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RISKS AND THREATS IN THE 21ST CENTURY MARITIME SECURITY

Abstract: *The complexity and fragmentation of maritime security efforts stem from a range of overlapping national, regional, and international interests, legal frameworks, and operational priorities. As maritime security encompasses a broad array of issues—such as piracy, illegal fishing, smuggling, environmental protection, and territorial disputes—it involves a diverse set of actors, including national navies, coast guards, international organizations, regional bodies, and private sector players. Each of these actors often has its own unique goals, approaches, and priorities, which may not always align. A major challenge is that states prioritize different threats depending on factors like their geographic location, economic reliance on maritime trade, and political agendas. For instance, a nation bordering key shipping lanes may focus on anti-piracy operations, while a coastal state facing extensive illegal fishing might prioritize environmental and resource protection. As a result, these varying priorities can lead to fragmented security efforts, where coordination is inconsistent and often reactive rather than proactive. Additionally, the globalized nature of maritime activities means that crises, often drive short-term, ad-hoc responses. These actions, while critical in addressing immediate threats, often lack a long-term, coherent strategy. In essence, while global interconnectedness in trade, energy, and security demands a coordinated maritime security approach, conflicting national interests, legal disputes, and the reactive nature of current security frameworks often hinder the creation of a unified and strategic global maritime security framework.*

Keywords: *maritime security, maritime strategy, conflict, terrorism, illegal migration, piracy, maritime power, naval power*

Introduction

Maritime security has long been integral to human survival and economic prosperity, as the oceans have served as conduits for fishing, trade, and transportation for centuries. From the age of exploration to the modern global economy, the marine environment has been a critical resource. However, as the importance of maritime transport continues to grow, the sector faces a complex set of old and new challenges that threaten both economic stability and global security.

Piracy has been a consistent threat throughout history. Although it was thought to be declining in the late 20th century, regions like the Gulf of Aden and the Gulf of Guinea have seen a resurgence in recent decades. Piracy disrupts trade routes, causes financial losses, and threatens the safety of crews and ships. Despite international naval operations, pirates adapt their tactics, posing a continuous challenge to maritime security.

Long-standing disputes over maritime boundaries and control of strategic waterways persist. The South China Sea and the Mediterranean Sea are two of the most contentious areas, where overlapping territorial claims by multiple countries threaten regional stability. These disputes can escalate into military confrontations and disrupt international trade.

Smuggling, whether it be narcotics, weapons, or human trafficking, has long exploited the vast, hard-to-monitor maritime domain. Similarly, illegal, unreported, and unregulated fishing not only harms ecosystems but also undermines coastal communities' livelihoods, particularly in developing countries.

As ships, ports, and maritime operations become increasingly reliant on digital technology, cyberattacks have emerged as a significant threat. Hackers can target critical systems, disrupting navigation, communication, and the logistics of maritime trade, with the potential to cripple global supply chains.

Rising sea levels, changing weather patterns, and melting polar ice caps are reshaping the global maritime landscape. Climate change introduces new risks to coastal infrastructure, impacts fish stocks, and may open new Arctic shipping routes that could alter geopolitical dynamics.

In the 21st century, terrorist groups have sought to target maritime assets, from ships to port facilities. The attack on the USS Cole in 2000 highlighted the vulnerability of naval ships, while attacks on oil tankers and other critical vessels demonstrate the potential for such actions to disrupt global energy supplies.

As global powers like the United States and China increasingly project naval power to secure their strategic interests, particularly in regions like the Indo-Pacific, the risk of military confrontations or naval blockades grows. These confrontations could have significant consequences for global maritime trade routes and the security of the seas.

Modern economies are deeply intertwined with maritime transport. Over 80% of global trade by volume is carried by sea, and disruptions to these networks can have far-reaching consequences. Global supply chains rely on the efficiency and security of maritime transport, making it a vital element of economic prosperity.

Strategic maritime chokepoints, such as the Strait of Hormuz, the Suez Canal, and the Panama Canal, are critical to the smooth flow of goods and energy. Any disruption, whether through conflict, piracy, or accidents, can severely impact global markets.

The COVID-19 pandemic highlighted vulnerabilities in global supply chains, particularly those dependent on maritime transport. Shipping delays, port congestion, and labor shortages exposed the fragility of the system.

The combination of old and new threats to maritime security poses a formidable challenge in safeguarding the oceans, which are essential to global trade, food security, and geopolitical stability. Addressing these challenges requires international cooperation, innovative solutions, and an adaptive approach that balances traditional security concerns with emerging threats like cyberattacks and environmental changes. Without a secure maritime environment, the global economy and the well-being of countless coastal communities remain at risk.

Maritime security in strategic theory

Historically, maritime strategic theory has focused on the importance of the sea as transportation lines or areas of command and control. The sea has always been vital for

global trade, with major maritime routes serving as arteries for economic exchange. Control over these routes ensures the flow of goods, resources, and energy supplies. Command of the seas has been a central tenet of maritime strategy. Theories from thinkers like the historian Thucydides (Thucydides, 1972) in antiquity and later theorists such as Alfred Thayer Mahan (1987) and Julian Corbett (2024) underscore the centrality of naval power in achieving national objectives. Mahan, for instance, argued that dominance at sea was essential for protecting and expanding national trade, while Corbett highlighted the use of naval forces to support broader military objectives, including the movement of ground troops. Both theorists, alongside earlier contributions from Thucydides, stressed the importance of sea control to either secure a nation's interests or disrupt those of an adversary. These concepts form the backbone of maritime strategy, which continues to evolve in response to contemporary challenges. They focused on the ways in which nations could exploit command of the sea in order to either secure and expand national trade, or destroy the trade and fleet of adversaries, and quickly move ground troops where needed.

In modern times, changes in naval technology have made clear in Strategic Maritime Doctrine reflecting the transformative impact of advanced technologies on the role and capabilities of warships. Various naval doctrines, such as the use of surface war ship and submarines, have developed around the principles of projecting power, deterrence, and securing maritime interests (Mahan, 1987). Historically, naval operations were primarily focused on achieving command of the sea and blocking enemy access. However, modern naval platforms have expanded beyond these traditional missions to become sophisticated assets capable of precision strikes deep into enemy territory. This shift represents a major change in naval strategy, allowing for long-range offensive operations, including the use of missile systems to target inland objectives. Advances in naval technology—such as steam power, radar, and missile systems—have transformed maritime strategy, enabling more effective command and control over vast areas of the ocean (Till, 2018).

More specifically, the modern warships that will be acquired can strike deep into the enemy's mainland, by launching missiles. The evolution of warships into platforms capable of precision strikes deep into enemy territory represents a significant shift in naval strategy and the concept of gunboat diplomacy. This capability allows nations to project power and influence without the need for a substantial ground presence, making naval forces a critical

component of modern military operations. The concept of "gunboat diplomacy," traditionally centered on demonstrating naval power to influence foreign nations, has also evolved. Today, it encompasses the use of advanced precision-guided missiles, such as cruise and anti-ship missiles, which significantly enhance the lethality and range of naval forces. These capabilities enable nations to project power and exert influence without relying on large-scale ground forces, reinforcing the strategic importance of naval forces in modern warfare. Additionally, emerging technologies, such as laser defense systems, offer new ways to counter aerial and maritime threats, including drones and small boats (Till, 2018).

This blend of offensive and defensive technological advances positions naval forces as critical elements in contemporary military operations, both in projecting power and safeguarding national interests. The foundational principles of maritime strategic theory, which have long emphasized the importance of the sea in global power dynamics, remain relevant. However, they now incorporate new dimensions, including cyber threats and climate change (Till, 2018). Cyberattacks on naval systems or maritime infrastructure, for example, represent an emerging risk that can disrupt critical supply chains or naval operations. Similarly, climate change, by altering sea levels and affecting geopolitical regions like the Arctic, adds complexity to maritime security considerations. As these challenges evolve, maritime strategy must continue to adapt, integrating traditional naval roles with new missions aimed at addressing these diverse and interconnected threats. The enduring significance of the sea in global power dynamics ensures that maritime strategy remains central to national security and international stability, but it must now address a much broader range of factors than in the past. Warships can also provide area defense against ballistic missile and anti-ship missile attacks and can become a mobile air defense network. Modern naval forces utilize advanced communication and information-sharing systems, allowing for real-time coordination and enhanced situational awareness across fleets. (Till, 2018).

Neither our security environment nor its understanding of the complex interactions inherent in conflict are fixed. The role of warships has expanded dramatically to meet the complexities of modern security challenges. Their versatility allows navies to address a wide range of missions, making them essential tools not only for military engagement but

also for diplomacy, humanitarian efforts, and international cooperation. This evolution reflects the changing nature of global security, where maritime forces play crucial roles in various operational contexts. Here are several key areas that illustrate this dynamic expansion: Intelligence, Surveillance, and Reconnaissance (ISR) Modern warships are equipped with advanced sensors and surveillance systems, allowing for extensive monitoring of maritime activities and collection of intelligence.

