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**BEFORE THE
COMMITTEE ON ARMED SERVICES
SUBCOMMITTEE ON SEAPOWER & PROJECTION FORCES & THE COMMITTEE
ON TRANSPORTATION & INFRASTRUCTURE SUBCOMMITTEE ON COAST
GUARD & MARITIME TRANSPORTATION
U.S. HOUSE OF REPRESENTATIVES**

**HEARING ON “REVITALIZING SHIPBUILDING AND THE MARITIME
INDUSTRIAL BASE”**

APRIL 22, 2026

Good afternoon, Chairman Kelly, Ranking Member Courtney, Chairman Ezell, Ranking Member Carbajal and Members of the Subcommittees. Thank you for the opportunity to discuss the Maritime Administration’s (MARAD) role in bolstering domestic shipbuilding and strengthening the maritime industrial base to ensure national economic and security resilience.

FOUNDATIONAL IDENTITY OF MARITIME SYSTEMS

In mathematics, an identity represents a condition that is invariant across all cases. It is not a hypothesis, a theory, or a policy preference. It is a statement of underlying structure—one that holds regardless of context, scale, or interpretation. That weight equals displacement is an identity. Systems that are designed in alignment with such identities function predictably. Systems that are designed in contradiction to them do not fail gradually; they fail deterministically.

Public policy, particularly in complex industrial systems, is often evaluated in terms of efficiency, optimization, or program performance. These are secondary considerations. The primary question is whether the system itself is aligned with its governing identity. If it is not, improvements to individual components—no matter how well designed—cannot produce durable outcomes. Shipping practice that is not aligned with the identity that the weight of a floating object equals the weight of the water displaced will inevitably lead to cargo on the ocean floor regardless of how exquisite the technology involved may be.

Maritime systems exhibit a comparable identity: all elements of maritime capability are rooted in cargo movement. This is not a modern interpretation or a theoretical construct. It is a historically consistent and empirically verifiable condition observed across all functioning maritime powers.

Maritime policy not aligned with the foundational identity that it must be rooted in cargo will lead to a failed maritime industry. This is the maritime version of deterministic failure.

Throughout maritime history, from early commercial trading systems to modern industrial fleets, the sequence is invariant. Cargo demand precedes and enables vessel deployment. Sustained vessel deployment supports shipbuilding. Shipbuilding sustains workforce and industrial capacity. Industrial capacity, in turn, enables maritime power and maritime power underwrites economic and national security. At no point in this sequence does the causal relationship reverse.

This identity is observable across multiple historical cases. The rise of British maritime dominance following the Navigation Acts was not driven by technological superiority alone, but by the deliberate structuring of cargo flows to national carriers. The structure the British Navigation Laws put in place facilitated the greatest maritime trading empire the world had ever known and is likely to ever know in the future unless the U.S. gets maritime policy correct now. Similarly, modern vertically integrated systems—most notably China’s—derive their effectiveness from aligning production, cargo generation, shipping, and shipbuilding into a continuous system.

Conversely, no sustained maritime power has been built by first constructing fleets or maritime industrial capacity in the absence of cargo demand. Such efforts produce temporary outputs, but not enduring systems.

This distinction is critical for policy design. If cargo is the governing input variable, then maritime policy must be structured to generate, secure, and align cargo demand. Policies that focus on downstream components—shipbuilding, workforce, or fleet size—without addressing cargo as the primary variable are necessarily incomplete.

The central premise of this testimony follows directly from this identity: rebuilding American maritime power requires restoring cargo to its role as the organizing principle of the system. All subsequent policy mechanisms must be evaluated based on whether they reinforce or contradict that condition.

CARGO AS THE PRIMARY SYSTEM VARIABLE

If cargo is the governing identity of the maritime system, it follows that cargo functions as the system’s primary independent variable. All other components—vessels, shipyards, labor, and infrastructure—are dependent variables whose scale, utilization, and economic viability are determined by the presence and structure of cargo demand.

