Tuesday, November 16

PLENARY SESSION
8:30 – 8:45 a.m.   Welcoming Remarks
Athar Pirzada, Co-Chair of MTS Conference Planning Committee

Introduction of Keynote Speaker
Geraldine Knatz, Port of Long Beach, Chair, Marine Board

8:45 – 9:15 a.m.
KEYNOTE ADDRESS:
“The Federal Role in the Marine Transportation System (MTS)”
Mortimer Downey, PBWorld (Confirmed)

9:15 – 10:15 a.m.
Federal Agency Discussion Panel (Geraldine Knatz, Moderator):
RADM Thomas Gilmour, U.S. Coast Guard (Confirmed)
Michael White, U.S. Army Corps of Engineers (Confirmed)
Dr. Richard Spinrad, National Ocean Service, NOAA (Confirmed)
George Schoener, U.S. Department of Transportation, Office of the Secretary (Confirmed)
Capt. William Schubert, U.S. Department of Transportation, Maritime Administration (Confirmed)

Technical Sessions (3 Concurrent Tracks):
10:30 a.m. – 12:30 p.m.

SESSION 1A: SECURITY I
Session Coordinator: Ric Walker, USCG R&D Center
Moderator: Ron Thomason, SeaSecure
National Infrastructure Protection Plan
Mary Ellen Hynes, U.S. Army Corps of Engineers
An Operational New York Harbor Port Security and Vessel Traffic Management System
Alan Blumberg and Michael Bruno, Stevens Institute of Technology
Design and Control of Platoons of Cooperating Autonomous Surface Vessels
Bradley Bishop, U.S. Naval Academy
Coast Guard’s Underwater Port Security R&D
Richard Walker, USCG R&D Center
Comprehensive Model of Maritime Activities and Risks
Ronald Pelot, Dalhousie University

SESSION 1B: MTS ECONOMICS I
Session Coordinators: Bruce Parker, NOAA and Deborah Johnson, BTS
Moderator:
Elasticity of Demand for Barged Corn Shipments on the Upper Mississippi River and Illinois Waterway
Larry Bray, Tennessee Valley Authority
Integrating Financial, Economic, and Environmental Issues in Container Port and Related Intermodal Planning
Tom Grigalunas, University of Rhode Island
Intermodal Transportation System Performance Assessment Model and Decision Tool
SESSION 1C: PORT OPERATIONS AND INTERMODALISM

Session Coordinator: Bob Bouchard, Maritime Administration
Moderator: Philip Kimball, Society of Naval Architects & Marine Engineers (SNAME)

Direct Versus Hub-and-Spoke Routing on a Maritime Container Network
Chaug-Ing Hsu and Yu-Ping Hsieh, National Chao Tung University

Ports of the Future
James Ligotti, Ingersoll-Rand

Environmental Challenges of Port Operations
Geraldine Knatz, Port of Long Beach

Maritime Development Program – Port of Oakland
Imee Osantowski, Port of Oakland and Tom Ward, JWD Group

LUNCH
12:30 – 1:30 p.m.

Technical Sessions (3 Concurrent Tracks):
1:30 – 3:30 p.m.

SESSION 2A: SAFE & EFFICIENT NAVIGATION I

Session Coordinator: Andy Silver, Naval Surface Warfare Center
Moderator: Frank Cole, Naval Facilities Engineering Command

Oceanographic and Geospatial Modeling in Support of Safe and Efficient Navigation
Bruce Parker, Frank Aikman, Mark Vincent, and Kurt Hess, NOS/NOAA.

