FACT SHEET – U.S. DOMESTIC SHIPBUILDING

- Before World War II, in 1937, one of the U.S. Government's predecessor agencies to the U.S. Department of Transportation, Maritime Administration, (MARAD), the U.S. Maritime Commission embarked on a *10-year plan to build 500 ships*. At the end of World War II, the U.S. flag fleet was the largest in the world at 4,446 ships of all types and sizes. This fleet carried 57-percent of U.S. trade.

- Similarly, after passage of the Merchant Marine Act of 1970, the industry experienced the most significant peacetime shipbuilding activity in U.S. history[1], with larger hulls, and newer, innovative ship types. *Over 50-years ago, by 1974, the U.S. government invested nearly $3.1B in shipbuilding and other support policies and programs that in today's dollars would equal nearly $20B*. Encompassed within a 10-year plan, the Federal assistance was matched with private funds, such that nearly 2/3 of the new shipbuilding funding came from those private funds.

- A 2009 Government Accountability Office (GAO) report[2] on Best Practices *High Levels of Knowledge at Key Points Differentiate Commercial Shipbuilding from Navy Shipbuilding* highlighted ways that could be utilized to control costs through commercial shipbuilding practices. That report found, "[d]elivering ships on time and within budget are imperatives in commercial shipbuilding. To ensure design and construction of a ship can be executed as planned, commercial shipbuilders and buyers do not move forward until critical knowledge is attained. Before a contract is signed, a full understanding of the effort needed to design and construct the ship is reached, enabling the shipbuilder to sign a contract that fixes the price, delivery date, and ship performance parameters."

- As defined in a recent summary report[3] of commercial U.S. shipbuilding, the aforementioned 1970s-era maritime policy and Federal assistance for program activity **created a demand or shipbuilding rate of 15-25 new ships per year**.

- Today, our nation's privately-owned capacity to build ships through domestic production is largely focused on shipbuilding for government programs, especially the Navy—as the Navy builds the largest mix of ships and submarines as defined in the *Navy's 30-year, long term shipbuilding plan*[4].

---

[1] Statement of Robert J. Blackwell, Assistant Secretary of Commerce for Maritime Affairs to House of Representatives, Committee on Armed Services, Seapower Subcommittee, September, 19, 1974

[2] https://www.gao.gov/assets/gao-09-322.pdf

[3] https://crsreports.congress.gov/product/pdf/IF/IF12534; In Focus-*U.S. Commercial Shipbuilding in a Global Context*; Congressional Research Service (CRS). November 15, 2023.

[4] https://sgp.fas.org/crs/weapons/RL32665.pdf; Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress; Congressional Research Service. May 30, 2024.

- Commercial shipbuilding needed for domestic commerce must comply with new regulations from EPA[5] (to reduce greenhouse gas emissions), and the U.S. Coast Guard (to improve cybersecurity[6] and marine safety). Table-1 indicates the age of the fleet by ship type for primarily, oceangoing U.S. flag ships serving in the Jones Act domestically-sailing fleet that could require replacement after 20-years if recapitalized in accordance with typical service life practices.[7]

- In 2023, the U.S. shipbuilding industry directly employed 105,652 people.[8] [9] In addition, for each shipyard job created, there are 2.6 jobs created in the domestic supplier base. Total economic activity associated with the industry supports some 400,000 jobs across the country - in all 435 Congressional districts - and generates more than $42.4 billion in GDP.[10]

Notable examples of shipbuilding activity within the Maritime Administration include:

- **National Security Multi-mission Vessel (NSMV) program.[11]** This program uses a commercial Vessel Construction Manager to plan the detailed design, construction, testing, and delivery of the ships before the first keel was laid through a series of (5) ships at Philly Shipyard, demonstrating Philly Shipyard's return to full scale commercial capability.

- **Title XI Ship Financing Program.** This program has $85M available to support nearly $1.3B in construction projects and up to $1.25B in pending project applications. The program encourages U.S. shipowners to obtain new vessels and recondition existing vessels with U.S. shipyards cost effectively. It also assists U.S. shipyards with modernizing their facilities for building and repairing vessels.

    - **Vessels of National Interest.** As authorized by 46 U.S.C. § 53703(d), MARAD may designate vessel types needed for U.S. economic and national security considerations.

- **Small Shipyard Program (SSG).** For Assistance to Small Shipyards, MARAD will award up to $8.75M from appropriations by July 8, 2024, and submitted a FY 2025 Budget request for $20 million[12] to provide grant funding for infrastructure improvements and workforce development at qualified small U.S. shipyards.

---

[5] https://www.epa.gov/regulations-emissions-vehicles-and-engines/epa-collaboration-international-air-pollution-0#:~:text=The%20sulfur%20content%20of%20fuel,an%20exhaust%20gas%20cleaning%20system)
[6] https://www.federalregister.gov/documents/2024/02/22/2024-03075/cybersecurity-in-the-marine-transportation-system
[7] https://marine-offshore.bureauveritas.com/marine/ship-classification/ships-in-service
[8] https://www.ibisworld.com/industry-statistics/employment/ship-building-united-states/
[9] https://shipbuildersusa.org/critical-issues/economic-security/
[10] www.maritime.dot.gov/sites/marad.dot.gov/files/2021-06/Economic%20Contributions%20of%20U.S.%20Shipbuilding%20and%20Repairing%20Industry.pdf
[11] https://www.maritime.dot.gov/sites/marad.dot.gov/files/2023-10/NSMV%20Fact%20Sheet%20%28Oct%202023%29.pdf
[13] https://www.workboat.com/philly-shipyard-lays-keel-for-first-jones-act-compliant-rock-placement-vessel

