



# **ACTIONS AND ACCOMPLISHMENTS OF THE CMTS**

August 1, 2020 – July 31, 2021

**RADM RICHARD TIMME**

Coordinating Board Chair

U.S. COAST GUARD

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## Message from the Chair

The Coast Guard is honored to have served as the Chair of the U.S. Committee on the Marine Transportation System (CMTS) Coordinating Board (CB) from August 1, 2020 through July 31, 2021. During the Coast Guard's Chairmanship, the CMTS provided an invaluable forum for identifying challenges impacting the marine transportation system (MTS) and championing initiatives that effectively enhanced the viability of global supply chains and our Nation's economy.

As the usage of waterways becomes more dynamic via the introduction of autonomous vessels, wind turbines, and commercial space launches, collaboration remains the foundation for collectively understanding the changes occurring within the MTS. Novel waterway uses and unprecedented world events require us to remain forward leaning by leveraging agency knowledge and professional expertise of CMTS members and the public we serve.

The effects of the COVID-19 pandemic were experienced locally and globally. However, through unity of effort, the CMTS proactively responded to the needs of MTS stakeholders by conducting outreach and developing timely guidance.

The hard work and dedication of the committee is showcased in this annual report. Much of the work is a result of the Integrated Action Teams (IAT) and Working Groups. Additionally, the Coast Guard would like to thank Ms. Helen Brohl, Executive Director, and the CMTS Executive Secretariat for their leadership and support.



**RICHARD TIMME,**  
Rear Admiral, U.S. Coast  
Guard, Assistant  
Commandant for Prevention  
Policy (CG-5P)

A handwritten signature in blue ink, appearing to read 'RVT'.

**RADM RICHARD TIMME**  
CMTS Coordinating Board Chair (2020-2021)  
U.S. COAST GUARD

# Summary of Accomplishments

## Chairmanship, U.S. Coast Guard

August 1, 2020 – July 31, 2021



The summary of accomplishments this year includes the following:

- Established the CMTS COVID-19 Working Group co-led by the U.S. Coast Guard and Maritime Administration to include 17 federal agencies.
- Released three updated reference catalogs: *Catalog of COVID-19 Federal Guidance and References for the U.S. Maritime Industry*, *Catalog of COVID-19 Best Management Practices for the U.S. Maritime Industry*; and *Catalog of Mental Health Resources for U.S. Merchant Mariners and Critical Workforce in the Marine Transportation System* (June 2021).
- Published two white papers: *Priority COVID-19 Vaccination of U.S. Merchant Mariners* and *Priority COVID-19 Vaccination of U.S. Port Workers* (June 2021).
- Published the report *A Resilient Path Forward for the Marine Transportation System: Recommendation for Response and Recovery Operations from the 2017-2019 Hurricane Seasons* (December 2020).
- Established the Supply Chain and Infrastructure IAT by combining the Infrastructure Investment IAT with the Supply Chain Work Group
- Co-led a panel discussion titled *Marine Transportation System Resilience under Climate Change and a Dynamic Global Supply Chain* with the American Association of Port Authorities (May 2021).
- Hosted a Federal Roundtable on *Agency Activities and Interests Relevant in the Application, Enabling and Fostering of Autonomous and Automated Maritime Technologies* (January 2021).
- Established the CMTS Diversity, Equity and Inclusion (DEI) Task Team and approved the *Resolution to Advance Diversity, Equity, Inclusion, and Representation in Federal Maritime Agencies and the Marine Transportation System* (April and July 2021).
- Promoted awareness of the Taft-Hartley Act and other mitigation strategies for MTS interruptions via an interagency tabletop exercise with a follow-up presentation by a Taft-Hartley subject matter expert to inform member agencies.
- Updated the CMTS Compendium of federal authorities and capabilities of member agencies.
- Published the *2021 U.S. Arctic Infrastructure Table Update*, which reflects the most current MTS components in the U.S. Arctic and delivered to the General Accounting Office (April 2021).
- Published the *U.S. Navigation Information Strategic Action Plan* to move the U.S. further to e-Navigation. (March 2021).