Cargo performs three distinct but interrelated system functions. First, it serves as the demand signal that initiates system activity. Without cargo, there is no requirement for ship construction, no vessel deployments, no utilization of port infrastructure, and no operating environment within which maritime services can occur.

Second, it provides a revenue base that sustains continuous operations. Systems designed around direct government aid scale directly with the level of government aid, not economic activity. When aid goes to zero, then the maritime activity that depends on it goes to zero, as happened in 1858, the beginning of the end of the U.S. as a true maritime power. And the unfortunate policy confusion between naval power, which we have, and maritime power, which we do not. Maritime assets are capital-intensive and require consistent throughput to remain economically viable. Intermittent or insufficient cargo flows result not just in reduced efficiency, but in asset underutilization and eventual market exit. Maritime systems based on enduring, commerce-based demand also endure.

Third, cargo operates as the coordinating mechanism that aligns system participants. Predictable and structured cargo demand enables long-term contracting, supports financing of vessels and infrastructure, and stabilizes labor demand. In the absence of such structure, system participants optimize individually, resulting in fragmentation rather than alignment. Maritime systems that are designed around direct government interventions inevitably suffer from zero sum competition between competing claimants for government support in a budget constrained environment. This is exactly the condition now operative in the tension between utilizers of government export financing and maritime interests enforcing cargo preference in a pareto-locked, stagnating system.

These functions are not independent; they are mutually reinforcing. Demand initiates activity, revenue sustains it, and coordination aligns it. Together, they establish the conditions under which a maritime system can scale and persist. Most importantly, these conditions allow all stakeholders to prosper in a positive-sum, self-reinforcing cycle of growth without the need for direct government (taxpayer) intervention.

The implication is direct: policies that do not influence the volume, predictability, and allocation of cargo demand cannot, by definition, control system outcomes. They may affect individual components, including the inefficient determination of winners and losers in the lottery of government intervention, but they cannot determine system performance.

SYSTEM DEPENDENCY CHAIN

From the identification of cargo as the primary variable, the structure of the maritime system can be expressed as a deterministic dependency chain. Cargo demand enables vessel deployment.

Without sustained cargo flows, vessels do not operate, regardless of fleet size or nominal capacity.

Sustained vessel deployment supports shipbuilding activity. Shipbuilding is not driven by abstract capacity requirements, but by expected utilization and revenue streams derived from cargo movement. The commercial maritime industry is fundamentally different from the Navy, where pure numbers matter. Industry does not build ships for the purpose of having ships. Industry builds ships to carry commerce. Applying the Navy logic of ships for their own sake to the maritime industry governing identity of ships for commerce will not lead to a successful outcome by any definition of success.

Shipbuilding activity sustains workforce development and retention. Skilled labor cannot be maintained through episodic demand; it requires continuous production and repair activity. Workforce capacity underpins the broader industrial base, including suppliers, repair facilities, and supporting infrastructure. This base is only viable when supported by sustained throughput.

The industrial base, once established and maintained, enables maritime power—defined not simply as the existence of assets, but as the ability to deploy and sustain maritime capability under both commercial and contingency conditions.

This chain is unidirectional and non-substitutable. Interventions applied downstream—such as subsidies to shipbuilding or workforce programs—cannot compensate for deficiencies upstream in cargo demand. At best, such interventions produce temporary outputs; at worst, they create structural imbalances that accelerate system degradation.

The policy implication is therefore structural rather than programmatic. Effective maritime strategy must operate at the level of the primary variable—cargo—because that is the only point in the system at which outcomes can be durably determined.

