SYM-AM-26-115

Excerpt from the Proceedings

of the

Twenty-Third Annual Acquisition Research Symposium and Innovation Summit

Thursday, May 7, 2026 Sessions
Volume II
"Accelerating Warfighting Capabilities"

Evaluating Pathways for U.S. Shipbuilding Cooperation With Allies

Published: April 30, 2026

The research presented in this report was supported by the Acquisition Research Program, Graduate School of Defense Management at the Naval Postgraduate School.

To request defense acquisition research, please contact:

Acquisition Research Program
Department of Defense Management
Naval Postgraduate School
E: arp@nps.edu
www.acquisitionresearch.net

Copies of Symposium Proceedings and Presentations; and Acquisition Sponsored Faculty and Student Research Reports and Posters may be printed from the **NPS Defense Acquisition & Innovation Repository** at **https://dair.nps.edu/**.

ACQUISITION RESEARCH PROGRAM
DEPARTMENT OF ACQUISITION, FINANCE, AND MANPOWER
NAVAL POSTGRADUATE SCHOOL

Evaluating Pathways for U.S. Shipbuilding Cooperation With Allies

Henry H. Carroll—is a research associate with the Center for the Industrial Base at the Center for Strategic and International Studies (CSIS). His analytical focuses include the defense industrial base, naval policy, and assessing foreign military industrial capacity. Prior to joining CSIS, he worked as an intern in the defense and international practices of Brownstein and as a defense-focused legislative intern for Senate Majority Leader Chuck Schumer. Henry holds a BA in history, with a concentration in war and society, from Yale University. His undergraduate senior thesis examined the politics of U.S. naval shipbuilding in the interwar period. [hcarroll@csis.org].

Cynthia R. Cook—is a senior fellow in the Defense and Security Department at the Center for Strategic and International Studies (CSIS). Dr. Cook is a member of the editorial board for the Defense Acquisition Research Journal and is an adjunct professor at the Pardee RAND Graduate School. From 1997 to 2021, Dr. Cook worked as a senior management scientist at RAND, where she served as the director of the Acquisition and Technology Policy Center. She holds a PhD in sociology from Harvard University and a BS in management from the Wharton School of the University of Pennsylvania. [ccook@csis.org]

Seamus P. Daniels—is a fellow for Defense Budget Analysis in the Defense and Security Department at the Center for Strategic and International Studies (CSIS), where he researches issues related to U.S. and global defense funding, force structure, and military readiness. Prior to joining CSIS, Mr. Daniels worked for Government Executive Media Group. He holds an MA in international relations from Johns Hopkins University School of Advanced International Studies and an AB from Princeton University's School of Public and International Affairs with minors in Near Eastern studies and Arabic language and culture. [sdaniels@csis.org]

Oliver B. Buntin— is a research assistant with the Center for the Industrial Base at the Center for Strategic and International Studies. His research portfolio includes shipbuilding cooperation, landpower doctrine, supply chain issues, and the industrial base. Oliver is currently pursuing degrees in political science and architecture at the University of Chicago. [obuntin@csis.org]

Abstract

The U.S. naval shipbuilding industrial base faces well-known challenges delivering ships on time and at cost. The U.S. shipbuilding challenge is a complex, enterprise-wide issue. There is no single policy solution or silver bullet to solve the overall problem. Solutions are urgently needed, but the inherent policy trade-offs must be carefully weighed.

One option to address the challenges is through partnerships with close allies to enhance the shipbuilding enterprise. This research assesses three pathways for cooperation, including allied purchase and revitalization of U.S. shipyards; various methods of coproduction, including modular construction; and U.S. purchase of allied-built ships. These pathways, identified in a previous work, each present their own opportunities and challenges that are analyzed in this report. The paper also explored hybrid approaches that involve multiple pathways. The research focuses on the strong shipbuilding nations—and U.S. allies—South Korea and Japan as the most likely partners, but the findings are relevant to shipbuilding cooperation with other nations as well. This paper is a preliminary excerpt from a forthcoming work that discusses four pathways (including maintenance cooperation) and hybrid approaches in more detail.

Introduction

Once the world's preeminent shipbuilder, the United States now struggles to produce naval ships at the scale, speed, and cost its security requirements demand. During and after World War II, American shipyards delivered warships and commercial vessels in numbers that contributed to both its economic strength and maritime dominance. During the war, the United States produced nearly double the number of ships as the next five producers combined (Silva, 2024). That capacity has eroded over decades, leaving a narrower and more fragile industrial

base. Today, workforce shortages, aging infrastructure, and brittle supply chains coupled with an uneven demand signal have weakened the naval shipbuilding enterprise (Daniels et al., 2025). Ships are routinely delivered years late and billions of dollars over initial estimates, constraining fleet readiness and consuming resources intended for modernization and force expansion.

The decline of U.S. shipbuilding reflects structural challenges that have accumulated over decades, limiting the effectiveness of purely domestic or unilateral solutions. An earlier CSIS assessment concluded,

> Despite the Navy's plans for growing the fleet and bipartisan efforts and funding from Congress, the U.S. shipbuilding enterprise—including the Navy, Department of Defense (DoD), Congress, and industry—has failed to consistently produce ships at the scale, speed, and cost demanded. These longstanding challenges stem from a series of interwoven, systemic issues within both the U.S. government and industry, as well as broader socioeconomic trends. (Daniels et al., 2025)

Unstable demand signals, evolving requirements, acquisition practices that diffuse accountability, limited competition in key segments, aging infrastructure, brittle supply chains, and a shrinking skilled workforce all contribute to persistent underperformance.

This report examines one policy solution that has gained increasing attention: cooperation with trusted allies to enhance the U.S. naval shipbuilding industrial base. It focuses on opportunities for deeper industrial integration with South Korea and Japan, two treaty allies that possess globally competitive commercial and naval shipbuilding sectors, advanced production techniques, and supplier ecosystems. Both countries operate high-throughput shipyards and have demonstrated the ability to deliver complex vessels on predictable schedules.

This report presents three pathways for cooperation, including allied purchase of, partnership with, or investment in yards in the United States; coproduction with allied shipbuilders; and the purchase of ships produced in allied yards overseas. It also addresses hybrid cases where multiple pathways are incorporated. The analysis assesses how these different pathways related to metrics including cost, speed, and development of indigenous shipbuilding capacity, and reviews their viability from the perspective of allied willingness and interest along with the U.S. regulatory and policy framework.

This report is not merely a theoretical exercise. Given global tensions and a rapidly rising U.S. shipbuilding budget, the United States and the Trump administration want to build ships quickly. At the same time, the governments of South Korea and Japan have excellent shipbuilding capabilities and seek to bolster cooperation with the United States to support their domestic industries and strengthen bonds with their most important military ally. This report lays out the ways U.S. policymakers can advance their goals via cooperation.

Pathways for Enhancing U.S. Shipbuilding Capability and Capacity

Carefully designed cooperation among U.S. industry, government, and trusted allies offers a practical approach to rebuild capacity while reinforcing collective maritime security. This report outlines three potential pathways for advancing allied shipbuilding integration, expanding on previous work on the topic (Carroll & Cook, 2025). Together, these pathways offer distinct mechanisms for addressing the U.S. naval shipbuilding challenge.

The three pathways explored in this paper are:

- Allied acquisition of, partnership with, or investment in U.S. shipyards to expand production capacity.

- Coproduction of warships by U.S. and allied shipyards, leveraging complementary industrial strengths.
- U.S. purchase of warships from allied shipyards to accelerate fleet expansion and reduce schedule risk.

In practice, these pathways are not mutually exclusive and have been frequently operationalized into a "hybrid cooperation approach," which is also discussed below. Moreover, other pathways also exist, such as expanding maintenance, repair, and overhaul (MRO) activities in allied shipyards overseas with the goal of repurposing U.S. maintenance facilities into new build yards. Collaboration on MRO will be considered in full in a forthcoming paper.

Criteria for Evaluating Cooperation Pathways

This report assesses these three different pathways by a series of metrics and reviews their viability from the perspective of allied willingness to cooperate and existing U.S. regulatory and policy framework. Each pathway is assessed against five principal criteria, grouped into those related to their impact on outcomes in impacting U.S. policy objectives and those related to the potential implementation of each pathway.

Outcome-related criteria include:

- *Ship delivery speed* assesses how a pathway may deliver ships expediently to the U.S. Navy.
- *Cost implications* assesses the budgetary repercussions of a given pathway.
- *Bolstering U.S. shipbuilding capacity* evaluates the extent to which a given pathway may expand the United States' indigenous shipbuilding capacity.

Implementation criteria include:

- *Allied industry willingness and ability* measures the extent to which industry partners in allied countries would be able and willing to cooperate with the United States in this manner.
- *U.S. political and regulatory viability* evaluates the palatability of each pathway within the U.S. shipbuilding enterprise given the interests of the Navy, broader DOD, Congress, and the shipbuilding industrial base as well as the requisite legal and regulatory changes needed for implementation.

The report identifies examples of ongoing or past cooperation. Some feature aspects that fall under multiple pathways. The final section of the report discusses potential models for future, hybrid approaches to cooperation.

The evaluation is not intended to select an optimal pathway for policymakers and the U.S. shipbuilding enterprise to implement. Rather, the assessment highlights which pathways correspond to U.S. policymaker preferences, such as the ability of the United States to rapidly expand the size of its fleet or to grow U.S. domestic shipbuilding capacity.

The pathways' evaluations are based on publicly available information as well as information gathered by the study team in interviews with current and former government officials, industry representatives, and think tank experts from the United States, Republic of Korea, and Japan. Interviews were conducted both in person, including during a visit to Korea and Japan in June and July 2025, and virtually.