- Example: SSG grants in 2009 and 2021 supported Philly Shipyard in building an apprenticeship program, which then facilitated their selection as the builder for the ongoing MARAD National Security Multi Mission Vessel (NSMV) program to build five Jones Act eligible vessels supporting mariner training as well as national maritime response tasking. Construction of Jones Act-eligible special purpose ships, like the NSMV, also includes those that support offshore green energy development. Together, Great Lakes Dredge & Dock Co., LLC and Philly Shipyard announced construction of the *Acadia*, the first Subsea Rock Installation Vessel (SRIV) in the Jones Act fleet. This 461-foot ship will carry a crew of 45 and be able to transport 20,000 metric tons of rocks as foundation for the monopiles that support offshore wind turbines.[13]

Ongoing Work

- Pursuant to 46 U.S.C. § 50114, MARAD, through the Department of Transportation, in consultation with the Secretary of the department in which the Coast Guard is operating; and the Commander of United States Transportation Command, shall submit a National Maritime Strategy to Congress every five years. To meet requirements for the upcoming national maritime strategy[14] and as directed and defined in Sec. 3542 of the FY2023 NDAA, MARAD entered into an agreement with a federally funded research and development center to conduct a study that identifies the key elements needed to inform the next national maritime strategy. MARAD has contracted with the Center for Naval Analyses (CNA) to complete the study, which will include considerations derived from a series of wargames on shipping and shipbuilding scheduled for July 2024.

The Department of Defense uses the Military Capabilities Requirements Studies (MCRS) to define and record the strategic sealift needed to move U.S. forces. This study was last completed as MCRS-20 and briefed to the Congress by U.S. Transportation Command in June 2021.[15]To meet the requirements outlined in the MCRS-20, MARAD administers multiple sealift programs that require ships and ship replacement or recapitalization:

- **Maritime Security Program (MSP**). The 60 dry-cargo ships serving in the MSP will all require replacement between 2024 and 2049 as they reach their 25-year age-out points, with as many as 36 MSP ships needing to be replaced between 2030 and 2033, alone.

- **Tanker Security Program (TSP).** Similarly, all 10 tankships in the newly established TSP, which age out of the fleet at 20 years, will need to be replaced on or about 2039. TSP has been authorized by Congress for up 20 ships, so an additional 10 tankers will need to be procured if that program increase is appropriated.

[13] https://www.workboat.com/philly-shipyard-lays-keel-for-first-jones-act-compliant-rock-placement-vessel
[14] https://www.congress.gov/117/plaws/publ263/PLAW-117publ263.pdf
[15] https://www.ustranscom.mil/cmd/panewsreader.cfm?ID=AE9B584E-9B91-7D14-AAC653E5F6341145

- **Cable Security Fleet (CSF).** The two privately-owned cable laying and repair ships in the CSF will require replacement by 2043, as they reach their service life limit of 40 years.

- **Ready Reserve Force (RRF).** The RRF, a fleet of 48 "surge" strategic sealift ships requires recapitalization to meet the initial, massive lift of U.S. forces. Readiness exercises have indicated that ships may not be immediately available in an emergency, largely due to maintenance needs.[16] As directed by Congress, MARAD has purchased used former MSP and other commercially available, militarily useful vessels including used RO/RO vessels from the second-hand international market. MARAD remains limited in its procurement authority to only 9 used ships for purchase.

- **Large, Medium-Speed Roll-on/Roll-off (LMSR).** The 15 LMSR ships built beginning in the 1990s will all require recapitalization beginning *no later than* 2048.

- **Design for Future Vessels.** MARAD received $12M in the FY2024 Consolidated Appropriations Act, P.L. 118-42, to create a ship design for up to 10 sealift ships for National Defense Reserve Fleet recapitalization in coordination with Navy/DOD.

Table 1. Age for Jones Act Eligible Ships in Ocean-going Trade [1]

Ship Type	Total Number	Age Ranges				Nominal Service life
		<10	10-19	20-29	>=30	
Tanker	55	17	25	11	2	20
Roll-On/Roll-Off (RO/RO)	5	1	1	3	0	30
Dry Bulk/General Cargo	8	1	0	0	7	35
Containership/CONRO	24	10	2	2	10	35

Note 1. The vessels in this table represent Jones Act fleet of 92 eligible oceangoing, self-propelled, privately-owned U.S.-flag vessels of 1,000 gross tons and above that carry cargo from port to port for commercial and government customers.

Economic service life depends upon a range of considerations including ship owner defined service life, regulatory action in marine inspection and safety, classification society survey, trade or routing service requirements, vetting inspection results, and the optimal business case for continued operation or removal of a ship from service. A significant number of vessels in the Jones Act fleet will need to be replaced over the next few years as they will soon exceed their nominal service life. For example, twenty-eight of the fifty-five tanker ships (over half the fleet) in Table 1 will exceed their nominal service life by 2030 and will likely need to be replaced, while ten of the Container/CORO ships will exceed their nominal service life in 2030.

[16] https://news.usni.org/2023/03/29/marad-head-not-at-all-confident-ready-reserve-fleet-could-be-crewed-in-a-crisis