

Maritime Transportation System National Advisory Committee

Minutes of Public Meeting

Dates: June 28-29, 2023

Location: U.S. Department of Transportation Headquarters –
Washington, D.C.

Table of Contents

Table of Contents 2

Acronyms and Abbreviations..... 4

Meeting Agendas..... 5

June 28, 20237

 Call to Order & Roll Call 7

 Members Present 7

 Members Absent 8

 MARAD / USDOT Members Present..... 8

 Public Members Present..... 8

 Item 1- Welcome & Comments from the MTSNAC Chairman 8

 Item 2 – Chair Guidance and Breakout Session – Breakout Rooms..... 9

 Item 3 – Reconvene and Update to Chairman..... 9

 Item 4 – Public Comments (if required) 9

 Item 5 – Break for Lunch 9

 Item 6 – Chair Guidance and Breakout Session – Breakout Rooms..... 9

 Item 7 –Reconvene and Brief Update report to Chair by Sub-Committee Chairs..... 10

 Item 8 – Closing Remarks and Adjournment..... 10

June 29, 202311

 Call to Order & Roll Call 11

 Members Present 11

 Members Absent 12

 MARAD / USDOT Members Present..... 12

 Public Members Present..... 12

 Item 9 – Welcome & Opening Statements..... 12

 Item 10 – Chair Guidance and Breakout Session – Breakout Rooms..... 12

 Item 11 – Reconvene and Update to Chairman..... 12

 Item 12 – Public Comments (if required) 13

 Item 13 – Break for Lunch 13

 Item 14 – Chair Guidance and Breakout Session – Breakout Rooms..... 13

 Item 15 – Reconvene and Presentation from Sub-committee Chairs..... 14

 Item 16 – Meeting Schedule and Planning Discussion 17

 Item 17 – Closing Remarks and Way Ahead 17

Item 18 – Closing Remarks and Adjournment.....	18
Appendices - Meeting Presentations - June 28-29, 2023.....	19
Appendix A – Draft Recommendation of the Port Subcommittee - No. 1	19
Appendix B – Draft Recommendation of the Port Subcommittee – No. 2.....	22
Appendix C – Summary of Port Subcommittee Breakout Session.....	27
Appendix D – Draft Recommendation of the Starboard Subcommittee – No. 1.....	31
Appendix E – Draft Recommendation of the Starboard Subcommittee – No. 2	34
Appendix F – Draft Recommendation of the Starboard Subcommittee – No. 3	37
Appendix G – Summary of Starboard Subcommittee Breakout Session.....	39
Appendix H –Starboard Subcommittee Presentation Slides.....	41

Acronyms and Abbreviations

ABS	American Bureau of Shipping
AIS	Automatic Identification System
CBP	Customs and Border Protection
CMTS	Committee on the Marine Transportation System
CON/RO	Container/Ro/Ro
DFO	Designated Federal Official
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
EPA	Environmental Protection Agency
FLOW	Freight Logistics Optimization Works
FMC	Federal Maritime Commission
IRPT	Inland Rivers, Ports, and Terminals
LPMS	Lock Performance Monitoring System
MARAD	Maritime Administration
MSP	Maritime Security Program
MTS	Maritime Transportation System
MTSNAC	Maritime Transportation System National Advisory Committee
NASSCO	National Steel and Shipbuilding Company
NDAA	National Defense Authorization Act
O & M	Operation and Maintenance
OSRA	Ocean Shipping Reform Act of 2022
OSCAR	Ocean Shipping Container Availability Report
PIDP	Port Infrastructure Development Program
PM	Program Manager
QOL	Quality of Life
RIS	River Information Services
RO/RO	Roll on/Roll/off
ROS	Reduced Operating Status
RRF	Ready Reserve Fleet
SIP	Student Incentive Program
SME	Subject Matter Expert
STB	Surface Transportation Board
STCW	Standards of Training, Certification, and Watchkeeping
STEM	Science, Technology, Engineering and Math Education
Title XI	Federal Ship Financing Program managed by MARAD
TSP	Tanker Security Program
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USTRANSCOM	U.S. Transportation Command
VAM	Vessel Acquisition Manager
VCM	Vessel Contract Manager

Meeting Agendas

Wednesday, June 28, 2023

- 10:00 am Call to Order & Roll Call
Jeff Flumignan, Designated Federal Officer
- Item 1 Welcome and comments from the MTSNAC Chairman
Robert "Bob" Wellner, Chairman, Maritime Transportation System National
Advisory Committee
- Item 2 Chair Guidance and Breakout Session – Breakout Rooms
Staff Liaisons to facilitate breakout sessions and prioritize Issue Areas and Desired
Outcomes
- Item 3 Reconvene and Update to Chairman
Robert "Bob" Wellner, Chairman, Maritime Transportation System National
Advisory Committee
- Item 4 Public Comments (if required)
Jeff Flumignan, Designated Federal Official
- Item 5 Break for Lunch
- Item 6 Sub-Committee Breakout Sessions in Breakout Rooms
Staff Liaisons to facilitate breakout sessions and prioritize Issue Areas and Desired
Outcomes
- Item 7 Reconvene full Committee and Brief Update Report to Chair by Sub-Committee
Chairs (current)
Robert "Bob" Wellner, Chairman, Maritime Transportation System National
Advisory Committee
- Item 8 Closing Remarks and Adjournment
Robert "Bob" Wellner - Chairman, Maritime Transportation System National
Advisory Committee

Thursday, June 29, 2023

- 10:00 am Call to Order & Roll Call
Jeff Flumignan, Designated Federal Official
- Item 9 Welcome & Opening Statements
Robert "Bob" Wellner - Chairman, Maritime Transportation System National Advisory Committee
- Item 10 Chair Guidance and Breakout Session – Breakout Rooms
Staff Liaisons to facilitate breakout sessions and prioritize Issue Areas and Desired Outcomes
- Item 11 Reconvene and Update to Chairman
Robert "Bob" Wellner, Chairman, Maritime Transportation System National Advisory Committee
- Item 12 Public Comments (if required)
Jeff Flumignan, Designated Federal Official
- Item 13 Break for Lunch
- Item 14 Chair Guidance and Breakout Session – Breakout Rooms
Staff Liaisons to facilitate breakout sessions and prioritize Issue Areas and Desired Outcomes
- Item 15 Reconvene and Presentations from Subcommittee Chairs
Robert "Bob" Wellner, Chairman, Maritime Transportation System National Advisory Committee
- Item 16 Meeting Schedule and Planning Discussion
Jeff Flumignan, Designated Federal Officer
- Item 17 Closing Remarks and Way Ahead
William "Bill" Paape, Associate Administrator for Ports and Waterways
- Item 18 Closing Remarks and Adjournment
Robert "Bob" Wellner, Chairman, Maritime Transportation System National Advisory Committee

Minutes of Maritime Transportation
System National Advisory Committee Public Meeting
June 28, 2023
10:00 am–3:00 pm EDT

Call to Order & Roll Call

Mr. Jeffrey Flumignan, Designated Federal Officer with MARAD, called the meeting to order at 10:00 am EDT, took the roll call, and welcomed two new committee members – Sara Fuentes of the Transportation Institute (TI) and Thomas Overacker of Customs and Border Protection (CBP).

Members Present

Federal Government Employees:

Michael Moltzen – U.S. Environmental Protection Agency
Thomas Overacker – U.S. Customs and Border Protection
Shelley Sugarman – U.S. Coast Guard
Brian Tetreault – U.S. Army Corps of Engineers

Special Government Employees:

Cheryl Ball – Missouri Department of Transportation
Lauren Beagen – Squall Strategies (virtual)
Erik Stromberg – Lamar University
Tom Wetherald – Global Dynamics – NASSCO (retired)

Representative Members:

Aimee Andres – Inland Rivers, Ports and Terminals, Inc.
David Cicalese – International Longshoremen's Association (virtual)
Brian Clark – North Carolina Ports Authority
Mario Cordero – Port of Long Beach
Bill Doyle – Maryland Port Administration
Berit Eriksson – Sailors' Union of the Pacific
Sara Fuentes – Transportation Institute
Joe Gasperov – International Longshore and Warehouse Union
Roger Guenther – Port Houston
Brian Jones – Nucor Corporation
David Libatique – Port of Los Angeles (Vice-Chair)
Bethann Rooney – Port Authority of New York/New Jersey
Stephen Spoljaric – Bechtel
Jack Sullivan – Matson Navigation, Inc
Penny Traina – Columbiana County Port Authority
Robert Wellner – Liberty Global Logistics, LLC (Chair)

Members Absent

Russell Adise –U.S. Department of Commerce
James Dillman – Gateway Terminal
Craig Johnson – Flagship Management, LLC