Allied Purchase of, Partnership With, or Investment in U.S. Shipyards

The first pathway for cooperation involves allied builders either acquiring or partnering with U.S. shipyards to improve their construction capacity and efficiency. The distinguishing feature of this approach is direct investment in U.S. facilities. Direct acquisition occurs when a foreign shipbuilder purchases a U.S. yard outright, gaining full operational control and access to its expertise, supply chain relationships, and intellectual property. This access facilitates technology and management-practice transfer, by which tacit knowledge and proprietary processes, not just documented procedures, can be shared. It may also enable transformative facility investments from the allied shipbuilder. The principal constraints are regulatory and workforce-related: Acquisitions of yards involved in sensitive naval work typically require CFIUS review and other clearances or waivers, while the acquiring firm must reconcile its management practices with U.S. labor, subcontractor, and cultural norms. Foreign shipbuilding firms also need to acclimatize themselves to U.S. government contracting practices.

Foreign shipbuilders have already taken significant actions along this pathway. Italy's Fincantieri SpA. bought Manitowoc Marine Group in Wisconsin in 2009; Australian ferry-maker Austal bought out Bender Shipbuilder and Repair Company's stake in their joint venture in Alabama in 2006; and South Korea's Hanwha Ocean purchased Philly Shipyard in 2024.

Partnership is a broader category that encompasses joint ventures, minority investments, commercial design collaborations, technical assistance agreements, and personnel exchange programs. While the foreign entity does not take ownership of a U.S. yard in a partnership, knowledge moves through negotiated channels, such as shared designs, jointly developed technology, or workers rotating between facilities to develop hands-on skills. Compared to a commercial design license agreement, which transfers only what is explicitly documented and tends to be weaker for process-level learning, partnerships can approach the knowledge-transfer depth of acquisition if they include sustained on-site rotations and engagement.

Partnership arrangements generally face lower regulatory scrutiny than acquisitions but must comply with ITAR, Export Regulations, and DSCA guidelines. Among the most noteworthy of these arrangements, South Korea's Daewoo Marine Engineering and Hyundai Heavy Industries have initiated partnerships with General Dynamics NASSCO and Huntington Ingalls Industries, respectively.

Pathway Evaluation

Ship Delivery Time

The speed with which foreign acquisitions or partnerships may lead to a production uptick depends on the parameters of the chosen approach, demand signal, regulatory barriers, and yard-specific physical and workforce conditions.

Direct acquisition requires an extended period of due diligence, regulatory approvals, and post-acquisition integration. In 2009, after Fincantieri acquired Manitowoc Marine Group—which included Marinette Marine and smaller yards in Sturgeon Bay and Green Bay, Wisconsin—it took several years to achieve full operational integration (Kington, 2015).

Committee on Foreign Investment in the United States (CFIUS) review processes typically take 12–18 months, and conditional approvals limit operational integration (Roberts & Clark, 2025). Facility renovations, workforce training, and production process standardization require multiple years before meaningful productivity improvements materialize.

Technology transfer partnerships, particularly in the commercial sector, offer the most rapid implementation timeline but typically feature less dramatic ramp-ups of capital investment

and output. A partnership dating to 2006 between General Dynamics-NASSCO's commercial division and DSEC, a division (at the time) of the South Korean marine engineering firm Daewoo Shipbuilding & Marine Engineering (DSME), began yielding productivity improvements within a year of inception (Heim & Tedesco, 2009, p. 9). Because such partnerships avoid ownership transition periods or CFIUS review (as well as ITAR compliance burdens if they exclusively focus on commercial vessels), they can commence relatively quickly.

Cost Implications

Direct acquisition of U.S. yards by foreign firms may require only limited upfront U.S. government expense, as capital investments typically come primarily from private foreign sources. However, foreign shipbuilders have sought U.S. government support for facility upgrades. Fincantieri paired its investment of approximately $500 million in Marinette Marine over the first 15 years of operation with $50 million each from the Navy and Wisconsin state government (Katz, 2023; Schumacher, 2022). Austal USA's recent expansion was supported by $288 million in private investment supplemented by $152 million in DPA Title III funding (Samora, 2024).

This public-private cost sharing reduces the fiscal burden on taxpayers compared to government-funded yard modernization. The South Korean government has pledged to invest as much as $150 billion in American shipbuilding as part of the bilateral "Make American Shipbuilding Great Again" (MASGA) initiative from 2025. The Trump administration's proposed maritime opportunity zones could spur additional private capital interest (J. Park et al., 2025; The White House, 2025a). However, indirect costs may arise from CFIUS reviews, compliance monitoring, and the suppression of alternative uses for waterfront real estate.

Non-equity partnerships like the NASSCO-DSEC collaboration impose lower upfront costs for both the government and private sector. NASSCO's partnership required limited facility investments (such as new paint-application systems) to achieve a reported 60% reduction in unspecified labor hour requirements for naval support vessels (White, 2011). The government's only unavoidable costs would be limited to regulatory oversight.

Bolstering U.S. Shipbuilding Capacity

The capacity creation potential of foreign acquisition and partnership is highly variable, dependent not only on the selected approach but also on implementation.

Direct acquisition has demonstrated the most dramatic instances of capacity creation in historical precedent. Fincantieri's acquisition of and investment in Marinette Marine transformed a small coastal vessel producer into a yard now capable of producing complex surface combatants including the Freedom-class LCS and Constellation-class frigates (Shelbourne, 2023). Austal USA rebuilt a similarly minor yard as a prime contractor for Independence-class LCS and eventually Virginia-class submarine modules—capabilities that would not have developed absent foreign investment and technology transfer (Austal USA, 2019).

The capacity creation mechanisms include physical infrastructure expansion (Fincantieri added approximately $500 million in facilities, including assembly buildings, ship lifts, and panel lines), workforce development (Marinette employment tripled), and technical capability enhancement through transfer of advanced manufacturing techniques such as modular construction and zone outfitting (Lockheed Martin, 2021). These improvements create enduring capacity that will benefit U.S. shipbuilding even if the foreign owner eventually sells the yard.

Commercial yard conversion through foreign investment could create substantial new naval capacity by revitalizing underutilized facilities. The U.S. has numerous marine sites with basic infrastructure (waterfront access, docks, cranes) that lack the specialized capabilities,

infrastructure, and workforce needed for naval production. Foreign investment could provide capital and expertise to bridge this gap.

Technology transfer partnerships create capacity through knowledge diffusion rather than capital investment. NASSCO's reported 60% reduction in labor hours for naval support vessels represented real capacity creation, meaning the same workforce and facilities could now produce significantly more ships per year (White, 2011). However, this productivity-driven capacity expansion subsequently faltered in the face of reduced demand. Nonetheless, technology transfer partnerships create less capacity than direct acquisition because they lack the sustained capital commitment and operational control that enable transformative change.

Allied Industry Willingness and Ability

Allied shipbuilders have several reasons to favor investing in the United States. South Korean and Japanese shipbuilders must contend with labor shortages at home and competition with Chinese shipbuilders in the commercial market. Entering the United States would open a new market for these shipbuilders. Moreover, they may face pressure from their governments to cooperate as a way to promote country-to-country ties (Guevera, 2025; Oh & Cecire, 2025). The South Korean government in particular has emphasized its MASGA project as a way to manage and improve its broader relationship with the United States in light of tariff disputes and regional security challenges (Yu, 2025).

Given the rising U.S. shipbuilding budget, the large total addressable market of U.S. naval shipbuilding is also naturally attractive to foreign shipbuilders. The Trump administration's FY2027 budget request for shipbuilding was $65.8 billion, which is the largest shipbuilding budget proposal since 1962 when adjusted for inflation (Shelbourne & LaGrone, 2026).

The recent history of foreign shipbuilders purchasing or even partnering with U.S. yards is not entirely positive, and past foreign buyers have faced substantial economic challenges in the U.S. market. Entering the U.S. market is complicated for foreign shipyards because of compliance burdens and an uncertain demand signal from the U.S. government. Austal posted its worst financial results ever in 2003 because of lower than anticipated labor productivity and inexperience with security requirements (Austal Limited, 2003, p. 5). Even well-capitalized acquirers like Fincantieri have needed to invest approximately $500 million in capital improvements, process improvements, and workers in addition to the initial $120 million acquisition price of Marinette Marine in 2009 (Katz, 2023; Schumacher, 2022). ITAR restrictions impose significant additional costs by forcing international shipbuilders to establish entirely new, duplicative engineering teams.

Shipbuilders consistently emphasize that sustained capital expenditures require long-term, stable contracts.[1] Without assured demand, foreign firms are understandably reluctant to investment in a monopsonistic market with massive regulatory uncertainty, compliance costs, and workforce challenges.

Hanwha Ocean and HD Hyundai Heavy Industries, South Korea's two largest shipbuilders, have pursed divergent approaches to entering the U.S. market. Hanwha purchased Philly Shipyard, committing itself to making billions of dollars in capital investments and immense workforce development challenges (Ha, 2025). Hyundai has signed a more limited MOU with Huntington Ingalls Industries focused on joint research and development, MRO contracts, and bidding for next-generation logistics vessels (HII, 2025). Hanwha's strategy involves a higher degree of risk in the pursuit of a commanding portion in the U.S. Jones Act

[1] Interview with International Shipbuilder, June 23, 2025.

and defense markets, while Hyundai's is significantly more cautious, with more limited upside in the form of maintenance and module contracts.

