

# A Conflict-Ready Coast Guard Is Vital to U.S. Success in a Long War with China

*Brent D. Sadler*

## KEY TAKEAWAYS

The U.S. Coast Guard will be a vital element in the next global war, especially for securing military logistics and ensuring continued safe passage for shipping.

The last time the Coast Guard supported blue-water global wartime naval operations was during World War II, and it likely lacks that capacity and capability today.

A dedicated and well-resourced program is needed to ensure that the Coast Guard and Navy are able to quickly transition to, and sustain, a wartime footing together.

A consideration of the Coast Guard's readiness for war puts its motto *semper paratus* (always ready) to the test. Should the U.S. and China come to blows, the fighting would be prolonged and global, and the homeland would likely not be spared bloodshed. Winning such a fight would require sustaining a wartime economy and a fighting force able to prevent a Chinese Communist victory.

The U.S. Coast Guard will be a vital element in such a fight, especially with regard to securing military logistics and ensuring continued safe passage for foreign shipping, which would be essential for a wartime economy. The last time the Coast Guard supported blue-water global wartime naval operations was during World War II, and the assumption that it currently has the capacity and capability—including the necessary speed—to prevail in such a conflict rests on shaky ground.

---

This paper, in its entirety, can be found at <http://report.heritage.org/bg3695>

The Heritage Foundation | 214 Massachusetts Avenue, NE | Washington, DC 20002 | (202) 546-4400 | [heritage.org](http://heritage.org)

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

Despite historical lessons and the acknowledged dangers of a potential war with China, the U.S. Navy and Coast Guard are not adequately practicing, nor are they fielding, the capabilities needed to fight together effectively. And, such a fight could rapidly evolve from a variety of escalatory paths—to include a gray zone (neither peace nor outright war) confrontation. Today’s Coast Guard is increasingly playing a role in great-power competition, and it, too, must be ready for such showdowns as well as war. A dedicated and well-resourced program is needed to ensure that these two military services are able to dominate gray zone operations and quickly transition to, and sustain, a wartime footing together.

## Background

The Coast Guard has a long history of fighting the nation’s wars alongside the Navy. (See the appendix). As with major conflicts of the past, the next conflict likely will be global, and will certainly require defending U.S. coastlines and critical shipping lanes. Less certain is the readiness of the Navy and the Coast Guard to transition from a peacetime confrontation to wartime conditions. Given the nature of the threat from China, the speed and effectiveness with which the Coast Guard’s cutters and aircraft could be armed and readied for combat would be critical. This is not a new concern but has been seemingly forgotten.

The Defense Department’s 20-plus-year focus on low-intensity counterinsurgency combat, and 30 years of uncontested naval supremacy, have conspired to obscure the level of preparedness for major war. In Secretary of Defense Jim Mattis’s words, “[W]e are emerging from a period of strategic atrophy, aware that our competitive military advantage has been eroding.... America’s military has no preordained right to victory on the battlefield.”<sup>1</sup> And, for too long, the critical wartime role of the U.S. Coast Guard has been overlooked.

## Practicing for Wartime Missions

An assessment of the Coast Guard’s preparation for major naval combat operations requires an understanding of how it trains, and of the type of wartime missions for which it trains.

Today, the Navy expects the Coast Guard to be ready for nine specific wartime missions, which are detailed in a 2008 memorandum of agreement between the Department of Homeland Security (DHS) and the Department of Defense. The list, which includes theater security cooperation, combating

TABLE 1

## GAO's Summary of DHS and DOD Agreement

Operational Activity	Description
Maritime interception/interdiction operations	Stopping, boarding, searching, diverting, or redirecting vessel traffic to enforce certain sanctions
Military environmental response	Responding to incidents of pollution in and around the battle space
Port operations, security, and defense	Ensuring port and harbor areas are free of hostile threats, terrorist actions, and safety deficiencies that would be a threat to the deployment of military resources
Theater security cooperation	Conducting humanitarian assistance, professional exchanges, combined operations, training, exercises, and other diplomatic activities to foster international cooperation
Coastal sea-control operations	Ensuring the unimpeded use of designated offshore areas at home and abroad by U.S. and friendly forces and deny the use of those areas by enemy forces
Rotary wing air-intercept operations	Conducting national air defense activities
Combatting terrorism operations	Providing special capabilities, such as training host nation forces and building the capacity of foreign maritime security forces, that serve as a force multiplier to Defense Department forces
Maritime operational threat response	Supporting Defense Department response to maritime security threats, including terrorism, piracy, and other criminal or unlawful acts
Military cyberspace operations	Conducting offensive and defensive cyberspace operations to achieve military objectives and preserve system availability, integrity, and confidentiality