STRUCTURAL MISALIGNMENT IN A U.S. MARITIME POLICY

U.S. maritime policy has been constructed in a manner that is inconsistent with the governing identity and dependency structure of the maritime system. Rather than operating at the level of the primary variable—cargo demand—policy interventions have been concentrated on downstream components, including fleet capacity, shipbuilding, and workforce development. These interventions are individually rational, but collectively misaligned, because they attempt to generate system outputs without establishing the conditions that produce them. This represents a structural inversion of the maritime system. The Trump Administration recognizes the connectedness of cargo demand to the rest of the maritime system and, as detailed later in the testimony, is for the first time in decades working comprehensively on a solution, first through

Executive Order 14269, Restoring America’s Maritime Dominance, followed by the recently published Maritime Action Plan (MAP).

Cargo demand determines vessel deployment; vessel deployment determines shipbuilding activity; and shipbuilding activity sustains workforce and industrial capacity. Past U.S. policy, by contrast, has attempted to stimulate shipbuilding and workforce development in the absence of sufficient and predictable cargo demand. The result is not system formation, but system fragmentation.

Shipbuilding programs currently operate without sustained order books, leading to episodic production and loss of learning curves. Workforce initiatives generate trained labor that cannot be retained due to insufficient throughput. Fleet capacity is supported through subsidies rather than utilization, resulting in assets that are minimally maintained rather than economically integrated into commercial trade flows. These outcomes are not the result of programmatic failure. They are the predictable consequence of operating a system in which the primary variable has been left unstructured.

Incremental improvements to downstream programs cannot resolve this condition. Enhancing shipyard efficiency, increasing subsidies, or expanding training pipelines does not alter the absence of cargo demand that would make those improvements economically durable.

As a result, policy interventions have been absorbed without changing system outcomes. Capacity is created but not utilized. Investment is made but not sustained. Programs succeed on their own narrow terms while the system as a whole continues to underperform.

This condition explains the persistence of U.S. maritime decline despite repeated policy interventions over multiple decades – in fact 150 years. The issue is not insufficient effort or inadequate program design; it is the absence of alignment between policy and the system’s governing identity.

Correcting this misalignment requires shifting policy focus from downstream outputs to upstream demand. Cargo must be treated not as an outcome of the system, but as the input that defines it.

EMPIRICAL INDICATORS OF SYSTEM ABSENCE

The current condition of the U.S. maritime sector reflects the structural misalignment described in the last section. The available data does not indicate cyclical weakness or temporary decline; it reflects the absence of a functioning system aligned with its governing variable resulting in near total disengagement of the U.S. maritime industry from the broader international maritime ecosystem. Several indicators illustrate this condition.

First, U.S.-flag vessels carry less than one percent of U.S. international physical trade by volume. This is not a marginal shortfall; it indicates that the system responsible for carrying U.S. commerce is overwhelmingly externalized to foreign-controlled capacity.

Second, the internationally trading U.S.-flag fleet consists of approximately 80 privately owned vessels. Their existence is oriented around the military (TSP, MSP, and CSP), not commercial activity. This scale is not sufficient to generate continuous commercial activity, sustain industrial demand, or support surge requirements under contingency conditions.

Third, the U.S. accounts for less than one percent of global commercial shipbuilding output, while China exceeds 55 percent, with new orders approaching 65–69 percent. In some critical ship types such as multi-purpose ships that would be critical for U.S. Navy distributed maritime operations, the Chinese order book approaches 100 percent. This disparity is not solely a function of cost competitiveness; it reflects the presence of a cargo-driven system in one case and its absence in the other.

Fourth, maritime transportation carries approximately 80 percent of U.S. trade by volume and roughly 60 percent by value, yet U.S.-flag participation in that carriage remains negligible. This divergence demonstrates that the U.S. is a major maritime trading nation without corresponding control over maritime transport capacity. The remaining 20 percent of U.S. trade is in services, in which the U.S. has a surplus, but the \$660B in data deliverable international trade is likewise dependent on outsourced capacity to install and maintain the subsea cable infrastructure that carries it. Taken together, these indicators describe a system that is not just underperforming but disconnected from the economic activity it is intended to support.