MARAD / USDOT Members Present

Chad Dorsey – Director, Inland Waterways Gateway Office, MARAD
Jeffrey Flumignan – DFO and Director, Office of Maritime and Intermodal Outreach, MARAD
Brian Hill – Alternate DFO and Director, Western Gulf Gateway Office, MARAD
Zanna Khurana – Office of Marine Highways, MARAD
William Paape – Associate Administrator for Ports and Waterways, MARAD
Tim Pickering – Office of Ports and Waterways Planning, MARAD
Branden Villalona – Alternate DFO and Director, South Atlantic Gateway Office, MARAD

Public Members Present

None

Item 1- Welcome & Comments from the MTSNAC Chairman

Mr. Robert Wellner welcomed the group, expressed his appreciation that everyone was there, and stressed the importance of in-person meetings. He then restated the primary goals of the committee:

- Strengthen the U.S. maritime industry
- Determine a viable workforce
- Support port infrastructure
- Create innovation in the maritime sector

Mr. Wellner then outlined the Sub-committees' deliverables timelines:

- Priority 1 recommendations are now in final form
- Priority 2 draft recommendations are due in July
- Priority 2 final recommendations are due in October
- Priority 3 draft recommendations are due in December
- Priority 3 final recommendations are due in January 2024

The Port Sub-committee has completed its Export Enhancements and Decarbonization and Emissions Reduction recommendations at Ports. He thanked them for including language concerning a national maritime strategy. The Starboard Sub-committee has completed its recommendations on RRF Recapitalization and Ship Repair. Mr. Libatique expressed his gratitude for the work and encouragement exhibited by all committee members. The group is now one-third of the way through its work plan. He thanked them for their hard work. Mr. Flumignan asked the sub-committees to return to the general meeting at 11:45. Tomorrow's start time will be 9:00 am vs. 10:00 am.

Item 2 – Chair Guidance and Breakout Session – Breakout Rooms

The members then joined their respective subcommittees.

Item 3 – Reconvene and Update to Chairman

After the members returned from their breakout sessions, Mr. Wellner asked for a briefing from each sub-committee. Mr. Wetherald provided the Starboard Sub-committee brief. The sub-committee reviewed the mariner shortage issue and noted the following:

- This is a multifaceted issue
- It reaches multiple government agencies
- No single touchpoint
- No sound, reliable data since 2017
- Difficult to identify where responsibility lies
- The focus will be on MARAD

The sub-committee identified several potential causes of the mariner shortage, including compensation, quality of life, public awareness, education, tracking of mariners, and credentialing. In the afternoon breakout, the sub-committee will meet with Dr. Kumar of MARAD to further explore these issues.

Mr. Jones then briefed the group for the Port Sub-committee. The subcommittee reviewed the following issues:

- Removing impediments to the Marine Highway Program (MHP)
- How legislation has changed some elements of the program, including adding breakbulk and bulk cargoes to the eligible cargo mix
- Need for MARAD data concerning successful Marine Highway grants
- Explore the use of tax credits in the MHP
- Need for a grant program to focus on the viability of projects

The sub-committee is currently in a fact-finding mode. They will focus on workforce development in the afternoon breakout session.

Item 4 – Public Comments (if required)

Mr. Flumignan announced that there were no public comments at this time.

Item 5 – Break for Lunch

The group then adjourned for lunch.

Item 6 – Chair Guidance and Breakout Session – Breakout Rooms

The members joined their respective breakout sessions at 12:45 pm.

Item 7 –Reconvene and Brief Update report to Chair by Sub-Committee Chairs

When the members returned to the general session, Mr. Wellner asked each sub-committee co-chair for a briefing. Mr. Wetherald provided the Starboard Sub-committee brief. The group had just met with Dr. Kumar and learned that there had been no new mariner data since 2017. The sub-committee discussed adding mariner billets under the MSP and TSP programs to increase the number of mariners. Another issue they discussed was the giant step from unlicensed to licensed seafarers under the Hawsepipeline progression path. Ms. Rooney asked if STCW requirements make this difficult, to which Mr. Wetherald replied yes.

Mr. Jones presented for the Port Sub-committee. The group reviewed workforce development inside and outside the gate, inland river ports, and coastal seaports. They also identified the need for education and outreach, including the need to "upskill" the existing workforce. They also discussed the need to evaluate where the future was taking the industry. They highlighted the need to invest in workforce training inside and outside the gate, e.g., distribution centers. They also discussed the issue of adequate workforce pay. The sub-committee will tap into outside resources later to dig deeper. They also learned that DOT's Office of Small Business has recruitment centers to attract new worker entrants.

Item 8 – Closing Remarks and Adjournment

Mr. Wellner noted that there were many challenges that the sub-committees uncovered. He also noted that there appear to be some walkover issues between the two sub-committees and that the chairs should discuss this. In addition, he encouraged the use of SMEs to assist the sub-committees.

Mr. Wellner then noted that the group would convene at 9:00 am. Tomorrow instead of the scheduled initially 10:00 am. The morning breakout sessions will focus on Priority 2 recommendations. Then after lunch, the sub-committees will brief the whole group on their deliberations. Mr. Flumignan requested that Mr. Jack Kearns of IRPT be appointed an SME for the Port Sub-committee. Mr. Wellner then adjourned the meeting at 3:05 pm.

Minutes of Maritime Transportation
System National Advisory Committee Public Meeting
June 29, 2023
9:00 am–3:00 pm EDT

Call to Order & Roll Call

Mr. Jeffrey Flumignan, Designated Federal Officer with MARAD, called the meeting to order at 9:00 am EDT and took the roll call.

Members Present

Federal Government Employees:

Michael Moltzen – U.S. Environmental Protection Agency
Thomas Overacker – U.S. Customs and Border Protection
Shelley Sugarman – U.S. Coast Guard
Brian Tetreault – U.S. Army Corps of Engineers

Special Government Employees:

Cheryl Ball – Missouri Department of Transportation
Lauren Beagen – Squall Strategies (virtual)
Erik Stromberg – Lamar University
Tom Wetherald – Global Dynamics – NASSCO (retired)

Representative Members:

Aimee Andres – Inland Rivers, Ports and Terminals, Inc.
David Cicalese – International Longshoremen's Association (virtual)
Brian Clark – North Carolina Ports Authority
Mario Cordero – Port of Long Beach
Bill Doyle – Maryland Port Administration
Berit Eriksson – Sailors' Union of the Pacific
Sara Fuentes – Transportation Institute
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Roger Guenther – Port Houston
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David Libatique – Port of Los Angeles (Vice-Chair)
Bethann Rooney – Port Authority of New York/New Jersey
Stephen Spoljaric – Bechtel
Jack Sullivan – Matson Navigation, Inc
Penny Traina – Columbiana County Port Authority
Robert Wellner – Liberty Global Logistics, LLC (Chair)

Members Absent

Russell Adise –U.S. Department of Commerce
James Dillman – Gateway Terminal
Craig Johnson – Flagship Management, LLC

MARAD / USDOT Members Present

Tretha Chromey – Deputy Associate Administrator for Ports and Waterways, MARAD
Chad Dorsey –Director, Inland Waterways Gateway Office, MARAD
Jeffrey Flumignan – DFO and Director, Office of Maritime and Intermodal Outreach, MARAD
Brian Hill – Alternate DFO and Director, Western Gulf Gateway Office, MARAD
Zanna Khurana – Office of Marine Highways, MARAD
William Paape – Associate Administrator for Ports and Waterways, MARAD
Tim Pickering – Office of Ports and Waterways Planning, MARAD
Branden Villalona – Alternate DFO and Director, South Atlantic Gateway Office, MARAD

Public Members Present

None

Item 9 – Welcome & Opening Statements

Mr. Paape appreciated the group's efforts over the last day. Mr. Wellner thanked everyone for the great work they have produced. He also stated that today the sub-committees will work on Priority 2 recommendations. After lunch, the Sub-committee co-chairs will brief the group on their Priority 2 recommendations. Mr. Flumignan advised that he guide us on future meeting dates in the afternoon. Mr. Wellner thanked the entire MARAD staff for their guidance and assistance to the sub-committees.

Item 10 – Chair Guidance and Breakout Session – Breakout Rooms

The members then joined their respective sub-committees for the morning breakout session.

Item 11 – Reconvene and Update to Chairman

When the group reconvened, both sub-committee co-chairs briefed the committee on their morning results. Mr. Wetherald presented for the Starboard Sub-committee. The sub-committee has drafted an 80-90% solution to their recommendations. The group also focused on two categories:

- Issues for which MARAD has responsibility
- Issues where MARAD can support other agencies

Some of the subcommittee's recommendations include:

- MARAD should continue to track maritime personnel and fix the mariner database
- MARAD should advocate for an increase in SIP (Student Incentive Program) funding

- MARAD should create and incentivize a hawsepipe program in conjunction with the state maritime academies
- MARAD should add entry-level billets in future MSP vessel operator contracts and include an increase in pay for those billets
- MARAD should pursue outreach, primarily by promoting the maritime industry as a career path and tapping into the existing military centers to accomplish this
- MARAD should support Quality of Life (QOL) initiatives throughout the maritime industry
- MARAD should address specific issues in the RRF
- MARAD should support the breakdown in regulatory barriers for mariners, specifically by "unscrewing" the mariner credentialing system
- MARAD should support crediting sea time while mariners are in ROS
- MARAD should support federal tax breaks for mariners

Mr. Jones presented for the Port Sub-committee. Today the sub-committee addressed dynamic capacity modeling. It reviewed the LPMS and RIS systems and discussed how USACE and CBP could manipulate ship manifest data for better forecasting. Regarding inland ports, there was a discussion of outside-the-gate activities and the need for more data. An expansion of FLOW would benefit this effort since inland river data is stale – much is three years old. Real-time data is needed. One sticking point is the reluctance of private terminals and shippers to share their proprietary data. However, if they perceive a benefit in sharing that data, they might be more willing to provide it.