Joint and Coalition Operations. Collaboration with other branches of the military and international partners is increasingly common, requiring warships to integrate into broader operational frameworks.

Cyber Operations. The growing significance of cyber capabilities means that warships can also play roles in cyber defense and offensive operations, protecting naval networks and infrastructure.

Environmental Protection and Research. Navies are engaging in missions that focus on environmental stewardship, conducting research on marine ecosystems and participating in anti-pollution efforts (Tsailas, 2020:83).

However, as Thucydides pointed out 2 millennia ago, the future is often unpredictable and often violent (Gray, 2015). Thucydides' insights into the nature of power, conflict, and human behavior remain relevant today, particularly in understanding the complexities of international relations. Thucydides emphasized that human motivations—fear, honor, and self-interest—often drive decisions in ways that can lead to unforeseen consequences. This unpredictability continues to be a hallmark of geopolitical dynamics, where even minor incidents can escalate into larger conflicts. But the physical characteristics of the conflict and the requirements placed on the military component of any strategy are always evolving. Thucydides' observations about the unpredictability and violence inherent in human affairs continue to resonate in contemporary global politics. By studying those insights, modern leaders can better navigate the complexities of international relations and work towards more stable and peaceful outcomes. Thucydides' emphasis on the importance of strategic thinking, historical awareness, and understanding human nature provides valuable lessons for policymakers today. Recognizing the potential for miscalculation and the importance of communication can help mitigate conflict. (Thucydides, 1972)

The importance of maritime security is deeply rooted in history

Control over the seas has long been synonymous with power, trade dominance, and military strength. To build a robust maritime power for the 21st century, it is crucial to study historical events, identify enduring trends, and apply those lessons to contemporary naval strategy. A comprehensive review of historical maritime developments can help guide the modernization of the Navy and ensure it is prepared to face the evolving challenges of the open seas. By drawing lessons from history and linking them with current realities, decision-makers can anticipate the long-term nature of maritime security challenges and opportunities. This approach underscores the importance of continuity in maritime strategy, where past experiences inform present actions, leading to better preparedness for future demands. While the discussion remains general, it suggests that more detailed and specific studies will be needed to adapt these insights to the evolving security landscape. The process of connecting the past, present, and future serves as a guiding framework for anticipating shifts in global power dynamics at sea and ensuring the Navy is equipped to navigate these changes.

This effort, to take advantage of the past experience, on the one hand to inspire us to look to the future, and on the other hand, constantly remember, just as our predecessors set the limits of their prediction, so we should set our own limits, since we cannot predict the distant future with certainty. Indeed, the future is not predetermined. It depends not only on our own strategic choices but also on those of other actors. It is the interaction between conflicting interests, and the game of opportunity and extraordinary change, that Thucydides describes emphatically in his classic work on the Peloponnesian War (Lendon, 2010).

The future of maritime security and naval power will increasingly depend on the interaction of strategies, particularly within the realm of cyberspace, where competition is constant. Cyberspace has become a critical domain of conflict, and maintaining superiority in this field is vital for overall defense. To ensure an unchallenged defense capability, it will be essential to bolster intelligence services, enabling them to adapt to and predict various alternative tactics and emerging threats. While power balance must exist, the response need not be symmetrical. Offensive cyber capabilities could go a long way toward offsetting any weaknesses. (Till, 2018). By preparing for a wide range of potential scenarios, defense forces can enhance their resilience, ensuring that no single cyber threat or strategy can

destabilize or neutralize their defenses. The ability to anticipate, simulate, and test responses to these scenarios will be critical in navigating the increasingly dynamic and dangerous security environment of the future. This proactive approach—focused on preparedness, adaptability, and intelligence—will help safeguard against unpredictable challenges in cyberspace and beyond. (Tsailas, 2020)

The importance of accurately interpreting historical lessons from past wars and conflicts inform present and future decisions. These lessons become part of our collective historical memory, shaping the values and strategic frameworks that guide society and its leaders. By understanding the true lessons of history, certain political and strategic options can be excluded in future conflicts, promoting actions that align with the common good and preventing the repetition of past errors. A thorough understanding of historical events helps to avoid drawing "false lessons" that might lead to misguided decisions in the present. Learning from history is not just about recalling events but about analyzing them critically to extract the right insights. When applied wisely, these lessons can strengthen leadership and decision-making, enhancing the chances of avoiding past mistakes and navigating future challenges more effectively. This underscores the necessity of careful, informed study of history to ensure that decisions today are grounded in the right understanding of the past.

During the Peloponnesian War, the Spartans believed that losing some battles in the naval struggle was nothing but insignificant defeats, since they were undoubtedly strong in land operations and invincible, but a decisive defeat of Athens at sea would lead the Athenians to desperate land operations where they would fight for their survival and find themselves in dire straits. Indeed, the Athenians found themselves in this fragile situation, with resources dwindling, while Sparta's "center of gravity", the Peloponnese, was safe from Athenian warfare. This commanding thought, which after the destruction of the opponent and his allies, leads to a decisive battle, presents a striking simulation in the early twentieth century during the First World War.

It is reminiscent of Admiral Tirpitz's German naval strategy of "risk management at sea", as the superiority of the British Royal Navy did not leave the German Admiralty under any illusion that it could prevail in a decisive naval battle. Tirpitz and the German

Admiralty understood that the Royal Navy held overwhelming superiority at sea. Instead of attempting to match the British fleet head-on in a decisive battle, they sought to create a fleet that could challenge British dominance through calculated risk. Thus, he drew up a plan for raids and bombardments -Focus on Asymmetric Strategies- of the east coast of Britain by German battle cruisers. The German strategy emphasized the use of U-boats and commerce raiding to disrupt British trade and supply lines. This approach aimed to weaken Britain economically and morally, leveraging the element of surprise and unconventional tactics. The Germans estimated that, under the weight of public pressure, the Grand Fleet would receive a defensive arrangement, which would necessarily lead to the dispersal of its forces. Thus, the High Seas Fleet could act against detachments of the Grand Fleet and achieve its gradual attrition, which could alter the balance of naval power in favor of Germany. Admiral Tirpitz's "risk management at sea" strategy highlights the complexities of naval warfare in the face of superior power. It illustrates the necessity of adaptive strategies in maritime contexts, where outright confrontation may not be viable. This approach remains relevant today, as nations navigate asymmetrical warfare and the challenges posed by more powerful adversaries (Pizzolo, 2021).

The Athenians in 480BC, taking advantage of circumstances such as adverse weather conditions and superior seamanship over the enemy, found themselves in a favorable position to reduce the naval power of the Persian Fleet at Artemisia, and immediately afterwards at Salamis, taking advantage of geography, they were able to defeat the Persians, making possible the decisive battle at Plataea and thus save Greece. We distinguish the effectiveness of decisive naval combat after defeating the opponent as a conscious strategy. Besides, this strategy was followed by Greece in the victorious Balkan wars (1912-1913) with the naval battles of Elli and Lemnos, liberating the entire Aegean Sea and depriving the Ottoman army of reinforcements, resulting in the liberation of Northern Greece. Admiral Kountouriotis' emphasis on naval battles as a means to determine war outcomes reflects a long-standing military tradition rooted in classical strategies. While the specifics of naval warfare have evolved, the core principle of seeking decisive engagements remains relevant. Modern navies still consider how control of the seas can influence land campaigns and overall strategic outcomes. This approach highlights the enduring importance of naval power in conflict, illustrating how historical insights can

inform contemporary military thinking. The ability to achieve maritime supremacy continues to be a vital element in shaping the dynamics of modern warfare.¹⁹

The decline of Byzantine naval power, beginning with the rise of Arab naval forces in the 7th century, which challenged Byzantine dominance in the Eastern Mediterranean. The Arabs' naval successes forced the Byzantine navy into a defensive posture, marking the start of a gradual weakening of its maritime strength. By the 13th century, Byzantium's influence had significantly diminished, with the growing power of Italian maritime cities like Genoa and Venice. Despite the continued importance of Greek sailors, the Byzantine navy had entered a period of decline. By 1453, the Byzantine Empire had lost its capacity to maintain critical supply lines to Constantinople, a failure that was instrumental in the Ottoman conquest of the city. Even before this final defeat, the Byzantine emperors had become increasingly dependent on the naval power of Genoa and Venice, which further eroded their ability to project maritime strength. This loss of naval capability was a crucial factor in Byzantium's overall downfall, illustrating the centrality of naval power in maintaining the empire's strategic position in the region (Charalampos, 2011).