## COVID-19 AND THE MTS

This year, the CMTS CB worked diligently to understand the breadth and depth of COVID-19's impact on U.S. merchant mariners, port workers and the MTS. Engaging with industry stakeholders and responding to their needs was a consistent priority. The following initiatives were undertaken and/or supported by the CMTS:

- The COVID-19 Work Group advocated for U.S merchant mariners and port workers classification as "Frontline Essential Workers" by publishing two white papers. Shifting the vaccination classification from "Other Essential Workers" to "Frontline Essential Workers" would affirm U.S. merchant mariners and port workers' critical role in the global supply chain and heightened their priority to receive the COVID-19 vaccination.
- Dr. Marissa Baker of the University of Washington, School of Public Health administered a mental health survey to U.S. mariners and received over 1300 responses. This study was sponsored by the CDC and its findings will inform future actions the COVID-19 Working Group may undertake to support the health and welfare of U.S. merchant mariners.
- Several informational COVID-19 webinars and listening sessions were hosted and well-attended by industry stakeholders. Webinar and listening sessions topics included vaccinations and COVID-19 testing for the MTS workforce and COVID-19's impact on the MTS.



*Seafarers at the Port of Port Arthur, in Port Arthur Texas, receive the COVID-19 vaccination.*

*Source: Port of Port Arthur*

*As we enter the second year of the COVID-19 pandemic, the Nation and the world continue to be tested by personal and professional challenges. These seemingly unsurmountable challenges have strained, stressed and tested everyone. Yet, people in every industry continue to persevere, especially those of you in the maritime profession.*

*RADM Timme, U.S. Coast Guard*

# INCREASING RESILIENCE IN THE MTS

## MTS Agency Responsibilities and Jurisdictions

The National Defense Act Authorization of 2021 requires the CMTS to provide Congress with a compendium of Federal programs engaged in the MTS. While an initial matrix was developed in 2010, the CMTS executive secretariat spearheaded the effort to update the compendium to reflect agency responsibilities and jurisdictions. This document minimizes informational gaps by serving as a comprehensive reference of Federal agencies' statutory authorities and jurisdictions concerning the MTS and is expected to be published in Fall 2021.

## MTS Preparedness

In partnership with the American Association of Port Authorities, the CMTS cohosted the webinar *Marine Transportation System Resilience under Climate Change and a Dynamic Global Supply Chain* as part of National Infrastructure Week. The webinar facilitated over 100 people's understanding of climate change and supply chain disruptions from the perspective of exporters, ports, and policy makers.

## Hurricane Season: Lesson Learned and Recommendations

In December 2020, the CMTS Maritime Resilience Integrated Action Team (R-IAT) published a report outlining lessons learned from MTS response and recovery operations from hurricane seasons 2017-2019.

A similar report for the 2020 Hurricane Season is being developed by the R-IAT and is expected to be published in 2021. This report highlights the nuances of MTS response and recovery operations amidst the COVID-19 pandemic. The CMTS, FEMA, MARAD, NOAA, USACE, and the USCG contributed insight and lessons learned, which will be retained as data on system disruptions and to measure the resilience from extreme weather in U.S. ports.