This condition is consistent with a system in which the primary variable—cargo demand—has not been structured to align with national maritime capacity. The observed outcomes follow directly from the dependency chain: without predictable cargo demand, vessels are not deployed; without deployment, shipbuilding is not sustained; without sustained production, workforce and industrial capacity erode.

The data therefore does not merely describe the state of the sector; it confirms the underlying diagnosis. The U.S. has maintained some elements of a maritime system—programs, assets, and institutions—without establishing the demand structure required to integrate them into a functioning whole. Hence what exists is inadequate to the foundational task of the U.S. Merchant Marine. 1: Carry our nation's commerce: 2. When called upon, carry the nation to war.

LIMITS OF INCREMENTAL REFORM

The conditions described in the last two sections cannot be resolved through incremental reform. Incremental reform assumes that the underlying system is correctly structured and that targeted improvements to individual components will produce improved outcomes. This assumption does not hold in the current case. The maritime system, as presently configured, is misaligned with its governing variable. As a result, improvements applied to downstream components do not propagate through the system. In this context, incremental interventions exhibit three consistent characteristics.

First, they are absorbed without altering system behavior. Investments in shipbuilding, workforce development, or fleet support increase capacity at the margin, but do not result in sustained utilization because the underlying demand signal—cargo—is not structured to support that capacity. In short, the investments are insufficient for generating and sustaining systemic change.

Second, they increase system complexity without necessarily improving performance. Additional programs, subsidies, and regulatory mechanisms layered onto a misaligned system, creates administrative burden while leaving core outcomes unchanged. In short, the investments risk resulting in a bureaucracy that sustains itself, but not maritime power.

Third, they produce diminishing returns over time. Each successive intervention requires greater expenditure or regulatory effort to achieve smaller incremental effects, as the system lacks the structural conditions necessary to convert inputs into durable outputs. In short, the investors, the U.S. taxpayer, will eventually grow weary of wasting their investments and abandon the effort altogether until the next crisis, when that next generation must start over. *The House Select Committee on the Causes of the Decline of American Commerce and Shipping*, also known as the Lynch commission, started the cycle we have been on since 1870.

These dynamics are not indicative of poorly designed programs; they are characteristic of systems in which the primary variable is ignored. As long as cargo demand remains unstructured, downstream interventions cannot produce sustained alignment.

This establishes a practical constraint for policy design. Adjustments to existing programs, whether through increased funding, expanded scope, or improved administration, cannot, by themselves, restore system performance. Such measures may preserve existing capacity in the short term, but they do not create the conditions necessary for growth or resilience.

Effective reform therefore requires intervention at the level of system structure. Specifically, it requires establishing predictable, enforceable cargo demand aligned with U.S.-flag capacity, such that downstream components operate within a coherent and self-reinforcing system.

The policy choice is not between different configurations of existing programs. It is between continuing to operate within a structurally misaligned system or redesigning that system around its governing identity. Just as navigation that ignores the governing identity that the earth is round will lead to nowhere, maritime policy that ignores the governing identity of the foundational role of cargo will also lead to nowhere.

HISTORICAL PRECEDENT FOR SYSTEM RECONFIGURATION

The requirement to align maritime systems around cargo demand is not theoretical. It is demonstrated in historical cases where maritime power was established or reestablished through structural intervention at the level of the primary variable.

The transition from Dutch to British maritime dominance provides a clear example. The Dutch system in the 17th century was highly efficient, integrating trade, shipping, and finance into a commercially optimized network. British policymakers did not displace this system through incremental improvements in ship design or operational efficiency. Instead, they altered the structure of the system itself.

Through the Navigation Acts, Britain imposed direct control over cargo flows by restricting the carriage of goods to British vessels or those of the producing country. This intervention did not attempt to influence behavior through incentives or subsidies. It changed the conditions under which the system operated.