**SOURCE:** U.S. Government Accountability Office, "Coast Guard: Information on Defense Readiness Mission Deployments, Expenses, and Funding," September 15, 2021, <https://www.gao.gov/products/gao-21-104741> (accessed March 8, 2022).

terrorism, and environmental response, among other issues,<sup>2</sup> reflects the time period in which it was written and does not address the types of missions that would be required in a prolonged war with China today—notably anti-submarine warfare. The Coast Guard cannot avoid anti-submarine warfare: Russia has operated nuclear submarines off both U.S. coasts with relative impunity, and inevitably will be joined by a growing fleet of Chinese nuclear submarines.

Moreover, a recent Government Accountability Office audit indicates that defense readiness is consistently a low priority. Between 2011 and 2020, the Coast Guard devoted only 4 percent of its operational hours to defense readiness, at an average of 7 percent of total operational expense.<sup>3</sup> Gauging whether this is adequate requires a closer look at the Coast Guard's wartime training regimen.

The Coast Guard organizes its operations within Atlantic and Pacific Areas that coordinate with the respective Naval and associated joint combatant commands, such as the Indo–Pacific Command. In the Pacific Area, the Coast Guard has typically sent a cutter to participate in the biennial Rim of the Pacific (RIMPAC) exercise. RIMPAC usually includes events focused on wartime missions that the Coast Guard would be expected to conduct. There is no such joint or inter-service exercise in the Atlantic Area. In recent years, the Indo–Pacific Command and the Coast Guard’s Pacific Area Command have participated in the Navy’s triennial global Large Scale Exercise, the biennial joint maritime exercise Valiant Shield, and the biennial Talisman Saber joint military exercise with Australia. The skills practiced in these exercises are foundational to coordinating operations, including practicing the rules of engagement and communications.

Pre-deployment training presents another opportunity for the Coast Guard cutter crews to train with the Navy. Before a cutter is deployed to operate overseas with the Navy, it completes about two weeks of classroom training and several days of at-sea evaluation by a Navy team. Since 2019, the Coast Guard has averaged one deployed National Security Cutter a year to the Navy’s Seventh Fleet in the Western Pacific.<sup>4</sup> Given Pacific Area’s 12 major cutters, deploying only one of its National Security Cutters annually with the Navy is insufficient for generating force-wide wartime competencies. That said, the Coast Guard does conduct other overseas operations that have wartime training value.

Since 2002, the Coast Guard has maintained a small patrol boat force in the Persian Gulf—Patrol Forces Southwest Asia.<sup>5</sup> Following the 2003 invasion of Iraq, its mission was to train the Iraqi military to protect its economically significant oil sites, which were expected to fuel Iraq’s reconstruction after the war. Today, this group operates as part of Navy Forces Central Command’s Task Force 55 based in Bahrain, and consists of six patrol boats, four Island-class Fast Response Cutters (FRCs), and two newer Sentinel-class FRCs.<sup>6</sup> This force operates in proximity to hostile Iranian paramilitary forces and a constant terror threat, exercising several coastal wartime missions daily. However, these experiences do not sufficiently encompass the type of wartime operations that would be expected in the expanses of the Pacific, let alone the peacetime competition with Chinese maritime forces pushing further into the Pacific.

## Controlling the Transition to Be Prepared for War with China and Russia

In recent years, the Coast Guard has operated in the Black Sea and South China Sea, putting its cutters in close proximity to the naval forces of China and Russia. This places U.S. cutters into great-power peacetime competition, which can quickly escalate into open conflict. Such confrontations can quickly de-escalate, as well. This dynamic places added pressure on the Coast Guard to be able to control escalation, preferably away from wider conflict. Despite this danger, because of the benefit that deployed cutters provide, such overseas deployments are not likely to diminish; in fact, they are more likely to play an increasingly important role in the nation's competitive strategy with China and Russia. These missions also provide invaluable experience, and as great-power competition heats up, the need to equip cutters with capabilities suitable for gray zone operations will increase.