U.S. Political and Regulatory Viability

Political support for foreign investment appears to be widespread. Former Navy Secretary Carlos Del Toro explicitly encouraged foreign investment in U.S. shipyards in 2024, praising Fincantieri and Austal for modernizing facilities while criticizing American shipbuilders for prioritizing stock buybacks over infrastructure investment (Lagrone, 2024). Navy Secretary John Phelan has stressed the need to imitate international best practices and praised Hanwha's investment in Philly Shipyard (Luckenbaugh, 2025). Local officials and congressional representatives in Alabama, Wisconsin, and Pennsylvania have consistently praised international shipbuilders for investing in their constituencies.

Not all actors in the United States offer full-throated support for bringing foreign shipbuilders into the U.S. industrial base. Some established U.S. naval shipbuilders view foreign investment as competitive threats that could win contracts that they want and undermine their business models. These concerns are not entirely unfounded. If foreign-owned yards capture a larger share of naval contracts due to superior efficiency or lower costs, purely domestic shipyards may face reduced order books and workforce instability.

Regulatory barriers present formidable obstacles even when political support exists. Executives from an international shipbuilder with a U.S. subsidiary have described how ITAR restrictions forced them to maintain parallel engineering teams across national lines, seek clearance to move employees between facilities, and obtain waivers for technical assistance—requirements that undermined the knowledge-sharing benefits that should flow from foreign ownership.[2]

The two approaches face different levels of regulation. Direct acquisition faces the strictest scrutiny, especially for naval yards. Investing in and converting a commercial yard to be capable of military shipbuilding (such as is the case in Hanwha Philly) may encounter somewhat less regulatory resistance if initially focused on auxiliary or support vessels. Warships are more complex assets with more sensitive technology on board, putting foreign ownership of yards under greater scrutiny. Commercial technology transfer partnerships without ownership changes face the fewest regulatory barriers; the NASSCO-Daewoo collaboration entirely avoided CFIUS review or extensive ITAR complications.

Summary

Fincantieri's transformation of Marinette Marine and Austal's development of Bender Repair demonstrate that allied investment and expertise can transform uneconomical or obsolete facilities, creating genuine capacity gains for U.S. shipbuilding (Lockheed Martin, 2021).

However, ITAR restrictions create challenges for foreign parent companies, from providing engineering support, sharing technical information, or moving personnel freely between their U.S. subsidiaries, and overseas facilities undermine the technology transfer benefits that represent the primary strategic rationale for accepting foreign ownership (Roberts & Clark, 2025). Foreign investment also cannot negate fundamental U.S. shipbuilding challenges such as design volatility, unnecessarily stringent naval requirements, single-source supply chains, and insufficient workforce development systems. Fincantieri's Constellation-class program experienced substantial delays and cost overruns after U.S. Navy modifications added

[2] Interview with U.S. Shipbuilder, April 1, 2025.

500 metric tons of additional outfitting to the European FREMM baseline, demonstrating that allied shipbuilders also struggle with dysfunctional procurement paradigms (Oakley, 2024).

For treaty allies such as Japan and South Korea, streamlined Technical Assistance Agreements (TAAs) and pre-approved personnel exchange programs could facilitate the knowledge flows that make foreign investment transformative rather than merely cosmetic. The success of the NASSCO-DSEC commercial collaboration illustrates the potential of tech-transfer partnerships unencumbered by the regulations and requirements associated with naval construction.

Foreign shipbuilders consistently emphasize that substantial investment in U.S. facilities requires confidence in long-term, stable demand.[3] The Navy's historically inconsistent procurement patterns—characterized by starts, stops, and dramatic shifts in ship class requirements—make investing in serving the U.S. naval market unattractive compared to commercial markets where contracts are more predictable. Multi-year block buys, realistic budgets, and credible production schedules that account for learning curves could make investing in the U.S. naval industrial base more appealing to allies.

Coproduction

A second approach for working with allies to increase ship production is through *coproduction.* This involves the United States working with an allied partner on shipbuilding, with production distributed across the nations, typically following one of two approaches. The first, traditional modular coproduction, involves foreign yards manufacturing self-contained, pre-outfitted ship modules to be transported to U.S. shipyards for final assembly and integration (Schank et al., 2016). The second, or "green hull," involves foreign shipyards constructing complete hull structures to be sent to U.S. yards for systems outfitting and completion.[4]

Proponents argue that modular coproduction could enable the United States to scale warship construction more rapidly by enabling parallel work across multiple facilities, resulting in time and cost savings (McDonald, 2025; UK Ministry of Defence, 2022; VU Marine, 2025). However, this pathway introduces learning curves in coordination and technical standards while facing political and regulatory barriers similar to the outright purchase of foreign ships (Papavizas, 2024). Advocates stress that green hull procurement is relatively straightforward to implement but acknowledge a learning curve regarding outfitting and highlight inefficiencies in producing ships this way.

Background

Allied nations have employed modular and green hull approaches for decades. These pathways are most often employed when: 1) the recipient nation requires new vessels urgently; 2) recipient nations lack the domestic capacity, expertise, or the financial resources to build complete ships themselves; and 3) the foreign partner provides design, engineering, and production expertise as well as hardware. In some commercial cases, modular production is used to outsource parts of the ship to countries with lower cost production.

Multiple examples exist of allied modular coproduction. In 2020, Germany selected Netherlands-based Damen Naval to design and manage the construction of its F126 Frigate program, aiming to harness Dutch expertise while splitting construction among at least three German shipyards—Peene-Werft, Kiel, and Blohm + Voss—with the goal of retaining 70% of the work in Germany. However, the program has suffered delays of at least three years and significant cost overruns (Hoffmann, 2025). German officials attributed the crisis to failures in

[3] Interview with International Shipbuilder, June 23, 2025.
[4] Interviews with International Shipbuilders, July 2025.

Damen's design and manufacturing software, while Dutch sources have argued that German micromanagement, including thousands of complex specifications and a monthlong approval process for minor subsystems, had itself compounded issues. As of April 2026, the role of lead contractor on the F126 project is in the process of transitioning to Rheinmetall, who acquired several major German shipbuilders in early 2026 (Pitel, 2026).

For the UK's Type 31 frigate program, Babcock has subcontracted hull block construction since 2023 for HMS Active (the class's second vessel) to Polska Grupa Zbrojeniowa. The blocks were manufactured in Poland and transported by barge to Scotland for integration. The deal was intended to control costs, circumvent British capacity bottlenecks, and prepare the Polish workforce for their own frigate program (Allison, 2023; Mustoe, 2023). However, outsourcing the modules has generated political controversy and resistance in Britain, including from organized labor (Allison, 2019).

There are also several examples of green hull cooperation. From 2007–2015, Navantia constructed the hulls for Australia's Canberra-class LHDs in Spain from the keel to the flight deck (approximately 85% of the vessel's structure), then transported them to Australia, where BAE Systems Australia installed the island superstructure, combat systems, and communications equipment (Navantia, 2018).

The coproduction of the Mistral-class LPDs split ship construction between three yards from 2003–2007. France's DCN (now Naval Group) handled the majority of systems and outfitting while Chantiers de l'Atlantique (another French yard) built the habitability modules and Stocznia Remontowa in Poland took on steelwork and hull construction to lower labor costs (Smallman et al., 2011).

The Polish Border Guard's current offshore patrol vessel program involves a green hull arrangement in which French shipbuilder Socarenam won the tender to build a 70-meter OPV for Poland, but hull construction was subcontracted to NavireTech in Poland. After a year of work, the partially equipped hull was launched in July 2022 and towed to Socarenam's shipyard in France, where final outfitting and equipment installation was completed. The program is expected to last from 2020–2030 (Peruzzi, 2023).

Pathway Evaluation

Ship Delivery Time

Previous efforts and interviews with shipbuilders suggest that the coproduction approach allows for eventual accelerated vessel delivery but involves a substantial upfront period to establish the necessary corporate, regulatory, and technical frameworks.

Once established, modular construction has the potential to accelerate individual ship construction. Commercial industry sources claim this approach can halve construction timelines via overlapping construction phases while boosting efficiency (VU Marine, 2025). Among other benefits, modular construction can occur in enclosed environments, avoiding weather-related delays that impact traditional shipyards. The United States' maritime industry is already familiar with modular construction, easing the implementation process (Ramponi, 2025). U.S. Virginia-class submarine producers have implemented aspects of modular shipbuilding, with General Dynamics Electric Boat and HII Newport News each building specialized elements and transporting supermodules to each other for a rotating final assembly location (Smallman et al., 2011, p. 50). The U.S. maritime industrial base is already making increased use of modular construction for surface ships, including Eastern Shipbuilding Group's work on DDG-51 Arleigh Burke modules for HII (Schuler, 2025).

These techniques offer the potential to reduce shipbuilding time requirements in the long run – especially if the U.S. Navy is willing to embrace new methods, including larger ship

sections that offer greater access to workers. Implementing modular coproduction between U.S. and allied shipyards would require additional preparation before construction can commence. This would involve negotiation and signing government-to-government agreements establishing the legal framework as well as industry-to-industry agreements. The latter would need to cover the development of detailed interface specifications defining how modules from different yards will connect and the establishment of common quality assurance protocols.

Modular coproduction would also require upgrades to U.S. shipyard infrastructure to handle module receipt and assembly as well as the training of U.S. shipyard workers in integration techniques. These investments in U.S. infrastructure (discussed in detail below) will take time to plan and execute.