*The Coast Guard cutter MAPLE, a 225-foot buoy tender, conducts a post-storm assessment after Hurricane Laura makes landfall.*

*Source: U.S. Coast Guard*

### The U.S. MTS includes:

- 25,000 miles of navigable channels
- 239 locks at 193 locations
- More than 3,700 marine terminals
- Almost 5.2 million cruise passengers
- 324 shipyards
- 88,600 aids to navigation
- 75,000 fishing vessels
- 1,400 designated intermodal connections



## MINIMIZING DISTRUPTIONS IN THE MTS



*The PAUL R. TREGURTHA, a U.S. bulk cargo vessel or “laker”, operates on the Great Lakes and transports cargoes including limestone, iron ore, and potash. These cargoes support steel production, construction and agriculture industries.*

*Source: Interlake Steamship News*

The United States is a maritime nation and its economy is stimulated by maritime shipping. NOAA reports the maritime economy was responsible for \$397 billion of the nation’s gross domestic product in 2019. Maritime shipping also supported key industries, which contributed more than \$665.7 billion in sales and provided 2.4 million jobs. When precipitating factors and events, such as COVID-19 or an obstruction of a significant waterway, cause undue delays and interruptions in the MTS, supply chains experience significant impacts. These circumstances simultaneously affect our Nation’s businesses, people, and way of life. To further the CMTS’s understanding and evaluation of MTS disruptions, the following initiatives were championed:

- Establishment of the Supply Chain and Infrastructure IAT. This IAT was formed by merging the Infrastructure Investment IAT with the Supply Chain Working Group.
- Mr. Peter Hurtgen, the former director of the Federal Mediation and Conciliation Service (FMCS), participated in a webinar and discussed the role of the Taft-Hartley Act when labor disputes impede national trade.
- Fifty federal agency representatives participated in a tabletop exercise focused on investigating marketplace interruptions in the MTS using two separate scenarios. The first scenario concerned a port closure caused by a labor dispute and the second scenario involved a bankrupt petroleum company abandoning vessels across the United States. The tabletop exercise successfully promoted information sharing, interagency coordination, and awareness of federal agencies jurisdictions and responsibilities.

*In March 2021, the container ship EVER GIVEN went aground and obstructed the Suez Canal for six days. At the time the vessel went aground, the U.S. Bureau of Transportation Statistics estimated at least 25 commercial vessels bound for U.S. ports were in queue to transit the waterway.*

*Source: BBC*



## EMERGING TECHNOLOGY IN THE MTS

### Anticipating Technological Advances in the MTS

Technology is advancing at a rapid pace. As such, it has become even more imperative that federal agencies with MTS oversight and authorities remain proactive in identifying and addressing new technology in the maritime domain. In alignment with the 2020-2021 CMTS Work Plan, participating agencies worked collaboratively by promoting the strategic assessment of new uses, technology, and trends occurring in the MTS. Furthermore, the Maritime Innovative Science and Technology IAT supported this initiative by developing a matrix of emerging technologies occurring in the MTS.

### Preparing for Autonomy in the MTS

The CMTS, began 2021 with a federal roundtable covering *Agency Activities and Interests Relevant in the Application, Enabling and Fostering Autonomous and Automated Maritime Technologies*. Over 50 participants attended from eight different federal agencies and exchanged best practices.

Additionally, in March 2021, the Maritime Science and Technology IAT facilitated the Sixth Biennial Marine Transportation System Innovative Science and Technology Conference. The conference entitled *Advancing the Marine Transportation System through Automation and Autonomous Technologies: Trends, Application and Challenges* was held with the Transportation Research Board and was an incredible success. It had the largest attendance of any conference and created a valuable opportunity for representatives from the government agencies, academia, and the private sector to discuss autonomy in the MTS.

The CMTS hosted a webinar led by Mr. Brett Phaneuf, the managing director of IBM's MAYFLOWER Autonomous Ship (MAS). He discussed the autonomous vessel's maiden voyage across the Atlantic Ocean. The MAS is crewless and uses artificial intelligence and solar energy during its transit.



