

Gray Hulls and Gray Zones

Description

Introducing Project Maritime: Exploring Underlying Conflict Multipliers in the Modern Maritime Dimension

Lisa McKinnon Munde

Editor's Note: The Irregular Warfare Initiative proudly announces [Project Maritime](#). This special project explores modern challenges and opportunities in the maritime dimension at the intersection of irregular warfare and strategic competition. With a focus on current events and their underlying geographical and historical patterns, recent changes to policy & doctrine, and emerging technologies, we aim to contextualize drivers of conflict in the maritime dimension and inspire dialogue toward integrated statecraft approaches. We invite your participation and engagement as we embark on this project.

Please send submissions to submissions@irregularwarfare.org with the subject line "Project Maritime Submission" and follow us on Twitter [@proj_maritime](https://twitter.com/proj_maritime).

Maritime Centrality

"Historical experience tells us that countries that embrace the sea thrive, while states that spurn the sea decline."

Xi Jinping, July 30, 2013

The maritime domain has long played a critical role in shaping global affairs and provides a uniquely telling lens for evaluating broader geopolitical, geostrategic, and geoeconomic trends.

Oceans, lakes, and rivers have always held profound significance as conduits for global connectivity. Most of today's megacities, representing many of the world's most prominent cultural and financial centers, are [non-coincidentally](#) located near an ocean, lake, or river. Hubs like Shanghai, New York, Mumbai, Istanbul, Lagos, and Rio de Janeiro emerged as global powerhouses in part due to their proximity to strategic waterways that facilitated trade and economic development. Today, [90 percent of trade](#), including consumer goods, agricultural products, energy, and raw materials, arrive by ship.

While free seas underpin the established rules-based international order and global economy, the maritime commons have become increasingly complex and contested.

While navalists (like our friends at [CIMSEC](#) and [Proceeding's Maritime COIN Project](#)) routinely explore strategic implications of maritime issues below armed conflict, the broader irregular warfare community seldom includes the maritime dimension or addresses related themes as a standard part of the discourse. Not since the Vietnam War have our services devoted significant resources and attention to the nexus between irregular warfare and the maritime domain—and even then, that was in support of a land-based campaign. Project Maritime aims to make modern maritime themes accessible and bridge the gap between practitioners, policymakers, and scholars. By focusing on current events and their underlying geographical and historical patterns, we aim to illuminate and contextualize modern challenges and potential opportunities.

Vast, Complex, and Dynamic

The Pacific Ocean alone is larger than the entire earth's landmass. Roughly half of the world's population lives within 100 miles of a coast, and 99 percent of international internet traffic travels beneath the surface via a vast network of undersea fiber-optic data cables. Likewise, many nations rely on undersea gas and oil pipelines for energy imports. The recent NordStream pipeline sabotage highlighted the vulnerabilities of these pipelines, and a recent IWI piece by Walker Mills called for [increased focus on critical undersea infrastructure protection](#) in response. In a 2017 Policy Exchange [report](#), current UK Prime Minister Rishi Sunak warned that a "successful attack on the UK's undersea cable infrastructure would be an existential threat to our security. Yet the exact locations of these cables are both isolated and publicly available "jugulars of the world economy which are a singularly attractive target for our enemies."

As a multidimensional space that spans from the seabed to the airspace above, ocean governance includes a complex patchwork of overlapping governance regimes and frameworks. In short, the environment is vast, complex, and dynamic. (Take this Council on Foreign Relations [quiz](#) to test your knowledge).

Challenges in the modern maritime dimension are further complicated by climate change, which will negatively affect human security and drive migration (particularly for developing coastal and island states like Haiti, Bangladesh, Cuba, and Indonesia). Climate events like melting sea ice also have geopolitical implications and serve as potential flashpoints in places like the Arctic, where states like Canada, Russia, and the United States have differing interpretations of the legal impacts of an increasingly [navigable Arctic](#).

Picture

Common Understanding

Project Maritime seeks to foster a common understanding of the challenges at the intersection of strategic competition in what has been dubbed the “Pacific Century.” However, while the People’s Republic of China, its [maritime militia](#), and excessive [maritime claims](#) in the South China Sea, including the question of Taiwan, often dominate the conversation as a primary security concern, modern drivers of escalation and conflict extend far beyond the Pacific.

