

# Security at Sea: A Turning Point in Maritime

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## Summary

Since the end of the Second World War, the United States has been the pre-eminent naval power and ultimate guarantor of global maritime security. It has also been one of the primary beneficiaries of the global maritime economic system, which in turn resourced its naval strength and increased the incentive to use that strength to protect the freedom of the seas. But a number of global changes, all likely beyond the United States' control, are driving new dynamics in both security and economics in the maritime domain. These challenges include the return of great power competition at sea, the maritime consequences of climate change, increased pollution, the rapid rise of illicit trade and resource exploitation, and the erosion of maritime governance.

These challenges are dynamic and inter-related—a change in one will often drive second and third order changes in the others. The United States has proven historically to be resilient and adaptive in the face of great challenges, and the maritime community has traditionally been a leader in innovation, collaboration, and positive-sum solutions. To meet the challenges of today and tomorrow, the United States should double down on those strengths, and work with allies to maintain and strengthen the rules-based international maritime system. Moreover, the United States should be a leader in envisioning changes to that system that will ensure it equitably meets the needs of all, accounts for the changes being driven by climate change and pollution, and anticipates a near-term future where autonomous systems will play a major role in the ecosystem.

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## The Return of Great Power Competition

After seven decades in which American naval superiority ensured a free, international maritime commons, great power competition has once more turned the oceans into an arena where autocratic powers like China, Russia, and Iran are attempting to limit longstanding freedoms of navigation and overturn the rule of international law. These attempts are creating dangerous flashpoints in areas including the South China Sea, Taiwan Strait, the Senkaku Islands, Strait of Hormuz, and the Bab al Mandeb, where increasingly aggressive action by maritime militias, coast guards, and navies could quickly—whether intended or not—devolve into open conflict.

While the news frequently covers issues in the Strait of Hormuz, South China Sea, and Taiwan, the waters around the Senkaku Islands are perhaps even more dangerous. The Senkakus (called Diaoyu by China), are a group of islands roughly 100 miles northeast of Taiwan that once supported a Japanese fishing community, but have been uninhabited since the 1940s.

They are claimed by both China and Japan but administered by the Japanese, and they have all the elements needed for an accidental, but significant, maritime clash. Both sides have substantial and capable maritime forces that now regularly operate in close proximity to the islands (and each other); both have stoked public emotion and leveraged the issue for domestic political advantage which has resulted in the rise of vocal nationalist groups in both countries dedicated to the cause of ‘national sovereignty’ with regard to the Senkakus. The United States, for its part, has publicly stated that the Senkakus are considered Japanese territory under the U.S.-Japan alliance treaty. Were a clash to occur here, the forces and incentives are already in place for it to escalate very quickly and for events on the sea to rapidly evolve into a situation which neither Tokyo nor Beijing could easily de-escalate.

## Climate Change

Climate change is also negatively impacting the maritime in a number of ways. Storms are more frequent and more powerful, causing increased damage to coastal and island communities. If the sea warms just a few more degrees, the power of its storms could double and result in large areas of the sea and its adjacent coasts becoming unusable for living, shipping, or resource extraction. Melting ice caps in the Arctic and Antarctic are opening new shipping lanes and presenting new geopolitical challenges as nations seek to impose control and extract resources in these areas. From a policy perspective, the Arctic is particularly interesting. Russia, Canada, and the United States all have territorial claims in the Arctic, and China has declared itself a 'Near Arctic Nation' to assert rights to navigation and resource extraction there.

Melting ice is also causing sea levels to rise and changing the ocean's salinity. The collapse of Antarctica's Thwaites "doomsday" glacier alone would result in eventual sea level rise of approximately two feet. Because the oceans absorb the majority of the additional CO<sub>2</sub> in our atmosphere ( about 90 percent), the seas are also becoming more acidic. These changes collectively have devastating effects on ocean life across the entire food chain.

Current ice melting patterns will result in the sea lanes near Russia becoming navigable for several months out of the year in the near future (they are currently navigable for several weeks each year, with 50-100 ships making the journey); the lanes near Canada are more restricted. The Arctic route saves up to 18 days (40 percent) on transits between the Pacific and Atlantic oceans. Although they have yet to enforce them, Russia is already taking steps to establish sovereign control of the navigable areas, such as requiring prior notification of passage, in order to establish precedence which may prevent these waters from being recognized as a free-to-all international strait under UN rules.

## The Cascading Effects of Pollution

In addition to climate change, pollution also poses a serious threat to more than just ocean life and sustainability. At the current pace, there will be more plastic than fish (by weight) in the oceans by 2050. Fertilizer run-off creates massive algae blooms that result in large areas of the sea having insufficient oxygen to support other types of sea life. And chemicals entering the ocean have serious, negative impacts on human health ashore as more than 20 percent of the protein that humans rely upon comes from the sea.