In contrast, the green hull approach's main stumbling blocks lie in the post-delivery installation of equipment and systems, which could require significant labor-intensive superstructure deconstruction and reconstruction.[5] Ships are not typically built "outside in," and either the correct cabling and interfaces for complicated systems have to be laid by the building yard – requiring significant information sharing efforts – or deconstruction and rework will be needed in the assembling yard (Birkler et al., 2015, p. 42). This approach runs counter to the best practice of advanced outfitting. While the green hull approach is likely simpler and quicker to get started, the long run benefits on per ship construction time may not be as high given rework requirements and process inefficiencies. Nevertheless, the outfitting of largely complete hulls is within the capabilities of the U.S. workforce and physical infrastructure, and the overall cooperation activity could begin relatively quickly.

Cost Implications

Making use of modular coproduction would require major infrastructure investments to upgrade U.S. shipyards to receive and assemble large modules from abroad, align standards with allied yards, cover transportation costs, and manage the inefficiencies of distributed production compared to one optimized facility.[6]

Although some U.S. shipyards have begun to adopt modern modular construction techniques, significant further investment would almost certainly be required.[7] This would dovetail with U.S. efforts to implement "nation as a shipyard" policies which leverage distributed modular construction across the United States and the recent U.S. Navy (2026) investment of $900 million (alongside $1.5 billion in private capital) to create the "Factory of the Future" in Cherokee, Alabama, to manufacture submarine components (O'Rourke, 2025, p. 24).

To make modular coproduction successful, U.S. shipyards would likely have to invest in facilities to accommodate module delivery and positioning. This would involve purchasing additional heavy-lift cranes, implementing precision measurement systems, and possibly revamping production flows.[8] Allied yards would need to ensure modules met the U.S. Navy's survivability and systems requirements. Extensive coordination would be needed to ensure modules fabricated abroad met American quality and safety standards (Cook et al., 2025).[9] Coordination costs would include government officials' time to align standards, as well as the pass-through costs of adjusting tooling and machining practices.

[5] Interview with International Shipbuilder, July 2025.
[6] Interview with International Shipbuilder, July 2025; interview with U.S. Shipbuilding Expert, May 23, 2025.
[7] Interview with U.S. Shipbuilding Expert, May 27, 2025.
[8] Interview with International Shipbuilder, July 2025; interview with U.S. Shipbuilding Expert, May 23, 2025.
[9] Interview with International Shipbuilder, July 2025; interview with U.S. Shipbuilding Expert, June 6, 2025.

Transporting large modules is expensive.[10] Construction across multiple locations involves one yard constructing and joining together several small blocks into superblocks, weatherproofing them for sea-borne transport, and then sending them to another yard for assembly. Typically barges or specialized heavy lift ships are needed to handle these superblocks, and the limited availability of such transportation can raise costs (Smallman et al., 2011, p. 24). A fully outfitted engine room module or accommodation block can weigh several hundred tons and require specialized heavy-lift vessels for transpacific transport (BreakBulk News, 2016). Modules must be protected from saltwater corrosion, mechanical stress, and shrinkage/expansion during transportation, adding cost and risk.[11]

Challenges to implemented allied modular coproduction include cross-shipyard communication across corporate lines, which is especially complicated by a lack of accountability when failures occur (Schank et al., 2011). Some of the difficulties coordinating between shipyards could be ameliorated if the ones overseas and in the United States were owned by the same overall entity.

The green hull approach might cost less to implement initially, but its relative inefficiency could lead to higher per-ship expense in the long run. Upfront capital and coordination costs would likely be lower because the approach keeps high-value, high-complexity, security-sensitive outfitting work in the United States. Transporting hulls is less sensitive than that of modules; Navantia's successful hull export from Spain to Australia demonstrates that a similar trans-Pacific arrangement should be possible.[12] However, building a ship in this manner is not a best practice. The significant reworking required to cut open parts of the ship (deck, piping, etc.) to emplace systems into the green hull would drive long-term cost increases, which must be balanced against lower up-front implementation costs.

Bolstering U.S. Shipbuilding Capacity

Modular coproduction's primary potential benefit to U.S. shipbuilding capacity would be through technology transfer and workforce skill development. By engaging with Korean and Japanese shipbuilders who employ advanced modular construction techniques, U.S. yards could acquire new methodologies that improve long-term productivity (Kuzminski & Schmiegel, 2025; Potter, 2024). While the United States has some experience in modular shipbuilding, there is still room to grow. Many sections of the U.S. shipbuilding industry already employ these methods, especially for nuclear submarines and some surface ships programs, such as the LPD-17 Flight I after Hurricane Katrina and increasingly Flight III Arleigh Burke destroyers (LaGrone & Shelbourne, 2025; O'Rourke, 2025, p. 25).

However, the modular coproduction pathway is not purely focused on expanding domestic production. Work performed in Korean and Japanese shipyards does not build U.S. capacity, except in the case where U.S. workers are brought over to learn skills working in foreign yards, such as in the Arctic Security Cutter program (Singsit, 2026). If U.S. yards change their workflow to only or primarily perform assembly of foreign-supplied blocks, U.S. yards could develop integration skills but likely would not markedly improve their overall ship construction capabilities.

The green hull approach may involve less domestic work than modularity construction, as many of the ships' blocks will have been joined in the foreign shipyard. Outfitting the hull structure after construction with high-end systems such as radar and weapons requires different skills than the advanced fabrication and pre-outfitting that support new ship construction.

---

[10] A 2011 RAND study of multi-yard cooperation efforts for warships noted transportation needs had implications on cost in all seven of their case studies (Smallman et al., 2011, p. 28).
[11] Interview with U.S. Shipbuilding Expert, May 23, 2025.
[12] Interview with International Shipbuilder, July 2025.

Modular integration demands precision engineering, complex project management, and sophisticated quality control—capabilities that could translate to improved overall shipbuilding prowess (VU Marine, 2025).

Allied Industry Willingness and Ability

Opinions differ among Japanese and Korean shipbuilders regarding the value and viability of green hull production for the U.S. market. Korean shipbuilders have voiced optimism that a green hull approach is more politically realistic than outright U.S. purchase of their vessels and could circumvent ITAR restrictions.[13] Korean builders have also noted that while the green hull approach would be less complex than modular cooperation, they have concerns about post-delivery systems integration and the need for intensive communication with U.S. prime contractors.[14] Japanese shipbuilders have raised concerns about the economics and quality control of the green hull approach, as well.[15]

Allied shipbuilders have expressed confidence that module production could decrease costs and timelines for U.S. ships, particularly if subcontractors are shared between the shipyards, creating commonality and efficiencies of scale from the start. For example, the Korean shipbuilder HD Hyundai Heavy Industries has signed an MOU with HII with one stated goal being to explore investing in distributed shipbuilding (HII, 2025).

Both Korean and Japanese yards have the capacity to carry out this form of cooperation. Modular production is central to how their yards function and is a core element of the cost-competitiveness that has driven their business success. Several South Korean shipbuilding firms, for example, already make extensive use of ship modules constructed abroad in yards in Vietnam and Singapore, amongst other locations, with final assembly in South Korea (Sung & Kim, 2025).

Similarly, constructing a green hull is not dissimilar from working to construct an entire ship – given differences in leaving access open to core systems that would need to be added later. Korean and Japanese yards have the facilities, workforce, and know-how to carry this out; however, it is worth noting that constructing only modules or green hulls could occupy their yards' productive capabilities that could otherwise possibly be deployed for potentially more profitable full-ship construction. This may reduce their willingness to cooperate – or drive-up expenses to compensate for their opportunity costs.

U.S. Political and Regulatory Viability

Both modular and green hull coproduction would likely encounter opposition from U.S. industry and labor, while contending with statutory restrictions that explicitly prohibit foreign construction of major vessel components.

Some U.S. shipbuilders, maritime unions, and aligned experts view modular or green hull coproduction as no different from buying complete foreign-built ships, which they have consistently opposed. This perspective is summarized in the words of one U.S. shipbuilding advocate who called coproduction with foreign shipyards a "disastrous mistake" that would involve "kicking American shipyard workers to the curb" (Paxton, 2024). Many political figures remain firmly behind maintaining and even strengthening protectionist restrictions (Tammy Baldwin, 2023).

Shipbuilders and their political backers oppose coproduction because it may threaten domestic shipyards' revenue while offering only limited opportunities for certain segments of the

[13] Interview with International Shipbuilder and International Defense Officials, June 30, 2025.
[14] Interview with International Shipbuilder, July 1, 2025.
[15] Interview with International Shipbuilder, July 1, 2025.

maritime industrial base. Final outfitting work, while valuable, is less remunerative than full ship construction, so if substantial portions of a vessel are fabricated in South Korea or Japan, U.S. yards lose out on the potential revenue and profit from labor-hours, change orders, and materials (Umbrex, n.d.). U.S. shipbuilders and their advocates also argue that coproduction might be a first step towards the United States purchasing foreign-built ships, which they oppose.

However, smaller U.S. yards and facilities that lack the capacity to bid on full-ship contracts might gain opportunities as module assembly or green-hull outfitting yards. (Naval Sea Systems Command, n.d.). Additionally, equipment and sustainment suppliers, particularly weapons and electronics system subcontractors, receive business regardless of where construction occurs and would benefit from increased volume (Titmuss, 2024).

Regulatory barriers compound political opposition. The Byrnes-Tollefson Amendment (10 U.S.C. § 8679) explicitly prohibits the construction of U.S. naval vessels, or "major component[s] of the hull or superstructure," in foreign shipyards. The statute includes a waiver provision, but annual defense appropriation acts, including the 2026 DOD Appropriations Act, consistently contain non-waivable provisions that prohibit the use of funds for constructing Navy ships at foreign shipyards (K. Park, 2025). The Coast Guard as a component of the Department of Homeland Security is not subject to this DOD-specific restriction on the use of the Shipbuilding and Conversion Funds in the Navy budget. This enabled the Trump administration to forge the icebreaker deal for the Arctic Security Cutter with Finnish and Canadian companies via presidential waiver.