With the empire's trade completely destroyed, it ceased to function as a significant naval force. Though some maritime activity remained in Greek hands, it was limited to local endeavors and had little economic impact. This loss of naval dominance allowed external powers, particularly the Venetians and Ottomans, to capitalize on the skills of Greek sailors and craftsmen from coastal regions around the Aegean and Black Seas. The Venetians, known for their extensive trade networks and powerful navy, and the rising Ottoman Empire, effectively absorbed the maritime expertise that once belonged to Byzantium. As Constantinople lost its economic vitality, it could no longer sustain its shipbuilding and maritime traditions, both of which passed into the hands of foreign powers. This shift marked the end of Byzantium's role as a significant player in Mediterranean and Black Sea trade, further cementing its decline and the rise of new maritime powers in the region.

¹⁹ Kountouriotis' strategy resonates with the classical Greek understanding of naval power, where victory at sea was seen as a pathway to broader military success. This historical foundation underscores the enduring relevance of naval engagements in warfare

The aim of discussing historical events is not to disregard the significance of modern naval strategies or to downplay the role of force multipliers like advanced weaponry, alliances, or diplomatic agreements. Rather, the intent is to highlight the timeless relevance of certain fundamental principles of naval strategy. Thucydides predicted modern forms of warfare two millennia ago, stating: "There will be other ways and means that no one can currently foresee, since war is certainly not one of those things that follows a stable pattern. On the contrary, it usually creates its own conditions in which one must adapt to changing circumstances" (Thucydides, 1972).

While technology and international partnerships are critical in shaping contemporary naval power, the lessons from history emphasize enduring strategies such as the control of vital sea routes, the projection of naval force, and the importance of securing economic lifelines. These principles, which have underpinned naval success for centuries, remain crucial in today's context of technological advancements and global alliances. The integration of these core elements with modern tools ensures a balanced, effective approach to maintaining maritime dominance and security.

It is because it is now believed that naval forces are not just military tools but also instruments of diplomacy, particularly in terms of coercion and potential destruction. Modern adversaries are expected to use their naval power strategically, leveraging it to exert political influence and achieve objectives through both force and deterrence. Thucydides' reflection in the Athenian-Melian Dialogue resonates with this dynamic. In his work, he famously argues that justice or law is only meaningful between equals in power, while in asymmetric relationships, the stronger party acts according to its capabilities, and the weaker party is constrained by its limitations.²⁰ (Venizelos, 2019:244)

This philosophical perspective underscores the realist view that power, particularly naval power, shapes diplomatic and strategic outcomes. The strong can use their naval forces to project influence and dominate weaker states, whose responses are limited by their relative weakness. This understanding remains relevant in contemporary geopolitics, where naval power continues to serve as a primary tool for coercion, deterrence, and negotiation. The mindset of a revisionist adversary, one who seeks to challenge or overturn the existing

²⁰ See Thucydides Histories [5.89] ...ὅτι δίκαια μὲν ἐν τῷ ἀνθρωπείῳ λόγῳ ἀπὸ τῆς ἴσης ἀνάγκης κρίνεται, δυνατὰ δὲ οἱ πρὸντες πράσσουσι καὶ οἱ ἀσθενεῖς συγχωροῦσιν. Page.244

international order, often disregarding justice or established norms. Such an opponent views the status quo—typically upheld by international agreements and law—as a barrier to their aspirations. Rather than adhering to the legal and diplomatic frameworks that maintain global stability, the revisionist uses political arguments to justify their actions, aiming to assert dominance over competitors and reshape the geopolitical landscape in their favor. This approach is rooted in a desire for superiority, where political rhetoric is employed to legitimize aggressive actions and rationalize the disruption of the established order. The revisionist's focus on altering the balance of power reflects a belief that existing norms do not serve their interests, and through their actions, they seek to assert control or challenge the dominance of other states. This behavior can lead to instability, as the pursuit of superiority by defying international law undermines the cooperative foundation on which global peace and security are built.

By studying historical trends in maritime power and applying their lessons to modern contexts, we can build a Navy that is adaptable, technologically advanced, and capable of projecting power across the globe. The foundation for maritime dominance in the 21st century rests on technological innovation, strategic alliances, and the ability to operate in a complex and changing global environment. Preparing the Navy for future challenges requires both a deep understanding of the past and a forward-looking approach to emerging threats and opportunities on the open seas.

Maritime security in modern times

The modern developments, particularly advancements in technology and warfare, have fundamentally altered the nature of conflict. These changes, driven by rapid technological progress and evolving strategies, have the potential to not only shift how wars are fought but also redefine the very goals of war. In this context, fear and disruption—amplified by tools like cyber warfare, drones, and precision strikes—can become powerful weapons that influence political objectives and outcomes. In modern conflicts, the focus is often not solely on territorial conquest but on destabilizing opponents, undermining their political and economic systems, and reshaping the global order to achieve new strategic aims. This transformation in warfare also introduces more complex and unpredictable threats, where non-traditional forms of conflict, such as hybrid and asymmetric warfare, may replace or supplement conventional battles. As a result, the goals of war may shift

from clear-cut victories to more nuanced objectives like weakening adversaries through economic, psychological, or political means, often without the need for prolonged military engagements. This reflects the increasingly blurred line between peace and conflict in modern geopolitical strategies (Tsailas, 2022:28-31).

The United Nations Convention on the Law of the Sea (UNCLOS) plays a crucial role in regulating maritime activities for navies worldwide. It provides a comprehensive legal framework governing the use of the world's oceans, addressing critical issues such as territorial rights, the exploitation of marine resources, and the jurisdiction over coastal waters. UNCLOS is foundational in establishing rules for traditional right of passage and ensuring the freedom of navigation, key principles that have long been part of international maritime law. Despite its global significance and the fact that 167 countries are full members as of June 2016, some States have not ratified UNCLOS. Though they observe many of its provisions as customary international law, their refusal to formally join the treaty reflects political concerns, particularly over the potential loss of sovereignty and control over maritime resources. Nevertheless, UNCLOS continues to serve as the primary international legal structure for ensuring orderly use and governance of the world's oceans, essential for both global trade and naval operations.

The tensions in the South China Sea, driven by Chinese violations, and the ongoing disputes in the Eastern Mediterranean and Aegean involving Turkey's infringements on Greece and Cyprus' Exclusive Economic Zones (EEZ), both highlight significant challenges to maintaining international order. These regions have become focal points for the broader struggle between adhering to international laws, such as UNCLOS, and the actions of states that seek to assert unilateral claims, often in defiance of global norms. China's aggressive actions in the South China Sea, including the militarization of artificial islands and encroachments into the EEZs of neighboring countries, threaten the principle of freedom of navigation and undermine regional stability. Similarly, Turkey's violations of Greece and Cyprus' EEZs raise serious concerns about the respect for sovereignty and international law in the Eastern Mediterranean. Both of these situations strain global efforts to preserve peace and the rule-based international system. For progressive democratic states, upholding international laws like UNCLOS is critical not only for maintaining order but also for preventing escalations that could lead to larger conflicts. These states view the enforcement of legal frameworks and diplomatic resolutions as essential tools in avoiding another

catastrophic global war. The violations in these regions are thus seen not just as localized disputes but as threats to global peace, testing the resilience of international norms and the ability of the world to deter the kind of aggressive actions that have historically led to major conflicts.

Significant tension in international maritime law enforcement

The essence of the argument about whether a navy, particularly one from a country like the United States that has not ratified UNCLOS, can enforce the Law of the Sea lies in the tension between international legitimacy and customary practice. Legally, the position of a non-ratifying nation is ambiguous because, without formal ratification, it technically lacks full legal standing under UNCLOS to enforce its provisions or challenge violations by other countries, such as China in the South China Sea or Turkey in the Eastern Mediterranean. Here are the core components of this argument:

- **Lack of Formal Membership:** Since the U.S. has not ratified UNCLOS, critics argue that it does not have the full legal authority to enforce or compel other nations to comply with the treaty's provisions. This leads to the perception of inconsistency, where the U.S. relies on UNCLOS to criticize actions like China's violations in the South China Sea but does not subject itself to the same legal obligations.
- **Customary International Law:** Supporters of U.S. naval actions argue that despite not ratifying UNCLOS, the U.S. adheres to many of its provisions as part of customary international law. Customary international law reflects practices widely accepted by nations, even if they have not signed specific treaties. The U.S. uses this rationale to justify its freedom of navigation operations (FONOPs) and efforts to uphold international norms in disputed waters. However, the legal weight of customary international law is often debated compared to treaty law.
- **Global Norms and Influence:** Some argue that even without formal ratification, a powerful navy like the U.S. can act as a de facto enforcer of international maritime rules, given its significant influence on global trade routes and security. This perspective suggests that the enforcement of international law is not solely about formal legal standing but also about

maintaining global order, especially when vital interests like freedom of navigation and regional stability are at stake.