The sub-committee moved a Priority 3 problem statement to the Priority 2 level – **Helping Communities Near Ports**. EPA is implementing some initiatives directed at this problem and incorporating Justice40 into them. Roadway congestion near ports is a continual problem since there are few options for new roads. Regarding inland river ports, there is a need to incentivize better road construction around the terminals and encourage the better use of short-line railroads to serve those ports. The sub-committee hopes to formalize these recommendations by the September meeting.

Item 12 – Public Comments (if required)

Mr. Flumignan announced that there were no public comments at this time. Mr. Wellner advised everyone that the date for draft submittals for Priority 2 recommendations has been pushed back from July to August.

Item 13 – Break for Lunch

The group then adjourned for lunch and requested to return by 12:30 pm.

Item 14 – Chair Guidance and Breakout Session – Breakout Rooms

Instead of another breakout session, both sub-committees were asked to present their recommendations to the group.

Item 15 – Reconvene and Presentation from Sub-committee Chairs

Starboard Sub-committee Presentation

Mr. Wetherald led the briefing. Under Task 1 (Recapitalization of the RRF), there are three recommendations:

Recommendation #1:

The Secretary of Transportation should pursue a sealift ship design in 2023 and prepare to hire a VCM with the intent that multiple shipyards be contracted to build these ships. At the same time, the Secretary should continue to acquire used sealift ships for the RRF as rapidly as Congress provides authority and appropriations.

To implement this recommendation, MARAD should:

- Continue buying used ships
- Develop a RO/RO design from a third-party design group
- Ensure that the design meets ABS-approved standards
- Develop ABS and USCG Design Basis Agreement
- Require that ship design be based on previous MARAD work
- Develop a requirement with a minimum of necessary military features
- Function as program manager
- Contract for a Jones Act owner-operator as VCM
- Use fixed-price contracting
- Develop a common charter between all stakeholders
- Develop oversight and risk management plan
- Ensure maximum use of common OTS equipment
- Provide maximum supply chain flexibility within the law

Mr. Wetherald added that this approach has pros and cons and displayed a chart listing them (See Attachment).

Recommendation #2

In combination with a MARAD-managed sealift shipbuilding program, the Secretary should institute a grant program for shipbuilders involved in the program to improve efficiencies and reduce costs of the shipbuilding program.

MARAD should use a grant vehicle like the Small Shipyard Grant Program to implement this recommendation.

Recommendation #3

MARAD should create and publish an annual compendium of U.S. Shipbuilding Capabilities. (MARAD had previously done this but ceased publication in 2004.)

Mr. Wellner thanked Mr. Wetherald for the presentation and made two suggestions to the recommendations:

- Under Recommendation #1, change Jones Act owner-operator to Section 2 operator
- Consider the use of an "active" RRF vs. the "current" RRF

Mr. Wellner also asked about the asset design under Recommendation #1. For example, what if requirements change and CON/RO, which DOD has expressed an interest in, becomes the new requirement? So, there should be flexibility in the design approach.

Ms. Ball asked how old the previous MARAD design requirements were, and Mr. Wetherald responded that this was fine given today's technology. Mr. Wellner asked if the grants would go only to a total construction yard under the proposed grant program or multiple component yards. Mr. Wetherald replied that the group could consider grants with multiple-yard contracts. Ms. Eriksson pointed out that a primary grant recipient could sub-contract with another entity. Mr. Wellner asked if MTSNAC needs to approve these recommendations today. Mr. Flumignan replied that MARAD could circulate the recommendations and have a final vote later, perhaps at the September meeting.

Port Sub-committee Presentation

Mr. Jones made the presentation. The sub-committee addressed two problem statements: Export Enhancements and Decarbonization and Emissions Reduction at Ports.

1. Export Enhancements

Recommended Actions

1. Develop an updated National Freight Strategic Plan (NFSP) incorporating the National Maritime Strategy to address last and first-mile freight transportation within the US and its territories. The NFSP and the individual State Freight Plans should be updated to implement lessons learned and identify gaps in pandemic-related challenges.
2. Support the designation of inland barges as Vessels of National Interest to prioritize Title XI loan guarantees for the construction of new barges and fleet expansion. Only two shipyards are building inland barges, which is a critical issue.
3. Support a significant increase in funding for the Small Shipyard Grant Program in the annual Presidential budget and prioritize grant awards for US shipyards constructing inland barges. The desired outcome is to provide a significant increase in funding to support the need for fleet renewal and expansion of the U.S. inland barge fleet.

4. Support liaison with USACE and USDA to identify those inland ports critical for agricultural exports and advocate for prioritization and increased funding for those ports to ensure regular maintenance dredging. Inland ports are vital to exports and need more O & M funding.
5. The Office of the Secretary of Transportation should support legislation that authorizes the creation of a forum, led by the Secretary, for coordination among the freight transportation modes and multiple Federal entities which have a role in freight, logistics, and supply chain issues.

This recommendation is not intended to replace the CMTS but to complement it. This should provide better coordination among multiple federal agencies.

6. The Secretary shall develop a strategic plan to support the development of a domestic production base for the supply of critical cargo handling equipment throughout the US supply chain. There is a need to build out our domestic production base and eliminate exemptions under the Build America Buy America Act (BABAA).
7. MARAD shall coordinate with FMC and USDA to restart the weekly Ocean Shipping Container Availability Report (OSCAR), identifying the quantity of equipment available in each significant intermodal hub and seaport. This recommendation explicitly targets the need to restart OSCAR, which began after the Trans-Pacific Stabilization Agreement dissolved. OSCAR gave exporters transparency and visibility over the availability of containers.

Mr. Wellner suggested that the recommendation to prioritize Title XI applications for inland barges also included increasing Title XI overall. Mr. Flumignan commented that there is draft legislation to increase funding for Title XI. Mr. Wellner also remarked that it was good to reference the National Freight Strategy and the National Maritime Strategy. Mr. Wetherald pointed out that the use of "shall" may not be appropriate since that is strictly speaking the congressional legislative language. Mr. Jones replied that he would make that change.

2. Decarbonization and Emissions Reduction at Ports

Recommended Actions

1. Deepen cooperative efforts with EPA and DOE to optimize decarbonization of and emission reductions in coastal, inland, and Great Lakes ports by identifying best practices and quantifying benefits from implementing efficiency and productivity measures. DOT can take advantage of the knowledge and expertise of other agencies.
2. Coordinate with EPA to update information on an appropriately frequent basis, new technologies, and strategies that could contribute to Port decarbonization goals for use, including but not limited to discretionary funding decisions. Information can be shared and disseminated through conferences and presentations on technologies and strategies from current research projects and challenges concerning ports' decarbonization goals and the environmental sustainability of the U.S. Marine Transportation System.
3. Increase funding provided to MARAD, EPA, and DOE targeted at research and development of reduced and zero emissions transport vehicles, carbon capture, and sequestration technologies for ports and terminals, alternative fuels, ultracapacitors, and

other energy storage solutions. More R&D funding is needed if emissions in and around ports are to be reduced or eliminated.

4. In coordination with DOT's Multimodal Office, support efforts to update the State Freight Plan Guidance to recommend including emissions reduction goals and decarbonization projects and include near port community collaboration in all plan updates. This recommendation is very closely related to Recommendation 1 under Export Enhancements.
5. DOT should follow the US National Blueprint for Transportation Decarbonization and engage with the US maritime industry, especially concerning international coordination, such as the Zero Emission Shipping Mission. The goal is to coordinate and not reinvent the wheel on the strategies needed to reduce greenhouse gas emissions across the transportation system.

Ms. Sugarman asked if the small shipyard program recommendation only applied to shipyards or could include other sectors such as fuel production, e.g., hydrogen-based and fuel-efficient ships. Mr. Moltzen replied that this is included in the R&D recommendation. Ms. Ball emphasized that recommendation #4 under Decarbonization and Emissions Reduction at Ports needs to be urgent. State freight plans will be updated in three years, so the recommendation should include "must be done." Ms. Cromey replied that the Freight Office, which will soon be set up within DOT, may include this and that the office may be up and running by the time of the next MTSNAC meeting. Mr. Stromberg suggested that recommendation #5 under Export Enhancements needs to be clarified since there is a distinction between this government forum and the CMTS. In addition, clarification will avoid unnecessary overlapping between the two entities. Mr. Flumignan added that the Surface Transportation Board (STB) needs to be part of either this new group or CMTS. Mr. Wellner requested that these recommendations be updated and distributed to all MTSNAC members.