Summary

Coproduction is a promising pathway for cooperation if policymakers wish to balance delivery speed with bolstering U.S. capacity. The Navy already encourages shipyards to distribute shipbuilding across the United States; subcontracting work for existing U.S. ship classes out to allied shipyards would accelerate the number of ships the United States can field across the next decade. It would necessitate expensive investments in U.S. shipyards to help receive and assemble these allied modules. But while some construction dollars would flow overseas, these investments could bolster U.S. shipbuilding capacity and competitiveness long term. The program could also serve as a way of accelerating U.S. adoption of the most advanced modular production methods.

Nonetheless, the fundamental challenge is that modular and green hull coproduction combine the disadvantages of both domestic and foreign production while capturing only some of the benefits. Both would be more expensive and time-consuming than building complete ships in Korea or Japan because of coordination challenges, transportation costs, and management overhead. Either approach would offer fewer work or profit opportunities for the domestic maritime industrial industry than purely U.S.-based construction. Both face much the same political and regulatory barriers as direct foreign ship purchases because U.S. industry and law regard foreign-built modules or green hulls as equivalent to foreign-built ships.

Green hull and modular coproduction approaches offer different upsides. The green hull approach is generally regarded as easier to implement by some international shipbuilders and some U.S. experts, though other international shipbuilders thought it may be difficult to implement and were concerned by quality control and interface compatibility.[16] It is possible that the assembly phase of this program could be carried out in less advanced shipyards in the

[16] Interview with International Shipbuilder July 1, 2025; interview with U.S. Shipbuilding Expert, May 23, 2025; interview with International Shipbuilder July 7, 2025.

domestic industrial base, enabling broader distribution of shipbuilding labor and dollars across the U.S. ecosystem – assuming that quality and technical difficulties can be overcome.

By contrast, modular coproduction offers greater potential for greater domestic participation and workforce skill training for the U.S. maritime industrial base. This pathway would be most viable under specific conditions, beginning with Congress not placing restrictions on shipbuilding funding in annual DOD appropriations acts. A program could be structured as a bridge with built-in transition mechanisms to secure political support. Initially, ships might involve 60–70% foreign module content, decreasing to 50% for mid-program ships, and ultimately achieving predominantly domestic construction. A viable program model might also include technology transfer and workforce development provisions, with allied shipbuilders required to train U.S. workers, share production methodologies, and support U.S. yards in developing modular production expertise.

Additionally, either method could be confined at first to specific ship classes. Support and auxiliary vessels may represent better candidates than surface warfare ships. They are similar to the ships that foreign shipyards have the greatest experience with and feature lower security risks, reduced complexity, and less political significance.

Purchase of Foreign Ships

Not all maritime nations have capacity to produce naval vessels within their country or to meet all their naval needs. Those nations often contract with shipyards in partner countries to procure ships and scale naval warfighting capability. Some countries may focus on building particular classes of ships while importing others. Earlier analysis suggests foreign acquisition typically occurs when domestic capacity is insufficient, unaffordable, or slow; to achieve cost-prohibitive or highly specialized capabilities; to balance efficiency and domestic participation with multi-yard contracts, post-delivery outfitting, or phased-in domestic participation; or to achieve technology transfer and workforce development (Price, 1984). In short, there are many reasons to import ships, and it is a common strategy to build a national navy using imported ships or mixing imported and domestically produced ships.

Although there are many examples of nations procuring ships from overseas, the U.S. Navy has limited recent experience with this approach and last procured foreign-built ships in the early 1980s from European shipyards (MARAD, 2024). These were fast sealift ships for Military Sealift Command rather than combatants.

To overcome challenges in the U.S. naval shipbuilding industrial base, numerous analysts have proposed procuring naval vessels built overseas – especially support ships (DiMascio, 2024; Montgomery, 2026; Wills, 2026). Former Congressional Research Service analyst Ronald O'Rourke (2026b) has argued that if the Navy needed to procure ships quickly, the only way to do this would be to buy foreign-made ships.

As with the other pathways, foreign ship purchase could take multiple forms, each with distinct tradeoffs between speed, cost, and fleet compatibility. The two potential approaches the United States could consider include 1) purchasing existing allied designs and 2) contracting with foreign yards to produce U.S. designs.[17]

[17] A third option for purchasing from U.S. allies would be joint development of new ship designs. While technically possible, this option is not considered here as the time, money, and intra-governmental effort required to create a new joint project rules this option out in the time scale and cost picture driving current cooperation needs. The need for two or more parties to agree when they have differing strategic needs, technical standards, political constituencies, and cost tolerances can cause roadblocks and inefficiencies. Recent U.S. efforts to adapt international designs

Pathway Evaluation

Ship Delivery Time

Allied shipyards could notionally produce and deliver ships relatively quickly provided there was clarity on the design and access to the necessary components in the supply chain.

South Korean and Japanese shipyards are accustomed to working quickly on shipbuilding projects, primarily commercial but also naval. Allied yards predominantly build commercial vessels, a deeply competitive market where success depends on delivering ships on time and at cost. Japanese and South Korean shipyards meet the challenge through attention to schedule and producibility, while investing in new production technologies (Jaquith, 2019). South Korea's acquisition practice is typically to fix requirements and limit change orders during the build process. Those lessons and best practices such as pre-outfitting of modules can apply to naval shipbuilding, even with different requirements. In practice, South Korea's adaptations of U.S. naval designs for their own fleet have consistently been delivered more quickly and consistently than their U.S. counterparts, though of course these ships are different – making specific estimates of time savings difficult (Bisht, 2021; Cha, 2024; Lee, 2021).

Procuring foreign-designed ships would be the fastest way to add ships to the U.S. naval fleet and would take advantage of existing production practices and supply chains. The shipbuilders would need to work with their U.S. Navy customer to understand any specific additional requirements. Further work would be necessary to incorporate U.S. naval systems on the vessels, and sensitive classified systems would likely need to be added in the United States.

Having foreign yards construct U.S. designs under license would require additional engagement to enable the allied shipbuilder to work with complex and often unique U.S. Navy requirements. Potential challenges include compliance, ensuring the correct processes are followed, and that security concerns are met. Foreign shipyards would have to follow the U.S. Navy's specific survivability specifications, systems integration protocols, and operational requirements.[18] At the basic production level, foreign yards typically use the metric system instead of the imperial system. Differences require either retooling or negotiation, although these delays are not insurmountable. Complex systems like the United States' AEGIS have been incorporated into allied ships by partner yards in the past (LaGrone, 2016).

Cost Implications

Japanese and South Korean naval ships are constructed in shipyards that build both commercial and naval vessels, where the push to be competitive in a commercial market increasingly dominated by Chinese ships forces builders to invest in increasing efficiencies and driving down costs. These investments, improvements, and management practices can be incorporated into naval production, where for example producibility is emphasized during the design phase.[19]

Procuring existing allied designs where the shipyard has already built ships of the specified design would be less expensive than purchasing a license-built U.S. design in terms of up-front purchase price. For example, comparing the cost of the FFG-62, DDG-51, and T-AOL

---

with the Constellation class have resulted in significant cost overruns (LaGrone & Shelbourne, 2024). Even within a single military, joint programs across services without identical and stable requirements can lead to cost growth, as the F-35 program showed (Lorell et al., 2013).

[18] Interview with U.S. Shipbuilder, October 23, 2025.

[19] This is not to imply that allied shipyards build commercial vessels and naval vessels interchangeably with the same workforces and facilities. Often, naval production occurs in a fenced-off section of a shipyard – and with a workforce comprised of the respective country's own nationals, which is not always the case in commercial construction. Nevertheless, some investment in commercial technology and infrastructure can benefit naval shipbuilding, not to mention the development of best practices in construction and management.

classes to the Korean Daegu, Sejong the Great, and Soyang-class vessels suggests that direct purchase of Korean designs could yield vessels 50–70% cheaper than their U.S. counterparts, even considering that the U.S. ships have different standards that also drive costs (Bisht, 2021; Cha, 2024; Lee, 2021). The Korean government notes that their Jeongjo the Great AEGIS-equipped destroyer was built in 38 months at a cost of around $1 billion, while the Arleigh Burke Flight-III has an approximately 4-year construction period and $1.4 billion dollar price.[20] However, life cycle logistics and MRO costs would be increased by the introduction of additional ship variants into the fleet, new parts, and different technical standards. Given that MRO typically accounts for a large proportion of vessel's lifetime cost, this could be a significant cost burden for this option in the long run (Maurer, 2024).

Producing U.S. designs rather than allied designs in allied yards would increase production costs for many reasons, and what follows is not an all-inclusive list. The U.S. Navy often evolves designs over the course of a build, especially for the first-in-class ship, which adds costs. South Korean yards, for example, typically require design maturity before they start laying the keel. These shipyards focus on "design for producibility," a term of art which means bringing ease-of-production considerations into the ship design process. As a result, their naval ships are often larger than comparable U.S. ships to enable easier worker access and build processes. Japanese ship construction practice also emphasizes minimal design changes during construction.[21]

U.S. Shipbuilding Capacity

Building ships abroad does not contribute to enhancing U.S. domestic shipbuilding capacity unless included as part of a hybrid strategy – discussed later – wherein foreign purchase was paired with a contractual requirement to invest in U.S. yards, as is commonly done in "offset" strategies.