*The MAYFLOWER Autonomous Ship*  
*Source: IBM*





## Appendix 1: Abbreviations

AIS	Automatic Identification System
Arctic-IAT	Arctic Maritime Transportation Integrated Action Team
CB	Coordinating Board
CMTS	U.S. Committee on the Marine Transportation System
DEI	Diversity, Equity and Inclusion
EO	Executive Order
FAC	Federal Advisory Committee
FutureNav	Future of Navigation Integrated Action Team
IAT	Integrated Action Team
II IAT	Infrastructure Investment Integrated Action Team
IHO	International Hydrographic Organization
M2M	Military to Mariner (CMTS Task Force)
MIST	Maritime Innovative Science and Technology
MSDI	Marine Spatial Data Infrastructure
MTS	Marine Transportation System
OGC	Open Geospatial Consortium
OMB	Office of Management and Budget (White House)
OPC	Ocean Policy Committee
RIAT	MTS Resilience Integrated Action Team
SAP	Strategic Action Plan
USACE	U.S. Army Corps of Engineers

## Appendix 2: Integrated Action Teams and Task Teams

### Arctic Marine Transportation Integrated Action Team

#### IAT Leads:

U.S. Coast Guard  
Maritime Administration  
National Oceanic and Atmospheric Administration

#### Participating Agencies:

Bureau of Ocean Energy Management  
Bureau of Safety and Environmental Enforcement  
Environmental Protection Agency  
Maritime Administration  
National Geospatial-Intelligence Agency  
National Oceanic and Atmospheric Administration  
Oceanographer of the Navy  
National Maritime Intelligence-Integration Office  
Office of Science and Technology Policy  
Office of the Secretary of Transportation  
U.S. Arctic Research Commission  
U.S. Army Corps of Engineers  
U.S. Coast Guard  
U.S. Department of State  
U.S. Transportation Command

#### Purpose:

The CMTS, through the work of the IAT, has responded to the call of Congress and the White House to coordinate domestic transportation policies and determine what is needed to improve the U.S. Arctic MTS. Through its recommendations and member agency actions, maritime transportation in the U.S. Arctic will be better managed and made more safe and secure, resulting in more efficient transits, greater protection of Arctic coastal and ocean resources, maintenance of subsistence uses by native communities, and less risk to loss of cargo and life.

#### Value:

Warming conditions and reduction in the extent of sea ice cover in the Arctic are creating new opportunities and challenges in the U.S. Arctic region with respect to marine transportation. Ensuring a safe and efficient U.S. MTS in the Arctic is essential to meeting the Nation's environmental, economic, development, and national security objectives.

## Future of Navigation Integrated Action Team

### **IAT Leads:**

National Oceanic and Atmospheric Administration  
U.S. Army Corps of Engineers  
U.S. Coast Guard

### **Participating Agencies:**

National Geospatial-Intelligence Agency  
National Oceanic and Atmospheric Administration  
Maritime Administration  
U.S. Army Corps of Engineers  
U.S. Coast Guard  
National Transportation Safety Board

### **Purpose:**

The CMTS Future of Navigation IAT facilitates the modernization and provision of navigation services, including the coordinated and integrated collection, processing, and dissemination of navigation data and information to provide services to stakeholders, eliminate duplication, and enhance the safety, reliability, and efficiency of our waterways and ports.

The work of this IAT is focused on implementation of the CMTS's e-Navigation Strategic Action Plan. E-Navigation is a critical component of the MTS infrastructure and is essential to enhancing MTS safety, efficiency, reliability, security, and environmental soundness. The scope of the Future of Navigation IAT is broader than e-Navigation and may address other navigation services, such as aids to navigation, navigation safety regulations, enhanced marine safety information services, seamless data exchange, decision-focused information, and improved connectivity.

### **Value:**

The Federal effort in facilitating the safe and efficient operations of these waters must be an accelerant, rather than a brake, on this economic engine. To this end, the Future of Navigation IAT leverages technology, initiates management improvements, redefines levels of service, develops data-driven analysis, and identifies and recommends regulatory changes to improve safety and efficiency on America's waterways.