Item 16 – Meeting Schedule and Planning Discussion

Mr. Flumignan announced the upcoming meeting schedule:

- September 20-21 in Washington, D.C.
- November 28-29 in Washington, D.C.

He also pointed out that the current MTSNAC charter expires in September 2024, but several current appointments expire earlier – March 2024. However, those members will continue the committee until new replacements are chosen. Mr. Wellner suggested that the Starboard Sub-committee needs rebalancing and invited any Port Sub-committee members who desired to move to the Starboard Sub-committee.

Item 17 – Closing Remarks and Way Ahead

Mr. Paape said that if members felt underrepresented by the MARAD staff, they should let him know. Mr. Wetherald said he would email the Starboard Sub-committee members their next virtual meeting date and time. Mr. Libatique expressed his gratitude to the group and added that he was encouraged by the progress made to date.

Item 18 – Closing Remarks and Adjournment

Mr. Wellner thanked everyone for their participation and reminded them not to hesitate to suggest things they think have value. Even if something has been recommended previously but there has yet to be an action, please bring it up again. The meeting was then adjourned at 1:40 pm EDT.

Certified and Accepted

Date:



Robert G. Wellner, Chair

08/14/2023

Appendices - Meeting Presentations - June 28-29, 2023

Appendix A – Draft Recommendation of the Port Subcommittee - No. 1

**Maritime Transportation System National Advisory Committee (MTSNAC)
Port Sub-Committee
Recommendation to the US Secretary of Transportation**

Date: 16 June 2023

Problem Statement – Decarbonization and Emissions Reduction at Ports

Emissions from fossil fuel vehicles, cargo handling equipment and vessels in and around ports contribute to climate impacts and pose health risks to nearby communities that often comprise low-income and minority populations.

Recommendation Request

Make recommendations to the Secretary of Transportation on actions that decarbonize our nation’s ports to reduce climate impacts and improve the health of Americans and address the environmental inequities that disadvantaged communities often experience.

Recommended Action

- 1. Deepen cooperative efforts with EPA and DOE to optimize decarbonization of and emission reductions in coastal, inland and Great Lakes ports, by identifying best practices and quantifying benefits from implementing efficiency and productivity measures.**

Desired Outcome:

Identifying best practices and lessons learned from decarbonization efforts at ports and replicating these successful projects in other ports, reducing criteria pollutants and greenhouse gas emissions from maritime and port activities. These efforts will improve air quality around ports and provide environmental sustainability for the U.S. marine transportation system.

Notable Background:

Within the Committee on Maritime Transportation System (CMTS) the Maritime Innovative Science & Technology Inter-Agency Team (MIST IAT) meets monthly to share projects and efforts that each agency is aware of to coordinate decarbonization efforts, since each agency has different perspectives and goals. DOT, EPA, and DOE also coordinate closely through existing forums, including through the Joint Office of Energy and Transportation created through the Bipartisan Infrastructure Law.

- 2. Coordinate with EPA to update information on an appropriately frequent basis, new technologies and strategies that could contribute to Port decarbonization goals for use, including but not limited to, in discretionary funding decisions.**

Desired Outcome:

Information will be shared and disseminated through conferences and presentations on technologies and strategies from current research projects and challenges with respect to Ports' decarbonization goals and the environmental sustainability of the U.S. marine transportation system. This includes sharing data, performance, and results from BIL and IRA funding programs at each Agency.

Notable Background:

Within the CMTS, the MIST IAT has developed conferences (e.g. CMTS/NAS/TRB Biennial Conference on the Marine Transportation System Innovative Science and Technologies) and presentations to share, identify, coordinate, and develop innovative science and technology initiatives and policies to address the challenges identified in the National Strategy.

- 3. Increase funding provided to MARAD, EPA and DOE targeted at research and development of reduced and zero emissions transport vehicles, carbon capture and sequestration technologies for ports and terminals, alternative fuels, ultracapacitors and other energy storage solutions.**

Desired Outcome:

With targeted funding and increased collaboration, Federal agencies will develop synergies among the agencies to target the most promising technologies and data sharing on the performance of these emerging technologies and the necessary operating conditions and infrastructure to facilitate greater acceptance among ports, marine and freight sectors. This will help improve overall funding effectiveness and more quickly identify the most successful and commercially available technologies for broad deployment.

Notable Background:

MARAD, EPA, HUD and DOE have a memorandum of agreement to implement the framework of strategies and actions outlined in the U.S. National Blueprint for Transportation Decarbonization. The agencies agreed to coordinate on policy and accelerate the research, development, demonstration, and deployment needed for innovative solutions and technologies that enable a clean, safe, accessible, equitable, and decarbonized transportation system for all.

- 4. In coordination with DOT's Multimodal Office, support efforts to update the State Freight Plan Guidance to recommend including emissions reduction goals and**

decarbonization projects and include near port community collaboration in all future plan updates.

Desired Outcome:

Increased consideration, awareness, and consistency of emission reduction goals across the maritime industry and ports.

Notable Background:

EPA, DOT, DOE, and HUD have committed to coordinating across the federal government with state and local governments, industry, and community stakeholders to reduce transportation greenhouse gas emissions. Including emission reduction goals in future updates is consistent with these agency goals.

- 5. DOT should follow the US National Blueprint for Transportation Decarbonization and engage with the US maritime industry especially as it concerns international coordination such as the Zero Emission Shipping Mission.**

Desired Outcome:

The transportation sector is the largest emitter of greenhouse gasses in the U.S., contributing significantly to the climate crisis. Reducing greenhouse gas emissions from the maritime industry will help reduce this impact while also improving air quality around ports and providing affordable and sustainable solutions for goods movement in the U.S.

Notable Background:

The U.S. National Blueprint for Transportation Decarbonization presents a strategy to decarbonize the entire transportation sector by 2050. EPA, DOT, DOE, and HUD formalized their commitment to this goal, and to collaborate and coordinate in achieving it, in a memorandum of understanding signed in September of 2022. The Blueprint identifies three overarching strategies to reduce greenhouse gas emissions across the transportation system; improve community design and land-use planning, increase options to travel more efficiently, and transition to zero-emission vehicles and fuels.

For maritime vessels, the Blueprint calls for international and domestic stakeholder engagement to develop and implement effective decarbonization strategies and regulations, infrastructure investments, and improved design and planning for clean technologies and fuels in maritime applications. The agencies are committed to building more detailed sector decarbonization plans that will achieve the agencies decarbonization goals.

Appendix B – Draft Recommendation of the Port Subcommittee – No. 2

**Maritime Transportation System National Advisory Committee (MTSNAC)
Port Sub-Committee
Recommendation to the US Secretary of Transportation**

Date: 16 June 2023

Problem Statement – Export Enhancements

Increased freight congestion at some ports has obstructed the international supply chain for American agricultural commodities and other goods. Promoting access to shipping trade lanes for nationally and globally significant agricultural commodities and other goods will help to stabilize transportation costs for farmers, processors, retailers, and consumers.

Recommendation Request

Make recommendations to the Secretary of Transportation on actions that support improved access to international markets, including alternate trade lanes and legislation explicitly designated for domestic and international shipment of agricultural commodities and other goods.

Recommended Actions

- 1. Develop an updated National Freight Strategic Plan (NFSP) incorporating the National Maritime Strategy to address last and first-mile freight transportation within the US and its territories.**

Desired Outcome:

The NFSP and the individual State Freight Plans should be updated to implement lessons learned and identify gaps in pandemic-related challenges.

Notable Background:

The supply chain disruptions and severe congestion experienced in the United States during the pandemic (2020-2022) indicate that considerable work remains to be done to strengthen US economic competitiveness and support an efficient and reliable supply chain. The safe and efficient freight movement is vital to the Nation's economic growth. In 2021, the Infrastructure Investment and Jobs Act (IIJA) was passed, requiring DOT to develop an updated National Freight Strategic Plan (NFSP) that includes a multimodal approach and will serve to inform infrastructure planning, coordinate investments, and support future freight efficiencies that improve the freight industry's performance. Through IIJA, State DOTs must develop a State Freight Plan demonstrating the ability to advance the National Multimodal Freight Policy to access formula funding.

In 2022, the U.S. Maritime Administration (MARAD) Reauthorization Act required MARAD to develop a new National Maritime Strategy (NMS) to help grow the maritime economy. By incorporating the NMS into the NFSP and State Freight Plans, an improved, integrated freight system will result thereby supporting efficient and reliable supply chains for domestic and international freight flows.

2. Support the designation of inland barges as Vessels of National Interest to prioritize Title XI loan guarantees for the construction of new barges and fleet expansion.

