



**TESTIMONY OF  
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COAST GUARD VICE COMMANDANT**

**ON**

**“NATIONAL ACADEMY OF SCIENCES STUDY / REPORT  
ON U. S. COAST GUARD AUTHORITIES”**

**BEFORE THE  
HOUSE TRANSPORTATION AND INFRASTRUCTURE  
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION**

**JUNE 21, 2023**

**Introduction**

Chairman Webster, Ranking Member Carbajal, and distinguished Members of the Subcommittee, thank you for inviting me to testify and for your continuing support of the United States Coast Guard. I look forward to discussing the findings and recommendations from the National Academy of Sciences’ study of U.S. Coast Guard authorities and the emerging challenges our Service is likely to face over the next decade.

I thank the National Academy of Sciences and the study committee chaired by Dr. Cary Coglianese for their professionalism and for the tremendous amount of work that went into this study. I am grateful to the numerous subject matter experts who contributed to this important research.

As the world’s premier, multi-mission, maritime service responsible for the safety, security, and stewardship of the Nation’s waters, the Coast Guard offers a unique and enduring value to the American public. At all times a military service and branch of the U.S. Armed Forces, a federal law enforcement agency, a first responder, a regulatory body, and a member of the U.S. Intelligence Community, the Coast Guard serves on the front lines for a Nation whose economic prosperity and national security are inextricably linked to the sea.

The study found that Congress has provided the Coast Guard adequate authority to respond to nearly all anticipated issues that will challenge the Service in the next decade; however, it identified that the Coast Guard does not currently have sufficient authorities pertaining to autonomous systems and commercial space flight. Furthermore, the study found the Coast Guard’s authorities related to cybersecurity are not explicitly included in relevant statutes.

The Coast Guard is prepared to work with the Administration and then Congress to review the findings and develop or modify authorities as necessary to deal with the rapid pace of global technological, geopolitical, and climate change effectively and to prepare the Service for tomorrow’s challenges.

We must adapt mission support capabilities, particularly data management, asset procurement, and workforce development, and strengthen our strategic planning to further the Nation’s maritime safety, security, and prosperity.

### **Autonomous Vessels**

The study identifies as a deficiency the inability of the Coast Guard to approve or adequately regulate fully autonomous vessels. The National Defense Authorization Act for Fiscal Year 2023 (NDAA) includes an At-Sea Recovery Operations Pilot Program. This pilot program will further our understanding of what is required to ensure the safe navigation of autonomous and remotely operated vessels in Federal waters. Lessons learned from this pilot program will inform future Coast Guard and legislative decision-making regarding autonomous and remote-controlled vessels.

In March 2023, the Coast Guard released our Unmanned Systems Strategic Plan. This document lays out three lines of effort, the second of which is to “establish a prevention and response framework essential to facilitate the safe use of remotely operated and autonomous vehicles and systems in the Marine Transportation System.” As the study notes, increased use of fully autonomous and remotely controlled vessels introduces risk into the Marine Transportation System (MTS). These risks include navigation and collision avoidance, cybersecurity issues, and unpredictable artificial intelligence (AI) system failures. The Service is taking a prudent approach towards regulating fully autonomous vessels in Federal waters that optimizes the opportunities inherent with such technologies and ensures safe and equitable use of our Nation’s maritime resources for all our stakeholders. The Coast Guard is working with Federal, State, local, tribal, and industry stakeholders to that end, while being mindful that any solution must be developed in accordance with the International Regulations for Preventing Collisions at Sea and in concert with the International Maritime Organization (IMO).

### **Commercial Space Operations**

The study also outlines limitations in the Coast Guard’s ability to establish spaceflight-related safety zones that are binding on foreign flagged vessels inside of the U.S. Exclusive Economic Zone (EEZ). The Coast Guard leverages traditional authorities vested in the Captain of the Port to support space launch and reentry activities. However, outside U.S. territorial seas, these authorities generally apply only to U.S. flagged vessels and are not applicable to foreign flagged vessels.