A surge in illegal, dangerous, and destabilizing activity at sea globally merits further exploration. In the past year alone, a snapshot of international headlines demonstrates how complex and dynamic the maritime domain is and confirms that truth is stranger than fiction. Unfortunately, maritime headlines do not always make national news, which experts often attribute to a phenomenon known as “[sea blindness](#)”: the oceans are out of sight and thus out of mind.

Gray Hulls, Gray Zones, Gray Matter

To better understand these potential drivers of conflict and instability, Project Maritime prioritizes *defining* and *describing* the maritime dimension and making nuanced analysis on associated themes accessible to non-navalists. Joint Doctrine Note 1-19, *Competition Continuum*, describes a competition-conflict continuum (pictured below) identified by conceptual and capability challenges. This special series prioritizes exploring the former over the latter.

Picture

The focus, thus, is more on the *what* and *where* than on offering solutions for the *who* and the *how*. While it is prudent for policymakers to prioritize capability gaps—including big-budget items like [hypersonic missiles](#), the naval surface fleet size, icebreakers, and submarines—it is equally important to consider a “high-low mix” and include irregular and asymmetric approaches in integrated deterrence. The recent [reports](#) of a Ukrainian drone attacking a Russian ship in the Black Sea provide a glimpse of this future. Retired U.S. Navy Adm. James Stavridis noted in a recent [tweet](#), “Here is the future of war at sea. Small, swift, unmanned attackers going at multi-billion dollar big platforms trying to guard exposed resource platforms. Danger ahead.”

Picture

Black Swans, Black Jellyfish, and Black Elephants

A recent UK Ministry of Defense [study](#) highlights the urgency to “explore new ways of finding answers for future, unforeseeable threats, to be ready to harness fleeting opportunities and seek new ways to keep on finding answers and opportunities. It means changing the way we think, act, and acquire equipment, exercise command, lead.” Their study proposes three metaphors of “Black Swans,” “Black Jellyfish,” and “Black Elephants” to describe distinct blind spots or cognitive biases. “Black Swans” represent unexpected, high-impact events; “Black Jellyfish” are complex, uncertain issues we thought we understood; and “Black Elephants” are challenges that everyone sees, but avoids tackling.

Deep Dives

What are the Black Swans, Black Jellyfish, and Black Elephants in the modern maritime dimension? Our nine deep dive topics attempt to tackle today’s most pressing challenges—including those that may not receive much attention in mainstream news reporting or are poorly understood by the joint force.

Picture

“Maritime Dimension”

We subscribe to the sentiment that “words mean things,” [especially in irregular warfare](#). After all, the difference between a “rock” and an “island” was the basis for a 2016 [decision](#) denying China’s South China Sea claims. However, for this special series, we will sacrifice some measure of doctrinal orthodoxy to maximize inclusivity and consider the broadest possible applications for the terms “irregular warfare,” “strategic competition,” and the “maritime dimension.” The project’s “irregular” focus encompasses terms like asymmetric, competition below armed conflict, and gray-zone trends. Relatedly, we avoid a singular term of reference, such as “maritime irregular warfare,” to encompass the subject matter presented here.

We also use the term “maritime dimension” in its broadest sense to include all aspects of maritime affairs, including but not limited to those spaces laid out in [joint doctrine](#). Our imagining of the maritime dimension encompasses maritime transportation, naval operations, maritime trade and shipping, maritime security, naval diplomacy, maritime law and law enforcement, ocean governance, marine resource management, open registries, and environmental considerations, to name merely a few aspects. We also intend to include the various subdomains that characterize this multidimensional space, including surface, subsurface, subsea, seabed, littoral, coastal, riverine, air, arctic, polar, Antarctic, cyber, electromagnetic, information, and human domains. That is not to say we do not recognize and appreciate the tremendous nuance and potential for increasing precision around these terms. We welcome a submission that attempts to present a cohesive taxonomy for this field amid the resurgence of strategic competition or build on an existing one, like that presented in this groundbreaking RAND [study](#).