## Maritime Data Integrated Action Team

### IAT Leads:

U.S. Army Corps of Engineers  
Maritime Administration

### Participating agencies:

National Oceanic and Atmospheric Administration  
Bureau of Ocean Energy Management  
Bureau of Safety and Environmental Enforcement  
Bureau of Transportation Statistics  
Federal Highway Administration  
Maritime Administration  
U.S. Department of Transportation - Office of the Secretary  
U.S. Army Corps of Engineers  
U.S. Navy  
Transportation Security Administration  
U.S. Coast Guard  
U.S. Department of Energy

### Purpose:

The purpose of the Maritime Data IAT is to serve as the CMTS's body of experts to facilitate discovery, access, and sharing of data related to the MTS. The IAT's efforts include facilitating the identification, archiving, linking, and integration of authoritative data among agencies with equities in maritime data. The goal of these efforts is to assist CMTS member agencies in their analysis related to the MTS and making timely and well-informed decisions to meet agency mission objectives.

### Value:

Efforts by the Maritime Data IAT will benefit the Nation by supporting discovery of maritime data; promoting shared data access through common standards; improving decision-making through common access to authoritative data; and optimizing CMTS member mission effectiveness through shared services and interoperability.

## Maritime Innovative Science and Technology Integrated Action Team

### **IAT Leads:**

U.S. Army Corps of Engineers  
Environmental Protection Agency  
Maritime Administration

### **Participating Agencies:**

Bureau of Transportation Statistics  
Department of Energy  
Environmental Protection Agency  
Federal Highway Administration  
Maritime Administration  
National Maritime Intelligence-Integration Office  
National Oceanic and Atmospheric Administration  
Saint Lawrence Seaway Development Corporation  
U.S. Army Corps of Engineers  
U.S. Coast Guard

### **Purpose:**

The Maritime Innovative Science & Technology (MIST) IAT provides the CMTS with a strategic capability to identify, coordinate, develop, and implement innovative research, development, and technology to address the pressing challenges identified in the *National Strategy on the Marine Transportation System: Channeling the Maritime Advantage* (2017).

### **Value:**

A coordinated Research and Development strategy will enable the Nation to address marine transportation infrastructure challenges efficiently, meet increasing freight demand, promote safety in and security of the MTS, and address the environmental impacts of the MTS.



## **Military to Mariner Task Force**

### **Task Force Leads:**

Maritime Administration  
Military Sealift Command

### **Participating Agencies:**

Maritime Administration  
National Oceanic and Atmospheric Administration  
Transportation Security Administration  
U.S. Army  
U.S. Army Corps of Engineers  
U.S. Coast Guard  
U.S. Department of Defense  
U.S. Department of Labor  
U.S. Department of Transportation  
U.S. Department of Veterans Affairs  
U.S. Navy  
U.S. Transportation Command

### **Purpose:**

The purpose of the CMTS Military to Mariner Task Force is to help coordinate Federal efforts to facilitate the transition from military service to civilian employment in the U.S. Merchant Marine or other positions within the MTS.

### **Value:**

Military sea-service veterans have specialized training and experience needed by the United States Merchant Marine. Facilitating the transfer from military service to merchant mariner increases the number of qualified mariners needed to support our economy and national defense.

## **MTS Resilience Integrated Action Team**

### **IAT Leads:**

U.S. Army Corps of Engineers  
National Oceanic and Atmospheric Administration

### **Participating Agencies:**

Bureau of Safety and Environmental Enforcement  
Bureau of Transportation Statistics  
Environmental Protection Agency  
Maritime Administration  
National Geospatial-Intelligence Agency  
National Oceanic and Atmospheric Administration  
U.S. Army Corps of Engineers  
U.S. Coast Guard  
U.S. Department of Homeland Security  
U.S. Navy  
U.S. Transportation Command

### **Purpose:**

The MTS Resilience IAT was established to focus on cross-Federal agency knowledge co-production and governance to incorporate the concepts of resilience into the operation and management of the U.S. MTS. For the purposes of this team, resilience is defined as the ability to prepare and plan for, resist, recover from, and more successfully adapt to the impacts of adverse events.

