentinian garrison commanded by Brigadier General Oscar Jofre.⁵⁷ Thompson states that an amphibious landing in the vicinity of Port Stanley "would probably run into well-prepared defensive positions, wire, mines, and beaches covered by gunfire both direct and indirect."58 At the time, the British did not possess armored amphibious vehicles or direct-fire assault guns on either vehicles or ships to provide any close fire support. Therefore, a suitable beach required that it was out of range of the Argentinian 105-mm guns, concentrated mostly around Stanley.⁵⁹ There was a risk to the landing force that Argentina would reposition their guns quickly. Argentina's guns were lighter than those the British had, and they could be cabled, lifted, and hauled by light-helicopters to new positions. 60 Of greater concern was the British fear of the civilian casualties as well as collateral building damage. A direct assault on Port Stanley was out of the question.

Several meetings of task force leadership occurred in mid-to-late April to analyze and discuss landings on the northeast coast of East Falkland Island. Northeast landing sites included Cow and Volunteer Bays and the Berkeley Sound. Task force planners decided that Cow and Volunteer Bays were too exposed, easily defended, and poor for moving ground forces inland. Further-

more, Berkeley Sound had poor landscape features, had anchorages susceptible to rough seas and it was too close to the bulk of Argentinian forces on East Falkland. The landing forces would only target these areas "if the Argentines looked as if they wanted to surrender."61 Berkeley Sound had the closest landing sites to Stanley, other than the port, but the British suspected the Argentinians of mining the seaward approaches.⁶² The San Carlos inlet on the west side of East Falkland was all that remained for major contenders for a landing site. This was Thompson's and Clapp's preferred choice.⁶³

On 29 April, Thompson and Clapp were met by Major General Jeremy Moore aboard HMS Fearless at Ascension to discuss their primary landing options selected from the list of 19. The staff of both Thompson and Clapp narrowed the list to three possible areas. They presented the Cow Bay and Volunteer Bay areas (one mile apart), San Carlos, and Berkeley Sound. Port Salvador was the fourth site in consideration by Thompson and his staff, and personally Thompson's second choice for a landing, but this was left out of their meeting. Due to reasons stated above, the staff eliminated options one and three and compromised on option two. Following the selection of San Carlos, Thompson's staff agreed that the Port Salvador Inlet, northwest of Stanley 30 statutory miles, was the best alternative choice should reconnaissance teams find the San Carlos Water mined or the area significantly defended. 64 Clapp did not push for his alternative landing choices for he was sure that San Carlos was the best choice.

Selecting San Carlos

San Carlos Topography

The San Carlos inlet is visually representative of a fjord. The northern side of the inlet above Port San Carlos has a low ridge of hills running southeast to northwest. Notable points on this ridge are the summits of Fanning Head and Settlement Rocks that are more than 700 feet above San Carlos Water. The southern flank of the inlet also has a ridge of hills that again runs southeast to northwest before turning straight north, providing shelter to the entire west and southern flank of San Carlos Water. The southern hills are known locally as the Sussex Mountains. 65 The west ridges are called the Campito Mountains, and the east, the Verde Mountains. These ranges on the flanks of San Carlos Water ascend more than 650 feet, and the 500-mark contour lines on either side are only three miles apart.⁶⁶

The Appropriate Beach

The beach conditions and the expected Argentinian defense of the beaches were major factors in selecting a suitable landing site. Any opposed landing overruled a beach's prime condition due to the preferred preconditions of an amphibious landing set forth early in the war by the British government and senior task force leadership. The San Carlos inlet had three suitable beaches. ⁶⁷ The beaches possessed the proper slope for landing craft. They also had limited, but enough, space for a brigade-size landing force and good exits for landing forces to carry on inland. By the time planners selected San Carlos, intelligence had confirmed that San Carlos was not in range of Argentinian guns, nor would a landing there cost a severe loss of life due to the small Argentinian defense. The only Argentinian defense force at San Carlos was a small detachment of soldiers, a force no larger than 50, at Fanning Head on the north side of the inlet.⁶⁸ By early May, Special Boat Service and Special Air Service reconnaissance teams found San Carlos "unbelievingly, except for visiting patrols . . . to be devoid of enemy." 69 The commanders of the task force partially selected the San Carlos inlet as the ultimate choice for an amphibious landing because it had a limited Argentinian defense and acceptable beaches. These are just two factors that went into selecting the landing site. Another factor that planners examined was which landing areas possessed proper anchorage.

Protected Anchorage

To conduct the amphibious landing that the task force planners envisaged, the water just off the landing area needed suitable depths and protection to anchor the vessels in the landing force. As part of the demands of the Royal Navy, the landing force had to have secure anchorage from bad weather and enemy attacks. 70 The constant factor year-round in the weather cycle of the Falklands was high winds, and the landing area had to have calm or mild waters. A slight wind would hinder the roll-on/roll-off unloading procedures of the ships. A swell was the greatest weather danger to the landing vessels, according to Clapp.⁷¹ Planners expected the landing force to be slow on approach, and this made the risk to the landing force from any weather anomalies high.⁷² The second concern came from subsurface threats such as mines and submarines. The Argentine Navy "was effectively eliminated as a serious opponent" by the time of the landing as part of the precursor phase of operations.⁷³ However, no matter how minimal, Argentinian submarines remained a constant threat to the task force and any anchored landing force for the rest of the war. Clapp states that from the naval perspective, the anchorage "had to have a difficult approach for or be easily defended against" submarine attacks. The Argentinians used German-designed S209 diesel submarines as part of their submarine force.⁷⁴ The threat posed by these submarines was that one could "wait in advance of a landing or creep in undetected after one."75 Therefore, the anchorage had to require enough depth to accommodate the drafts of the largest ships but also shallow enough water to prevent submarine incursions. 76 With these risks in mind, task force planners selected San Carlos.

Clapp describes San Carlos as the "obvious choice."⁷⁷ He states that, from the overall point of view, "it seemed likely that the enemy would also have discovered San Carlos and marked, mined, and defended it."⁷⁸ The Royal Navy sent warships into the Falkland Sound and discovered that it was not mined. Likewise, special forces discovered that the entrance to the San Carlos inlet had no mines. The San Carlos inlet forked into two waterways. One harbored the small settlement of Port San Carlos, and the other led to the settlement of San Carlos.⁷⁹ Six to seven grid miles separates these settlements. The narrow waters made it "ideal hiding places for ships particularly when there was mist and low cloud."⁸⁰ Ironically, General Menendez viewed the lack of "naval maneuver room" as a reason to dismiss San Carlos as a potential landing site for an amphibious landing.⁸¹

The San Carlos inlet had two "fine natural anchorages." The deepest depth of the entrance to the inlet is 116 feet. The northern anchorage site ranges from this depth to 65 feet. The southern anchorage, where most of the landing ships gathered, ranges from depths of 100 feet deep to 40 feet at the shallowest. San The width of the entrance is one and three-quarter miles. Six of the escorts remained positioned in the Falkland Sound for the landings. A submarine incursion was unlikely. Furthermore, the Argentinians mostly withdrew their naval forces from the maritime exclusion zone after the sinking of the ARA *General Belgrano* (C 4).