Desired Outcome:

MARAD designates the US inland barge fleet as Vessels of National Interest which would prioritize any applications for the Title XI loan guarantee program, and support fleet renewal and expansion activities that are critically needed to support US exports.

Notable Background:

Industry estimates are that between 2022 and 2025, 4,239 inland barges will be scrapped from the inland fleet, with only 150 to 175 new barges constructed annually during that same period. This will result in a projected shortage of as many as 3,500 barges or a reduction in the US inland barge fleet size of 83% by 2025. Over the same period, dry cargo tonnage is projected to grow from approximately 314.8 million tons to approximately 325.1 million tons representing a 3.27% increase. In addition, ton-miles during this period are projected to increase from 20.14 billion-ton miles to 21.15 billion-ton miles representing a 5.01% increase. Designating the US inland barge fleet as Vessels of National Interest will prioritize applications for Title XI funding and help reduce the massive shortage of barges needed to transport US exports.

3. Support a significant increase in funding for the Small Shipyard Grant Program in the annual Presidential budget and prioritize grant awards for US shipyards constructing inland barges.

Desired Outcome:

The Small Shipyard Grant program is provided with a significant increase in funding to support the need for fleet renewal and expansion of the US inland barge fleet.

Notable Background:

Approximately 300 small shipyards throughout the United States are responsible for constructing, and maintaining over 40,000 military, safety, security, and commercial vessels in the US flag fleet, including inland barges. These shipyards are essential to maintaining US commerce and national defense, safety, and security. The Small Shipyard Grant Program is vital to maintaining US shipbuilding and maintenance capacity, American manufacturing, and well-paying industrial jobs. However, the Small Shipyard Grant Program has historically suffered from an annual appropriation of \$20 million or less including several

years of zero funding. Meanwhile, shipyards have expressed a need for over \$100 million annually to help maintain the fleet, safely and efficiently.

At current capacity, the small shipyards that typically construct inland barges can build approximately 300 inland barges annually versus a replacement need of 800 to 1000 barges per year. The net effect will be a loss of capacity in the US inland water system, negatively impacting US export capacity and American producers and manufacturers.

- 4. Liaison with USACE and USDA to identify those inland ports that are critical for agricultural exports and advocate for prioritization and increased funding for those ports to ensure regular maintenance dredging.**

Desired Outcome:

The inland ports that support the transportation of significant levels of the nation's agricultural commodities are all identified, the Army Corps' criteria for allocating inland waterway O&M funds are revised to give priority to ports that support agricultural exports and consistent federal resources are allocated to maintain navigational access to those port's, shielding the US export market.

Notable Background:

On the inland waterways, priority for federal dredging funding is currently given to ports based on ton miles as well as other factors including support for subsistence harbors, harbors of refuge, commercial fishing, passenger ferries and energy generation. While commercial fishing is prioritized, there is not an equal priority given to ports that transport agricultural exports. Not only do U.S. agriculture exports feed the world, but they are also a large reason for reduced trade deficit and the economy of agriculture-producing states. Critical inland ports engaged in the transportation of agriculture, keep costs down thereby enabling the U.S. to be such a large player in the international market. However, not all ports that are located close to the growers and are critical to the agriculture export market, have a high ton-miles value and therefore may not qualify for dredging funding from the U.S. Army Corps of Engineers. The result is that smaller inland ports are required to pay for their own dredging or light load their barges. This raises the cost to the farmer and the economies of scale become imbalanced.

- 5. The Office of the Secretary of Transportation should support legislation that authorizes the creation of a Secretary led forum for coordination among the freight transportation modes and multiple Federal entities which have a role in freight, logistics, and supply chain issues.**

Desired Outcome:

Coordination of planning, strategy, and programmatic efforts among the relevant modal administrations of DOT (MARAD, FHWA, FRA), Department of Commerce (DOC),

USACE, STB and FMC as it relates to coordinating US freight transportation system investments and our response to supply chain challenges.

Notable Background:

The US supply chain is increasingly dependent on multiple modes of transportation. Historically, there hasn't been much coordination among the modal administrations and other Federal agencies and offices that have some role in supporting the supply chain. With growing trade volumes and ever-increasing complexity, close coordination on the development of transportation infrastructure investment, bridging modes and the government agencies associated with those modes is vital. Coordination among MARAD, FHWA, FRA, DOC, USACE, FMC and STB is critical to ensure Federal resource allocation is optimized and programmatic efforts to address transportation issues are complementary across transportation modes.

- 6. The Secretary shall develop a strategic plan to support the development of a domestic production base for the supply of critical cargo handling equipment throughout the US supply chain.**

Desired Outcome:

A domestic supply which supports the objectives of Build America Buy America (BABA).

Notable Background:

With 90 percent of global trade traveling by sea, the U.S. has both commercial and strategic interest in maintaining robust maritime capabilities. Unfortunately, Chinese companies are increasingly dominant in the global maritime supply chain, producing at least 95% of the world's shipping containers, 85% of chassis and more than 80% of the world's ship-to-shore gantry cranes. Given the national security and resiliency risks associated with this market dominance and overdependence on Chinese-manufactured cargo handling equipment, supporting a domestic manufacturing base for cargo handling equipment is essential to our national economy, national security and supply chain resiliency. This would also allow ports and terminals to leverage the availability of federal funding to upgrade and/or expand their fleet of cargo handling equipment with equipment that is more sustainable and compliant with Buy America/American requirements.

- 7. DOT shall coordinate with FMC and USDA to restart the weekly Ocean Shipping Container Availability Report (OSCAR), identifying the quantity of equipment available in each significant intermodal hub and seaport.**

Desired Outcome:

Provide visibility of current and forward-looking projections for US exporters of container equipment availability at key intermodal hubs and seaports, allowing exporters to plan supply chain activities, better control inventories, and increase the competitiveness of US exports.

Notable Background:

The Ocean Shipping Container Availability Report (OSCAR) was jointly administered by the USDA and FMC using data from ocean carriers participating in the Transpacific Stabilization Agreement (TSA). The report provided a weekly snapshot of the availability of containers for export bookings at 18 different intermodal locations summarized by location, size, and type (i.e. 20 ft. dry van, 40 ft. dry van, 40 ft. high cube, 20 ft. refrigerated, and 40 ft. refrigerated). The report provided availability for the current week and a two-week forward-looking projection.

With the dissolution of the Transpacific Stabilization Agreement (TSA) in February 2018, publication of the OSCAR report was suspended, and US exporters lost critical visibility of available container capacity. The supply chain disruptions and severe congestion experienced in the United States during the pandemic (2020-2022) exposed a break in the ability to locate container equipment efficiently. Restoring OSCAR will provide the US exporters visibility of available container capacity and allow proper planning for freight shipments.

Appendix C – Summary of Port Subcommittee Breakout Session

Summary of June 28, 2023 Deliberations

Marine Highway Program

- Lack of clarity among MARAD staff and members on what the intended purpose of the program is.
- How does MARAD define success for a service route? Upon probing, MARAD believes that the Red Hook Barge service is an absolute “success” even though it has been heavily subsidized at over \$10 M / year for 20+ years.
- Success factors should include utilization, sustainable (no subsidy)
- As with other grant programs, there is difficulty in accessing funding from the Marine Highway Grant Program in a timely manner. As a result, if a new service could have been started during the pandemic to alleviate congestion, federal assistance would not be able to be leveraged.
- Goal could be to make a modal shift possible and sustain existing services
- Some impediments to further uptake of marine highway services include:
 - Density
 - Frequency
 - Reliability
 - Balance
 - Revenue
 - Multiple Touches
 - Routing decisions are made at cargo booking.
 - Double Harbor Maintenance Tax Payment
- Is there a tax credit that could be awarded for shippers that shift from road (and rail) to water?
- Future grant applications should require the project sponsor to indicate how long they anticipate that the operation would need to be subsidized and where the subsidy would come from, along with providing a business plan for making the service self-sustainable.
- Shippers are not aware of the modal options that are available to them and rely entirely on the freight forwarder or NVOCC to make all of the arrangements. Outreach and education to cargo owners and the decision makers is needed.
- Note: MARAD previously had Marketing & Outreach staff that were cut many years ago. Further, while “economic development” is part of MARAD’s mission, they are not staffed to carry that mission out.

Requests for MARAD

1. Data related to the historical operation (5-10 years) of the MARAD designated marine highway routes (units or tonnage moved, per unit costs, cost savings from less highway maintenance, quantification of emissions reductions) followed by a discussion to address any questions the committee may have

2. Briefing on what MARAD identifies as the problems with the marine highway system program and the lack of viable services relative to the number of designated services, projects funded, and grants awarded? What are the lessons learned from other successes and failures that could be leveraged?
3. Distribute a copy of the Harbor Maintenance Tax economic assessment that has done in a previous MTSNAC term (2 or 3 back).