By structuring cargo demand, the policy created predictable and protected throughput for British carriers. That throughput, in turn, produced sustained vessel deployment. Sustained deployment generated consistent demand for shipbuilding. Continuous shipbuilding activity supported workforce development and industrial capacity.

The sequence follows directly from the dependency chain described in the System Dependency Chain section. Cargo structuring produced alignment across all downstream components without requiring separate interventions for each.

This case demonstrates two principles relevant to current policy. First, durable maritime power is achieved by controlling the conditions of demand, not by optimizing supply in isolation. Attempts to improve fleet capacity or shipbuilding without addressing cargo flows do not produce sustained outcomes. Second, system alignment is not achieved through persuasion or voluntary coordination among participants. It is achieved through structural design that makes aligned behavior economically rational.

The historical record does not provide examples of maritime systems achieving durable scale through downstream intervention alone. It consistently shows that control of cargo flows precedes and enables the development of fleet capacity, industrial strength, and maritime power.

The implication for current policy is direct. Reestablishing U.S. maritime capability requires interventions that operate at the level of cargo demand, consistent with the system identity and dependency structure outlined in prior sections.

CONTEMPORARY SYSTEM COMPETITION: THE CHINESE MODEL

The contemporary maritime competitive environment reinforces the structural principles established in prior sections. China's maritime-industrial system operates through alignment at the level of the primary variable, cargo, and demonstrates the effectiveness of system-level design.

China has integrated production, cargo generation, shipping capacity, and shipbuilding into a continuous, self-reinforcing system:

Production → Cargo → Shipping → Shipbuilding → Industrial Expansion → Increased Production

This structure ensures that cargo demand is not incidental to the system, but internally generated and strategically directed. As a result, vessel deployment is sustained, shipbuilding activity is continuous, and industrial capacity scales in response to predictable throughput.

Continuous demand signals drive continuous production, and industrial capacity scales in direct response to predictable throughput. As already discussed, China's scale in commercial shipbuilding—and its concentration in key vessel segments relevant to contested logistics—creates a structural dependency risk that extends beyond simple capacity metrics.

But this dominance is not confined to shipbuilding output. It is embedded across the broader maritime system. Chinese firms operate and finance a substantial share of global port infrastructure, shaping cargo flows and access at scale. Major port reliance, including in the US, of Chinese manufactured gantry container cranes is well known. State-backed institutions provide integrated marine financing that links ship construction, ownership, and employment into a single aligned system. China also controls one of the world's largest commercial fleets by ownership and influence, reinforcing its ability to internalize cargo demand. Increasingly, it is extending that influence into the standards and rule-setting bodies that define technical, digital, and regulatory frameworks for global shipping.

This is not the product of marginal cost advantage. It reflects a system in which demand, capacity, finance, infrastructure, and governance are structurally aligned—and in which the terms of competition are being actively shaped rather than passively accepted.

The U.S. operates under a fundamentally different condition. Cargo demand is largely unstructured with respect to national maritime capacity, resulting in limited vessel deployment, episodic shipbuilding, and constrained industrial scale. The disparity between the two systems is therefore not primarily a cost differential; it is a difference in system architecture.

This distinction establishes a critical strategic constraint. Competing with China on cost terms requires operating within a system optimized for scale, integration, and state-directed demand. The U.S. cannot replicate these conditions without fundamentally altering its own economic and regulatory structure. Attempting to compete on those terms is therefore structurally disadvantaged. Effective competition requires altering the basis of competition rather than optimizing within it.

For the U.S., this means shifting from cost-based competition to value-based competition, anchored in attributes that emerge from system design rather than input cost. These include assured access to capacity, operational reliability under stress, regulatory transparency, and alignment with national security requirements.

When cargo demand is structured to support U.S.-flag participation, these attributes become economically material. Predictable throughput enables financing, reduces volatility, and supports long-term investment in fleet and industrial capacity. System reliability becomes a competitive advantage rather than a cost burden.