The Defense Science Board recently concluded that the U.S. military is underperforming and ill-equipped for great-power competition, and recommends that the military build new capabilities for gray zone operations.<sup>7</sup> As the U.S. Coast Guard increasingly confronts Chinese and Russian naval forces, it will benefit from additional non-lethal options to compel harassing vessels to remain clear, and better control escalation. Like the Navy, the Coast Guard could look to the Marine Corps' efforts in crowd control by field testing non-lethal Active Denial Systems based on microwave and acoustic technologies.<sup>8</sup> Deploying these systems would require developing a doctrine for peacetime competition as well as related training; this would necessarily cover independent operations as well as operations with partner navies.<sup>9</sup> Given the absence of such doctrine, related training is not occurring in the limited pre-deployment preparation routines. While promising technologies are coming, a deployed cutter's best option for gray zone confrontations is a blast of water from a fire hose and, when available, speed, to get away from harassers quickly.

Furthermore, given the July 2020 incursion of more than 300 Chinese fishing vessels in the protected waters of Ecuador's Galapagos Islands, the danger is on its way to U.S. waters. This situation makes it critical to outfit Coast Guard cutters for gray zone operations overseas and increasingly in U.S. Pacific waters prone to Chinese fishing-fleet encroachment. Despite this urgency, employment of non-lethal systems should build on cutter capabilities and not diminish space and weight capacity reserved for warfighting equipment.

## Ship Design Limits and the Most Dangerous Wartime Mission

Given the paucity of U.S. merchant mariners and the fact that there are too few U.S. commercial ships, any loss to this fleet would imperil a long-term war effort. This reality places added importance on protecting every U.S.-crewed merchant ship, making convoy missions a potential deciding factor in the next major war.<sup>10</sup> However, the Navy has stated that it would not be able to fulfill this role, given its limited capacity to conduct wartime operations and defend critical shipping and sea lanes. The U.S. would likely have no allies to turn to for help with escorting vital shipping, as most U.S. allies have similarly neglected this mission.<sup>11</sup>

So, in this vacuum, the Coast Guard will need to be prepared to protect vital U.S. shipping against long-range aircraft that employ anti-ship cruise missiles, as well as against submarines. Repeated Russian and Chinese long-range submarine and aircraft deployments demonstrate their ability and wartime intention of interdicting U.S. Pacific-region and Atlantic-region sea and air traffic. Of these two threats, the submarine threat is more concerning and more difficult for the Coast Guard to address.

For addressing air threats, the National Security Cutter has only limited air search radar (AN/SPS-75), though it does have an advanced electronics suite (CDLMS and AN/SLQ-32), and deck space on the focsle (the raised part of the forward upper deck) for containerized weapon systems.<sup>12</sup> The Coast Guard has not disclosed if it will retain similar sensors and power, space, and weight reserves in its forthcoming Offshore Patrol Craft (OPC), the first of which is due to be delivered in fiscal year 2022 (or 2023, given delays).<sup>13</sup> Given the cost and displacement of the OPC, it is likely that the Coast Guard's plan for 25 of these cutters will have similar capacity for air defense. However, it is doubtful whether either the National Security Cutter or OPC as configured could conduct convoy missions or sustain Pacific anti-submarine patrols.

Several factors conspire to raise doubts about the adequacy of the Coast Guard's current and proposed major cutters (that is, cutters with a helicopter deck, at-sea endurance of more than 60 days, and a range of greater than 10,000 miles) to execute convoy and anti-submarine missions. First, limited aviation fuel carried onboard may preclude sustained air operations. The Coast Guard normally conducts episodic air operations, and its cutters and crews are not equipped to sustain persistent maritime submarine patrols. Second, there are no organic sonar systems on any cutter, nor are purpose-built deployable sonar systems available. Modifying the escort

mission module (EMM) developed for Littoral Combat Ships might come close to meeting the latter need. The EMM includes towed sensors—a passive array and an active/passive variable depth sonar (VDS).<sup>14</sup> Without a shipboard weapon, prosecuting threat submarines requires an embarked helicopter capable of employing an air-dropped torpedo (that is, an Mk 54) near its target. The EMM program would require congressional support to expand the current planned purchase of 10 modules and increase funding for training additional sonar operators to provide the Coast Guard with a rudimentary anti-submarine capability. Third, the National Security Cutter cannot store and handle the Mk 54 torpedo onboard as the cutter is presently configured, rendering it impotent against a submarine. Whether the OPC can store torpedoes is unknown.

