

Maritime Industrial Base in Crisis, New CMS Report Finds

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However, many of the United States' maritime allies are experiencing similar challenges to their domestic shipbuilding industries and have adopted creative approaches to solving them. The United States must utilize the experience, knowledge and resources of its allies to develop the best strategy possible for building a stronger, more resilient MIB.

Accordingly, the Center for Maritime Strategy conducted a study of America's allied maritime industrial base to examine how five American allies (South Korea, Italy, Canada, Sweden and the United Kingdom) build commercial and naval ships, how they support their shipbuilding industries and what lessons America can learn from its allies about how to revitalize its MIB.

Each country faces similar shipbuilding challenges to America but has taken a different approach to addressing them. Although South Korea and Italy have successfully maintained strong commercial and naval shipbuilding sectors, Canada and the United Kingdom have largely allowed their commercial sectors to atrophy while primarily focusing on warship construction, while Sweden has seen both sectors significantly diminish and maintains only marginal naval shipbuilding capabilities. Many of America's allies have successfully maintained strong MIBs by streamlining the process for designing and building ships. Among the countries studied, the most successful nations at sustaining strong commercial and naval shipbuilding industries have found ways to minimize late-stage design changes, build a greater variety of ships based on a common design and establish a shipbuilding culture which emphasizes delivering ships on time and under budget.

Similarly, the study illustrates how government investments in their MIBs can set their shipbuilding industries up for success, including by training the next generation of skilled tradespeople and supporting greater supply chain resilience. America's most successful shipbuilding allies have also heavily invested in integrating new technology into their shipyards, fully embracing automation, digitization and artificial intelligence to support their work – often with strong government support for these efforts.

America can build a stronger, more capable MIB by partnering with and learning from its allies. Accordingly, this study provides recommendations for how America can apply these insights to support its MIB while embracing greater multilateral maritime cooperation.

CMS and speakers from the allied nations in the report will host a panel discussion on the new report on Tuesday, April 21 from 3:30-4:30 p.m. in the Cherry Blossom Ballroom.

| Recommendations | | | |
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| <p>Reforming the Design and Build Processes</p> <ul style="list-style-type: none"> • Design, then bend: Only begin vessel construction once the design is 100 percent complete to avoid disruptions. • Make VCMs the norm: Use vessel construction managers (VCMs) to oversee all government shipbuilding projects to streamline production and design processes. • Embrace modularity: Creating common designs to be used across multiple types of ships could reduce delays in the design process and increase interoperability. | <p>Embracing New and Emergent Technologies</p> <ul style="list-style-type: none"> • Digitize, automate, and get “smart”: Integrate automation, digitization, and AI in shipyards to empower—not replace—the existing workforce. • Build ships to sail, engineer them to last: Increase operability by incorporating condition-based maintenance (CBM) in ship design to reduce the unpredictability of maintenance and repairs • Cross the digital divide: Embrace digitization by allocating Shipyard Infrastructure Optimization Program budgets to digitization, consulting mariners to address their needs, building worker trust in digital systems, and avoiding disrupting essential shipbuilding processes. | <p>Increasing Allied Cooperation</p> <ul style="list-style-type: none"> • Leverage maritime alliances: Expand opportunities to collaborate with allies on shipbuilding, modeling existing frameworks like AUKUS, MASGA, and OCCAR. • Build a “bridge” over troubled waters: When American yards are at capacity, construct the initial ships in a multi-vessel purchase in allied ports while simultaneously investing in U.S. shipyards to eventually onshore construction. • Use allied ports in a storm: Engage U.S. maritime allies to provide drydock and port access to the U.S. Navy, especially those with maritime infrastructure in the Pacific. • “All hands on deck” for skilled labor: Supplement the domestic shipbuilding labor pool with high-skilled migrants from allied countries. | |
| <p>Ensuring On-Time Delivery</p> <ul style="list-style-type: none"> • Incentivize success: Offer financial incentives (but not punitive fees) for on-time and on-budget delivery of ships. • Small blocks stack just as well as large ones: Order ships in smaller blocks to allow greater flexibility in design and capabilities and avoid cascading delays across larger block buys. | <p>Training Current and Future Shipbuilders</p> <ul style="list-style-type: none"> • Educate, empower, lead: Expand shipbuilding apprenticeship opportunities and increase support to trainees. • Engineer the future of naval architecture: Expand existing and create new naval architecture and marine engineering programs to address labor shortages. | <p>Strengthening U.S. Supply Chains</p> <ul style="list-style-type: none"> • If you need it, print it: Increase additive manufacturing capabilities and training opportunities to mitigate supply chain gaps and reduce overreliance on sole-source manufacturers. • Build supply chain contingencies: Reduce supply chain vulnerabilities in a conflict by developing contingencies which identify alternate sources and lean on dependable allies. | <p>Revitalizing Commercial Shipbuilding</p> <ul style="list-style-type: none"> • Chart a collaborative course: Facilitate collaboration across government and industry to strengthen America as a competitor in the commercial shipbuilding sector. • Shared insight, collective impact: Share best practices to encourage cooperation among U.S. and AMIB companies to strengthen the shipbuilding industry. |

Read the full report [here](#).