The strategic objective is therefore not to match China within its system, but to construct a system in which U.S. advantages are decisive. Among other policy imperatives, integrating the MAP into the broader administration policy of industrial capacity renewal is critical to its success.

The side that defines the structure of the system defines the terms of competition. The side that defines the terms of competition determines the outcome. This principle is consistent with longstanding strategic doctrine. Classical Chinese military writings, including *The Art of War* and the *Thirty-Six Stratagems*, emphasize that success is achieved not by contesting an opponent where they are strongest, but by shaping the conditions of competition so that advantage is determined before engagement occurs. In this framework, the objective is not to optimize performance within an adversary's system, but to alter the structure of the environment in which competition takes place. Applied to maritime strategy, this reinforces the requirement to define the system—through cargo, demand, and alignment—rather than compete within a system

optimized for another actor's strengths. In short, we do not need to "out-China" China. We need to make China's system irrelevant.

STRATEGIC IMPLICATION: VALUE-BASED COMPETITION

The structural differences outlined in the previous section establish that competition with China cannot be conducted on cost terms alone. The relevant question is not whether U.S.-flag operations can match the lowest marginal voyage cost, but whether an alternative system can deliver superior outcomes when evaluated across the full set of economic and operational variables that govern real-world decision-making. This distinction shifts the basis of competition from price to total system value.

In practice, maritime transportation decisions are not made solely on nominal freight rates. They incorporate a range of risk-adjusted factors, including reliability of service, exposure to geopolitical disruption, contractual enforceability, insurance availability, and the stability of long-term capacity. These factors directly affect total logistics cost, even when they are not reflected in headline pricing.

A cargo-structured U.S. maritime system converts these factors from external risks into internalized system characteristics. First, it reduces supply uncertainty. When cargo demand is aligned with U.S.-flag capacity, access to transportation is not contingent on foreign carrier prioritization decisions. This eliminates the risk of sudden capacity withdrawal during periods of geopolitical stress. Or, as the U.S. became painfully aware during the supply chain crisis, the dominance of foreign carriers in our supply chains and their propensity to optimize around many things, what's best for the American consumer not among them. Empty shelves were the result.

Second, it stabilizes pricing over time. Predictable throughput enables long-term contracting and reduces exposure to spot market volatility. While marginal voyage costs may remain higher in certain segments, total cost variability declines, which is a critical input for industrial planning and financial modeling.

Third, it improves capital formation. Structured cargo demand produces predictable revenue streams, which reduce financing risk for vessels, infrastructure, and supporting industrial assets. Lower risk profiles translate directly into improved access to capital and reduced cost of financing.

Fourth, it ensures operational continuity under stress. U.S.-flag carriers operate under national obligations that extend beyond purely commercial considerations. This provides a level of service assurance that is not available from foreign-controlled capacity in crisis conditions.

These effects are cumulative. Reduced volatility, improved access, and assured continuity increase the effective value of the system to cargo owners, even if nominal transport costs are higher on a per-voyage basis.

The result is a shift from lowest-cost selection to risk-adjusted optimization. Cargo owners, particularly in critical sectors such as energy, agriculture, and defense supply chains, make decisions based on total system reliability and exposure, not solely on marginal price. Those that don't free-ride off those that do. Proper government policy addresses the free rider problem.

Accordingly, the objective of U.S. maritime policy is not to eliminate cost differentials, but to structure a system in which those differentials are outweighed by measurable reductions in risk and increases in reliability. This is the mechanism by which the U.S. alters the terms of competition. Rather than attempting to outperform China within a cost-optimized system, the U.S. establishes a system in which reliability, access, and stability are the primary determinants of value. Within that system, U.S. advantages are decisive.

MAP AS SYSTEM EXECUTION ARCHITECTURE

The MAP provides the mechanism through which the structural principles outlined in prior sections are operationalized. Its function is not to introduce isolated programs, but to align policy instruments at the level of the primary variable—cargo demand—such that system outcomes follow from system design.