Task force planners required a landing area with suitable depths and protection from the natural elements and enemy attacks. The San Carlos inlet was the best choice available in this regard. The inlet had two anchorages in a narrow and relatively shallow stretch of water that helped prevent the threat of submarines. Task force planners also worked out that the anchorage site of the troopship *Canberra* would still keep the top decks of the ships above the waterline even if it were sunk. Represent the narrow causeway of water also prevented swells from interfering with offloading operations, even with strong winds. Task force planners also selected the inlet as the ultimate landing site due to the surrounding natural features on all sides of the inlet that would protect the landing forces from counterattacks.

Secure from Counterattacks

The topography around the San Carlos inlet provided either an advantage over the surrounding area or potentially a great obstacle that risked the success of an amphibious landing. If secured, the hundreds of feet of ascending terrain gave invading ground forces the advantage of viewing the surrounding terrain of San Carlos for miles in each direction. This would enable the British to easily spot any approaching Argentinian counterattacks by air or land via line of sight or at night with thermal optic targeting. Furthermore, securing the surrounding

high ground of the San Carlos inlet allowed air defenses to install. Overall, if the landing force seized the surrounding ridges, they held nearly every advantage. However, the enemy also holds every described advantage should they instead hold or reinforce the high ground before sufficient forces could land and establish a perimeter. Task force planners debated the scenarios of landing at an area with a high ascending surrounding landscape and decided that the advantages outweighed the disadvantages of such a venture.

Securing the high ground around the San Carlos inlet was a military necessity for the British landing force for both security and the prevention of an immediate Argentinian counterattack. The fear that the Argentinians would spot the landing force immediately entering the Falkland Sound and quickly reinforce the outpost at Fanning Head and other defensive points was a possibility the task force planners embraced when selecting San Carlos. Regarding ground counterattacks, Thompson's concern was that the nearest Argentinian reinforcements would quickly secure the Sussex Mountains as the landing force approached San Carlos.85 An Argentinian counterattack from Goose Green-Darwin just 20 miles south had the potential to inflict serous casualties on the landing force. The Argentinian base there held 600 Argentinian troops and an airfield supporting small attack aircraft.86 During planning, Thompson only speculated that this force had the support of artillery, although he was certain it possessed air defense guns and surface-to-air missiles. A British Sea Harrier was shot down by these defenses in this area on 4 May.⁸⁷ Three more Argentinian battalions were at either Port Howard or Fox Bay on West Falkland, though these were not an immediate threat.⁸⁸ An Argentinian aerial counterattack to the San Carlos landing was a concern, but task force planners thought that one was logistically and numerically unlikely to repel the landing force. However, the landing was still at threat from aerial attacks.

Aerial Threats and Aerial Defense

The surrounding natural topography of San Carlos eliminated the threat of Exocet missiles. The surrounding features protected the landing force ships due to the phenomenon of radar shadowing provided by the terrain around the San Carlos inlet. ⁸⁹ The radar of the Exocets functioned poorly when operating near land. ⁹⁰ Furthermore, Argentinian pilots needed a minimum of "2,000 yards to lock their Exocet missiles on to target and direct line of site." ⁹¹ Even though San Carlos eliminated the greatest threat posed to the landing force, it did not eliminate all forms of aerial attacks.

By the time of the landing, Woodward states that "on paper, [the Argentinians] still had air superiority," even with the Pebble Island Raid.⁹² And they were still a threat. The British knew that the San Carlos inlet was in the range of unrefueled Argentinian aircraft.⁹³ Clapp was specifically worried at the fact that

it was close to the maximum action radius of the Argentinian Skyhawks with heavy payloads. 94 Even so, the windows of attack to the landing force in the San Carlos inlet for Argentinian pilots was narrow. The two openings for attack aircraft at San Carlos were at the northwest entrance to the Falkland Sound and the southeast valley between the Sussex and Verde Mountains leading to Darwin then Goose Green. The northwest entrance allowed for only mediumto high-level strikes, and the entrance gave Argentinian aircraft only two miles or 15 seconds at 550 mph. The southeast valley was the only approach that allowed for low-level strikes. Pilots had six miles of visibility and a gentle slope to approach the ships at or near sea level.⁹⁵ British warships in the Falkland Sound were at greater risk than those in the inlet. Their placement was part of the British plan. Planners knew that due to fuel constraints, Argentinian aircraft would most likely approach San Carlos directly from the west. Clapp deliberately planned a "defense to take advantage of the protected anchorage and the high ground."96 The six warships in the Falkland Sound were a picket line defense for the landing. Also, the frigates Broadsword and Brilliant with Sea Wolf missile systems were part of this defensive line. Other warships possessed the Sea Dart missile system. The Sea Wolf and Sea Dart had both scored aerial victories against aircraft. This picket line meant that Argentinian aircraft would first be subject to ship-to-air missiles before flying over the antiaircraft barrage from warships in the Falkland Sound and landing force vessels in San Carlos Water. The picket line also preyed on the mental condition pilots face during war.

Like many kamikazes in World War II flying through a constant heavy barrage with limited time, Argentinian pilots targeted the first ship they saw. Subsequently, the picket line of warships in the Falkland Sound faced the brunt of the Argentinian aerial attack following the landing. Furthermore, due to the split-second decisions and the minimum distances between aircraft, bombs, and targets, many of the Argentinians released their bombs "not allowing sufficient time for them to arm." The west-northwest approach had a suitable defense to air attacks from the warships and the natural terrain of the inlet. The southeast approach was more accessible to attack aircraft, but the British prepared for this.