If ship orders given to foreign yards were restricted to classes of ships that U.S. shipyards do not have the capacity or economic incentive to build, or if the Navy were to procure ships to the extent that U.S. shipyards' order books were overflowing, then sending orders abroad may not negatively impact the naval shipbuilding industrial base directly. However, this would still not contribute to the United States' capacity in the long run.

Allied Industry Willingness and Ability

Allied shipbuilders have indicated an interest in constructing ships for the U.S. Navy. In interviews, they have suggested that they could dedicate entire sections of their yards to U.S. naval construction if they received long term contracts.[22] Korean yards' success in building modified U.S. designs makes them confident they can deliver ships to the U.S. Navy at a substantially lower cost.[23] From their perspective, building their own designs would be easiest. Working with U.S. naval designs would be possible but challenging; along with different standards, foreign yards have highlighted the challenge of managing requirements creep given the allied yards' practice of constructing mature (i.e., fixed and unchanging) designs.

Moreover, for exporting nations, selling ships has the same benefits as other exports, including market expansion and support of the local economy, risk diversification, and economies of scale. The South Korean and Japanese governments are strong proponents of

[20] Slide deck provided by Ministry of National Defense, Republic of Korea.
[21] Interview with International Defense Officials, July 4, 2025.
[22] Interview with International Shipbuilder, September 24, 2025.
[23] Interview with International Shipbuilder, June 30, 2025; Interview with International Shipbuilder, July 2, 2025.

their builders selling to the United States as it would bolster their maritime industrial bases while simultaneously strengthening their defense partnerships with a crucial ally.

U.S. Political and Regulatory Viability

For nations that traditionally construct their own warships – including the United States – purchasing ships from overseas represents a change in strategy with significant barriers and internal resistance to overcome. Purchasing naval ships from partners and allies faces strong headwinds, with the most profound challenge based in U.S. law. The Byrnes-Tollefson amendment (10 U.S.C. § 8679) prohibits U.S. armed forces' vessels from being built in a foreign shipyard, though it can be waived by the president (Construction of Vessels in Foreign Shipyards: Prohibition, n.d.). Members of Congress have made consistent efforts to tighten these restrictions in annual NDAAs (Tammy Baldwin, 2023). While the 10 U.S.C. § 8679 restriction can be waived by the president, other restrictions in annual DOD appropriations acts on the use of Navy shipbuilding funds cannot be waived by the president acting alone. They would require the support of Congress (K. Park, 2025).

American shipbuilders have consistently opposed outsourcing naval vessel construction. They have claimed that they are far from full capacity and that current naval procurement barely supports their continued business health.[24] Unions such as the International Association of Machinists and Aerospace Workers have warned that that outsourcing would undermine national security (IAM Union, 2025).

These challenges, though difficult, are not insurmountable. The possibility of a presidential waiver in case of a national security emergency means that if there were no other alternative to growing the fleet, it would be possible to do so by buying foreign ships for the Navy – if Congress does not continue to place restrictions on naval funding.

Summary

Every pathway for cooperation presents distinct opportunities, and their feasibility depends on the willingness of U.S. leaders to overcome the challenges. The potential to leverage the direct procurement of foreign-built vessels from allied shipyards depends on strategic and political priorities. If U.S. policymakers' top priorities are speed, buying foreign ships is a strong option. However, if increasing domestic shipbuilding capacity is policymakers' first priority, procuring ships built in foreign yards will not yield tangible progress. Political and regulatory challenges make buying foreign ships difficult unless sufficient political will is mustered to change the current policy landscape.

Hybrid Approaches and Conclusions

This report does not seek to suggest a single optimal approach to address the shipbuilding challenge facing the United States, which include a series of interwoven, systemic issues in both government and industry that impede the industrial base's ability to build ships at the speed, scale, and cost the Navy needs. Each of the three aforementioned pathways—allied partnership with, investment in, or acquisition of U.S. shipyards; modular coproduction with foreign yards; and purchasing foreign ships—involves tradeoffs in terms of time, cost, and improvement of U.S. industrial capacity. These pathways also depend on both allied willingness and U.S. political and regulatory viability. Allied cooperation–regardless of the form it takes–will face challenges to implementation. Nonetheless, policymakers with distinct policy preferences can leverage allied capability to solve discreet problems, even if it does not immediately solve the entire problem set bedeviling U.S. naval shipbuilding.

[24] Interview with U.S. Shipbuilder, October 23, 2025.

If U.S. policymakers' focus were solely on rebuilding U.S. domestic capability, then encouraging allied investment in, partnership with, or acquisition of U.S. shipyards would be a key pathway – but it would likely not be a fast or cheap solution to deliver more ships into the U.S. fleet. It would also require some regulatory reform to enable easier communication and coordination between shipyards' foreign headquarters and their U.S. partners or subsidiaries.

If, instead, U.S. policymakers' top priority was delivering ships into the U.S. fleet as quickly as possible, then buying foreign designs off the shelf would present a more immediate option. But this will not bolster the capacity of the U.S. maritime industrial base in the long term. Although foreign ships may be cheaper than equivalent U.S. ships, they could end up costing more to sustain in the long run due to a lack of commonality. It would also require the expenditure of a large amount of political will or capital to change existing laws, at a minimum reforming the DOD appropriation acts' annual restrictions on shipbuilding funding to allow for foreign construction with a presidential waiver, as is the case with the Byrnes-Tollefson amendment (10 U.S.C. § 8679).

Modular coproduction could serve to both improve U.S. domestic capacity and increase ship deliveries to the fleet. It leverages allied capabilities to scale the production of U.S. ships and could reduce cost and ship construction time in the long run, although it would require a significant amount of startup time and capital. It could help bolster U.S. shipbuilding capacity via technology transfer and investments, but perhaps not to the same extent that focusing on allied partnership and investment might. And it would face strong political headwinds from U.S. domestic industry and would require political reforms potentially to the same extent as directly purchasing U.S. ships.

However, the different pathways to cooperation outlined in this report need not be implemented in isolation. In practice, cooperation will often entail combining two or more pathways to deliver ships more quickly, control costs, facilitate the buildup of domestic production capability, attain U.S. political support, or make cooperation more appealing to allied industry. Australia's planned procurement of the Mitsubishi Heavy Industries-designed Mogami frigate follows a hybrid approach. The lead ships will be built in Japan and subsequent ones in Australia (Australian Government Defense Ministers, 2025).

Another hybrid approach was recently employed by the United States with the Arctic Security Cutter (ASC) program, more commonly referred to as the Icebreaker Collaboration Effort (ICE) Pact.[25] Combining foreign construction, phased onshoring, and knowledge transfer via personnel exchange, the ASC program is a hybrid approach that uses foreign yards to build ships in the near term and to rebuild domestic shipbuilding capability via investment in and the sharing of expertise with the U.S. maritime industrial base. The ASC program involves both purchasing foreign ships and partnering with, investing in, and/or acquiring U.S. yards.[26] The United States was able to purchase foreign-built ships with a presidential waiver, without need

[25] In an example of cross-administration and bipartisan focus, the ICE Pact framework was established under the Biden administration in a November 2024 MOU, in which the United States, Canada and Finland agreed to collaborate on icebreaker construction. In April 2025, under the second Trump administration, the Coast Guard announced a Request for Information (RFI) for the Arctic Security Cutter, a program intended to supplement the delayed, over-budget polar security cutter program (O'Rourke, 2026a, p. 13).

[26] Contracts for up to 11 ASCs were divided between two contract teams. The first part of the contract went to Canadian shipbuilder Davie, which will construct two ASCs at its Helsinki Shipyard and subsequently three ASCs in Texas through its newly acquired U.S. subsidiary (formerly Gulf Copper; Naval News, 2026). In the second contract, the first two vessels will be built by Finnish shipbuilder Rauma in Finland using a design from Finland's Aker Arctic and Canada's Seaspan. Another four vessels will be constructed in the United States by Bollinger to the same design (U.S. Coast Guard News, 2025).

for congressional action, as the U.S. Coast Guard is part of DHS and thus subject to different procurement laws and regulations.[27]

The ASC program demonstrates that the United States has the capacity and will to engage in international shipbuilding cooperation, especially if done through a hybrid approach. Combining pathways in this way allows shipbuilding cooperation to perform well against many outcome metrics (such as building ships fast or building U.S. capacity) at once, while individual approaches require more difficult trade-offs to be made. Cooperation in hybrid models allows investment, partnership, coproduction, or even foreign purchase to all work hand-in-hand to make a deal both productive and politically viable.

That said, hybrid approaches do not offer a perfect solution. Hybrid approaches are more complex forms of cooperation, and basic defense industrial collaboration is already difficult to carry out. They also are a form of policy bundling, wherein every interest group may realize some objectives, but the solution may be subsequently less efficient (especially on cost) as a result. The choice between different hybrid approaches to collaboration, even beyond those in the ASC program, will depend on U.S. political tolerance for foreign ownership, the desired balance between speed and structural transformation, and foreign shipbuilders' capital access and risk tolerance.

Nevertheless, the ASC program demonstrates that when U.S. strategic needs are clear and pressing enough, it is possible to pursue innovative methods. Whether through an individual pathway or a combination of several, the United States should consider leveraging its allies and their shipbuilding industries to rebuild U.S. naval power.