Diving Deep

Project Maritime embarks on this journey with three key aspects in mind: (1) contextualizing modern drivers of conflict through the lens of current events and geography, (2) surveying today’s dynamic policy and doctrine landscape, and (3) exploring applications and implications for emerging technologies with a focus on those that impact “maritime domain awareness” commonly referred to as [Blue OSINT](#) (open-source intelligence). We have mapped out our first ten “deep dives” that combine these thematic and geographic aspects, although we welcome submissions on other topics of interest.

Current Events: Illegal, dangerous, and destabilizing activities

China

Just this week amid the Shangri-la Dialogue in Singapore, a Chinese [warship](#) (LUYANG III DDG 132 [PRC LY 132]) performed a provocative, unsafe maritime interaction in cutting in front of USS *Chung-Hoon* as the US warship and a Canadian warship operated together in international waters. In a recent [talk](#), Rear Adm. Mike Studeman, commander of the Office of Naval Intelligence, reiterated the dangers posed by China’s frontline forces thus:

“China’s militia and Coast Guard have rammed foreign ships, water cannoned other vessels, interfered with legitimate resource exploration activities sponsored by other nations, driven off Southeast Asia nations’ fishermen in their own waters, and engaged in many other harassment

tactics as they try to enforce their unlawful claims and cow other nations into giving China de facto control of whatever Beijing unilaterally claims in contravention of the U.N. Convention of the Law of the Sea (UNCLOS).â€•

Chinaâ€™s malign maritime activity is not limited to the [South China Sea](#), of course. Its state-subsidized distant-water fishing fleets engaged in IUU fishing have been a contentious issue in [Latin America](#) as well as [West and Central Africa](#). Stanford University and the Hoover Institution have led the field in bringing attention to these issues through efforts like [Chinaâ€™s Global Sharp Power Project](#), [Project Myoshu](#) from the Gordian Knot Center for National Security, and Stanford Law Schoolâ€™s inter-disciplinary [Policy Practicum: Outlaw Ocean](#), based on Ian Urbinaâ€™s best-selling book [Outlaw Ocean](#).

Russia

Russian fleets are also [significant](#) perpetrators of state-sponsored IUU fishing and â€•dark shipping.â€•

- Russian military forces have also demonstrated a surge in illegal, dangerous, and destabilizing activities. In an unprovoked incident in April over the Black Sea, Russian fighter jets intercepted a U.S. drone most unusually. The MQ-9 Reaper drone was operating in international airspace over the Black Sea when a section of Russian Su-27 Flankers approached it. One of the Russian jets dumped fuel on the drone before eventually colliding with it, causing it to crash into the Black Sea. While such midair collisions in international airspace occur occasionallyâ€•the most well-known perhaps being the EP3 incident at Hainan, Chinaâ€•this malicious fuel dumping tactic is worthy of examination amid a renewed emphasis on gray zone and asymmetric approaches. The unprofessional interaction occurred amid the ongoing conflict in Ukraine, where [maritime activities](#) have played a critical role, including along the [Dnipro River](#), in the recently extendedâ€•albeit fragileâ€•Black Sea Grain Initiative, naval mining, destruction of the Kerch Bridge, sinking of the Moskva, and a recently reported Ukrainian [drone attack](#) on a Russian ship and the unique role of Turkey and its control of the approaches to the Black Sea.

Indeed, the Black Sea is worthy of special attention. As Jakub Grygiel wrote in a recent [article](#) for the Hoover Institution:

â€•Thirty years from now, a historian writing a book on the events of the last two decades happening in the area between Russia and the Middle East, including in Ukraine, might entitle it The Long War for the Black Sea. For, in fact, while the military clash between Russia and Ukraine is occurring predominantly on land and the outcome of the war will

determine the political and economic survival of an independent Kyiv, the great strategic prize is the Black Sea. To control Ukraine means to dominate the Black Sea, and to control the Black Sea means to control the internal sea of Central Europe and the Caucasus! The heart of Europe flows into the Black Sea.â?•