- **Hypocrisy Criticism:** Opponents of this position contend that non-signatories of UNCLOS, like the U.S., lack the moral and legal legitimacy to challenge violations or dictate compliance with a treaty they themselves refuse to ratify. This can weaken their diplomatic stance, making it easier for violators like China or Turkey to dismiss criticism as hypocritical.

In essence, the argument centers around whether a nation that has not ratified a treaty can legitimately act as an enforcer of that treaty's provisions. While there is no clear legal answer, the debate highlights the tension between power, international law, and the principles of fairness and legitimacy in global governance.

Key points that emphasize the necessity of collective allied action

The argument for collective allied action and a persistent naval presence on the seas is essential for ensuring stability in global maritime regions, particularly in sensitive areas like the Mediterranean. When paired with the legal framework provided by UNCLOS, this approach gains significant legitimacy and strengthens the justification for such actions. Here are the key points that highlight the importance of this collective action:

Collective Deterrence and Stability: A coordinated naval presence by allied nations acts as a strong deterrent against violations of international maritime law, such as those seen in the South China Sea and the Eastern Mediterranean (Tsailas, 2022).

The involvement of multiple allied navies reinforces the commitment to maintaining order, security, and freedom of navigation in critical waterways. This presence prevents unilateral actions by revisionist states like China or Turkey that might challenge the international order.

Legal Justification through UNCLOS: The legal representation of UNCLOS by allied nations, many of which are signatories, provides the necessary legal foundation for their presence and actions in disputed or sensitive maritime regions. UNCLOS offers the legal framework for addressing issues related to territorial waters, Exclusive Economic Zones (EEZs), and the rights of passage. Allied forces

acting under this international law enhance their legitimacy in enforcing maritime rules and ensuring that violators cannot claim legal ambiguity.

Promoting Global Maritime Norms: A collective and persistent allied presence in regions like the Mediterranean ensures that global maritime norms, such as the right to free passage and the peaceful resolution of disputes, are upheld. This sends a clear message to countries like Turkey and China that international waters are not areas for unilateral control or exploitation, and that adherence to legal frameworks is expected.

Multilateral Approach to Crisis Prevention: By working together, allied navies can better prevent potential conflicts or confrontations in sensitive regions. A unified front not only strengthens military presence but also supports diplomatic initiatives to de-escalate tensions through multilateral dialogue. The Mediterranean, for example, is a region where the presence of multiple allied navies can help prevent energy disputes and uphold international law.

Operational Readiness and Flexibility: Persistent naval deployments allow allied forces to remain operationally ready and capable of responding quickly to emerging threats or violations of international law. This readiness is key in contested waters, where the ability to enforce maritime law and maintain the status quo is crucial for long-term peace and security.

Collective allied action with a legal framework like UNCLOS is critical

Collective allied action supported by a legal framework like UNCLOS is vital for legitimizing naval operations, maintaining international order, and preventing escalation in sensitive maritime regions. This combination ensures that actions taken by allied forces are both legally justified and strategically sound.

The emphasis on naval deployment, persistent presence, and interoperable training highlights a strategic approach to countering violations of maritime law and ensuring regional stability. The continuous deployment of naval units in areas where international maritime principles are being violated serves as a clear signal to potential aggressors that

allied forces are committed to upholding the law. This presence can deter reckless behavior, such as illegal resource extraction or aggressive territorial claims. Also, having naval assets on station allows for rapid response to emerging threats or incidents, helping to manage crises before they escalate into larger conflicts.

Conducting regular exercises ensures that allied forces are well-coordinated and capable of operating together effectively. This interoperability is crucial in high-stakes environments where timely and decisive action may be required. Continuous training helps maintain operational readiness, ensuring that naval forces are prepared for a variety of scenarios, including enforcement of maritime law, humanitarian missions, or potential conflict.

Implementing a blockade can be an effective mechanism to enforce international law and exert pressure on states that violate maritime norms. Historically, blockades have been used to limit the movement of goods and reinforce compliance with legal standards. Allied navies acting under the authority of UNCLOS can impose blockades in accordance with international law, reinforcing the legitimacy of their actions. This legal backing provides a framework for enforcing maritime rights without escalating into outright conflict.

The combined strength of allied navies creates a formidable deterrent against reckless behavior at sea. Knowing that multiple nations are prepared to respond collectively can discourage adversaries from pursuing aggressive or unlawful actions. By asserting control and promoting adherence to international law through a consistent naval presence, allied powers can help create a more stable maritime environment, ultimately contributing to regional and global security.

The critical role of allied navies in upholding international law and addressing multifaceted maritime challenges

The deployment of naval units, alongside regular exercises and training, is vital for maintaining a strong deterrent posture against violations of maritime law. By leveraging the authority of UNCLOS, allied navies can effectively deter aggressive actions, manage crises, and promote adherence to international norms in sensitive maritime areas. They can prevent crimes involving trafficking in human beings, drug trafficking, illicit arms transfers, terrorist operations at sea, various human rights violations and related crimes against

humanity, as well as violations of state rights of natural resources funded by the offender state. These issues are now at the heart of this century, along with many UN resolutions requiring law enforcement at sea, and fall under the purview of the Navy under UNCLOS.

The seas are no less important today than they were a hundred years ago. While air travel and digital communications, along with roads and railways, have made it possible to circumvent the sea to some extent, they cannot call into question the basic economic fact that maritime transit is the most cost-effective way to transport goods from point A to point B. required to combat piracy, search and rescue and manage freedom of navigation.

The assertion that the seas remain as vital today as they were a century ago underscores the enduring significance of maritime transit in the global economy and security. Despite advancements in air travel, digital communication, and land transportation, shipping remains the most economical method for transporting large quantities of goods over long distances. Maritime transport accounts for about 90% of global trade by volume, emphasizing its critical role in international commerce. The integration of maritime routes into global supply chains is essential for the efficient movement of raw materials, manufactured goods, and energy supplies. Disruptions in maritime transport can have cascading effects on economies worldwide.

The ongoing threat of piracy, especially in key shipping lanes, necessitates robust maritime security measures. Naval forces play a crucial role in safeguarding commercial shipping routes, ensuring that vessels can operate safely and securely. Maritime forces are often tasked with search and rescue missions, responding to emergencies at sea, including natural disasters or distress calls from vessels. This capability is essential for maintaining safety and security in maritime environments. The ability to navigate freely across international waters is a fundamental principle of maritime law. Ensuring this freedom is vital for maintaining open trade routes and preventing conflicts over territorial waters, especially in contested regions like the South China Sea and the Eastern Mediterranean. Modern navies must adapt to new threats such as cyber warfare, hybrid tactics, and the potential use of non-state actors in maritime conflicts. Addressing these challenges requires ongoing investment in naval capabilities and international cooperation. Maritime operations must also account for environmental protection and sustainability, ensuring that the seas are managed responsibly. This includes regulations on pollution, overfishing, and the

preservation of marine biodiversity. So the importance of the seas in global trade and security has not diminished. While alternatives to maritime transport exist, none can match the efficiency and cost-effectiveness of shipping goods by sea. The ongoing need for maritime security measures, including the fight against piracy, search and rescue operations, and the maintenance of freedom of navigation, underscores the crucial role that navies and maritime forces play in safeguarding this vital domain. The sea remains a central arena for economic activity and geopolitical interaction, making it essential to prioritize maritime strategies and policies in today's interconnected world.

The past two decades have indeed seen remarkable changes in global maritime trade, underscoring the dual nature of globalization: it presents significant economic opportunities while simultaneously creating challenges and risks. The doubling of global trade transported by ship highlights the sea's critical role as the backbone of international commerce. This surge illustrates how integral maritime transport is to facilitating global economic interactions. The quadrupling of total vessel traffic indicates not only heightened trade activity but also a greater interconnectedness among countries, especially as emerging markets participate more actively in global trade networks. The trend toward larger container ships have significantly enhanced shipping efficiency, allowing for larger and more economically viable shipments. This shift has transformed the logistics of trade, enabling more cost-effective transport of goods across vast distances. The fact that developing countries now account for nearly half of global trade marks a significant shift in the dynamics of international commerce. This participation reflects the benefits of globalization but also introduces complexities related to regulatory standards, environmental concerns, and economic stability.