References

Allison, G. (2019, January 4). *CSEU say government is 'slowly killing the shipbuilding industry.'* https://ukdefencejournal.org.uk/cseu-say-government-is-slowly-killing-the-shipbuilding-industry/

Allison, G. (2023, April 9). *Poland building part of a British frigate – why?* https://ukdefencejournal.org.uk/poland-building-part-of-a-british-frigate-why/

Austal Limited. (2003). *Concise report 2003*. https://investor.austal.com/static-files/402bad07-95cf-48ce-993e-89e4a8d2d38e

Austal USA. (2019, December 13). *Austal USA celebrates 20 years.* https://www.austalusa.com

Australian Government Defense Ministers. (2025, August 5). *Mogami-class frigate selected for the Navy's new general purpose frigates*. https://www.minister.defence.gov.au/media-releases/2025-08-05/mogami-class-frigate-selected-navys-new-general-purpose-frigates

Birkler, J., Schank, J. F., Arena, M. V., Keating, E. G., Predd, J. B., Black, J., Danescu, I. E., Jenkins, D., Kallimani, J. G., Lee, G. T., Lough, R., Murphy, R., Nicholls, D., Persi Paoli, G., Peetz, D., Perkinson, B., Sollinger, J. M., Tierney, S., & Younossi, O. (2015). *Australia's naval shipbuilding enterprise: Preparing for the 21st century*. https://www.rand.org/pubs/research_reports/RR1093.html

Bisht, I. S. (2021, August 26). South Korea approves $3.07 billion frigate program. *The Defense Post*. https://thedefensepost.com/2021/08/26/south-korea-frigate-program/

[27] President Trump issued a presidential memorandum authorizing construction of up to four Arctic Security Cutters abroad under 14 U.S.C. 1151(b), the Coast Guard version of 10 U.S.C. § 8679, which prohibits foreign construction unless waived by the president (The White House, 2025b). While Navy shipbuilding funds are restricted from use for overseas procurement via DOD authorization act provisions, the U.S. Coast Guard under DHS does not face these unwaivable congressional restrictions and therefore may acquire foreign-built vessels with a presidential waiver (Construction of Vessels in Foreign Shipyards: Prohibition, n.d.).

BreakBulk News. (2016, December 9). *Transporting modules a much bigger task than just crossing Pacific*. https://breakbulk.news/transporting-modules-much-bigger-task-just-crossing-pacific/

Carroll, H. H., & Cook, C. R. (2025). *Identifying pathways for U.S. shipbuilding cooperation with Northeast Asian allies*. Center for Strategic and International Studies. https://www.csis.org/analysis/identifying-pathways-us-shipbuilding-cooperation-northeast-asian-allies

Cha, E. (2024, August 7). *Hanwha Ocean to build second Soyang-class fast combat support ship (AOE-II)*. Naval News. https://www.navalnews.com/naval-news/2024/08/hanwha-ocean-to-build-second-soyang-class-fast-combat-support-ship-aoe-ii/

Construction of Vessels in Foreign Shipyards: Prohibition, 10 U.S.C. § 8679 (n.d.). Retrieved October 31, 2025, from https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title10-section8679&num=0&edition=prelim

Cook, C. R., Edel, C., Paik, K., Sanders, G., Carroll, H. H., Buda, K., & Augé, J. (2025). *Enhancing defense industrial cooperation between Australia and the United States*. https://www.csis.org/analysis/enhancing-defense-industrial-cooperation-between-australia-and-united-states

Daniels, S. P., Carroll, H. H., Cook, C. R., Buntin, O., & O'Rourke, S. (2025). *Outlining the challenges to U.S. naval shipbuilding*. https://www.csis.org/analysis/outlining-challenges-us-naval-shipbuilding

DiMascio, B. T. (2024, October 22). *Foreign shipyards can help the U.S. Navy build its fleet*. U.S. Naval Institute. https://www.usni.org/magazines/proceedings/2024/october/foreign-shipyards-can-help-us-navy-build-its-fleet

Guevera, J. (2025, April 17). *Shipbuilding and the future of U.S. sea power: The role of South Korea and Japan in the rejuvenation of the American fleet*. Center for Maritime Strategy. https://centerformaritimestrategy.org/publications/shipbuilding-and-the-future-of-u-s-sea-power-the-role-of-south-korea-and-japan-in-the-rejuvenation-of-the-american-fleet/

Ha, S.-Y. (2025, July 7). Trump's efforts to revive U.S. shipbuilding slowed by inconsistent policies, leadership gaps, funding shortfalls. *Korea JoonAng Daily*. https://koreajoongangdaily.joins.com/news/2025-07-07/business/industry/Trumps-efforts-to-revive-US-shipbuilding-slowed-by-inconsistent-policies-leadership-gaps-funding-shortfalls/2345718

Heim, A., & Tedesco, M. (2009, July 30). *A shipbuilder's assessment of America's marine highways*. General Dynamics NASSCO. https://www.nassco.com/pdfs/Shipbuilder-Assessment-American-Marine-Highway-NASSCO.pdf

HII. (2025, October 26). *HD Hyundai Heavy Industries and HII execute memorandum of agreement to collaborate on distributed shipbuilding and pursue teaming on auxiliary and commercial vessels*. https://hii.com/news/hd-hyundai-heavy-industries-and-hii-execute-memorandum-of-agreement-to-collaborate-on-distributed-shipbuilding-and-pursue-teaming-on-auxiliary-and-commercial-vessels/

Hoffmann, L. (2025, July 16). *First calls from German MP for cancellation of F126 frigate programme*. Naval News. https://www.navalnews.com/naval-news/2025/07/first-calls-from-german-mp-for-cancellation-of-f126-frigate-programme/

IAM Union. (2025, January 7). *IAM Union continues to champion expansion of domestic U.S. Navy shipbuilding*. https://www.goiam.org/news/imail/iam-union-continues-to-champion-expansion-of-domestic-u-s-navy-shipbuilding/

Jaquith, P. E. (2019). Asian vs. U.S. warship design, production engineering, and construction practice. *Naval Engineers Journal*, *131*(4), 55–58.

Katz, J. (2023, April 19). *Fincantieri finishing $300M shipyard renovations, a big bet on the US Navy's frigate plans*. Breaking Defense. https://breakingdefense.com/2023/04/fincantieri-finishing-300m-shipyard-renovations-a-big-bet-on-the-us-navys-frigate-plans/

Kington, T. (2015, May 16). Naval work booming at Fincantieri. *Defense News*. https://www.defensenews.com/naval/2015/05/16/naval-work-booming-at-fincantieri/
Kuzminski, K., & Schmiegel, L. (2025, July 3). *A workforce strategy for America's shipbuilding future*. War on the Rocks. https://warontherocks.com/2025/07/a-workforce-strategy-for-americas-shipbuilding-future/
LaGrone, S. (2016, September 6). *New South Korean destroyers to have BMD capability*. USNI News. https://news.usni.org/2016/09/06/new-south-korean-destroyers-ballistic-missile-defense-capability
Lagrone, S. (2024, March 7). *SECNAV Del Toro tells U.S. shipyards 'invest more', encourages foreign investment*. USNI News. https://news.usni.org/2024/03/07/secnav-del-toro-tells-u-s-shipyards-invest-more-encourages-foreign-investment
LaGrone, S., & Shelbourne, M. (2024). *Constellation frigate delivery delayed 3 years, says Navy*. USNI News. https://news.usni.org/2024/04/02/constellation-frigate-delivery-delayed-3-years-says-navy
LaGrone, S., & Shelbourne, M. (2025, September 12). *U.S. naval shipyards accelerating outsourcing for new construction programs*. USNI News. https://news.usni.org/2025/09/12/u-s-naval-shipyards-accelerating-outsourcing-for-new-construction-programs
Lee, D. (2021, November 12). *South Korea's HHI wins new KDX III Batch II destroyer contract*. Naval News. https://www.navalnews.com/naval-news/2021/11/south-koreas-hhi-wins-new-kdx-iii-batch-ii-destroyer-contract/
Lockheed Martin. (2021). *Shipyard transformation through investment* [Press release]. https://www.lockheedmartin.com/content/dam/lockheed-martin/rms/documents/lcs/Shipyard_Brochure.pdf
Lorell, M. A., Kennedy, M., Leonard, R. S., Munson, K., Abramzon, S., An, D. L., & Guffey, R. A. (2013). *Do joint fighter programs save money?* https://www.rand.org/pubs/monographs/MG1225.html
Luckenbaugh, J. (2025, June 2). Navy taking shipbuilding lessons from Indo-Pacific allies. *National Defense Magazine*. https://www.nationaldefensemagazine.org/articles/2025/6/2/just-in-navy-taking-shipbuilding-lessons-from-indopacific-allies
MARAD. (2024, September 27). *National register eligibility assessment vessel: Antares (AKR-294)*. https://vesselhistory.marad.dot.gov/documents/68f6e020-0b5b-48a1-aff5-8e4f2ebdc45d.pdf
Maurer, D. (2024). *Weapon system sustainment: DOD identified operating and support cost growth but needs to improve the consistency and completeness of information to Congress* (GAO-24-107378). U.S. GAO. https://www.gao.gov/products/gao-24-107378
McDonald, J. (2025, March 19). *Modular construction is key for Navy's shipbuilding goals*. GovCIO Media & Research. https://govciomedia.com/modular-construction-is-key-for-navys-shipbuilding-goals/
Montgomery, M. (2026, February 15). Trump could be missing the opportunity to rebuild the Navy efficiently and quickly. *New York Post.* https://nypost.com/2026/02/15/opinion/trump-could-be-missing-the-opportunity-to-rebuild-the-navy-efficiently-and-quickly/
Mustoe, H. (2023, April 9). Britain's new warships to be partly built in Poland. *The Telegraph*. https://www.telegraph.co.uk/business/2023/04/09/britains-new-frigates-built-in-poland/
Naval News. (2026, February 11). *Davie Defense awarded USCG contract to build five Arctic security cutters*. https://www.navalnews.com/naval-news/2026/02/davie-defense-awarded-uscg-contract-to-build-five-arctic-security-cutters/
Naval Sea Systems Command. (n.d.). *Navy partners with private industry to grow submarine industrial base capacity*. Retrieved November 10, 2025, from