Iran

Equally unsettling is the trend of problematic interactions between Iranian forces and merchant vessels in and around the Arabian Gulf and Gulf of Oman. In recent weeks, commandos boarded and seized in international waters [Advantage Sweet](#), a Marshall Islands-flagged oil tanker chartered by Chevron, on its way to Houston from Kuwait. Less than a week later, a swarm of Iranian fast-attack craft seized a second vessel, the Panama-flagged tanker [Niovi](#). According to a U.S. Fifth Fleet statement: â??Over the past two years, Iran has harassed, attacked or interfered with the navigational rights of 15 internationally flagged merchant vessels. Iranâ??s continued harassment of vessels and interference with navigational rights in regional waters are unwarranted, irresponsible and a present threat to maritime security and the global economy.â?•

Perhaps the most disturbing of these events occurred in July 2021, when an Iranian-built drone armed with explosives attacked a merchant vessel, *Mercer Street*, killing two crew members. This recent surge in Iranian aggression invokes memories of the [Tanker War of the 1980s](#).

Geography

Mark Twain once wrote, â??God created war so that Americans would learn geography.â?• Martin Lewis, a prominent geographer, and founder of the popular blog [geocurrents](#), echoed that while he taught at Stanford University, â??most students learn that the globe is divided into fundamental units called either countries or nation-states, few of which have much significance. Beyond that, geographical knowledge is considered worthwhile mostly for game shows or trivia nights at local pubs. The result is not merely widespread gaps in public knowledge but rather pervasive geographical illiteracy that has damaging real-world consequences.â?•

In recognition of this unfortunate reality, a forthcoming Project Maritime deep dive will include a thorough, if ambitious, graphical representation of recent current events to illuminate overarching trends, black swans, black jellyfish, and black elephants.

The â??deep diveâ?• will explore the geographic and historical patterns that underlie these trends and illuminate the significance of the global system of waterways. As Dr. Ike Wilson and Scott Stimson

[write](#), these nuances are increasingly important today â??where adversaries generate and exploit compound security threats deliberately and strategically along the gaps and seams of traditional geographic combatant command boundaries. The geography of compound threats is an essential calculus in strategic planning, force planning, and risk management and mitigation.â?• They go on to point out that â??the convergence of threats at key geographic locations presents the United States with additional challenges, but it also presents opportunities to sharpen our focus and apply our resources in more precise and economical ways, at decisive locationsâ?!

Picture

The Ship That Launched a Thousand Memes

The six-day blockage of the [Suez Canal](#) by the container ship Ever Given in 2021 highlighted the [global systemâ??s dependence on vital maritime chokepoints](#) and the potentially disastrous implications of disruption to global trade. As we launch Project Maritime, the tenth anniversary of Chinaâ??s Belt and Road Initiative (BRI) looms large. Despite varying [assessments](#) as to the success of the individual projects, which have included investments in maritime infrastructure from the Panama Canal expansion to Pakistanâ??s Gwadar Port to Hambantota Port on the southern coast of Sri Lanka to the port of Djibouti in the Red Sea, this maritime Silk Road serves as a reminder of the centrality of the maritime dimension and the enduring geostrategic importance of the worldâ??s ports, harbors, sea lanes of communication and the extent to which theyâ??re predicated on physical geography.

Picture

Dynamic Policy and Doctrine

The project will also explore recent changes to policy and doctrine. What, for example, are the implications of a recent [change](#) to the Navyâ??s [roles](#) and mandate under Title X that now includes â??the peacetime promotion of the national security interests and prosperity of the United Statesâ?• in addition to its traditional focus on power projection? What are the significant changes to a forthcoming revision of Joint Publication 3-32, *Joint Maritime Operations*, and naval doctrine publications like a Naval Warfare Publication entitled *Maritime Competition*?