The surrounding landscape of the San Carlos inlet also provided perfect crests to install ground-to-air missile defense systems. The plan was for the first units in the landing force to secure the ridge lines, followed by artillery and the Rapier battery units. ⁹⁹ The goal of the Rapier system was to provide aerial coverage of the inlet as another layer of defense. The Rapiers were put into positions "scientifically chosen by computers in Britain's chief radar research establishment at Malvern." ¹⁰⁰ Unfortunately for the British, the systems could not install immediately due to the landing order. The landing began at night, and the

Rapiers did not begin to install until daylight. The process was "excruciatingly slow," because crews stowed the Rapiers at the bottom of ships' holds. Furthermore, the Rapiers could only move by helicopter due to their size, weight, and the lack of roads or trails in the surrounding landscape. If spotters incorrectly sited the Rapiers by even a few feet, a helicopter had to adjust them. The British lost two Gazelle helicopters and three of four pilots during the installment process from attacking Argentinian aircraft. Once the Rapiers were online, they were quite formidable.

The Rapiers were low-level ground-to-air missiles firing up to 10,000 feet. ¹⁰² Once established, the Rapiers set the firing base at X feet above the landing forces, putting the ships and troops ashore into a protected "pit." Installing these at elevated positions above the landing force decreased the time and distance the Rapiers needed to target, fire, and reach Argentinian air units. This increased the risk to Argentinian planes and pilots should they aim to strike at the landing force and further decreased pilots' time to assess, determine, and aim at any target inside the inlet. To prevent friendly fire once the missiles were online, Woodward set a box 10,000 thousand feet high and 10 by 2 miles wide that British aircraft could not enter. ¹⁰³

Although the San Carlos inlet did not eliminate the threats of ground counterattacks and aerial bombardments, the inlet succeeded in mitigating the threat to an acceptable level of risk. Securing the high ground around the inlet alone was able to deter counterattacks from enemy forces. Furthermore, the landing force outnumbered the nearest Argentinian forces at Goose Green-Darwin by a factor of nine-to-one at minimum. Via special forces, the British also had eyes on the main elements of Argentinian forces in the vicinity of San Carlos and on the main routes that reinforcements would travel to San Carlos, giving the landing force a clearer picture and enough time to react if needed. The surrounding landscape of the San Carlos inlet eliminated the threat of Exocet missiles and blocked a significant portion of other aerial attacks as well as suited the Royal Navy's and ground force's defense capabilities. The last reason task force planners selected the San Carlos inlet was due to its proximity to their ultimate objective of Stanley.

Proximity to Stanley

The proximity of the landing beach to the largest town on the Falkland Islands, Stanley, was a high priority to Argentinian defenders but of less priority to British task force planners. Clapp states, through the courtesy of the SBS and SAS, that the Argentinian defense catered to the expectation that the British would mount an amphibious assault like "the American way and land, if not straight into Stanley, then very close indeed." This went against the guiding preconditions for a British landing set forth by political and military leadership at the

start of the war. Furthermore, any landing too far from Stanley involved a long approaching march that put stress on their logistics and ability to resupply. Argentinian commanders set a policy that any landing far away from Stanley would face harassment from the helicopter infantry reserve at Stanley as well as from Argentinian special forces. As already mentioned, task force planners assessed nearly every plausible landing site on the Falkland Islands. And though the Argentinians had garrisoned troops on West Falkland, they did not suspect the British of contemplating a landing there.

Admiral Woodward sought a landing on West Falkland at the early stages of the planning process. Woodward considered West Falkland due to the likelihood of an easy victory and the expected advantages gained after taking the island. At the meeting aboard *Fearless*, on 16 April, Woodward first brought up the subject to the planning staff to make a bridgehead on the northwest coast of West Falkland at Stevelly Bay and hold it until finishing the construction of an airstrip. Woodward envisioned an airstrip that supported Lockheed C-130 Hercules transports and phantom fighter aircraft. He also listed that a landing at Low Bay, Lafonia, was also in close proximity to a flat plain necessary for the construction of an airstrip. 108

Thompson writes that an airfield at Stevelly Bay on West Falkland was about as close to the Argentina mainland as the British could "get without actually being in the sea." Furthermore, his engineers did not have the materiel nor the numbers to carry out such a scheme there or on Lafonia. Clapp and Southby-Tailyour added that they did not believe the landing would add "any real pressure on the Junta." It also meant that if the Argentinians did not budge in diplomacy, that a second amphibious landing was necessary on East Falkland anyway. Thompson states that this alone was reason enough to throw the notion out. Woodward later realized that the landing at Stevelly Bay also exposed the fleet to air launched Exocets with no available cover to the task force, and the risk was too large to tolerate. All that remained was a landing on East Falkland.

The Low Bay landing scenario did not present an advantage over counterattacks from Goose Green-Darwin and was much closer to the Argentinian garrison there. Furthermore, the garrison strategically secured the chokepoint between Lafonia and the rest of East Falkland, and this had the possibility to hold up any British advance entirely. Therefore, planners eliminated Low Bay and Lafonia altogether. Volunteer and Cow Bays, Salvador and Teal Inlets, and the San Carlos area were acceptable landing sites due to their proximity to Stanley. Argentinian land commander General Menendez did not consider defending San Carlos, for it was 50 miles from Stanley and unlikely that the British would land that far away. And landings at Volunteer and Cow Bays and Salvador and Teal inlets were all half that distance. The Argentinians did not

believe the British would choose a course where they would have to trek "units, supplies, and equipment across the rugged terrain of East Falkland to get to Stanley. They also believed that the British would get bogged down and that this approach placed them in an unacceptable vulnerable state."¹¹⁴

The case for arguing that planners partly selected San Carlos due to its proximity to Stanley began when the British Royal Navy put forth the notion of landings on West Falkland or Lafonia. Both Clapp and Thompson and the Commando brigade staff aboard *Fearless* conclusively agreed that the landing should take place on East Falkland prior to Woodward's proposal. West Falkland was too far, had too many risks, and demanded a second amphibious landing, which was unacceptable. Lafonia was also too far and gave every tactical advantage to the defending Argentinians and, therefore, unacceptable as well. A British landing at San Carlos was by no means the closest route to Stanley. However, it was well within the parameters of an acceptable distance away from their objective.