## Recommendations for the Navy, the Coast Guard, and Congress

To ensure that the Coast Guard is ready to dominate gray zone confrontations and seamlessly transition to joint wartime missions, the Navy, the Coast Guard, and Congress should do the following:

**The Secretary of the Navy should convene a Naval board to review and reset requirements for Coast Guard wartime mission support.** Today, the two services periodically meet at a Navy–Guard board, but the board’s mandate and authorities must be refocused. Specifically, as the Navy General Board did in the intervening years between World War I and World War II, a new Naval board would look for design solutions to existing cutters and would combine the procurement plans of Navy warship and Coast Guard cutter force structures. This board should produce a consolidated Naval 30-year plan that clearly delineates wartime missions, associated cutter-design requirements, and wartime transition plans for all Coast Guard aircraft and cutters. This combined long-range shipbuilding plan should reflect an update to the Coast Guard’s outdated 2004 Program of Record plan for its cutter fleet. The new plan would need to carry weight within the DHS and OMB to ensure adequate funding of the Coast Guard.

**The Chief of Naval Operations and the Coast Guard Commandant should execute dedicated annual wartime drills in the Atlantic and Pacific.** The goal of these annual wartime drills would be to ensure that every crew of the Coast Guard’s major cutter fleet is exposed to wartime operational training within a two-year period. In the Pacific Area, the drills should be separate from and in addition to RIMPAC, and preferably focused on convoy and anti-submarine

operations in the South and Central Pacific. Additionally, pre-deployment training and crew inspections (that is, Tailored Ship's Training Availability) should increase focus on wartime blue-water missions as well as proficiency in gray zone tactics.

**The Secretary of the Navy should make available one EMM for proof-of-concept testing and installation on a deployed National Security Cutter.** Making one EMM available for proof-of-concept testing would help to inform design of a modular and expeditionary sonar system for the Coast Guard's cutters. If the EMM proves unsuitable for cutters, other options should be found that would enable the Coast Guard to quickly (say, within 90 days) install and operate an anti-submarine capability. In conjunction, solutions are needed for weapons stowage that enable wartime load out (such as torpedoes and anti-ship and anti-air weapons). In addition, routine installation of such capabilities on deployed cutters should begin.

**The Coast Guard Commandant should deploy non-lethal weapons on its major cutters.** Priority should be given for installation of non-lethal weapons capabilities on cutters deploying to the Western Pacific. Additionally, the Coast Guard and the Navy should co-develop gray zone tactics, drawing from the experience of regional Coast Guards, especially regional responses to "shouldering" tactics<sup>15</sup> employed by the Chinese. In conjunction with employing these new tactics, the Coast Guard should consider training and deploying Maritime Security Response Teams to cutters that will operate in close proximity to Chinese maritime militia. While important for effective peacetime operations, installation of non-lethal capabilities now must not preclude later installation of critical wartime capabilities.

**Congress should increase the Coast Guard's operational budget to enable increased wartime training and overseas deployments.** The Coast Guard is currently operating at capacity, and yet, to be ready for the demands of the next major war, it must do more. Setting aside arguments for a larger cutter fleet, Congress can assist today by funding exercises that practice wartime skills with emphasis on convoy and anti-submarine warfare operations. Additionally, as the Coast Guard plays an increasingly important role with partner nations standing up to China and Russia, it will be necessary to review and, as appropriate, increase operational budgets. That said, any operational funds should be conditioned on ensuring the greatest strategic value of major cutter overseas deployments, to include maximizing exercises with partner naval forces, conduct of important port visits, and conduct of bilateral information exchanges.



## Conclusion

The U.S. Coast Guard has been an active participant in every major conflict since its inception. Ensure that the Coast Guard is ready to fight alongside the Navy in the next major war is vital, and doing so requires greater investment in associated training, exercises, and new deployable weapon systems. Developing rapidly deployable sonar systems and weapons storage on today's cutters is key. Given the nature of peacetime competition, cutters must also be better outfitted for gray zone operations.

The actions detailed here would only be a down payment on a larger bill. An accurate measure of the nation's readiness for the next major war requires ensuring that the U.S. Coast Guard is equipped and able to transition promptly to a war footing. Policymakers and Naval leaders should consider the question: What should happen within 90 days of the President ordering the Coast Guard to be prepared for war?