### **Value:**

The RIAT seeks to affect future resilience policy and aid in delivering enhanced resilience programs through identifying, coordinating, and leveraging complementary Federal investments and activities related to MTS resilience.

## Supply Chain and Infrastructure Integrated Action Team

### **IAT Leads:**

U.S. Army Corps of Engineers  
International Trade Administration  
U.S. Department of Treasury

### **Participating Agencies:**

Environmental Protection Agency  
Federal Highway Administration  
Federal Maritime Commission  
International Trade Administration  
National Oceanic and Atmospheric Administration  
National Maritime Intelligence – Integration Office  
U.S. Coast Guard  
U.S. Department of Transportation  
Maritime Administration  
U.S. Transportation Command

### **Purpose:**

The Supply Chain and Infrastructure Investment IAT (SCIIAT) was formed by combining the Infrastructure Investment IAT with the Supply Chain Working Group (SCWG). The Infrastructure Investment IAT was approved by the CMTS CB in 2012, and the SCWG was formed in 2020 in response to the COVID-19 public health emergency.

### **Value:**

The SCIIAT seeks to enhance interagency discussion, communication and recommendations and/or actions in support of the MTS supply chain. Furthermore, it is also the forum for facilitating the development of broad evaluation and decision criteria used to inform a whole-of-government approach to Federal infrastructure investment.

## COVID-19 Working Group

### **Work Group Leads:**

Maritime Administration  
U.S. Coast Guard

### **Participating Agencies:**

Center for Disease Control  
Cybersecurity & Infrastructure Security Agency  
Federal Maritime Commission  
Maritime Administration  
Military Sealift Command  
National Geospatial-Intelligence Agency  
National Maritime Intelligence-Integration Office  
National Oceanic and Atmospheric Administration  
Occupational Safety and Health Administration  
U.S. Army Corps of Engineers  
U.S. Customs and Border Protection  
U.S. Department of Energy  
U.S. Department of State  
U.S. Department of Treasury  
U.S. Department of Transportation Office of the Secretary  
U.S. Environmental Protection Agency  
U.S. Navy, Office of Naval Intelligence  
U.S. Transportation Command

### **Purpose:**

The purpose of the COVID-19 Work Group is to serve as the CMTS forum for high-level interagency discussion, communication, and/or actions in support of the MTS under and after COVID-19.

### **Value:**

The COVID-19 Work Group seeks to enhance interagency discussion and communication concerning the pandemic's impact on the commercial sector. More specifically, the COVID-19 Work Group endeavors to address impediments to safety and the effective and efficient operation of the MTS.

## Diversity, Equity and Inclusion Task Team

### Work Group Leads:

Helen Brohl, Executive Director, CMTS  
Alejandra Enriquez, USACE Knauss fellow

### Participating Agencies:

U.S. Committee on the Marine Transportation System  
U.S. Department of Transportation  
U.S. Department of Homeland Security  
Maritime Administration  
National Oceanic and Atmospheric Administration  
U.S. Coast Guard  
U.S. Army Corps of Engineers

### Purpose:

The DEI Task Team provides an interagency forum for the identification, discussion, and sharing of tools and practices that promote diversity, equity, justice and inclusiveness within the MST workforce.

### Value:

The DEI Task Team seeks to encourage the active engagement of agency representatives to achieve meaning and lasting advances in DEI efforts within their agencies.

The CMTS serves as a Federal interagency maritime policy coordinating committee for assessing the adequacy of the marine transportation system, promoting the integration of the marine transportation system with other modes of transportation and other uses of the marine environment, and coordinating, improving the coordination of, and making recommendations regarding Federal policies that impact the marine transportation system.



**U.S. Committee on the Marine Transportation System**  
202-366-3612  
1200 New Jersey AVE, SE  
Washington, DC 20590  
[www.CMTS.gov](http://www.CMTS.gov)