The alarming reports of migrants drowning at sea highlight the urgent humanitarian issues that arise alongside increased maritime activity. Conflicts, poverty, and environmental degradation push individuals to undertake perilous journeys across the seas, often with tragic consequences. The vulnerability of global fish stocks due to overfishing and environmental changes presents a significant challenge for marine ecosystems and food security. Unsustainable fishing practices threaten not only marine biodiversity but also the livelihoods of communities' dependent on fishing. Competing claims over underwater resources, including oil, gas, and minerals, create tension and uncertainty in maritime regions. Disputes, particularly in areas like the Mediterranean and the South China Sea, can

lead to geopolitical friction and conflict. As maritime zones become more active and contested, the potential for conflict increases. Nations are likely to assert their claims more aggressively, leading to friction over territorial waters, right of passage, and resource exploitation. Increased maritime activity also raises security concerns, including piracy, trafficking, and environmental degradation. The need for effective maritime security measures is essential to ensure the safety of trade routes and protect marine environments. In summary, while globalization has significantly transformed the maritime sector, leading to increased trade volume, larger vessels, and broader participation, it has also introduced a host of challenges. The complexities of migration crises, environmental sustainability, resource competition, and geopolitical tensions underline the need for comprehensive strategies that address both the benefits and risks associated with maritime globalization. Ensuring a balanced approach to maritime governance, focusing on sustainability, security, and cooperation among nations, will be essential in navigating the future of the world's oceans.

As these trends continue, Earth's seas will increasingly resemble smaller and busier bodies of water, where activities, interests, and threats will converge. For example, the Mediterranean Sea serves as a microcosm for the evolving dynamics of global maritime environments, illustrating both the opportunities and challenges that will likely characterize the world's seas in the future. The Mediterranean offers vast economic prospects for coastal nations through tourism, shipping, and access to rich marine resources. Its strategic location as a crossroads for trade between Europe, Africa, and the Middle East enhances its significance in global commerce (Tsailas, 2024). The presence of valuable resources, such as fisheries, oil, and gas reserves, intensifies competition among nations. As demand for these resources grows, so too does the potential for conflict over rights to exploit them. As global trade continues to expand, seas like the Mediterranean will see increased vessel traffic. This surge will necessitate effective traffic management and safety protocols to prevent accidents and ensure the smooth flow of commerce. Also, is home to a wide array of stakeholders, including coastal states, shipping companies, environmental organizations, and international bodies. This diversity of interests can lead to both cooperation and conflict, requiring diplomatic efforts to balance competing demands. The presence of multiple nations with varying interests creates a complex geopolitical landscape. Disputes

over territorial waters, fishing rights, and resource exploration can lead to tensions, as seen in ongoing conflicts involving countries like Turkey, Greece, and Libya.

The Mediterranean is a primary route for migrants seeking safety and economic opportunity. This situation presents significant humanitarian challenges, as nations grapple with how to address the influx of migrants while ensuring their safety at sea. The convergence of interests highlights the need for robust international governance frameworks. Collaborative approaches are essential to address issues such as environmental protection, maritime security, and resource management. Increased maritime activity poses risks to marine ecosystems, with threats such as overfishing, pollution, and habitat destruction. Sustainable practices and stringent regulations will be critical to preserving the health of marine environments.

The Mediterranean Sea exemplifies what other maritime regions may face as globalization progresses. As the seas of tomorrow become busier and more contested, the experiences and strategies developed in the Mediterranean can provide valuable insights for managing similar challenges elsewhere. Coastal nations will need to adapt to the evolving maritime landscape, enhancing their capabilities for maritime security, environmental stewardship, and crisis management. Building resilience in the face of emerging threats and challenges will be essential for ensuring long-term stability.

The Mediterranean Sea serves as a critical buffer zone and a reflection of the complex geopolitical landscape that is increasingly becoming characteristic of other major maritime regions. The area has historically been a meeting point for the interests of great powers, including the United States, Russia, and China. Its strategic position as a conduit between Europe, Africa, and the Middle East makes it a focal point for competition and influence among these powers. It acts as a battleground for proxy conflicts, where regional players, often supported by larger powers, vie for influence. This dynamic creates instability and can lead to violent confrontations that reverberate across the region. It is increasingly perceived as a source of threats, where instability in one area (such as the Middle East or North Africa) can spill over into surrounding regions. This creates a volatile environment, necessitating proactive security measures by coastal and neighboring nations.

As global maritime dynamics evolve, regions such as the Pacific, Atlantic, Arctic, and Indian Oceans are likely to mirror the Mediterranean's complexities. These bodies of

water will see increasing naval presence and competition as nations seek to assert their interests and secure vital maritime routes. The actions and reactions of major naval powers—namely the United States, China, and Russia—will shape the strategic landscape of these oceans. Their deployments and military strategies will reflect broader geopolitical goals, impacting regional security and stability.

The potential for terrorist groups, including Islamist factions, to target maritime assets and corridors is a growing concern. The Mediterranean has already witnessed such threats, and similar patterns may emerge in other regions, necessitating robust maritime security frameworks. Shipping routes in contested waters are increasingly vulnerable to attacks, underscoring the need for enhanced maritime security cooperation among nations to safeguard these critical corridors. The convergence of interests among major powers necessitates improved interoperability and collaboration among allied navies. Joint exercises, intelligence sharing, and coordinated responses will be essential to address common security challenges. As maritime environments become more congested and contested, naval forces must adapt to new realities, including the integration of advanced technologies, increased focus on cybersecurity, and the development of hybrid warfare strategies.

The Mediterranean Sea, with its critical geostrategic chokepoints and complex geopolitical landscape, offers vital lessons for navigating future maritime challenges. The Suez Canal, the Strait of Gibraltar, and the Bosphorus Strait are essential maritime chokepoints that facilitate global trade. They serve as critical transit routes for oil, natural gas, and goods, making their security paramount for economic stability. Tensions surrounding these chokepoints highlight how nations prioritize the protection of their economic interests. Disruptions in these areas can have far-reaching implications for global supply chains and economic security.

The Mediterranean has been at the forefront of a significant migration crisis, presenting a complex mix of humanitarian challenges and national security concerns. The multinational response to this crisis has underscored the need for collaborative approaches to address the humanitarian aspects of maritime security. By closely observing the current dynamics in the Mediterranean, policymakers can gain valuable insights into the interplay of maritime security, economic interests, and humanitarian issues. This understanding is

crucial for developing effective strategies for other maritime regions experiencing similar pressures. The lessons learned can inform future planning and preparedness strategies in a globalized world. As economic activities expand into contested waters and new maritime challenges emerge, a proactive and adaptable approach will be essential.

In summary, the Mediterranean Sea serves as a crucial case study for understanding the multifaceted challenges of maritime security in the context of globalization. The lessons derived from its geopolitical dynamics, humanitarian crises, and economic activities can inform future strategies for managing the world's oceans. By leveraging these insights, nations can better prepare for a future where maritime environments are increasingly interconnected, contested, and vital for global prosperity.

My conclusion effectively highlights the complex and intertwined challenges facing Mediterranean states. The civil wars in Syria and Libya have had significant implications for regional stability, leading to the proliferation of arms, refugee crises, and increased terrorist activity. These conflicts often spill over into neighboring countries, exacerbating tensions and creating security dilemmas. The instability in North Africa, driven by economic challenges and political unrest, contributes to the rise of extremist groups. As these groups exploit vulnerabilities, they pose threats not only to regional security but also to European nations, prompting increased military and humanitarian responses. Countries in the Mediterranean face a spectrum of terrorist threats, from organized groups like ISIS to localized factions. These threats necessitate robust counterterrorism strategies and cooperation among nations to safeguard citizens and maintain public order.

Israel's security concerns are multifaceted, with Iran representing a significant existential threat due to its nuclear ambitions and support for militant groups like Hezbollah. The regional arms race and Iranian influence in Syria further complicate this landscape. Groups like Hamas present immediate security challenges through rocket attacks and military incursions. The ongoing conflict requires Israel to maintain a high state of alert and to engage in complex military and diplomatic strategies. This longstanding conflict remains a focal point for regional and global tensions. The failure to achieve a lasting peace agreement contributes to cycles of violence and instability, affecting not only Israel and Palestine but also the broader Arab world.

Last but not least, the division of Cyprus, with Turkey's occupation of the northern part, highlights the challenges of territorial disputes and national identity in the region. This issue continues to draw international attention and complicate relations between Turkey, Greece, and the European Union. Turkey's deployment of naval forces to escort its gas exploration vessels in the Eastern Mediterranean—especially in areas claimed by Cyprus and Greece—reflects its strategic objectives to expand its influence and secure energy resources. This aggressive posture is part of Turkey's broader ambition to assert its rights over the energy-rich waters of the Mediterranean. Turkey's actions are contentious, as they often occur without the consent of the countries whose exclusive economic zones (EEZ) are being violated. The Turkish government argues that its actions are justified based on historical claims and the rights of the Turkish Cypriots, yet these justifications are not widely accepted internationally.