Conclusion

The decision to land at San Carlos came from careful consideration by task force planners who assessed the geography, typography, hydrography, and meteorology of the Falklands while pitting the capabilities of their forces against the known and later discovered capabilities of Argentinian forces. Task force planners faced constant duress over the timetable and the fog of war. The grand objectives and preconditions firmly established by senior political and military leadership guided task force planners and they followed the guidelines as best they could. Political and military leadership sought an unopposed landing, and San Carlos met that condition because it was out of range of Argentina's heavy guns and defended by a force smaller than a company at a single observation point. The San Carlos inlet also met the minimum number of beaches, the specific grade, and possessed good exit points for a brigade-size landing force. Furthermore, San Carlos Water had two suitable anchorage sites for landing vessels, and the risk of swell and enemy submarines was low. The terrain around the inlet gave the anchored ships and the offloading troops protection from counterattacks and made aerial bombardment much more of a challenge for Argentina. The surrounding landscape also enabled the British to erect groundbased missile defense systems, providing further security for the landing force and relieving the pressure on their naval escorts. Lastly, San Carlos was within an acceptable range away from their ultimate objective of Stanley.

British task force planners faced an incredible challenge ahead of them at the start of the war. British intelligence on Argentina and their defense of the Falklands at the start of the conflict was minimal and speculative. For selecting a landing site, planners had dozens of options and still even 19 after they eliminated the obvious unacceptable landing areas. Although task force planners viewed San Carlos as the most obvious choice, the Argentinians did not consider it as a likely option. The Argentinians correctly believed that Stanley was the British's likely objective on the Falklands and planned a defense around that area. This made the British landing at San Carlos a stunning success with total surprise achieved. The landings commenced as planned and without significant error. The error that did exist came in the form of poor stowage of the Rapier missile batteries aboard the anchored ships and overall human delay due to insufficient chances and time to train and rehearse landing scenarios at Ascension Island or at sea. The picket line of warships served their intended purpose by Commodore Clapp by absorbing the majority of aerial bombardment from Argentinian aircraft instead of striking the landing ships. The landing forces' swift and sudden claim over the surrounding ridges prevented any counterattack and gave them time to regroup, install defenses, and plan their assault further into the mainland.

Lessons

The amphibious operation at San Carlos as part of the Falklands War provides many lessons for the contemporary discussion on amphibious operations. The British did not have a single unified commander for the operation. This was only a mild inconvenience due to the good-natured and cooperative characteristics of the four commanders involved in the British task force. However, having no unified commander to direct and coordinate naval and marine elements synchronously during amphibious operations exponentially increases the risk of failure. Furthermore, the Falklands War also describes how intricate naval and amphibious operations are intertwined. A naval campaign could not have taken the Falklands back physically and neither could amphibious operations conduct at all had the naval campaign and subsequent goals of sea dominance not been achieved by the time of the landing. Even with naval dominance achieved, the amphibious campaign at San Carlos suffered from its own shortcomings.

The British government highlights its approval of the San Carlos site as a proper fit to their parameters and preferred way of war, landing unopposed and with surprise achieved. This assertion is not contested, although this method of operation was also entirely selected due to the reality that the British had insufficient amphibious assault vehicles and necessary equipment required for a contested landing and the specialized operations that exists in amphibious warfare. Aerial amphibious landings via helicopter transports were also an option in this period of amphibious warfare. But the British were unable to conduct this method of landing in mass due to a shortage of helicopters and helicopter transport vessels in the British arsenal. The decision to land at San

Carlos instead of Stanley also drew out the conflict perhaps unnecessarily. It is debatable whether casualties would be less or not had they proceeded with a direct assault on the defended beaches of Stanley but drawing out the conflict allowed further Argentinian aerial operations to continue and achieve success. From the Argentinian perspective, the onset of winter was fast approaching, and they only needed two weeks before an amphibious landing could no longer launch. By not challenging British naval forces more aggressively with their own naval forces and failing to understand the preferred British methods of amphibious operations, the Argentinians ultimately failed at delaying the British long enough for weather to decide the fate of the Falklands. It is possible that simple defenses such as sea mines at San Carlos or throughout the Falkland Sound may have eliminated the selection of San Carlos altogether and delayed the landing at the alternate site long enough to where a landing was no longer feasible.

Today's armed forces can learn from the Falkland's War and the story of San Carlos with regard to the current capability status and deployment of amphibious forces with respect to the likely areas around the world that would require such forces. Furthermore, the Falklands War is perhaps the greatest example of immediate logistics practice and usage of modern naval warfare to this day. From the defender's perspective, the actions and defenses at San Carlos and East Falkland Island during the Falklands War is an example of perhaps how not to defend an island with multiple inlets and chokepoints. Furthermore, the Argentinian armed forces acted without appropriate interservice cooperation and lacked a central intelligence network that may have better informed defense commanders of the Britain's likely landing site.

The story of San Carlos is yet unfinished and requires further analysis when more or all reports on the Falklands War are accessible to the public. In historical terms, the Falklands War is relatively new. Only time and further analysis will reveal the full story of the San Carlos landing and further explain why British task force planners selected it for an amphibious assault.

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Spymaster's Prism: The Fight against Russian Aggression. By Jack Devine. Lincoln: Potomac Books, an imprint of University of Nebraska Press. Pp. 304. \$34.95 (hardcover); \$26.95 (ebook).

In his second book, author Jack Devine channels more than three decades of experience with the CIA into a profound and persistent warning: "never trust the Russians." In *Spymaster's Prism: The Fight against Russian Aggression*, published in 2021, Devine's deep reflection on a career spent focused on Russian intelligence and counterintelligence throughout and after the Cold War shines through with immense detail and personal experience. He clarifies early on that a spymaster is not a spy; rather than managing tactical espionage, a spymaster is responsible for the unique mission of running and handling foreign spies and spy networks. A skilled spymaster can gaze through a prism, faceted by political and military and social factors, to determine how to most effectively employ spies to achieve their country's national interests.

The Russian Foreign Intelligence Service (SVR) and American Central Intelligence Agency (CIA) are joined by the British Secret Intelligence Service (SIS), Chinese Ministry of State Security (MSS), Iranian Ministry of Intelligence (VAJA), and Israeli Mossad in endeavoring to do this at the very highest levels. And it is through this prism that Devine shares his analysis and opinions on the vulnerabilities the United States bears vis-à-vis Russia. However, Devine's strength of perspective also carries a weakness in the author's somewhat extreme and narrow focus on threats emanating from Russia. While he makes explicit reference to "big power" adversaries and includes China in that group, Devine's recommendations on how to strengthen the American intelligence address only the threats posed by Russia. In a time marked by a strong resurgence of great power competition, his advice feels deflated by the realities and exigencies of an international security environment that must balance much more than Russian aims.