The MAP achieves this by integrating demand generation, capacity development, financing, and enforcement into a coordinated framework. This requires the MAP to be integrated into the broader efforts at revitalizing the totality of U.S. industrial capacity. They are interlocking elements of the same overarching goal.

At the core of this framework is the structuring of cargo demand. The U.S. Maritime Preference Requirement (USMPR) establishes phased, capacity-aware requirements tied to trade lanes and commodity classes. By doing so, it converts cargo from an external market condition into a governed system input. This is the critical intervention: once demand is structured, downstream alignment becomes economically rational rather than administratively imposed. Multiyear cargo commitments generate predictable revenue streams, enabling continuous vessel deployment and eliminating the episodic utilization that has historically constrained U.S.-flag operations.

Financing mechanisms are aligned to this demand structure. A redesigned and enhanced Title XI and the Capital Construction Fund are repositioned to support system participation rather than isolated asset acquisition. Predictable throughput reduces revenue uncertainty, which in turn lowers financing risk and expands access to capital. The effect is to convert maritime investment from a speculative activity into a financeable industrial system.

The Maritime Security Trust Fund (MSTF) provides continuity of funding consistent with system requirements. By combining user-based contributions, trade-linked mechanisms, and appropriated support, it eliminates the stop-start funding cycles that have historically disrupted maritime investment and planning.

Enforcement is integrated into existing Customs and Border Protection processes through importer-of-record accountability and service contract declarations. This ensures that compliance is embedded in existing commercial workflows, avoiding the need for parallel enforcement structures while maintaining credibility.

The MAP also addresses system integration at the industrial level. Maritime Prosperity Zones (MPZs) align infrastructure, labor, and capital into geographically concentrated clusters, enabling scale effects and reinforcing throughput-driven demand. This ensures that cargo structuring translates into sustained industrial activity rather than isolated investment. Synchronized grant awards across PIDP, small and large shipyard grants, and maritime highway grants ensure a coherent, strategic approach to eco-system development vice the previous process of awards disconnected from each other and broader national economic and security goals. Research dollars flowing to the Center for Maritime Innovation ensure we maintain a view of disruptive technologies, such as small nuclear reactors for marine propulsion that present opportunity for the U.S. to leapfrog ahead in value-based competition.

Taken together, these elements operate as a unified system. Cargo demand drives vessel deployment. Vessel deployment supports financing. Financing enables shipbuilding and repair. Industrial capacity sustains workforce. Workforce and capacity underpin maritime power. Maritime power ensures national and economic security.

The MAP therefore does not attempt to improve individual components in isolation. It establishes the conditions under which all components operate as a coherent, self-reinforcing system aligned with its governing identity.

SHIPBUILDING AS A SYSTEM OUTPUT, NOT A POLICY STARTING POINT

The current policy discourse often treats shipbuilding as the central problem of U.S. maritime decline. This framing is incomplete. Shipbuilding is not an independent driver of maritime power. It is a downstream output of a functioning maritime system. As established in earlier sections, sustained shipbuilding activity is a function of continuous vessel deployment, which itself depends on predictable cargo demand.

Efforts to expand shipbuilding capacity in the absence of structured cargo demand therefore encounter a structural constraint. Without sustained throughput, shipyards do not receive consistent order books, production remains episodic, and cost reductions associated with scale

and learning curves do not materialize. Workforce development cannot be maintained, and industrial capacity contracts between periods of activity. Expansion in periods of national crisis become unreliable and chaotic.

This pattern has characterized U.S. shipbuilding policy for decades. Investments are made, capacity is created, and then utilization declines due to insufficient demand. The result is a cycle of build-up and contraction rather than sustained industrial growth. We have repeated this process, what Nancy Shadlow characterized as a “Crisis of Repetition” in an op-ed for *Breaking Defense*, across generations of leaders who consistently got it wrong. It is time to break that cycle, and the MAP provides the tools.