A small sample of recent policy changes of interest include:

- The emergence of the QUAD and [Indo-Pacific Partnership for Maritime Domain Awareness \(IPMDA\)](#).
- Joint U.S.-Philippine patrols [planned](#) for later this year and [recent visit](#) by Vice President Harris to Palawan.
- President Biden's [National Security Memorandum \(NSM\)-11 Memorandum on Combating Illegal, Unreported, and Unregulated Fishing and Associated Labor Abuses](#)
- Maritime Architecture and Response to International Terrorism In the Middle East Act of 2023 or [MARITIME Act](#).
- Recent [bilateral agreements](#) with Papua New Guinea including a defense cooperation agreement and an agreement concerning counter illicit transnational maritime activity operations.

Picture

Emerging Technologies

In an era of rapid technological evolution, advancements across various fields demand careful examination and exploration. Project Maritime will include a particular focus on the implications of open-source intelligence, or Blue OSINT, for maritime domain awareness. Per [naval doctrine](#), maritime domain awareness is the effective understanding of anything associated with the global maritime domain that could impact the security, safety, economy, or environment of a nation. Stanford Professor [Amy Zegart](#) highlights the critical role of OSINT in her bestselling book, *Spies, Lies, and Algorithms*, and on a recent IWI podcast [episode](#).

Picture

The 2023 Intelligence Community [Annual Threat Assessment](#) notes that "the convergence of capabilities in high-performance computing, big data, and machine learning" each a critical enabler across multiple domains "could have broad yet unidentified consequences across military, commercial, and basic research applications with relevance to national defense, economic security, and political stability."

Blue OSINT has [implications](#) for addressing a range of illegal activities, including illegal, unreported, and unregulated (IUU) fishing and transshipment, sanctions evasion, and illegal activity like smuggling. It offers benefits such as affordability, allowing coastal states to more efficiently monitor and enforce their Exclusive Economic Zones (EEZs), and enabling information sharing with partners. By leveraging publicly available and commercially available data and integrating various datasets, Blue OSINT

enhances insights to enable better governance, economic policy, and sustainable development decisions.

[Global Fishing Watch](#) has been a leader in this field—not only in their open-access technology products, datasets, and code but to the extent that they have [partnered](#) with other nations to bring transparency to the maritime space and as an example of a whole of nation approach to modern challenges.

[Picture](#)

Whole-of-Nation Approaches

Project Maritime aims to model the very whole-of-society approaches required to contend with malign activity from pacing threats. To that end, the project includes planned collaborations with thought leaders and organizations across sectors and internationally. We will also amplify the excellent work of our colleagues at the Center for International Maritime Security (CIMSEC), Hoover Institution and Stanford University, US Naval Institute and its Maritime COIN project, Joint Special Operations University, as well as industry and NGO partners making waves in the “Blue OSINT” and emerging technology space like Global Fishing Watch, Windward, Planet, and various [Defense Innovation Unit-sponsored projects](#). We also aim to amplify media outlets like [gcaptain](#) and [What’s Going On With Shipping](#), which produce top-notch content and analysis and are popular with navalists and those in the maritime industry but perhaps lesser known by the irregular warfare community of interest.

Embracing Opportunity, Partnerships, and Innovation

Amid all these challenges lie significant opportunities. A singular focus on challenges in a merely reactionary or “prevent defense” mindset is both unproductive and limiting. Instead, Project Maritime aims to inspire approaches informed by current events, geography, policy, and emerging technology that capitalize on our nation’s two primary advantages in the contemporary security landscape. Our extensive network of alliances and partnerships, predicated on shared values such as the preservation of free and open seas, and second and our nation’s leading edge in technology and innovation. Project Maritime hopes to add to the dialogue as our nation navigates not only these challenges—but also the opportunities. Please join us in this conversation—we want to hear from you!

The views expressed are those of the authors and do not reflect the official position of the United States Military Academy, Department of the Army, or Department of Defense.

Lisa McKinnon Munde is a graduate of the United States Naval Academy and served as a naval intelligence officer. She holds an MA in Latin American studies from Stanford University and is a 2022-2023 Hoover Institution Veteran Fellow, where her work is focused on illegal, unreported, and unregulated fishing. Lisa also leads Project Maritime for the Irregular Warfare Initiative—a joint venture between West Point’s Modern War Institute and the Empirical Studies of Conflict Project at Princeton University.

Date Created

2023/06/08