Furthermore, despite his knowledge of how Russia views the geopolitical order and its desired role for expanded influence therein, the solutions Devine prescribes to deter Russian aggression lack feasibility and specificity. To be fair, well over a year prior to the beginning of the war in Ukraine, he advocates for

a "forceful U.S. containment policy response that challenges Russian interests [by] reinforcing our alliances with NATO partners and the democracies in eastern Europe." This, of course, rings uncannily true today, but it is much easier said than done. Ultimately, the reader has an unfair advantage on Devine knowing how a hypothetical scenario indeed played out in reality. He suggests that "bolstered support for Ukraine and the Baltic states would send a clear message to Moscow," but does not expand on the scenario in which Moscow receives and disregards the message, which of course, we are watching play out in our present day.

Still, Devine deftly organizes and presents key developments in Russian/ Soviet history, guiding readers to understand the scale and scope of the Russian intelligence machine. Weaving between historical examples and personal anecdotes, Devine hearkens back to a fundamental premise many times that Russia is our strategic adversary and will remain so; to interpret past periods of détente as cooperation warming to trust would be a delusional mistake. To emphasize the constancy of Russia's intelligence strategy, he cites KGB officer Sergei Tretyakov, also known as Comrade J, who aided the United States as a double agent in New York City in the late nineties: "The Cold War never ended. Before the collapse of the Soviet Union, the KGB had a list of three main adversaries: (1) The United States (2) NATO and (3) China. After the KGB was disbanded and the SVR (the modern-day KGB) was formed . . . the SVR had three main targets: (1) The United States (2) NATO and (3) China." Devine employs insights like these to demonstrate where he sees the United States trailing Russia in the intelligence game. Even in the middle of their defeat in the Cold War and crumbling of the Soviet Union, Devine highlights that Russia never abandoned its spying program or any of its elaborate collection operations. He also expresses worry over a growing trend to abrogate the so-called Moscow Rules, most notably evidenced by Russia's nefarious involvement in U.S. elections. For decades, the United States and Russia had abided by these unwritten but mutually agreed on norms. Devine interprets the flouting of these rules as major cracks in the foundation of an unstable, fraught U.S.-Russia relationship that will only worsen if we fail to redouble our intelligence and spycraft.

Structuring the book are 13 "lessons," one introducing each chapter. Together, they imply a new set of Moscow rules, each affirming that Russia will continue to pour its utmost effort and resources into weakening the United States and its allies through patient and ruthless spy operations. Devine takes time to guide his readers through the making of Vladimir Putin from lowly KGB officer to president, flanked by loyalists and convinced that he can restore prestige to Russia following the chaos and embarrassment of the fall of the Soviet Union. Devine's point is clear: for as long as Putin remains at the helm of the Russian state and its inextricably linked intelligence juggernaut, we should

expect Russia to pursue its national interests at any cost. In the words of Putin, "there is no such thing as a former KGB man," and Devine helps his audience understand that Putin still sees the world through the gimbal-lensed eye of a Cold War spymaster.

Since the Russian invasion in February 2022, a torrent of commentary emerged concerning Russia, Vladimir Putin, and the future of both as much of the Western world rallied around Ukraine. Devine's work, predating the tectonic shift we have witnessed in Eastern Europe over the past year and a half, deserves praise for a prophetic study of Ukraine. In 2018, Devine embarked on a book tour throughout Kyiv to promote a Ukrainian language edition of his first book, *Good Hunting*. On that trip, he met with multiple Ukrainian government and military officials, leading him to make predictions that exactly conform to how the Ukrainians have navigated Russian aggression: "Putin runs a great risk of underestimating the resolve of the Ukrainians to remain a free and independent people . . . Ukrainians [will] fight to the last man." Of course, to balance this prescient assessment, Devine remarks that global players see Volodymyr Zelensky as "inexperienced and who could possibly make unnecessary concessions to Russia," when in fact, his performance has been the opposite.

Spymaster's Prism at times speaks directly to the intelligence community given the author's experience, but it is instructive in developing a fuller perspective of the threat Russia poses to the United States for anyone working in national security, notably in military and policy spheres. However, Devine is intentional about making the book accessible and interesting to those without experience in these domains, animating his arguments with stories of spies like Karel Kayhanen, codename Vik, who placed a red thumbtack in the sign for horse cart rentals next to the Tavern on the Green restaurant, located in Central Park, New York. Had he suspected he was being watched, he was supposed to place a white thumbtack instead. Vik would eventually defect and cause great damage to the Soviet intelligence service. In this way, Devine offers a counter example to the Russian resoluteness in spycraft—allegiances can be porous, and interests can change.

And this is where Devine believes the United States enjoys a critical advantage in that it stands for values—rule of law, sovereignty, and individual liberty—that eclipse those of Russia. He holds conviction in the idea that "American exceptionalism," which underpinned the sense of mission he witnessed throughout the long slog of the Cold War, imbues a special strength and resiliency. Devine's sense of patriotism saturates the pages of this book, but it might also obstruct his interpretation of America's dominance in the global order and domestic affairs. He remarks that the "United States was exceptionally good in comparison to any country in any period in human history," and that this state was attained through the good faith and function of our democratic

institutions. Trust in our democratic institutions is undeniably flagging. And therein lies a weakness Russian spies will try to exacerbate. Readers, much like a spymaster, are left to ponder this conundrum from many angles—how do we heal at home to project power abroad? The specifics of the solution may differ, but one senses that Devine would agree with at least one imperative: the time to act is now.

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Escaping the Deadly Embrace: How Encirclement Causes Major Wars. By Andrea Bartoletti. Ithaca: Cornell University Press, 2022, Pp. 252. \$55.95 (hardcover); \$35.99 (ebook).

The possibility of major power conflict is a central concern for policy makers and academics. With Russian aggression against Ukraine and Chinese statements on reunification with Taiwan, many commentators argue that the risk of a major power war is increasing. Though tensions are rising among the major powers, questions remain as to how a major power war would begin and whether other states would join. In *Escaping the Deadly Embrace*, Andrea Bartoletti considers those questions and offers a new theory to explain the causes of major power wars.

Escaping the Deadly Embrace identifies how geography contributes to the initiation and spread of major power wars. Bartoletti contends that encirclement is the main independent variable, arguing that "encirclement is present when a great power (encircled great power) shares two different borders with one or two great powers (surrounding great powers)" (p. 7). Bartoletti differentiates between two types of encirclement, latent and actualized. Latent encirclement means that there is no possibility of war with the surrounding powers while actualized encirclement means that there is a strong possibility of a twofront war with the surrounding powers. The difference in the two threat environments depends on the "invasion ability" of the immediate rival, defined as "the operational ability of the surrounding great powers to launch a two-front war . . . in the present" (p. 12). The invasion ability of a rival is the intervening variable that shifts latent to actualized encirclement, thereby increasing the likelihood of major power war. When surrounding powers are geographically present but lack invasion ability that constitutes latent encirclement. The threat environment creates a tense situation with a double security dilemma for a major power, but the rival lacks the current ability to launch an attack. To address this dilemma, Bartoletti explains that the encircled great power will seek to reduce the risk of a two-front war in two ways, by (1) finding allies and (2) creating buffer zones. The surrounding powers will respond by forming alliances and creating their own buffer zones. Essentially, the major powers want to improve their security situation, but in doing so both the encircled and surrounding states take actions that reduce their security and set the stage for war.