The presence of Turkish naval forces in disputed waters has heightened tensions between Turkey, Greece, and Cyprus. Such maneuvers provoke a strong response from these nations, which view Turkey's actions as aggressive and a violation of international law, particularly the United Nations Convention on the Law of the Sea (UNCLOS). Turkey's assertive naval deployments have galvanized a unified response from Greece and Cyprus, leading to increased military readiness and calls for support from the European Union and NATO. Many European countries have expressed solidarity with Greece and Cyprus, condemning Turkey's actions and advocating for adherence to international law. The situation has led to the formation of new alliances and partnerships in the region. Countries like Egypt, Israel, and Greece have strengthened their military cooperation and diplomatic ties to counter Turkey's assertiveness and protect their interests in the Eastern Mediterranean.

The dynamics of great power competition significantly influence stability in the Mediterranean region. Russia's strategic maneuvers, particularly in relation to its interests in the Black Sea and support for the Assad regime in Syria, demonstrate its efforts to expand its influence and counter Western power. Since 2012, Russia has actively deployed a fleet to the Mediterranean as part of its reconstituted Mediterranean Squadron. This presence serves multiple purposes: projecting power, securing maritime access, and enhancing its operational capabilities in a critical area. Moscow has framed its naval deployments as a response to NATO's strategic missile defense initiatives and other military activities by

European nations. This justification reflects Russia's broader narrative of encirclement and the need to safeguard its interests against perceived threats from the West.

Russia's support for the Assad regime is a cornerstone of its strategy in the Mediterranean. By maintaining a foothold in Syria, Russia secures access to critical maritime routes and establishes itself as a key player in Middle Eastern geopolitics. The establishment of naval and air bases in Syria enhances Russia's ability to project power in the region and reinforces its influence over regional actors. This military presence allows Russia to operate more freely across the Mediterranean and assert its interests in conflicts involving key players like Turkey and Iran. Its aggressive posture in the Mediterranean and its near abroad (e.g., the Baltics, Georgia, and Ukraine) contribute to regional instability. These actions have heightened tensions between NATO and Russia, compelling European states to reassess their security strategies and military readiness. Also the use of cyber-attacks and hybrid warfare tactics complicates the security landscape further. These activities can destabilize governments, influence public opinion, and create friction among allies, adding layers of complexity to the geopolitical environment.

In light of Russian assertiveness, EU and NATO member states have increased their military cooperation and enhanced their presence in the Mediterranean. This includes joint naval exercises, intelligence sharing, and bolstering defense capabilities in Eastern Europe and the Black Sea. European nations are also engaging in diplomatic efforts to mitigate tensions with Russia while maintaining a unified stance against aggression. This balancing act is crucial for preserving stability while addressing security concerns.

The Mediterranean is not only a theater for U.S.-Russia competition but is also increasingly influenced by China's growing presence. As China expands its Belt and Road Initiative into Europe and the Mediterranean, its interests will intersect with those of Russia and the West, adding further complexity to regional dynamics. The interplay of great power interests, regional conflicts, and national ambitions raises the risk of miscalculations and escalation. Unchecked tensions could lead to conflict scenarios that disrupt maritime trade and regional security.

International tensions are indeed acutely focused on sea straits, particularly in the Mediterranean, where key geopolitical choke points—like the Suez Canal, the Bosphorus-Dardanelles Strait, and the Strait of Gibraltar—remain vital for global trade, military

strategy, and diplomatic maneuvering. These straits are critical maritime chokepoints that not only facilitate the flow of goods and resources but also act as flashpoints for international rivalry and regional tensions.

The Suez Canal is one of the most strategically significant waterways globally, connecting the Mediterranean Sea to the Red Sea, and by extension, Europe to Asia. Its importance stems from its ability to reduce the travel distance for ships by thousands of miles, avoiding the longer route around the southern tip of Africa. The Sinai Peninsula, adjacent to the Suez Canal, has been a hotspot for terrorist activity, particularly from groups like ISIS and other militant factions. While these threats have not directly targeted the canal, the persistent instability in the region keeps the Suez vulnerable. Egypt's military presence and international support are critical to safeguarding this vital artery of global trade. Any disruption in the Suez Canal would have severe consequences for international shipping, raising concerns about the security of energy supplies and goods transiting between Europe, the Middle East, and Asia. The blockage of the Suez in 2021 by the *Ever Given* container ship illustrated how fragile this chokepoint is, causing massive economic losses.

The Bosphorus-Dardanelles Strait, also known as the Turkish Straits, connects the Black Sea to the Mediterranean through Aegean Sea, making it a critical route for countries like Russia and Ukraine to access global markets. Turkey controls the Bosphorus and Dardanelles under the Montreux Convention, which grants it the ability to regulate the transit of military ships from non-Black Sea states. This control gives Turkey significant leverage in regional politics. At times of heightened tensions, such as the 2014 annexation of Crimea by Russia and during conflicts in Syria, speculation has grown over whether Turkey might restrict Russian naval movements through the strait. This would have serious military and economic consequences, as Russia relies on this passage for access to warm-water ports and to project power into the Mediterranean. Turkey's ability to close the strait to adversaries gives it significant geopolitical leverage, especially in dealings with both NATO allies and Russia. Tensions between Ankara and Moscow, while fluctuating, are shaped by this maritime reality. During crises, this control of the straits allows Turkey to play a pivotal role in balancing regional power dynamics.

The Strait of Gibraltar, separating the Iberian Peninsula from North Africa, is the western entrance to the Mediterranean and a key gateway for ships traveling between the Atlantic and the Mediterranean. The territorial dispute between Spain and the United Kingdom over Gibraltar is a long-standing issue, with Spain claiming sovereignty over the territory while the UK maintains control of the strategically located Rock of Gibraltar. While the dispute has remained mostly diplomatic, it represents a significant point of friction between two NATO allies. Gibraltar's location makes it strategically valuable for monitoring maritime traffic in and out of the Mediterranean. The British naval base there ensures a continuous Western presence, adding to its importance as a choke point for controlling access to the Mediterranean. It also holds importance for commercial shipping, as much of Europe's oil, gas, and goods transit through the Strait of Gibraltar.

The struggle for control or influence over these chokepoints highlights broader great power competition. In the Mediterranean, this includes not only regional actors like Greece, Turkey and Egypt but also global powers like the U.S., Russia, and China. Each of these nations recognizes the strategic importance of controlling or influencing these sea passages. Navies play a crucial role in managing tensions around these chokepoints. Regular exercises, freedom of navigation operations (FONOPs), and naval diplomacy are essential tools for ensuring that these strategic waterways remain open and secure. Allied naval forces, particularly NATO, maintain a persistent presence in the Mediterranean to safeguard the free flow of maritime traffic through these straits.

The breadth and diversity of tensions in the Mediterranean offer a critical learning environment for global maritime security strategies, given that the region serves as a microcosm for wider geopolitical dynamics that are likely to be replicated in other parts of the world. The variety of conflicts and responses to them provide valuable insights into how future threats might unfold, particularly as maritime power continues to be an essential element of global security and international relations. Should terrorist groups escalate their efforts to include maritime attacks in the Mediterranean, it could provide crucial information on tactics, such as targeting critical infrastructure (ports, ships, undersea cables) or hijacking vessels. These potential scenarios could then be applied to other global hotspots where maritime chokepoints are similarly vulnerable, such as the Straits of Malacca or the Bab-el-Mandeb. Those terrorist activities would serve as a model for other regions to preemptively address vulnerabilities in their maritime defense strategies. The use

of asymmetric warfare—where non-state actors challenge state forces—may influence the tactics that groups such as Al-Qaeda, ISIS, or others could adopt, particularly in areas like Southeast Asia or East Africa where maritime threats are also growing.

The Mediterranean features multiple regional rivalries, including the Israeli-Palestinian conflict, tensions between Cyprus and Turkey, and Greece's disputes with Turkey over maritime boundaries. These conflicts offer lessons that could be applied to other contested maritime zones, such as the South China Sea or the Taiwan Strait. The Israeli-Palestinian dispute shows how non-state actors and state militaries can interact in tightly contested regions. Any maritime actions between Israel and Hamas, for instance, provide a study in asymmetric naval warfare, which could be informative for other areas where small states or non-state actors challenge more powerful nations.

Tensions over energy exploration in the Eastern Mediterranean between Greece, Cyprus, and Turkey, especially involving exclusive economic zones (EEZs), could serve as a precedent for similar disputes in the South China Sea. In both regions, the deployment of naval forces to enforce or contest claims underpins broader diplomatic and economic goals. For instance, China's island-building and militarization of the South China Sea mirror some of the strategies employed by Turkey to assert its maritime claims. The geopolitical maneuvering between Greece, Cyprus, and Turkey mirrors China's approach in the South China Sea, where Beijing has engaged in aggressive tactics to assert control over disputed territories. Similarly, in the Taiwan Strait, tensions between China and Taiwan—and their potential for military confrontation—echo the strategic calculations seen in the Eastern Mediterranean.