https://www.navsea.navy.mil/Media/News/Article-View/Article/3913023/navy-partners-with-private-industry-to-grow-submarine-industrial-base-capacity/
Navantia. (2018, June 26). *HMAS Canberra handed over to the Royal Australian Navy*. https://www.navantia.es/en/news/press-releases/hmas-canberra-handed-over-to-the-royal-australian-navy/
Oakley, S. S. (2024, May 29). *Navy frigate: Unstable design has stalled construction and compromised delivery schedules*. U.S. GAO. https://www.gao.gov/products/gao-24-106546
Oh, M., & Cecire, M. (2025). *Why the United States, South Korea and Japan must cooperate on shipbuilding*. RAND. https://www.rand.org/pubs/commentary/2025/05/why-the-united-states-south-korea-and-japan-must-cooperate.html
O'Rourke, R. (2025). *Navy force structure and shipbuilding plans: Background and issues for Congress*. Congressional Research Service. https://sgp.fas.org/crs/weapons/RL32665.pdf
O'Rourke, R. (2026a). *Coast Guard polar security cutter (PSC) and Arctic security cutter (ASC) icebreaker programs: Background and issues for Congress* (CRS Report No. RL34391). Congressional Research Service. https://www.congress.gov/crs-product/RL34391
O'Rourke, R. (2026b, February 11). *Building the fleet to meet the mission* [Public comments on panel]. WEST 2026. https://www.youtube.com/watch?v=2wkCBwb5lXI
Papavizas, C. (2024, May 7). *When is a vessel built in America "U.S. built."* MaritimeFedWatch, Winston & Strawn. https://www.winston.com/en/blogs-and-podcasts/maritime-fedwatch/when-is-a-vessel-built-in-america-us-built
Park, J., Singh, K., & Singh, K. (2025, November 14). *US, South Korea unveil details on shipbuilding investment*. Reuters. https://www.reuters.com/world/asia-pacific/us-south-korea-release-details-deal-including-korean-investment-shipbuilding-2025-11-14/
Park, K. (2025, September 30). *U.S. defense bill upholds overseas shipbuilding ban, challenging MASGA*. The Chosun Daily. https://www.chosun.com/english/world-en/2025/10/01/GNSOKZHDOFGA7HA6OZIBGMMACI/
Paxton, M. (2024, August 5). *Outsourcing the US shipyard industrial base will outsource American sovereignty*. National Defense Transportation Association. https://www.ndtahq.com/outsourcing-the-us-shipyard-industrial-base-will-outsource-american-sovereignty/
Peruzzi, L. (2023, May 31). *Offshore patrol vessels and shipbuilders in Europe*. ESD. https://euro-sd.com/2023/05/articles/31365/offshore-patrol-vessels-and-shipbuilders-in-europe/
Pitel, L. (2026, April 7). Europe's rearmament meets reality: The story of a failed frigate project. *Financial Times*. https://www.ft.com/content/124c9dfc-18da-49fa-aab5-6389dce833ae?syn-25a6b1a6=1
Potter, B. (2024, May 3). *Lessons from shipbuilding productivity—Part I*. https://www.construction-physics.com/p/lessons-from-shipbuilding-productivity
Price, R. A. (1984). *Manufacturing technology for shipbuilding* (NSRP #0140; Shipbuilding Technology Transfer). U.S. Department of Transportation Maritime Administration. https://doi.org/10.21236/ADA443660
Ramponi, D. (2025, September 22). *Breaking ships into blocks: How modular construction is changing shipbuilding*. ShippingKnowHow. https://www.shippingknowhow.net/post/breaking-ships-into-blocks-how-modular-construction-is-changing-shipbuilding
Roberts, M., & Clark, B. (2025). *Shoring up the foundation: Affordable approaches to improve US and allied shipbuilding and ship repair*. Hudson Institute. https://www.hudson.org/supply-chains/shoring-foundation-affordable-approaches-improve-us-allied-shipbuilding-ship-repair-bryan-clark-michael-roberts

Samora, S. (2024, July 21). *Austal USA spending $288M to expand Alabama ship plant*. Manufacturing Dive. https://www.manufacturingdive.com/news/austal-usa-288-million-ship-plant-expansion-mobile-alabama-us-navy/722779/

Schank, J. F., Arena, M. V., Ip, C., Kamarck, K. N., Murphy, R. E., Lacroix, F. W., & Lee, G. T. (2011). *Lessons from Australia's Collins submarine program* (Vol. IV; Learning from Experience). RAND Corporation.

Schank, J. F., Savitz, S., Munson, K., Perkinson, B., McGee, J., & Sollinger, J. M. (2016). *Designing adaptable ships: Modularity and flexibility in future ship designs*. https://www.rand.org/pubs/research_reports/RR696.html

Schuler, M. (2025, September 16). *Eastern Shipbuilding partners with HII to boost U.S. Navy destroyer production*. gCaptain. https://gcaptain.com/eastern-shipbuilding-partners-with-hii-to-boost-u-s-navy-destroyer-production/

Schumacher, K. (2022, May 12). *Fincantieri Marinette Marine cuts the ribbon on a new building for new Navy ships*. WBAY. https://www.wbay.com/2022/05/12/fincantieri-marinette-marine-cuts-ribbon-new-building-new-navy-ships/

Shelbourne, M. (2023, April 25). *Major shift comes to Fincantieri Marinette Marine as Freedom LCS line ends*. USNI News. https://news.usni.org/2023/04/25/major-shift-comes-to-fincantieri-marinette-marine-as-freedom-lcs-line-ends

Shelbourne, M., & LaGrone, S. (2026, April 3). *Pentagon's new $65.8B shipbuilding ask is highest since 1962*. USNI News. https://news.usni.org/2026/04/03/pentagons-new-65-8b-shipbuilding-request-is-highest-since-1962

Silva, F. (2024). *Governmental influence on shipbuilding* [Master's thesis, Naval Postgraduate School]. https://dair.nps.edu/handle/123456789/5280

Singsit, J. (2026, February 12). *US Coast Guard selects Davie Defense for five Arctic security cutters*. Naval Technology. https://www.naval-technology.com/news/uscg-asc-davie-defense/

Smallman, L., Tang, H., Schank, J. F., & Pezard, S. (2011). *Shared modular build of warships: How a shared build can support future shipbuilding*. RAND. https://www.rand.org/pubs/technical_reports/TR852.html

Sung, S.-H., & Kim, J.-W. (2025, April 14). *With domestic dockyards fully booked, Korean shipbuilders turn overseas*. KED Global. https://www.kedglobal.com/shipping-shipbuilding/newsView/ked202504140008

Tammy Baldwin. (2023, July 21). *Baldwin strengthens Buy America requirements for Navy ships in must-pass Senate defense bill*. https://www.baldwin.senate.gov/news/press-releases/baldwin-strengthens-buy-america-requirements-for-navy-ships-in-must-pass-senate-defense-bill

Titmuss, P. (2024, April 5). *7 Naval contractors serving the U.S. government*. ExecutiveGov. https://www.executivegov.com/articles/naval-contractors-serving-us-government

UK Ministry of Defence. (2022). *Maritime modularity concept*. https://assets.publishing.service.gov.uk/media/63dcece38fa8f57fc8061089/Maritime_Modularity_Concept.pdf

Umbrex. (n.d.). *How the defense contractor industry works*. Retrieved November 10, 2025, from https://umbrex.com/resources/how-industries-work/aerospace-defense/how-the-defense-contractors-manufacturing-industry-works/

U.S. Coast Guard News. (2025, December 29). *Coast Guard awards contracts to build Arctic security cutters*. https://www.news.uscg.mil/Press-Releases/Article/4368196/coast-guard-awards-contracts-to-build-arctic-security-cutters/

U.S. Navy. (2026, March 20). *Advanced shipbuilding "factory of the future" opens in Alabama*. https://www.navy.mil/Press-Office/Press-Releases/display-pressreleases/Article/4439992/advanced-shipbuilding-factory-of-the-future-opens-in-alabama/

VU Marine. (2025, June 21). *Modular shipbuilding: A game changer in modern marine manufacturing*. https://vumarine.com/modular-shipbuilding-a-game-changer-in-modern-marine-manufacturing/
White, R. D. (2011, July 3). Full steam ahead for Nassco shipyard in San Diego. *Los Angeles Times*. https://www.latimes.com/business/la-xpm-2011-jul-03-la-fi-made-in-california-shipyard-20110703-story.html
The White House. (2025a, April 9). *Restoring America's maritime dominance*. https://www.whitehouse.gov/presidential-actions/2025/04/restoring-americas-maritime-dominance/
The White House. (2025b, October 8). *Memorandum on construction of Arctic security cutters*. https://www.presidency.ucsb.edu/documents/memorandum-construction-arctic-security-cutters
Wills, S. (2026, March 11). 'Let foreign yards build U.S. Navy auxiliary and service ships now.' *Seapower*. https://seapowermagazine.org/let-foreign-yards-build-u-s-navy-auxiliary-and-service-ships-now/
Yu, J. (2025, August 14). *How South Korea's 'MASGA' proposal could reshape US shipbuilding*. The Diplomat. https://thediplomat.com/2025/08/how-south-koreas-masga-proposal-could-reshape-us-shipbuilding/


Acquisition Research Program
Department of Acquisition, Finance, and Manpower
Naval Postgraduate School
555 Dyer Road, Ingersoll Hall
Monterey, CA 93943

www.acquisitionresearch.net