When the surrounding powers have achieved sufficient invasion ability to launch a joint attack against the encircled power, then the latter must decide whether to suffer the consequences of encirclement or break it by initiating war. The theory provides two scenarios for possible increases in a rival's invasion ability: (1) concentration of forces and (2) closure of the circle. The first scenario suggests that when the surrounding powers have no remaining threats, they have the ability to concentrate their forces against the encircled power. This first situation can occur when winning a war against another opponent or neutralizing an internal conflict. The second scenario involves the surrounding power annexing territory along the borders of the encircled power, thereby closing the circle around the latter. In both instances, the likelihood of a two-front war is not a distant issue, but a "concrete probability in the present" that the encircled power must address immediately (p. 12). When the surrounding powers have the opportunity to increase their invasion ability, the encircled state must start a war to ensure its survival.

Bartoletti explains that war contagion, as shown by other major powers joining the conflict, results from the alliances that emerged as part of the double security dilemma. As the encircled great power forms alliances, the state's rivals will seek to form their own alliances. Bartoletti notes that there "is the formation of a rival-based network of alliances, where each great power joins the opposite bloc of its own immediate rival" (p. 8). The major powers divide themselves into two camps with rivals on opposing sides. Once war begins, the surrounding great powers will be concerned about possible increases in their immediate rival's invasion ability. This increase can occur due to the loss of an ally (via defection or defeat) or the annexation of territory along the immediate rival's borders. When the encircled power initiates a war, the risk of an increase in a rival's invasion ability will cause the surrounding major powers to join the conflict.

Escaping the Deadly Embrace evaluates the argument through three instances of an encircled power and the occurrence of major war. First, Bartoletti explores why France pursued the Italian Wars during the sixteenth century. Bartoletti evaluates that conflict as a series of five major power wars, allowing for a more thorough evaluation on changes in invasion ability as the intervening variable. The next case investigates France, again as the encircled power, during the

Thirty Years War. That chapter demonstrates how France pursued alliances and buffer states to ensure its security, why the War of Mantuan Succession did not result in a major power conflict, and why the French did declare war in 1635. The final case study concerns German efforts to eliminate the double security dilemma prior to 1914. Bartoletti explores a new argument on the initiation of World War I, identifying the construction of strategic railroads in Poland as increasing the invasion ability of Russia. Each chapter thoroughly explores the implications of Bartoletti's theory, drawing on a mix of archival and secondary sources for each of the major wars. Each case makes a compelling argument for how encirclement of the great power contributed to the threat environment as well as the initiation and contagion of war. The final chapter provides an overview of several remaining major wars, including the possible outlier of World War II, with Germany's lack of encirclement.

Escaping the Deadly Embrace offers an interesting theory for understanding how encirclement drives major powers to war. The cases reveal anomalies regarding how the threat environment influences states' behavior. With actualized encirclement, the theory combines the logic of preemption via the imminent threat of an invasion and of prevention that the surrounding great powers have yet to act (annexation or concentration has not occurred, but it could). Bartoletti suggests that the combination creates a "now-or-never logic" for war initiation (p. 25). That logic has two implications for understanding state behavior. First, Bartoletti notes, "changes in the invasion ability of the surrounding great powers pose imminent threats to its survival" (p. 23). Second, that the encircled state must launch "an attack against one of the surrounding great powers . . . [as] the only rational option to guarantee its survival" (p. 24). Following this logic, one would assume that the encircled state has no other available options and that it must declare war immediately for self-preservation.

The French responses in the Italian Wars and in the Thirty Years War challenge this logic. First, France in the first of the Italian Wars (1521–26) initiates local proxy wars in response to the increased invasion ability of Charles V to close the circle by taking the Duchy of Milan. This proxy conflict did end up becoming a major power war, yet the French intended to let only local allies fight initially. The proxy war as a path to great power war appears at odds with the gravity of the threat suggested by the now-or-never logic. The argument suggests that encircled states seek allies to create conflicts that divert the surrounding state's military forces. However, the theory suggests that behavior occurs during latent encirclement, not once the invasion ability has increased.

Second, the theory suggests that the French should have initiated war following the Battle of Nördlingen and the diplomatic victories of Austria in the seventeenth century. The two victories influenced French decision-making about war with Spain and Austria. Yet, this case presents two anomalies that do not align with the arguments on encirclement. First, the French signed alliance agreements with the Dutch Republic and Sweden after the perceived increase in invasion ability. These acts occurred during actualized encirclement and not during latent encirclement as the theory predicts. In latent encirclement, the French government did offer financial support, to at least Sweden, to fight "wars of diversion" (p. 82). However, the French government had refused "open alliances" with both parties during this period (p. 83). Bartoletti notes that "Richelieu had rejected the same Dutch proposal [alliance agreement] in April 1634," which the two countries signed in February 1635 (p. 84). The French refusal to make commitments during latent encirclement and only offering alliances in actualized encirclement suggests a more complicated relationship between threat and behavior than proposed by the theory. Furthermore, the combination of a proxy conflict in the Italian Wars and this refusal of a commitment prior to the Thirty Years War suggests that strategies of diversion may not fit under the category of seeking allies. Instead, the strategy may be a distinct, independent response to the threat environment.

The second anomaly in the Thirty Years War concerns the initiation of the conflict. Bartoletti focuses on the Battle of Nördlingen and the diplomatic victories of Austria as increasing Austria's invasion ability and as influencing the French decision for war. Yet, the evidence in Escaping the Deadly Embrace also suggests that "Spanish refusal to release the Elector of Trier . . . created the casus belli" (p. 83). The logic does not suggest that the encircled power needs a political crisis to initiate war for any reason. The increases in the surrounding power's invasion ability should have immediately imperiled the French state. The actions of France suggest further factors influenced the decision to initiate war. In 1635, France may have been influenced by what Dan Reiter calls "the political costs of preemption." Leaders preferred being attacked as it allows them to appear as if they were the victim and to build sympathy among third parties for support. If leaders strike first, they would risk allies not joining the war. In this case, the actions of the Spanish during the Trier crisis may have given France an opportunity to play victim. Spanish troops massacred French soldiers and conquered a small state under French protection.² France could appear as a defender as a result, thereby lower the political costs to initiate war against Spain. Regardless of the precise reason, the use of the crisis raises questions on the severity and immediacy implied by the theory for war initiation. Overall, these anomalies in the cases suggest a need for a more complicated and nuanced explanation on how states perceive threats and react to them.