Since 2016, the number of space launches and reentry activities has steadily increased each year to a total of 84 in 2022. As of May 22, 2023, there have been 40 licensed launches and reentries in 2023, and NASA anticipates between 90 and 100 launches in total, by the end of the year. The FAA forecasts as many as 186 launches per year by 2026.

The Elijah E. Cummings Coast Guard Authorization Act of 2020 required the Coast Guard to conduct a two-year pilot program to establish and implement safety zones to address space activities and offshore energy development activities in the EEZ. Although the pilot program will not be complete until next year, preliminary review indicates safety zones cause minimal impact to commercial shipping because they are located offshore, away from congested port entrances, and are in effect for short durations. We are conducting further analysis of the impacts to commercial fishing where traditional fishing areas are located within offshore safety zones.

The authority to establish and enforce safety zones in the EEZ directly supports the United States' Space Priorities Framework and contributes to safety in the MTS while strengthening U.S. strategic needs in space-based operations. The Coast Guard continues to explore this issue with the Administration and in close consultation with the IMO to ensure that the United States continues to respect the principles of freedom of navigation guaranteed by customary international law as reflected in the United Nations Convention on the Law of the Sea.

## **Cyber**

The study recommends Congress consider amending the Maritime Transportation Security Act (MTSA) and the Magnuson-Stevens Act to align with recent changes in the Ports and Waterways Safety Act. Existing MTSA authorities do not differentiate the threat source, whether cyber or physical. Using these authorities, we have required MTSA facilities to assess and document cyber vulnerabilities and address these vulnerabilities in their Facility Security Plans. Within the bounds of our MTSA authority, we are also working with the Department of Homeland Security (DHS) Cybersecurity and Infrastructure Security Agency (CISA) to update established maritime security regulations to strengthen cybersecurity requirements for both facilities and vessels.

In August 2021, the Coast Guard published a Cyber Strategic Outlook outlining three lines of effort: (1) Defend and Operate the U.S. Coast Guard Enterprise Mission Platform, (2) Protect the MTS, and (3) Operate In and Through Cyberspace. The Coast Guard is operationalizing MTS cyber risk management at the port level. We verify that port facilities and vessels conduct cybersecurity risk assessments, develop security plans to address cyber risks, and report cyber incidents. The Coast Guard established three Cyber Protection Teams. Each team has three deployable Mission Elements trained to Department of Defense (DoD) standards and are interoperable with DHS and DoD cyber forces. Cyber Protection Teams support Captains of the Port by responding to cyber incidents and assessing critical infrastructure cybersecurity. Coast Guard Captains of the Port leverage existing Area Maritime Security Committees and Harbor Safety Committees to evaluate port-wide cyber risks, share threat information, participate in joint exercises, and report and respond to cyber-attacks when needed.

## **Data Management**

The Study highlights the criticality of data management and analysis to Coast Guard mission support capabilities. The DHS Chief Privacy Officer partners with our Coast Guard Privacy Office to advise on data management initiatives. To sharpen our competitive edge as an organization, the Coast Guard formally established the Office of Data & Analytics (CG-ODA) led by the Service's first Chief Data and Artificial Intelligence Officer on September 1, 2022. CG-ODA's mission is to accelerate the advancement of data and analytics, AI, and machine learning to increase business efficiency and mission effectiveness across the Coast Guard, while appropriately safeguarding privacy and civil liberties. To do so, CG-ODA is building an adaptable data governance framework to collect data in accordance with law; protect privacy, civil rights, and civil liberties; manage data responsibly; secure data effectively; and share data effortlessly, and is identifying and nurturing the skills required to cultivate a data-literate workforce.

## **Procurement**

The study recommends Congress ensure the Coast Guard has the statutory authority to keep pace with emerging technological trends by acquiring state-of-the-market assets. In 2022, Congress provided the Coast Guard authority to use other transaction agreements (OTA) to operate, test, and acquire cost effective technology to meet the mission needs of the Coast Guard.