**Brent D. Sadler** is Senior Fellow for Naval Warfare and Advanced Technology in the Center for National Defense, of the Kathryn and Shelby Cullom Davis Institute for National Security and Foreign Policy, at The Heritage Foundation.

## Appendix: The U.S. Coast Guard's Wartime History

In accordance with law (U.S. Code Title 14), “the President is authorized to place the Coast Guard under the Navy in time of emergency, which could be in time of peace.”<sup>16</sup> This authority was famously used in the critical months leading up to the U.S. entry into World War II. That said, before America’s November 1941 decision to enter the war, two key events marked a long process shifting the Coast Guard to a war footing. First, on September 5, 1939, within days of war beginning in Europe, President Franklin D. Roosevelt, directed the Coast Guard to support “neutrality patrols” to monitor hostile maritime activity far from U.S. shores.<sup>17</sup> Then, 2,100 Coast Guard personnel were transferred to 22 Navy ships and four transports by a July 1941 executive order. These Coastguardsmen would form the basis of the landing boat crews seen off the beaches of Guadalcanal and Normandy.<sup>18</sup>

During the war, the Coast Guard played a critical role in convoy duty in the Atlantic, supported amphibious invasions in all theaters, and protected U.S. ports. World War II cost the U.S. Coast Guard a total 574 combat deaths, for a force that was credited with sinking all German submarines during the 1942 and 1943 Atlantic convoys.<sup>19</sup> The Coast Guard’s success in transitioning to wartime operations was due in part to its pre-war mobilization under the Department of the Navy and design decisions made a decade before.

The Navy General Board played a key role in ensuring that Coast Guard cutters were designed with adequate space and weight to be outfitted for war. During the interwar years of 1919 to 1941, this board met three times to discuss cutter designs. The last session to meet on Coast Guard cutter requirements took place in July 1931. That session provides important insights to the thinking of the time. First, the Navy fully intended to employ Coast Guard cutters in an anti-submarine and convoy role, and cutters would have to be so designed. Second, in at least one case, the Coast Guard’s use of the Navy’s designs greatly eased wartime transition, as exemplified by the Treasury-class cutter. That cutter was based on the Navy’s Erie-class gunboat, which was equipped with sonar technology, depth charges, and air defense. However, in 1931, back-fitting was already proving problematic for the smaller and under-construction Thetis-class cutter. These problems would constrain its wartime operations.<sup>20</sup> It would take time before the nation’s naval forces could blunt Germany’s submarine offensive Drum Roll (December 1941 to April 1942), which claimed 200 ships totaling 1.15 million tons.<sup>21</sup> By April 1942, Germany had shifted its submarine operations away from American waters, and American ship losses dropped precipitously as convoys supported by the Coast Guard and the Navy were implemented.

Without the gradual movement to a war-footing beginning with the “neutrality patrols” in 1939 and the Navy General Board’s plans for arming cutters, it would have taken much longer to implement effective convoys and maritime patrol, at far greater loss.

World War II would be the last time the Coast Guard operated in blue-water missions supporting the nation’s war efforts. During the Vietnam War, Coastguardsmen were active in riverine operations and coastal bombardment. The Hamilton-class served in the Vietnam War, and was the last to be built during the Cold War. It would turn out to be the last class built with sonar technology and the ability to conduct anti-submarine warfare, as anti-submarine warfare diminished with the fall of the Soviet Union.

After the fall of the Soviet Union, the Coast Guard’s wartime roles evolved to include port security and escorting high-value Naval warships, such as nuclear ballistic-missile submarines in coastal waters. The biggest institutional change since 1941 was triggered by 9/11, when in 2003, the U.S. Coast Guard was moved from the Department of Transportation to the Department of Homeland Security, under whose jurisdiction it operates today. This move was part of a national security reorganization known as the Homeland Security Act (Public Law No. 107-296).<sup>22</sup>