Workforce Development

- Coastal ports – inside the gate – workforce needs are in skilled trades such as electricians, mechanics and IT specialists.
- Inland ports – workforce needs are in the manual labor trades and recruiting younger people to the industry.
- Warehousing / drayage / other port/supply chain providers – we need more information regarding their workforce development challenges. Arrangements will be made to have a warehousing industry representative provide a briefing to the subcommittee at the next meeting.
- Most of the coastal ports have programs in place working with local high schools, community colleges, vocational schools on outreach and training initiatives.
- There is a need to “upskill” the current workforce to handle emerging technologies and prepare for future needs, in particular in areas such as maintenance and repair, technology support and clerical work.
- Training takes money. Considerable discussion was held regarding whether funding for training should come from government or the private sector. Consensus settled on a cost sharing arrangement.
- Consideration to be given to how existing DOT grant programs (PIDP, RAISE, AMH, etc.) and other Federal government programs (EPA Clean Ports, etc.) can be modified to require a prescribed level of cost sharing for training related to new equipment or technology that is funded for ports in order to ensure that the workforce is adequately trained.
- Consideration to be given as to whether MTSNAC should recommend DOT carry out a supply chain workforce development study to identify needs and gaps in workforce development inside and outside the terminal gates.
- Consideration to be given as to whether training methodologies should be expanded to include online training opportunities that could be combined with hands on training to accelerate training and expand availability.
- A request was made to look into gathering feedback from US inland barge line operators as to their workforce development needs and existing programs.
- Consideration to be given as to whether MTSNAC should recommend the DOT Office of Small and Disadvantage Business form recruitment centers to assist industry in marketing and attracting new workers.

Requests for MARAD – TBD

Summary of June 29, 2023, Deliberations

Dynamic Capacity Modeling

- USACE Lock Performance Monitoring System (LPMS) collects data on lock performance, waiting times, delays, lock status and restrictions.
- LPMS is useful for inland waterways and lock status and is primarily used internally at USACE by lock operators and USACE district personnel
- There are some real time data elements for LPMS (lock status, vessels waiting) that could be used by private industry, however, its primary function is data collection for statistical purposes.
- River Information Systems (RIS) is an international set of standards for rivers and inland water systems that includes elements such as inland navigation charts, Notice to Mariners, AIS vessel tracking, LPMS and other data. RIS has NOT be fully implemented in the US although some individual elements are available.
- In terms of coastal ports, the chief data elements that are missing from current efforts to monitor port related capacity issues are DC (warehouse) capacity, drayage capacity and chassis capacity. These data elements are controlled by disparate 3rd party entities that can be challenging to collect and unite with other data sources.
- In terms of inland ports, most of the data is collected through manual means and is dated. Some of the data currently available is only as current as 2020.
- Private terminals make up a large portion of inland waterways terminals. Private terminal operators typically do not share volume and capacity information unless there is something to gain by doing so (i.e. grants).
- There are Federal protections in place for some types of data (Trade Secrets Law, FOIA, etc.)
- It was discussed that we may need to bring BTS into this discussion and specifically the FLOW project
- Bills of Lading data for US imports and containerized exports is available, however, data regarding the “farm to Co-op/elevator/terminal” and “Co-op/elevator/terminal to ocean port” are largely missing.
- Subcommittee should consider determining from USACE what data they are currently collecting, what do they do with this data, what data can they collect and what they are authorized to do with this data.
- A suggestion was made to consider a reservation system for the locks similar to ocean terminal gate reservation systems that would provider better utilization and data capture.

Requests for MARAD: TBD

Helping Communities Near Ports

- This problem statement currently falls under Priority III, however, discussion was held that the subcommittee may wish to move this up to Priority II given its importance.
- Justice 40 requires a minimum of 40% of benefits from certain Federal funding programs to flow to disadvantaged communities.
- As it relates to air emissions near ports, greenhouse gas emissions related to decarbonization efforts are only a portion of the issue. Consideration must be given to “public health pollutants” including, but not limited to, fine particulate matter, diesel particulate matter and other carcinogenic compounds.
- Electrification of port equipment is one means available to address greenhouse gas emissions and some public health pollutant issues.
- The San Pedro Bay port complex is far ahead of other coastal ports in their electrification efforts which has the potential to put ports in the San Pedro Bay area at a disadvantage initially to other ports due to higher costs.
- The PIDP program has Justice 40 elements incorporated and it was stated that the subcommittee should request a briefing from MARAD staff in this regard.
- Adding on deck rail is a chief solution to assisting local communities with traffic density, however, not all coastal ports are suited for on dock rail. Communities do not want more truck traffic around ports.
- Most coastal ports are “land poor” so re-routing roadways is largely not possible. Designated truck routes are an available solution, however, this requires monitoring and enforcement.
- Data collection must be undertaken to determine where cargo is flowing after it leaves the gates of the coastal port in order to inform which solutions would be most applicable.
- 24/7 operations is another chief solution, however, this has to extend to the DC warehouse located outside the port gates. Inside the gates, the ports are capable of 24/7 operations already.
- Utilizing off-peak and weekend gate hours is another solution but there has to be an incentive to do so and the DC warehouse and drayage operators have to be on board and supporting through similar operating schedules.
- Class 1 railroads have to be part of the solution as well.
- As it relates to inland ports, adopting congestion pricing models incentivizing off-peak operations is a potential solution, however, the cargo has to have to somewhere to go.
- It was discussed that there is inadequate funding for short line railroads and that additional funding of FRA grants would be helpful.
- Private inland terminals cannot view roadway use outside their gates as “not my problem”. They need to be involved in planning and utilization discussions.

Requests for MARAD - TBD

Appendix D – Draft Recommendation of the Starboard Subcommittee – No. 1

**Maritime Transportation System National Advisory Committee (MTSNAC)
Starboard Sub-Committee
Recommendation to the US Secretary of Transportation**

Date: 22 June 2023

Problem Statement – Recapitalization of the Ready Reserve Force

Recommendation to address the following MTSNAC tasking statements:

- The use of the VCM concept to build auxiliary and sealift ships. This report might best be presented as a pros and cons discussion of the various methods of sealift ship acquisition.
- Make recommendations on how MARAD might execute the design and construction program that may be required by the 2023 NDAA.

Problem Statement:

Reserve Fleet strategic sealift capacity is dropping dramatically and will have a deficit to the requirement in excess of 4 million square feet of vehicle space by the end of 2023. Plans to make up this deficit have been less effective than they need to be. If no action is taken a serious deficit of reserve strategic sealift will remain for the foreseeable future. Congress has directed MARAD (2023 NDAA) to commission the design of a commercial specification sealift ship, and pending appropriations, begin a new construction program using a Vessel Construction Manager (VCM). MARAD previously used the VCM process for the National Security Multi-Mission Vessel (NSMV) program because, among other reasons, MARAD was not equipped to directly manage a ship construction program.

Recommendation Request:

We recommend the Secretary pursue a sealift ship design in 2023 and prepare to hire a VCM with the intent that multiple shipyards could be contracted to build these ships. At the same time the Secretary should continue to acquire used sealift ships for the Ready Reserve Force (RRF) as rapidly as Congress provides the authority and appropriations.

Recommended Action:

There are important lessons learned from the National Security Multi-Mission Vessel (NSMV) program that need to be taken into account in any new MARAD led shipbuilding program. Many of these are in fact things that were done well and need to be emulated in a new program. The MARAD Administrator should do the following:

- Continue buying used ships as rapidly as Congress provides authority and appropriations.

- From existing funding, in 2023, develop a well vetted Sealift RO/RO design from a third-party commercial design group using a process similar to the NSMV. The design should be:
 - Based on commercial design standards developed to the level generally referred to in the industry as a functional design
 - Ensure American Bureau of Shipping (ABS) approval in concept
 - Develop ABS and USCG Design Basis Agreement (an agreement by all parties establishing all applicable design rules sets and requirements)
 - The requirements for the design should be based on previous MARAD work and the requirements for the used vessels. Do not reopen the requirements churn
 - Develop ship requirements with minimum necessary military features
- MARAD needs to act as the Program Manager
 - Need an enhanced MARAD program office, including a more robust staff than currently assigned to the NSMV program office
 - Successful matrixed organization that did NSMV is not enough to handle an RRF recapitalization program
- Contract for a US Jones Act owner operator as the VCM
 - Nominally the VCM contract would be for the 10 ships of the initial program. This could be modified if there are issues with performance
- Use fixed price contracting – minimizes risk to government
- Develop a Communications Charter between all stakeholders
- Develop an Oversight and Risk Management Plan that will analyze program risk, including risk identification, likelihood and consequence, mitigation strategy and monitoring activities.
- Ensure maximum use of commercial OTS equipment, commercial ship specifications and construction processes
 - Provide maximum supply chain flexibility within the law
- Ensure 100% Cargo Preference
- Ensure virtually complete firewall between MARAD and the shipyard
- Pursue approach that could result in multiple shipyard participation

Desired Outcome:

In ten years the newbuild program could have built ten ships for a total of about 1.5 million square feet of capacity and the buy used program could have bought 20 used ships for a total of roughly 3.4 million square feet of capacity. This will not completely meet the then deficit, but in combination with other programs will dramatically improve the potential for the RRF to meet wartime requirements. These will be modern ships allowing the RRF to retire all of

the current steam ships making the manning of reserve ships easier. Additionally, the new build program will support and help strengthen the shipbuilding and repair industrial base. Long term, the government should continue to build at least one sealift ship a year for as long as the nation needs strategic sealift. This will ensure that there is no future block obsolescence similar to what is currently being experienced.