Pollution also has indirect, cascading effects on other areas of concern. Piracy in the Horn of Africa region provides an unfortunate illustration of how pollution, security, and economics are all inter-related. As the waters off Somalia were increasingly polluted, they could no longer support the fish stocks that local communities had relied on for millennia. Consequently, fishermen had to venture further and further offshore to find their catch. Eventually, the cost in fuel, time, and risk outweighed the value of the catch they could gather, so they had to turn to other means of survival and applied their maritime skills to crime. Piracy received the most attention in the West due to the impact on international shipping, but Somali maritime crime extended to drug smuggling across the region and the movement of Al Qaida affiliated terrorists from the Arabian peninsula to Africa. This led to a rise in terrorism and organized crime in Somalia and adjacent states with severe security and economic impact ashore. As the area affected by piracy increased and the Western response became more aggressive, the United Nations arbitrarily extended its warning zone all the way to India's west coast. Despite the fact that no piracy had occurred within many hundreds of miles of India, insurance companies raised rates for all shipping entering the UN warning area, causing significant economic damage to trade in Mumbai and other Indian ports.



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## Trade and Governance

Approximately 80 percent of Earth's population lives near a coast (Delhi and Mexico City are the only non-coastal mega-cities) and 90 percent of our international trade (by volume) moves by sea. The flow of energy, goods, raw materials, people, and livestock all rely on safe and efficient maritime transportation. As demonstrated by the post-Covid supply chain disruptions and the grounding of the vessel Evergiven in the Suez Canal in 2021—an event that cost an estimated \$20 billion—this complex system of systems is not as robust or resilient as we believed. The maritime world has always been loosely governed, if at all. It is not uncommon for ships to be owned by a company in one country, operated by a company in another, flagged in a third, insured in a fourth, and crewed by sailors of a dozen nationalities. The laws, conventions, and customs that govern the maritime domain have not kept pace with the realities and complexity of modern times.

Several major participants in the international maritime system—most notably China—are actively working to subvert, weaken, and reshape it to their own advantage. And technological changes more substantial than any seen since the transition from sail to steam, such as automation of shipping, are quickly approaching. Substantial modernization is needed if the United States and its allies are to continue to reap the benefits of maritime trade.

## Bottom Line

Challenges in the maritime domain are substantial, complex, and inter-related. Directly or indirectly, they impact nearly every person on the planet. Maritime nations have historically led the world in technological innovation, international collaboration, efforts toward conservation, and the development of international law and policy that balances human economic activity with sustainability. The historical record, though, is no guarantee of future success. The U.S. and its global partners should actively work to maintain the existing rules-based international maritime system and strengthen it through revisions that will ensure it fairly meets the needs of all, accounts for the changes being driven by climate change and pollution, and anticipates a near-term future where autonomous systems will play a major role in the ecosystem.

Because these challenges span the scope of security, economics, technology, and ecology, and because the laws, rules, and mores of the modern maritime world are largely codified through the UN system (the International Maritime Organization in particular), UN reform should be the initial focus. Making the UN more responsive by ending the veto of the permanent members of the Security Council is an important place to start.

The UN should also become more representative by enhancing the role that regional maritime institutions play in developing rules, and encouraging maritime partners like Japan to match China's financial contributions to gain influence (and encouraging China to match U.S. financial contributions). The U.S. and its global partners should also focus on enhancing the UN's role in changing maritime behaviors that negatively impact climate and sustainability would be a good start. China and Russia will certainly oppose, and probably defeat, these initiatives in the Security Council. But championing these changes and forcing public opposition of those on the wrong side of history is, in itself, beneficial. It will raise awareness of the importance of maritime issues in the public forum, and force those who oppose changes beneficial to all to self-identify as Mercantilist revisionaries that place their narrow self-interests above all else. The challenge is daunting, but the maritime nations are well suited, and strongly incentivized, to meet it.

## About the Author

**Scott Tait** is an affiliated researcher at IGCC and executive director of the IGCC-incubated National Security Innovation Catalyst, located at UC San Diego. Catalyst improves the linkages and information flow between San Diego's national security community, entrepreneurial companies with dual-use technologies, academia, investors and policy decision-makers. Tait served in the U.S. Navy for 27 years. His assignments included positions leading strategy, policy, and innovation efforts, working directly for 3 and 4-star commanders in the Indo-Pacific region and Washington, D.C. He also held senior policy positions, with a focus in Indo-Asia, on the Joint Chiefs of Staff (J-5), Pacific Fleet staff, and U.S. Seventh Fleet staff. At sea he served in Cruiser and Destroyer ships, commanding USS Mustin (DDG 89) and, most recently, USS Zumwalt (DDG 1000). Tait holds master's degrees from Stanford University in international policy and the U.S. Naval War College in national security and strategic studies. At the U.S. Naval War College, he was a member of the Halsey Alfa Advanced Research and Wargaming Project.

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