Russia's expanded naval presence in the Mediterranean offers a lens through which to examine great power competition at sea. Since 2012, Russia's reconstituted Mediterranean Squadron has demonstrated its intent to maintain a foothold in a critical region, a strategy that can be compared to its activities in the Black Sea and the Arctic. These maneuvers provide insights into how other world powers, such as China or India, might act in contested waters elsewhere in the future. Russia's continued naval presence in the Mediterranean, with a focus on projecting power and securing maritime access, provides a preview of how other world powers may seek to balance the United States and its allies in critical areas like the Pacific Ocean. For example, China's development of a blue-water

navy to exert influence in the Indo-Pacific region shares similarities with Russia's moves to preserve its interests in Europe's southern flank. Russia's Mediterranean maneuvers also give clues about how future confrontations between great powers might unfold, particularly in areas where U.S. and NATO forces have established naval dominance. This pattern of interactions, from the Mediterranean to the Pacific, will be central to understanding the future balance of power in global maritime disputes.

The Mediterranean is a key battleground for managing both humanitarian and security issues, ranging from migration to piracy. The lessons learned from these crises could be critical for managing similar challenges elsewhere, particularly in regions where global sea routes converge. The multinational efforts to manage the massive migration crisis in the Mediterranean serve as a model for future responses to displacement caused by climate change or conflict in other regions. The increasing importance of humanitarian naval operations—rescue missions, refugee transport, and managing displaced populations—will likely be mirrored in areas like Southeast Asia or the Indian Ocean, which could experience similar patterns of migration due to rising sea levels or political unrest. While piracy has declined in areas like the Gulf of Aden, it remains a significant threat in parts of the Mediterranean, offering valuable lessons for combating such issues elsewhere. This could apply to future anti-piracy efforts in Southeast Asia, the Gulf of Guinea, or even the Caribbean, as maritime traffic increases and economic hardships exacerbate piracy risks.

The transformation of the maritime space into a battleground for energy and mineral resources has significantly altered the strategic importance of the seas, expanding beyond traditional naval considerations of free passage and control of maritime chokepoints. In the contemporary context, control over maritime spaces has increasingly been linked to the exploitation of natural resources, such as oil, gas, and rare minerals found in offshore areas and deep-sea environments. As nations seek to secure their economic futures, maritime territory rich in these resources has become an extension of sovereign power and national wealth. Disputes over Exclusive Economic Zones (EEZs) and continental shelf boundaries now often revolve around the potential for lucrative energy resources. Offshore drilling platforms have become strategically significant, as they represent critical infrastructure for energy production. In regions like the Eastern Mediterranean, the South China Sea, and the Arctic, energy resources found in contested maritime zones have heightened tensions and

led to military build-ups. Beyond oil and gas, the extraction of valuable minerals from the seabed, such as cobalt, manganese, and rare earth elements, is emerging as another source of national wealth. These resources are critical for modern technologies, including renewable energy systems and advanced electronics, which adds further strategic value to controlling maritime areas. As these resources become scarcer on land, competition for control over the sea floor will likely intensify.

The new maritime reality, where the sea itself is seen as a source of wealth, poses unique challenges to maritime safety. Traditional naval doctrines, focused on controlling sea lanes and denying access to enemy shipping, do not fully address how to manage and protect critical offshore energy infrastructure or how to engage with such assets during times of conflict. For instance, naval strategists have yet to develop clear doctrines on what to do with enemy-controlled offshore drilling platforms or seabed mining operations during wartime. Offshore energy platforms and seabed mining operations are likely to become high-priority targets in any future naval conflict. However, the legal and strategic framework for dealing with such assets remains unclear. Do they qualify as civilian infrastructure, and would targeting them violate international law? Or are they legitimate military targets because of their critical role in national economies and wartime logistics? This ambiguity needs to be addressed in future naval doctrines, particularly as energy infrastructure becomes increasingly intertwined with national security. Just as nations protect their maritime territories with naval forces, they will also need to protect their offshore energy infrastructure. This may involve not only physical defenses, such as naval patrols or anti-missile systems, but also cyber defenses to prevent sabotage or disruption of operations (Tsailas, 2024). Conversely, nations may develop specialized tactics and technologies for disabling or capturing enemy offshore platforms, either to deny their use or to exploit them for their own economic benefit.

Building a Navy for the 21st Century

The Navy must prioritize the development and integration of emerging technologies. This includes not only unmanned systems (both aerial and underwater) and AI but also advancements in missile defense, hypersonic weapons, and directed energy systems. Investments in cyber warfare capabilities are essential to defend naval assets from digital

threats. History shows the importance of controlling vital maritime chokepoints. The Navy should focus on ensuring freedom of navigation in critical regions such as the South China Sea, the Persian Gulf, Mediterranean Sea and the Arctic. This requires a global presence and the ability to rapidly deploy forces to secure these routes in times of crisis.

Global maritime security increasingly depends on alliances and partnerships. The 21st-century Navy must work closely with allied nations and regional partners, strengthening cooperation through joint exercises, intelligence sharing, and multilateral maritime operations. Building a network of strategic bases and partnerships will enhance operational reach and resilience. The Navy must prepare for emerging challenges posed by climate change, such as rising sea levels and the opening of new shipping routes in the Arctic. This includes developing new infrastructure, icebreaking capabilities, and the ability to operate in increasingly contested and harsh environments. The future of naval warfare will be increasingly multi-domain, with conflicts not only taking place on the surface but also in the cyber, space, and undersea domains. The Navy must be able to integrate and coordinate operations across these domains to maintain superiority in modern maritime conflicts.

In a rapidly evolving geopolitical and technological landscape, building a Navy for the 21st century requires a fundamental rethinking of strategy, capability, and operational flexibility. The modern Navy must be equipped not only to protect national interests but also to maintain global stability, ensuring freedom of navigation, securing vital trade routes, and deterring adversaries in an increasingly contested maritime domain. Key components of building a 21st-century Navy include technological innovation, strategic adaptability, enhanced power projection, and global partnerships.

Key Components for a 21st-Century Navy:

1. Technological Innovation and Modernization

The 21st-century Navy must embrace emerging technologies to stay competitive and maintain superiority in maritime operations. Several cutting-edge technologies will shape future naval capabilities:

- **Unmanned Systems:** Autonomous drones, both aerial (UAVs) and underwater (UUVs), will play a crucial role in surveillance, reconnaissance, and combat operations. These systems reduce risk to human operators and enhance operational reach, enabling the Navy to gather intelligence and engage adversaries in difficult environments.
- **Artificial Intelligence (AI) and Big Data:** AI can optimize decision-making, enhance real-time threat analysis, and streamline logistics. AI-driven systems will allow the Navy to process large amounts of data from sensors, satellites, and radar to predict threats and guide strategic and tactical responses.
- **Hypersonic Weapons:** With speeds exceeding Mach 5, hypersonic missiles can penetrate current missile defense systems. Developing both offensive and defensive hypersonic capabilities will be critical to maintaining a competitive edge in modern naval warfare.
- **Directed Energy Weapons:** Laser and electromagnetic railguns offer the potential for cost-effective and high-precision engagement of threats such as incoming missiles or drones. These systems can significantly enhance the Navy's defensive capabilities.
- **Cyber Warfare:** As digital systems control much of the naval infrastructure, securing cyber networks is as critical as securing ships and ports. Offensive and defensive cyber capabilities will be essential to protect naval assets from cyberattacks and disrupt enemy operations.
- **Green Technology:** Environmental sustainability will also be a priority. The Navy should invest in renewable energy sources for ships, reducing reliance on fossil fuels and increasing operational endurance while cutting emissions.

2. Flexibility and Multi-Domain Operations

Modern naval forces must be capable of conducting operations across multiple domains—air, sea, undersea, space, and cyber.

- **Multi-Domain Integration:** The Navy must integrate capabilities across these domains to ensure coordinated responses in complex and contested environments. Naval vessels, aircraft, submarines, satellites, and cyber assets need to operate in

concert, sharing data in real time to enhance situational awareness and decision-making.

- **Littoral and Blue-Water Operations:** The Navy must retain its ability to operate in both littoral (close to shore) and blue-water (open ocean) environments. In littoral regions, smaller, agile ships equipped with advanced sensor suites and precision weapons are essential for operating in congested and contested coastal waters. At the same time, larger fleets must remain prepared for deep-sea engagements and power projection.
- **Submarine and Anti-Submarine Warfare:** Submarines remain a critical asset in deterrence and stealth operations. Anti-submarine warfare (ASW) must also be a priority, as adversaries continue to invest in submarine technologies. The ability to detect and neutralize submarines will be crucial to maintaining control of the seas.