The theory on encirclement provides two possible opportunities for future work. First, scholars should consider whether a shared border between great

powers is a necessary condition for encirclement. Bartoletti argues "encirclement . . . occurs in the presence of one or two great powers on two different borders of the encircled great power" (p. 10). Certainly, that limitation makes sense to identify possible cases of encirclement in the context of the sixteenth and seventeenth century. Yet, the sharing of borders might not be necessary in the interconnected world of the twentieth and twenty-first centuries. One could consider shifting the requirement from territorial borders to territorial placement for power projection. For instance, the United States sought to contain the Soviet Union during the Cold War via alliances and the creation of an extensive basing network. While World War III did not occur, further study could focus on understanding how encirclement influenced the Soviet Union and exploring whether actualized encirclement emerged during that time.

The second opportunity concerns the role of technology in war initiation. Technology does play an implicit role in Bartoletti's exploration of the origins of major war. In World War I, the question was not whether Russia could engage in a general mobilization to concentrate its forces for a joint attack, but in how long it would take to achieve that general mobilization. Bartoletti theorizes that Russian railroads influenced its invasion ability and thus German decision-making to declare war. Bartoletti acknowledges that technology is a relevant factor in the concentration of large-scale armies. Technology might influence the encirclement of a great power. A double security dilemma could emerge as technology enhances the projection of a major power's military to another region. The capability to concentrate military forces quickly near an encircled power could constitute an increase in invasion ability. Looking even further ahead, the possibility of encirclement may expand as states continue to develop technology that fosters the militarization of space. If states reconsider requirement of the use of outer space for peaceful purposes, the possibility to surround a state from above may emerge. Using satellites with weapons systems may allow states to "surround" another to monitor and influence communications while preparing for a first strike.

Overall, Bartoletti provides compelling insights on how encirclement creates a threat environment and influences major power war. The book is a must read for those interested in understanding how rivalries among great powers can spiral into conflicts, with neither side necessarily wanting a fight. *Escaping the Deadly Embrace* provides a welcomed challenge to current scholarship on how power transitions and polarity influence the likelihood of major power war.

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Endnotes

- 1. Dan Reiter, "Exploding the Powder Keg Myth: Preemptive Wars Almost Never Happen," *International Security* 20, no. 2 (1995): 25–28.
- 2. Iskander Rehman, "Raison d'Etat: Richelieu's Grand Strategy During the Thirty Years' War," *Texas National Security Review* 2, no. 3 (2019): 39–75.

What It Means to Be a Man: How to Become a Better Person. By Major General Bill Mullen, USMC (Ret). Quantico, VA: Marine Corps University Press, 2023. Pp. 208. Open access (paperback and ebook). https://doi.org/10.56686/9798985340464.

Major General Bill Mullen, USMC (Ret) wrote *What It Means to Be a Man: How to Become a Better Person* for young Marines interested in personal and professional growth. The book comes from the author learning from his own shortcomings and with Marines who have occasionally fallen short of the Corps' standards of honor, courage, commitment, and faithfulness. The author sees young Americans today overly influenced by drugs, pornography, social media, and video games, which all can damage mental health. Too often, according to General Mullen, young Marines succumb to these vices as well. He wrote this book, therefore, in the hope that "if it causes one Marine, male or female, to make better decisions and try harder to live up to our core values, then it will have been worth the effort" (p. xvii).

One of the strengths of the book is its accessibility. Mullen wrote it with clear and concise prose that Marines of all backgrounds can follow. He also structured the book to be user-friendly, with 14 brief thematic chapters designed to hold modern readers' attention. It discusses important subjects for leaders such as self-discipline, peer pressure, and mentoring. Discussion questions and suggested readings follow each chapter to help readers engage with and explore the subject matter further. Marine leaders, whether they rate blood stripes or not, could easily formulate and conduct quick learning sessions using any chapter they desire from this text. With this book, one could easily see a sweaty lance corporal discussing professional attitude with his team in the field, school-circled Marines on the quad raising their hands to answer their platoon sergeant's question about character, or a major calling his shop together to discuss the chapter on thinking critically.

Bill Mullen loves history, made evident by his frequent use of historical figures throughout the text. He uses renowned UCLA men's basketball coach John Wooden and former British prime minister Winston Churchill as examples of keeping positive and professional attitudes toward hard work. In his

chapter on the value of integrity and character, Mullen brings in tales of Medal of Honor recipient Rear Admiral James B. Stockdale, 26th president of the United States Theodore Roosevelt, and arctic explorer Sir Ernest Shackleton. Abraham Lincoln makes three appearances: two of them for his forbearance and self-discipline during the Civil War in the first chapter, while his history of working through personal tragedy gets him a central position in chapter 7, the one entitled "Get Back Up."

Some of the author's historical figures are controversial, however. Margaret Thatcher in the chapter on character is dubious since it is hard to think of a more controversial English political figure in the last 50 years. Mullen's admiration of Andrew Marshall is understandable. The former director of the Office of Net Assessment for the Department of Defense worked in government for four decades and mentored countless government bureaucrats. But who does Mullen cite as Marshall's greatest students? Richard "Dick" Cheney, Donald Rumsfeld, and Paul Wolfowitz, the co-architects of the ill-considered and costly invasion of Iraq. Lastly, Robert Lee's betrayal of the United States should be enough to exclude him outright, but Mullen includes him because of Lee' self-discipline. To be fair, Mullen denounces Lee for his treason, but why include him at all considering how many other better examples there are? Mullen's discussions of self-discipline, character, and mentorship would have been more effective with a more carefully screened line up.