This outcome is not a failure of shipyards, workforce, or individual programs. It is the predictable consequence of attempting to generate downstream outputs without aligning the upstream variable that drives them.

Accordingly, policies that focus on shipbuilding in isolation, whether through subsidies, incentives, or industrial policy measures, cannot produce durable results. They may increase capacity temporarily, but they do not create the conditions necessary for that capacity to be utilized at scale. The implication is not that shipbuilding should be deprioritized, but that it must be addressed within the context of the full maritime system.

By structuring cargo demand through the MAP, the U.S. creates the conditions under which shipbuilding becomes economically sustained rather than programmatically supported. Continuous vessel deployment generates predictable demand for new construction and repair. Predictable demand supports investment in shipyard capacity, workforce development, and supply chains. Over time, this produces scale, reduces unit costs, and improves competitiveness. This approach also alters the terms of competition with China.

China’s advantage in shipbuilding is not solely a function of lower costs; it is the result of a system that generates continuous demand for shipyard output. Attempting to match that advantage through cost-based competition alone is structurally disadvantaged.

The U.S. must therefore compete by constructing a system in which its own advantages—reliability, access, and alignment with national security—drive sustained demand. Shipbuilding competitiveness then emerges as a consequence of system design, not as a prerequisite for it. The strategic objective is not to build ships in order to create a maritime system, but to build a maritime system that produces ships as a natural and continuous output.

CONCLUSION

The analysis presented in this testimony establishes a single, consistent conclusion: U.S. maritime underperformance is not the result of isolated program deficiencies, but of structural misalignment between policy and the governing identity of the maritime system – cargo.

Maritime power is not generated through the accumulation of assets. It is produced through the alignment of a system whose primary variable is cargo demand. When that variable is unstructured, downstream components—fleet capacity, shipbuilding, workforce, and industrial base—cannot be sustained, regardless of the level of policy intervention applied to them.

The current condition of the U.S. maritime sector reflects this reality. The nation remains a major international trading power yet relies overwhelmingly on foreign-controlled capacity to carry its commerce. This is not a marginal gap; it is the predictable outcome of a system in which cargo demand has not been aligned with national capability. It is also an existential vulnerability. One that meets the classic definition of an iceberg vulnerability: a hidden structural risk where what is visible is minor relative to the underlying exposure, and where failure, often fatal, occurs rapidly once stress reveals the full extent of that exposure.

Incremental adjustments to existing programs cannot resolve this condition. As long as policy remains focused on downstream outputs rather than upstream demand, interventions will continue to be absorbed without producing durable change. In other words, wasted.

The MAP provides a different approach. By structuring cargo demand, aligning financing with throughput, and integrating industrial capacity into a coordinated system, it establishes the conditions under which maritime power can be regenerated as a sustained and self-reinforcing outcome.

This approach also defines the terms of strategic competition. The U.S. cannot compete with China by attempting to replicate a cost-optimized system operating at scale under fundamentally different economic, political and social conditions. Attempting to do so accepts a structurally disadvantaged position.

Effective competition requires altering the system itself, shifting from cost-based competition to a model in which reliability, access, and stability are the primary determinants of value. Within such a system, U.S. advantages are decisive.

The policy choice is therefore clear. The U.S. can continue to operate within a misaligned system, applying incremental fixes that at best preserve existing capacity but do not restore maritime power. Or it can redesign the system around its governing variable, cargo, and allow maritime power, including shipbuilding capacity, to emerge as a natural and sustained output.

The outcome will be determined not by the scale of investment, but by the structure of the system in which that investment operates. The MAP offers a roadmap for aligning of investments to achieve the goal of American maritime dominance.

Thank you for the opportunity to testify today on behalf of MARAD. I appreciate the Subcommittee's continuing support for maritime programs, which are vital to our economic prosperity and the readiness of our national defense. Your leadership is instrumental as we work to revitalize this critical sector. I look forward to any questions you may have.