## Endnotes

1. Jim Mattis, "Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge," U.S. Department of Defense, January 2018, p. 1, <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf> (accessed January 21, 2022).
2. Heather MacLeod, "Coast Guard: Information on Defense Readiness Mission Deployments, Expenses, and Funding," Government Accountability Office, September 15, 2021, p. 12, <https://www.gao.gov/assets/gao-21-104741.pdf> (accessed January 21, 2022).
3. *Ibid.*, pp. 7 and 14.
4. National Security Cutters deployed to the Western Pacific include the *Bertholf* (2019), the *Stratton* (2019), the *Waesche* (2020), and the *Munro* (2021). See Dzirhan Mahadzir, "U.S. Coast Guard Continues to Expand Presence in the Western Pacific," *USNI News*, September 3, 2021, <https://news.usni.org/2021/09/03/u-s-coast-guard-continues-to-expand-presence-in-the-western-pacific> (accessed January 21, 2022); Alex Wilson, "Coast Guard Cutter Munro Arrives for Patrol with 7th Fleet in Western Pacific," *Stars & Stripes*, August 17, 2021, [https://www.stripes.com/branches/coast\\_guard/2021-08-17/coast-guard-7th-fleet-western-pacific-munro-deploy-2579731.html](https://www.stripes.com/branches/coast_guard/2021-08-17/coast-guard-7th-fleet-western-pacific-munro-deploy-2579731.html) (accessed January 21, 2022); Dzirhan Mahadzir, "U.S. Coast Guard Eyes Expanded Operations in Western Pacific," *USNI News*, August 16, 2019, <https://news.usni.org/2019/08/16/u-s-coast-guard-eyes-expanded-operations-in-western-pacific> (accessed January 21, 2022); and Gidget Fuentes, "Cutter Bertholf's Indo-Pac Deployment Highlighted Coast Guard's National Security Role," *USNI News*, July 24, 2019, <https://news.usni.org/2019/07/24/cutter-bertholfs-indo-pac-deployment-highlighted-coast-guards-national-security-role> (accessed January 21, 2022).
5. U.S. Coast Guard Atlantic Area, "Patrol Forces Southwest Asia," <https://www.atlanticarea.uscg.mil/Our-Organization/Area-Units/PATFORSWA/> (accessed January 21, 2022).
6. News release, "Task Force 55 Holds Change of Command," U.S. Naval Forces Central Command, August 13, 2020, <https://www.cusnc.navy.mil/Media/News/Display/Article/2311817/task-force-55-holds-change-of-command/> (accessed January 21, 2022), and "U.S. Coast Guard Commissions 45th Fast Response Cutter," *Naval News*, October 19, 2021, <https://www.navalnews.com/naval-news/2021/10/u-s-coast-guard-commissions-45th-fast-response-cutter/> (accessed January 21, 2022).
7. U.S. Department of Defense, Defense Science Board, "2019 DSB Summer Study on: The Future of U.S. Military Superiority," Executive Summary, June 2020, [https://dsb.cto.mil/reports/2020s/2019\\_Future\\_of\\_U.S.\\_Military\\_Superiority\\_Executive\\_Summary.pdf](https://dsb.cto.mil/reports/2020s/2019_Future_of_U.S._Military_Superiority_Executive_Summary.pdf) (accessed January 21, 2022).
8. U.S. Department of Defense Non-Lethal Weapons Program, "Active Denial Technology (ADT)," *Fact Sheet*, updated August 2020, [https://jnlwp.defense.gov/Portals/50/Documents/Press\\_Room/Fact\\_Sheets/FACT%20SHEET\\_ADT\\_AUG20.pdf](https://jnlwp.defense.gov/Portals/50/Documents/Press_Room/Fact_Sheets/FACT%20SHEET_ADT_AUG20.pdf) (accessed January 4, 2021). "The Department of Defense Non-Lethal Weapons Program stimulates and coordinates non-lethal weapons requirements of the U.S. Armed Services and allocates resources to help meet these requirements. The Commandant of the Marine Corps serves as the Department of Defense Non-Lethal Weapons Executive Agent. Located at Marine Corps Base Quantico, Va., the Joint Intermediate Force Capabilities Office serves as the Department of Defense Non-Lethal Weapons Program Executive Agent's day-to-day management office." Joint Intermediate Force Capabilities Office, "Organization," <https://jnlwp.defense.gov/About/Organization/> (accessed January 4, 2021).
9. Admiral Scott H. Swift (Ret.), "Foreword," in Andrew S. Erickson and Ryan D. Martinson, eds., *China's Maritime Gray Zone Operations* (Annapolis, MD: Naval Institute Press, 2019), p. xiv; Andrew S. Erickson and Ryan D. Martinson, "Introduction: 'War Without Gun Smoke,'" in *ibid.*, pp. 7 and 8; and Ryan D. Martinson and Andrew S. Erickson, "Conclusion: Options for the Definitive Use of U.S. Sea Power in the Gray Zone," in *ibid.*, pp. 293–298, published jointly with the Naval War College's China Maritime Studies Institute as part of the Studies in Chinese Maritime Development series.
10. Salvatore R. Mercogliano, "Suppose There Was a War and the Merchant Marine Didn't Come?" *USNI Proceedings*, Vol. 146, No. 1 (January 2020), <https://www.usni.org/magazines/proceedings/2020/january/suppose-there-was-war-and-merchant-marine-didnt-come> (accessed January 21, 2022).
11. Matthijs Ooms, "It's a Navy's Job, Only No Navy Can Do It! Understanding and Addressing Western Neglect of Maritime Trade Protection," *International Journal of Naval History*, May 12, 2021, <https://www.ijnhononline.org/its-a-navys-job-only-no-navy-can-do-it-understanding-and-addressing-western-neglect-of-maritime-trade-protection/> (accessed January 21, 2022).
12. U.S. Coast Guard Acquisition Directorate, "National Security Cutter," [https://www.dcms.uscg.mil/Portals/10/CG-9/Acquisition%20PDFs/Factsheets/NSC\\_0821.pdf](https://www.dcms.uscg.mil/Portals/10/CG-9/Acquisition%20PDFs/Factsheets/NSC_0821.pdf) (accessed January 21, 2022).
13. Ronald O'Rourke, "Coast Guard Cutter Procurement: Background and Issues for Congress," Congressional Research Service, January 20, 2022, pp. 5–13, <https://crsreports.congress.gov/product/pdf/R/R42567/142> (accessed March 7, 2022).
14. U.S. Department of the Navy, "Exhibit P-40, P-1 Line Item Number / Title: 1602 / LCS ASW Mission Modules," Stratvocate.com, February 2020, [https://www.stratvocate.com/files/2021/OPN\\_BA1\\_BOOK-p751/OPN\\_BA1\\_BOOK.html](https://www.stratvocate.com/files/2021/OPN_BA1_BOOK-p751/OPN_BA1_BOOK.html) (accessed January 21, 2022).
15. Shouldering refers to a tactic where the aggressor ship pushes a target ship off its intended course, or slows it down, without the use of weapons. It is a tactic used by the Soviet naval forces during the Cold War and today by the Chinese maritime militia and Chinese coast guard.
16. Establishment of Coast Guard, U.S. Code Title 14 (1941), <https://www.govinfo.gov/content/pkg/USCODE-2017-title14/html/USCODE-2017-title14-part1-chap1-secl.htm> (accessed March 14, 2022).