The book's primary weakness is inclusivity. It starts with the title, *What It Means to Be a Man*. Mullen meant it to catch readers attention but claims that it is in no way "a book about men for men" (p. xiii). For many readers, however, women will appear to be an afterthought. Mullen only included four of them among his historical figures. Instead of Robert Lee, Andrew Marshall, or John Brown (antislavery notwithstanding, he was a literal murderer) why not include Marines like Colonel Nicole A. Mann, a combat veteran fighter pilot and NASA astronaut who earned the *Military Time*'s 2024 Marine of the Year? Why not political scientist, author, and professor Dr. Kyleanne M. Hunter, another Marine pilot and combat veteran who is a renowned expert on the military and gender integration? Why not Brigadier General Lorna M. Mahlock, the Marine Corps' very first Black female Marine to reach general officer rank? Including these women or others like them would have gone a long way toward being more inclusive toward his intended audience.

Mullen would probably argue that the character traits espoused in this book are appropriate for all Marines, and I would agree. But what use is John Walter Wayland's essay about what makes a true gentleman (p. 176), Rudyard Kipling's idealization of Victorian Era manhood in "If," (pp. 170–72), or J. Glenn Gray's Warriors: Reflections of Men in Battle (p. 114) to women in his audience? Books

tend to represent the author's point of view. The Marine Corps is not known for sophisticated discussions about gender in the military or in war. The Corps' culture is dominated by the very masculine worldview that can be seen in this book. Bill Mullen is of that world; it is what he knows.

Therefore, as useful as this book could be, I wish it did more. I disagree with Scott Hamm, who wrote the foreword, that it is written for men *and* women. When Mullen entitled it *What It Means to Be a Man*, he targeted males, thereby placing gender squarely in readers' minds. What it means to be a woman in this country is different than what it means to be a man. In the Marine Corps, the differences are even more pronounced because it has a long history of excluding women from occupation specialties and leadership roles, which have hindered their promotion, leadership, and potential. Only recently has the Corps abandoned these exclusions, but this book reminds readers that culture often lags personnel policies. I wish Bill Mullen would have taken the opportunity to use this book to make Marine culture more inclusive of women, which would have better helped *all* Marines live up to their core values. The fact he did not attenuates what would otherwise be a book well worth his audience's time.

Mark R. Folse, PhD

(The reviewer would like to express his sincerest condolences to MajGen Mullen's family and close friends. The above review was written with the highest respect for the book's author and was not meant in any way to tarnish his sterling reputation.)

The Nuclear Club: How America and the World Policed the Atom from Hiroshima to Vietnam. By Jonathan R. Hunt. Stanford, CA: Stanford University Press, 2023. Pp. 376. \$95.00 (hardcover); \$32.00 (paperback).

There is a broad (though not complete) international consensus that the prevention of nuclear proliferation remains one of the primary security challenges of the contemporary world. The United States is particularly concerned with this issue, expending significant diplomatic effort over recent decades in seeking to prevent the nuclearization of both North Korea (where that effort has already failed) and Iran (where it is on the verge of failing). Since it took effect in 1970, the lynchpin of the international nonproliferation regime has been the Treaty on the Nonproliferation of Nuclear Weapons (NPT) and 191 states are signatories to it today. On its website, the United Nations Office for Disarmament Affairs calls the NPT "a landmark international treaty whose objective is

to prevent the spread of nuclear weapons and weapons technology, to promote cooperation in the peaceful uses of nuclear energy and to further the goal of achieving nuclear disarmament and general and complete disarmament."

In his book The Nuclear Club, Stephen R. Hunt, an assistant professor at the U.S. Naval War College, details the history of not only this treaty but the history of international nuclear nonproliferation politics preceding it. In this exhaustive recounting of that history, Hunt also seeks to lay bare the true—and sometimes cynical—motivations behind the development of the nonproliferation norm and the international treaties, including not only the NPT but also the Limited Test Ban Treaty (LTBT) and the Treaty of Tlatelolco, built up to enforce it. While the United States and the Soviet Union sought to prevent their postwar disputes in various places around the world from developing an unwanted nuclear element, they also sought to consolidate their own privileged positions in the international system and to ensure that the nuclear club to which they belonged remained a very exclusive one. Smaller powers generally recognized that they did not have the technological capability, at least in the near term, to produce such weapons themselves and were content to halt their further expansion to those states already in possession of them, though they also insisted upon a disarmament clause to the NPT. The initial idea was that "the atomic contagion would be quarantined en route to its eventual eradication" (p. 47). Though nonproliferation efforts have been successful in preventing widespread access to nuclear weapons, the eradication phase has been largely ignored.

Hunt stresses the permanent two-tier system that the nonproliferation regime has produced. He notes, "those . . . states that had demonstrated atomic power before 1967 and henceforth upheld the NPT would be treated as the planet's nuclear guardians. Those who did so afterward would be branded volatile upstarts or dangerous rogues" (p. 7). This has allowed the postwar great power states to consolidate their exclusive nuclear power status and therefore their international hegemony. The nonproliferation regime has prevented direct armed conflict between the great powers, but only at the cost of displacing this violence onto non-nuclear states in the form of proxy wars. This system has protected those in the "club" from violent conflict with its peers but has left those outside of it vulnerable to great power competition and other forms of large-scale violence.

On the path to drawing out these broad implications of the nonproliferation regime to the international order, the body of the book provides a granular understanding of the strategic thought processes and diplomatic twists and turns that took place in its establishment. Hunt properly focuses most of his intention on the United States and Russia. He provides detailed accounts of internal debates in the John F. Kennedy and Lyndon B. Johnson administrations

about whether nonproliferation was desirable, and, if so, how to best achieve it. Two particular points of disagreement were whether West Germany should be permitted to possess a nuclear arsenal and whether or not the United States should be able to station portion of its own arsenal on the territory of its nuclear allies. Negotiations between U.S. and Soviet diplomats over these and other issues are extensively delineated and explained.

Hunt's historical analysis is not limited to the United States, the Soviet Union, and Europe, however. An entire chapter is devoted to the Treaty of Tlatelolco and nuclear nonproliferation in Latin America, covering the geopolitics surrounding the issue between Mexico, Brazil, and other South American countries. Due attention is also paid to India and China throughout the book. Hunt provides a truly global understanding of how the nuclear nonproliferation regime came to be.

This book offers a comprehensive understanding of the historical, strategic, and diplomatic background to anyone interested in the history of the nuclear nonproliferation regime. Hunt skillfully lays bare the various motivations leading to its establishment. It was the result of both high-minded ideals and cynical self-serving machinations to consolidate power. Its outcomes have been similarly dual-sided, serving fairly well its goal of preventing the spread of nuclear weapons, but also consolidating international power hierarchies and leaving non-nuclear states vulnerable to armed aggression. To anyone interested in the contemporary international order and nonproliferation regime, this book is essential reading.

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