3. Power Projection and Global Presence

A global Navy must be able to project power far beyond its shores, ensuring deterrence and rapid response to crises. Key elements of power projection include:

- **Aircraft Carrier Strike Groups:** Aircraft carriers continue to be vital for projecting power, allowing for the deployment of air assets anywhere in the world. Modernizing carriers with advanced technologies, including UAVs and advanced strike aircraft, will extend their relevance and effectiveness.
- **Expeditionary Capabilities:** Amphibious assault ships and rapid-response naval forces will be necessary to deploy troops and equipment swiftly during humanitarian crises, conflicts, or deterrence operations. Expeditionary forces must be equipped to operate in contested environments and respond to hybrid threats.
- **Forward-Deployed Fleets:** To maintain a persistent global presence, the Navy should continue positioning fleets strategically across key regions. Forward deployment ensures rapid response to threats and facilitates diplomatic engagement, reassuring allies and deterring potential adversaries.

4. Strategic Maritime Chokepoints and Sea Lines of Communication (SLOCs)

Control of vital maritime chokepoints—such as the Strait of Hormuz, the Suez Canal, and the South China Sea—is critical to maintaining global trade and securing strategic advantages. Securing Sea Lines of Communication (SLOCs) will be essential to protect the global economy, as over 80% of international trade is transported by sea.

- **Chokepoint Security:** The Navy must ensure the security of these strategic passages, where adversaries may seek to disrupt global trade or military movements. This requires a combination of naval presence, regional partnerships, and surveillance capabilities.
- **Freedom of Navigation Operations (FONOPs):** Regular FONOPs demonstrate commitment to the international principle of freedom of the seas, especially in contested regions where territorial claims threaten access to vital maritime routes.

5. Alliances and Partnerships

Building and maintaining strong international alliances is essential for a 21st-century Navy. Global maritime security cannot be guaranteed by one nation alone. Cooperation, interoperability, and joint operations with allied and partner nations are crucial.

- **Bilateral and Multilateral Exercises:** Regular joint exercises with allied navies, such as those with NATO, ASEAN, and Quad members (U.S., Japan, India, Australia), enhance coordination and readiness. These partnerships help build trust and operational cohesion in complex environments.
- **Capacity Building and Regional Cooperation:** Supporting regional partners with training, equipment, and infrastructure strengthens collective maritime security. Partnering with nations along critical maritime routes ensures a stable, rules-based international order at sea.
- **Interoperability:** The Navy must invest in systems that allow seamless communication and operational integration with allied forces, enhancing combined mission effectiveness. Standardizing equipment and operational procedures across fleets will improve coordination and reduce response times during joint missions.

6. Adapting to Climate Change and Environmental Shifts

Climate change is reshaping the maritime domain in profound ways. Rising sea levels, more frequent extreme weather events, and the opening of new Arctic shipping routes demand that the Navy be prepared to adapt to these new realities.

- **Arctic Operations:** As polar ice melts, new shipping routes and resource competition will emerge in the Arctic. The Navy must enhance its capability to operate in extreme cold and ice-covered waters, developing icebreakers, cold-weather gear, and Arctic-ready ships.
- **Disaster Relief and Humanitarian Assistance:** Naval forces will increasingly be called upon to respond to natural disasters, especially in coastal regions. Expanding humanitarian and disaster response capabilities will ensure the Navy is able to provide critical aid during global crises.

Conclusion

Building a Navy for the 21st century is a multifaceted challenge that requires strategic foresight, technological innovation, and adaptability to an evolving global landscape. By integrating advanced technologies, ensuring multi-domain operational capability, maintaining a global presence, and fostering international partnerships, the modern Navy will be well-positioned to safeguard national interests, protect global trade, and promote stability on the high seas. As threats become more complex and diverse, the Navy must evolve to face both traditional and emerging challenges, ensuring it remains a dominant force in securing maritime security for the decades to come.

The changing maritime environment underscores the need for the modernization of naval forces and a renewed focus on multilateral maritime cooperation to address emerging challenges. As competition for control over maritime zones intensifies, especially due to the growing importance of energy and mineral resources, naval forces must adapt to this new reality. While traditional naval power focused on sea control, freedom of navigation, and defense against enemy fleets, today's environment demands a strategic shift toward safeguarding economic assets and vital infrastructure in contested waters. One of the most significant shifts in modern naval strategy is the increased competition over maritime zones that hold valuable energy and mineral resources. Exclusive Economic Zones (EEZs),

territorial waters, and continental shelves have become focal points for state competition due to their potential for oil, gas, and other valuable minerals.

Many maritime disputes, such as those in the South China Sea or the Eastern Mediterranean, are driven by the quest for control over undersea oil and gas reserves. The ability to exploit these resources can bring significant national wealth, making these zones highly strategic. Consequently, naval forces must be prepared to protect national interests in these areas, including offshore drilling platforms, pipelines, and exploration activities. While the traditional focus of naval warfare was sea control and fleet-on-fleet engagements, modern navies must now prepare for missions that involve protecting resource extraction infrastructure. This includes defending offshore oil rigs, gas platforms, and subsea pipelines from both state and non-state actors, including sabotage, attacks, and cyber threats.

The protection of offshore infrastructure, such as oil platforms, is a new and underdeveloped area in naval strategy. These structures are critical economic assets, but they are highly vulnerable in times of conflict, especially given their isolation and exposure in vast ocean spaces. Offshore platforms, being fixed and isolated targets, are particularly vulnerable to adversarial control or destruction during a conflict. Despite this, modern naval doctrine has not fully addressed how these facilities should be protected in wartime. It is likely that adversaries would seek to disrupt or seize such platforms, potentially cutting off vital energy supplies and inflicting severe economic damage. To protect these assets, navies will need to develop layered defense strategies, incorporating surface vessels, submarines, unmanned systems, and air assets. Additionally, integrating advanced surveillance and early warning systems, along with cyber defense measures to prevent attacks on digital control systems, will be crucial. Protecting offshore infrastructure also involves navigating complex legal and diplomatic frameworks. Operations may require coordination with international bodies like the United Nations (UN) to ensure compliance with maritime law, particularly the United Nations Convention on the Law of the Sea (UNCLOS), and to manage disputes through peaceful negotiations where possible.

Given the complexity of modern maritime security threats, no single nation can address these challenges alone. Multilateral cooperation, particularly with international partners like the United Nations (UN), NATO, and regional maritime organizations, will be essential. The UN, particularly through UNCLOS, provides the legal framework for

resolving maritime disputes and managing the use of ocean resources. Naval forces will need to operate within this framework, ensuring that maritime claims and activities respect international law while defending national interests. Diplomacy and legal strategies will be critical in preventing conflicts over resources from escalating into military confrontations. NATO plays a central role in ensuring collective maritime security, particularly in the North Atlantic and Mediterranean. NATO navies regularly engage in joint exercises and operations aimed at ensuring maritime security, countering piracy, and safeguarding critical infrastructure. Enhanced cooperation within NATO, including sharing intelligence and resources, will be vital to addressing the emerging threats in contested waters. Beyond global institutions like the UN and NATO, regional maritime cooperation is equally important. In contested regions like the Indo-Pacific or the Arctic, bilateral and multilateral cooperation with regional partners will be essential for maintaining stability and ensuring that maritime disputes do not escalate into armed conflict.

Navies in the 21st century must confront a range of new threats, many of which were not anticipated by theorists of naval warfare in previous centuries. Modern conflicts increasingly involve "gray zone" operations, where states use unconventional methods—such as cyberattacks, economic coercion, and proxy forces—to achieve objectives without engaging in open warfare. Offshore infrastructure is particularly vulnerable to these tactics. Navies must be prepared to respond to non-traditional threats, including sabotage and cyberattacks on critical energy assets. With the growing reliance on digital systems to control offshore drilling platforms, pipelines, and shipping operations, cybersecurity has become a central concern. Attacks on these systems can disrupt operations, compromise safety, and cause significant economic damage. Naval forces will need to incorporate cyber defense into their overall maritime security strategy. Climate change is increasingly affecting maritime security. Rising sea levels, the opening of new Arctic sea routes, and increased storm activity can threaten maritime infrastructure and complicate naval operations. The changing environment may also intensify disputes over resources, particularly as shrinking ice caps expose previously inaccessible oil and gas reserves.

The maritime environment has evolved, and with it, the role of naval forces in protecting national and global interests. The control of maritime zones, particularly those rich in energy and mineral resources, has become a strategic priority for many nations. Modernizing naval forces to address these new challenges requires a focus on technological

innovation, multilateral cooperation, and a comprehensive strategy to protect critical offshore infrastructure. By working closely with international organizations like the UN and NATO, and coordinating with regional maritime forums, navies can effectively address the broad spectrum of risks and threats in the 21st-century maritime domain.

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