17. William H. Thiesen, "The Coast Guard's World War II Crucible," *Naval History Magazine*, Vol. 30, No. 5 (October 2016), <https://www.usni.org/magazines/naval-history-magazine/2016/october/coast-guards-world-war-ii-crucible> (accessed January 21, 2022).
18. Robert Erwin Johnson, *Coast Guard-Manned Naval Vessels in World War II* (Washington, DC: Office of the Coast Guard Historian and U.S. Government Printing Office, 1993), p. 2, <https://media.defense.gov/2020/Jun/19/2002318603/-1/-1/0/CGMANNEDVESSELS.PDF> (accessed January 21, 2022).
19. William L. Ross, "Semper Paratus? The Coast Guard Is Not Equipped to Fight," *U.S. Naval War College Review*, Vol. 43, No. 1 (Winter 1990), pp. 113–130, [https://www.jstor.org/stable/44638366?seq=1#metadata\\_info\\_tab\\_contents](https://www.jstor.org/stable/44638366?seq=1#metadata_info_tab_contents) (accessed January 21, 2022).
20. Nolan V. Cain, "Mobilizing the Coast Guard for War: An Analysis of the U.S. Coast Guard's Wartime Preparation Activities from 1918–1941," U.S. Army Command and General Staff College, June 2020, pp. 80–84, [https://media.defense.gov/2021/Nov/04/2002886785/-1/-1/0/2020-CAIN\\_THESIS.PDF](https://media.defense.gov/2021/Nov/04/2002886785/-1/-1/0/2020-CAIN_THESIS.PDF) (accessed January 21, 2022).
21. Douglas Botting, *The U-Boats* (Fairfax, VA: Time Life Books, 1979), pp. 130 and 131.
22. The Homeland Security Act of 2002, 6 U.S. Code § 101 (2002), <https://www.govinfo.gov/app/details/PLAW-107publ296> (accessed March 14, 2022).