## **Workforce**

As noted in the study, recruiting, training, and retaining a technically proficient workforce is integral to successfully executing Coast Guard missions. The Commandant's highest priority is modernizing the Coast Guard's talent management system, which has not significantly changed in 75 years, to best recruit and retain a 21<sup>st</sup> century workforce. To achieve this priority, we are deploying innovative recruiting practices; revolutionizing talent management policies; developing individually tailored, on-demand, and modernized learning; and delivering point of need healthcare and family services.

In May 2022, the Coast Guard established an Incident Management Team (IMT) that focuses Service-wide resources on three lines of effort to bolster recruiting efforts: generate more leads, improve the recruiting process, and increase recruiting capacity and performance. To generate more leads the Service upgraded messaging and recruiting logos and is surging marketing efforts into non-traditional media spaces. To improve the recruiting process and correspondingly increase capacity, the Coast Guard aligned accession standards with the DoD while also adding recruiting offices and a recruiting call center.

Retention of Coast Guard members is essential to conduct and support missions around the globe. The Coast Guard's Workforce Planning Teams (WPTs) monitor and evaluate the total active duty, reserve, and civilian workforce to identify trends, assess gaps, and provide recommendations for policy modifications, as well as monetary and non-monetary interventions to ensure the Coast Guard is best positioned to meet future needs. The WPTs carefully consider organizational and programmatic equities and risks to optimize Service readiness. To maintain a competitive edge, the Coast Guard must continue modernization efforts for personnel management and family support services.

The Coast Guard continues to enhance the workforce's quality of life through improved support programs. We modified assignment policies to better facilitate the co-location of dual military families, increased parental leave, and expanded the childcare fee assistance subsidy program. The Service also continues to improve healthcare service and access to care for its workforce and their families by expanding access to telehealth services, offering online appointment scheduling, migrating to electronic health records, and offering expansions to key health services such as physical therapy and behavioral health services.

Still, issues persist regarding access to affordable housing and healthcare, especially for members stationed at units far from concentrations of personnel and family support services. Recent phenomena, like the proliferation of short-term rental properties, place financial constraints on service members forced to rent or buy housing on the private market, where costs outpace adjustments in Basic Allowance for Housing. Furthermore, some Coast Guard families must stay overnight in hotels for routine medical care, with specialty care often requiring multi-night stays. We are working to remove these hardships.

We are also seeking additional authority to allow the Coast Guard to commit Reserve Forces to foreseeable operations to augment the Active Duty workforce. Currently, the Secretary of Homeland Security has Title 14 authority to involuntarily recall reservists for emergency augmentation for limited durations. This is in addition to applicable Title 10 authorities to involuntarily recall reservists during war, national emergencies, or following a Presidential authorization for a named operational mission or an emergency involving weapons of mass destruction or a terrorist attack. In March 2023, the Service provided a legislative change proposal to Congress proposing authority for the Commandant to involuntarily activate reservists for preplanned operations that are not conditioned on an emergency.

### **Strategic Foresight Planning**

Project Evergreen, the Coast Guard's strategic foresight program, was chartered in 2002 to "infuse the Service with strategic intent." Operating in four-year cycles, Project Evergreen now includes a facilitated strategic foresight gaming and workshop series that yields insights which are incorporated into enterprise strategies and implementation frameworks. Project Evergreen prepares current and rising Service leaders to fulfill national imperatives despite future uncertainty by inculcating strategic thinking and perspectives across long-range planning and short-term operations.

A necessary corollary to Service-wide strategic resilience is regulatory and statutory foresight to empower the Coast Guard with appropriate tools to meet national needs. Thus, the study's recommendation to add legal foresight into the Evergreen process is aligned with our strategic intent for the program and will be incorporated into future Evergreen experiences where possible.

### **Conclusion**

The Coast Guard has broad authorities to meet the demands of an uncertain future influenced by geopolitical conflict, rapid technological change, and an increasingly dynamic climate. We are committed to working with DHS, the Administration, and Congress to preserve the Service's existing authorities and secure any additional authorities needed to provide enduring value to the American public.

Thank you for the opportunity to testify today and thank you for your continued support of the United States Coast Guard. I look forward to your questions.