Notable Background:

- Navy has previously attempted a program for strategic sealift recapitalization known as “CHAMP”. CHAMP failed because of a runaway requirements process resulting in cost estimates that at times exceeded \$1B per ship.
- The NAVSEA estimate of the cost of NSMV was \$700M-\$750M. The MARAD contract with the VCM for the NSMV is \$315M.
- Recapitalizing the nation’s strategic sealift fleets has been a recognized but difficult problem to solve for a decade or more. There are many different opinions on how this should be done and there have been a number of plans over the years. None of the solutions are cheap. As with any plan there are pros and cons. This one is no exception.

Pros or Positive Attributes	Cons or Challenges
Projects are delivered on time and on budget. This has been proved through the NSMV program	Supply chain disruptions and inflation can disrupt a fixed price contract and should be anticipated in the contract
Program had flexibility to survive unprecedented economic situation caused by COVID-19	The ship design needs to be well vetted and settled prior to contract so the shipyard can conduct a detailed design and get immediately into construction. Normal government contracts don’t work this way
Effective Management of risk at contract award. Good foundational design and the companies know what they were selling	The firewall between the shipyard and government provided by the VCM contract holder must be sacrosanct
These are fairly simple ships to begin with. Not appropriate for combatant ships.	A Communications Charter between all stakeholders is required
Builds and maintains shipyard industrial base and workforce	An Oversight and Risk Management Plan is required
Will open up govt shipbuilding to yards that currently don’t/can’t do it	An ABS and USCG Design Basis Agreement is required
With common design, ships could be built at multiple yards	Skilled labor at shipyards is an industry wide problem that can disrupt this style of contract
	Building new ships is more expensive than buying used

Prepared By: MTSNAC Starboard Subcommittee

Date: 29 March 2023

Appendix E – Draft Recommendation of the Starboard Subcommittee – No. 2

**Maritime Transportation System National Advisory Committee (MTSNAC)
Starboard Sub-Committee
Recommendation to the US Secretary of Transportation**

Date: 22 June 2023

Problem Statement – Recapitalization of the Ready Reserve Force

Recommendation aimed at addressing the following MTSNAC tasks.

- How existing or new commercially viable production lines to recapitalize to build required sealift vessels.
- Ways to enable maritime industry innovation in information, automation, safety, environmental impact, and other areas.

Recommendation from MTSNAC to the Secretary of Transportation Date

Problem Statement:

There are concerns that the US Shipbuilding Industrial Base does not have the capacity or the ability to efficiently and cost effectively build new sealift ships for the nation's reserve sealift ships. While most shipbuilders use a range of automated welding technologies, efficiencies in shipbuilding can be obtained with investment in new automation technologies from welding to information management. Failure to act will likely result in higher costs for a future sealift program and a lower likelihood of a cost-effective follow-on program that could avoid future block obsolescence of the reserve sealift fleet. Failure to act may also reduce the likelihood of a healthy competition for the construction of new sealift ships.

Recommendation Request:

We recommend that, in combination with a MARAD managed sealift shipbuilding program, the Secretary institute a grant program to shipbuilders involved in the program to improve efficiency and reduce the costs of the shipbuilding program.

Recommended Action:

Using a grant vehicle similar to the Small Shipyard Grant Program, institute a grant program specifically focused on the sealift shipbuilding program. The grants could be tied to winning a shipbuilding contract for the sealift ships. The grants would be separate from the negotiated fixed price for the shipbuilding contract. As part of the shipbuilding competition, shipyards could be required to propose potential projects where a grant, provided at the beginning of the project, would improve the efficiency and cost-effectiveness of the project. The efficiencies achieved through the grant, could be used as part of the competition evaluation process used by the VCM to determine the winning bid. The grants could be structured as matching grants

where the shipyard would cover (on the order of) 50% of the cost of a given project. The grant values should be in excess of \$25M.

Desired Outcome:

MARAD is able to efficiently and cost effectively execute a strategic sealift new construction program. Additionally, the slow erosion of the US shipbuilding industrial base is arrested. The investment that MARAD makes in the industrial base as a part of a strategic sealift newbuild program improves the efficiency and efficacy of the shipyards that build ships for the Jones Act.

Notable Background:

- MARAD has long supported the part of the shipbuilding industrial base that builds smaller vessels for Jones Act service (through the Small Shipyard Grant Program), from work boats to fishing boats. While at the same time the commercial shipyard industrial base capable of building large ships that could support strategic sealift requirements has slowly atrophied.
- Industry experts consulted by the subcommittee generally agreed that there is adequate industrial capacity to meet the needs of a proposed strategic sealift build program. If a significantly larger shipbuilding requirement emerged, there are concerns that the barriers to entry to large shipbuilding are too large for a company to stand up a new shipyard, capable of building sealift ships, from a green field.
- Experts agreed that greater efficiencies can be achieved within the existing industrial base. These efficiencies will vary shipyard by shipyard. While one shipyard might benefit by installing a new, highly efficient stiffened plate processing line, another might benefit most from a new Enterprise Resource Planning (ERP) system. While more difficult to tie directly to efficiency, projects to lower emissions, like replacing older diesel engines in cranes, might be given a priority within the grant assessment process.

Addendum. Examples of how grants might be applied with the intent of improving the efficiency of the winning shipyard and in the end lowering the cost of the ships.

- Redevelop part of the shipyard to more efficiently manufacture block types needed to build large RO/RO ships. This might constitute changing an area of the yard from manufacturing only flat bottom blocks to manufacturing both flat and deck-with-shell blocks.
- Install dedicated outfit cranes. Maximizing on-ground outfitting is a proven method of reducing the cost of shipbuilding. Relatively light capacity overhead cranes (static or rail), dedicated to the conduct of outfitting can improve the efficiency of the on-ground outfitting portion of the shipyard by enhancing the use of blue-sky opportunities.
- Replacement or upgrade of heavy lift cranes. This might include replacing crawler cranes with installed rail cranes or heavy transporters. This might also include replacing diesel powered equipment with electric equipment in areas where port

emissions controls required this conversion. On ground outfitting is always more efficient than on-hull outfitting. Heavier crane capacity allows larger, heavier block erection which facilitates more on-ground outfitting.

- Install Enterprise Resource Planning (ERP) software. This might entail implementing an integrated Supply Chain Management software package.
- Install an automated panel line. A panel line like this can dramatically increase the rate at which the shipyard can produce basic stiffened flat panels. This panel line might include welding processes that improve the flatness of the panels thus improving subsequent block alignment or insuring flatness of cargo decks. The panel line might include welding automated components that complete the weld up of all the transverses on a panel. A modern panel line can improve quality, efficiency and reduce manpower requirements.

Prepared By: MTSNAC Starboard Subcommittee

Date: 29 March 2023

Appendix F – Draft Recommendation of the Starboard Subcommittee – No. 3

**Maritime Transportation System National Advisory Committee (MTSNAC)
Starboard Sub-Committee
Recommendation to the US Secretary of Transportation**

Date: 22 June 2023

Problem Statement – Recapitalization of the Ready Reserve Force

Recommendation aimed at addressing the following MTSNAC tasks.

- How existing or new commercially viable production lines to recapitalize to build required sealift vessels.
- Ways to enable maritime industry innovation in information, automation, safety, environmental impact, and other areas.

Recommendation from MTSNAC to the Secretary of Transportation Date

Problem Statement:

Currently, there is no annual reporting on United States shipbuilding and repair facilities. Without this information, efforts to improve and enhance these critical industries lack the baseline information to make appropriately informed decisions. Taking inventory of available capabilities in the United States shipbuilding and repair industry is not only a prudent exercise, but a necessary annual practice to understand how to improve the industry, specifically the use of strategic capital investments.

Recommendation Request:

MARAD create and publish an annual compendium of U.S. shipbuilding capabilities.

Recommended Action:

The Maritime Administration (MARAD) previously drafted and released a comprehensive report on United States shipbuilding capabilities, this should be reviewed, restarted, or revised to ensure a compendium of capabilities and limitation in United States shipbuilding is annually reported on. (See Notable Background, below, for direct reference to discontinued MARAD reports).

Desired Outcome:

An accurate accounting of all United States shipbuilding and repair facilities, including the possible expansion to include a separate United States private shipyards report (as was previously done). Without understanding the current landscape, capital improvements may be misappropriated, or worse, unnecessary or duplicative. A comprehensive report, much like the 2004 and 2003 reports that MARAD discontinued, will serve a critical role in understanding deficiencies in our nation's readiness for shipbuilding and ship repair efforts. (See Notable Background, below, for direct reference to discontinued MARAD reports).

Notable Background:

According to MARAD's website, the last "Report on Survey of U.S. Shipbuilding and Repair Facilities" was published in 2004, almost twenty years ago. A similar, but distinctly different report on U.S. Private Shipyards was also previously published, but apparently discontinued after the last publication of October 2003. This report should also be considered for a reporting restart.

Link to Report on Survey of U.S. Shipbuilding and Repair Facilities (2004):

<https://www.maritime.dot.gov/sites/marad.dot.gov/files/docs/ports/national-maritime-resource-and-education-center/9491/2004-reportonsurveyofusshipbuildingandrepairfacilities.pdf>

Link to U.S. Private Shipyards (2003):

<https://www.maritime.dot.gov/sites/marad.dot.gov/files/docs/ports/national-maritime-resource-and-education-center/9511/2003overview-usprivateshipyards-mjrshipbldgrprbase.pdf>

Prepared By: MTSNAC Starboard Subcommittee

Date: 29 March 2023

Appendix G – Summary of Starboard Subcommittee Breakout Session

The Starboard Subcommittee Meeting, June 28

The Starboard Subcommittee had an hour-long conversation with Dr. Sashi Kumar, MARAD Director of Workforce Development on Wed 28 June 2023. Dr. Kumar discussed the pending Work Force Strategic Plan that was almost ready before the last change of administration. The new administration has reviewed it and made changes. They are on Rev 7 now, and it is going back through the review process. A draft of the Plan was requested for the subcommittee and tactfully denied. (Note: Sara has a presentation MARAD gave to the NDTA on the plan and will provide it to the Subcommittee).

Shashi told the background of the Work Force Survey. The 2016 NDAA asked for Work Force Working Group be constituted as a subcommittee of MTSNAC. The WG was chaired by MARAD. They prepared a 2017 mariner report based on USCG data from the Nation Maritime Center (for getting Merchant Mariner licenses and documents). One recommendation was that MARAD conduct a survey of mariners every 2 years. The last time it was done was in 2002. MARAD is in favor of conducting this survey. However, this takes OIRA approval (which is part of OMB). The 2002 survey was done by the Bureau of Transportation Statistics (BTS). MARAD looked for a contractor to conduct the new survey and hired one. In 2018, MARAD was ready for an online survey. OIRA has put this in infinite change and review cycles until recently. OIRA thought the methodology is flawed. The mariners are civilians and have no service obligation. OIRA thought the results of the survey would not be valuable. In February 2021, OIRA denied MARAD's request to conduct of survey. However, under the new administration, MARAD submitted a new package in 2022. In Mar 2023, OIRA said they would discuss it now and they seemed receptive. They asked that a few questions be added. The final package went in yesterday. The next challenge is the USCG, as the USCG changed their policy on sharing PII data with agencies. This is the next fight. Shelly independently determined that the USCG will be receptive.

The billet ratio that MARAD used in the 2017 survey was 2 individuals to man one billet. More specifically, for unlicensed it was 1.7 to 1, and 2 to 1 for licensed. STCW requirements with recent sailing experience along with medical qualification were all needed to count a mariner in the 2017 study.

MARAD is currently cut off from the NMC now. MARAD and USTRANSCOM sent memo to CG regarding the requirements for the new MMLD. MARAD believes that they will have access when it is available. Shelly independently determined that MARAD is in fact cut off currently from the MMLD but it was because of a MARAD data breach of the PII. She also determined that the CG expects that MARAD will have access to the data in the new MMLD which will hopefully be available by 2026.

Quality of Life (QOL) is a big issue. It was the #1 item during the Mariner conference. The most important aspect being internet connectivity. In 2021 a survey on mariner mental health was conducted (by the CDC and the University of Washington). Issues discovered included the

need to address the shortage of mariners that would allow for better rotations and the need to address sexual assault issues. Female participation in the workforce is about 7%. MARAD is working on final rule making in on Sexual Assault/Sexual Harassment (SASH) prevention and support. Industry needs to recognize that this is a different world. Everybody wants qualified workers. A worker shortage is a worldwide problem. After COVID things have changed. Some of the mariners that left have come back but many have not. New workers want the ability to plan a career. Additionally pay and incentives need to be at a level to attract workers. People ashore are making more now. There is also a need to eliminate barriers to entry.

Dr. Kumar stated that he has .5 billets to keep track of about 70 maritime schools in terms of finding intern opportunities and spreading the word about maritime community jobs. They are working with maritime training centers through the Centers of Excellence (COE) programs. The first group of 27 COEs were designated in 2021. In 2022 Congress changed the COE process. This slowed the second round which should go out soon. Question. What if MARAD had an RFP to create a hawsepipe program for 3rd Engineers or 3rd Mate in a COE. Answer – it may work through a grant program. (Note - This should be one of our recommendations.) No grants are currently available.

Advocacy. Dr. Kumar stated that there is so much we could be doing but there is a lack of resources and personnel. He has only 3 people who work on Work Force development. They are pretty busy. He was asked if funding was available would he be allowed to use it for this purpose. He said that if there were funds that were line item appropriated to work with promotional programs he would be able to do it.

A question was asked if the Maritime Security Program (MSP)/Tanker Security Program (TSP)/National Security Multi-Mission Vessel (NSMV) contracts be changed to add entry level positions. He agreed conceptually with this. In the past there were 40-50 people in a crew and now it is more like 20 people. COVID showed us we need resilience. However, all we have done is reduce resilience across the system. He said that adding billets in this way could be a good recommendation. However, the state schools are not required to have a licensing program. MARAD does not have a stick with the state schools. They can't add personnel above the CG manning standards to the training ships, including the NSMVs.

Maine Maritime is planning to conduct ratings training on the NSMV. What about other schools? Funding of rating programs might be funneled through MARAD. Kings Point has 177 incoming, with 15% female, 27% minority. Upon graduation, They can go to any of the military services. About 25% have been joining the military. Recently as high as 45% but this year it is lower. There is a service obligation. Tracking it was not done well.

During the last administration, the enforcement was much stricter. Every graduate is now monitored, both KP and SIP as well as the reserve obligation. Individuals are given time to meet requirements and to respond but if they don't then MARAD will take action. Kings Pointers have to repay the cost of KP or the entire SIP (from a State School) or join a military service. Doubling the SIP payable to maritime academy students is considered low hanging fruit.

Appendix H –Starboard Subcommittee Presentation Slides



MARAD Responsibilities

1. MARAD publish the Work Force Strategic Plan and effectively track national security mariners

- MARAD complete review, approval and publication of the Work Force Strategic Plan
- MARAD conduct and publish the results of the Work Force Survey
- MARAD support funding for MMLD

2. Maritime School programs

- MARAD/DoT advocate for increase in SIP. Double from \$32k to \$64k
- MARAD assume fuel costs for NSMV training missions
- MARAD create and incentivize Hawsepape education programs at COEs (requires MARAD resources and grants)

3. RRF/MSP/TSP Management

- MARAD add entry level (deck and eng) billets to all future contracts for RRF/MSP/TSP ships. Increase stipend
- MARAD, through RRF/MSP/TSP contracts, increase mariner compensation

4. Marketing and Outreach

- MARAD Reorganize/reprioritize organization and increase staff/funding to promote maritime as a career
- Develop a MARAD Public Affairs Strategy/ Use of gateway offices as a part of a promotion strategy
 - ❖ Tell benefits and incentives story
- MARAD work with Navy/USCG to take part in TAP programs promoting maritime jobs. Work with military recruiters to direct (washouts) to maritime jobs
- MARAD develop/publish/promote maritime career path mapping
- MARAD coordinate with Maritime groups on promotional efforts (TI, AMC, MIRAID, AWO, AMP, USA Maritime)

5. Quality of Life (QOL)

- MARAD promote QOL initiatives within industry (broad approach) (SASH, mental health, racism, hazing, etc.)
- MARAD address specific RRF/MSP/TSP QOL issues (habitability, connectivity, rotations, etc.)

Figure 1- Presentation slide No. 1 for Task 2 Mariner Shortage

Task 2 – Mariner Shortage Draft Recommendations



MARAD Support

1. **Regulatory Barriers**

- Unscrew credentialing system. MARAD/DoT advocate for funding/assist USCG with MMLD
- MARAD support fully crediting engineering sea time in ROS for RRF crews (USGC responsibility)
- MARAD advocate for rationalization of credentialing requirements incl. STCW requirement reduction. Support NMERPAC

2. **Wages, Benefits and Incentives**

- MARAD/DoT advocate for public service loan forgiveness including Hawsepape costs for maritime service
- MARAD/DoT support Federal income tax breaks for sailing mariners

Figure 2- Presentation slide No. 2 for Task 2 Mariner Shortage