Augmented Reality for Maritime Navigation: The Next Generation of Electronic Navigational Aids
Chuck Benton, LookSea, LLC & Technology Systems, Inc. and Richard Walker, USCG R&D Center

Navigational Dredging and Institutional Change
Richard Burroughs, University of Rhode Island

The CCOM Chart-of-the-Future Project: Maximizing Mariner Effectiveness through Fusion of Marine & Visualization Technologies
Matthew Plumlee, Rick Brennan, Roland Arsenault, and Colin Ware, Center for Coastal & Ocean Mapping, University of New Hampshire

Integration of Laboratory Measurements of Ship Underkeel Clearance with Climatological Prediction of Damage Risk
Michael Briggs, U.S. Army Engineer Research and Development Center; Paul Kopp and Andrew Silver, Naval Surface Warfare Center

SESSION 2B: ENVIRONMENTAL TOPICS I – BALLAST WATER RESEARCH

Session Coordinator: Bruce Parker, National Ocean Service, NOAA
Co-Moderators: Dorn Carlson, NOAA and Kelly Lyles, Smithsonian Environmental Research Center

Ballast Free Ship Concept
Michael Parsons, Michigan State University

Ozone and Sonics
Tom Maddox, Environmental Technologies, Inc.

Recent Shipboard Ballast Water Related Work
Allegra Cangelosi, Northeast Midwest Institute

State of Washington Regulations and Current Ballast Water Technologies
Scott Smith, Washington Department of Fish & Wildlife

SESSION 2C: MARITIME DOMAIN AWARENESS (MDA)

Session Coordinator: Athar Pirzada, U.S. Coast Guard
Moderator: Edward E. Page, Marine Exchange of Alaska
**Contribution of Interagency Coordination to MDA in the Port of Miami**  
Anita Rothblum, USCG R&D Center

**MDA Information Sharing Web Portal**  
Robert Bohlman, Marine Exchange of Puget Sound and Janet Buxbaum, Enterprise Engineering Incorporated

**Technologies Under Consideration for MDA**  
Guy Thomas, U.S. Coast Guard

**Maritime Industries’ Shared Commitment to Support MDA**  
Edward Page, Marine Exchange of Alaska

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**PLENARY SESSION**

4:00 – 5:30 p.m.

**Coordination: Key to the Future of the MTS**

**Introduction of Speakers**  
Rodney Gregory, IBM Global Services, Marine Board Member

*“How Better Coordination Can Expand and Improve MDA”*  
Jeff High, U.S. Coast Guard (Confirmed)

*“Integrated Ocean Observing System and Other Recommendations of the National Ocean Commission”*  
Richard Spinrad, NOAA (Confirmed)

*“Status Report on SEA-21 and MTS”*  
John Gaughan, Chair, MTS National Advisory Council (Confirmed)

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5:30 – 7:30 p.m.

**RECEPTION**

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**Wednesday, November 17**

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**PLENARY SESSION**

8:30 – 8:45 a.m.  
**Introduction of Keynote Speaker**  
R. Keith Michel, Herbert Engineering Corp., Past Chair, Marine Board

8:45 – 9:15 a.m.

**KEYNOTE ADDRESS:**  
*“Identifying Needs and Coordinating Transportation Security Research”*  
Dr. Charles McQueary, Department of Homeland Security (confirmed)

9:15 – 10:15 a.m.

**MTS Industry Stakeholder Discussion Panel** (R. Keith Michel, Moderator):

- Richard Fairbanks, American Salvage Association (ASA)
- Douglas Scheffler, American Waterways Operators (AWO)
- Representative, Coalition for Secure Ports (confirmed)
- Dierdre McGowan, Inland Rivers Ports & Terminals, Inc. (confirmed)
- Representative, Passenger Vessel Association (PVA) (confirmed)
- Representative, World Shipping Council (WSC) (invited)
- Representative, Port Security Council of America (invited)

Technical Sessions (3 Concurrent Tracks):

10:30 a.m. – 12:30 p.m.

**SESSION 3A: SECURITY II**

**Session Coordinator:** Siraj Khan, Applied Technology Division, Customs and Border Protection  
**Moderator:** Ray Mintz, Consultant
A Method for Enhancing Maritime Security through the use of Compton Backscatter Imaging
William J. Baukus, American Science & Engineering, Inc.

100 Percent Screening of Cargo Containers
Victor Orphan and Ernie Muenchau, Science Applications International Corporation

Advanced Technology for Marine Cargo Security
Douglas Brown, Ancore Corporation

Homeland Security Instrumentation for Radiation Detection at Seaports
Richard Kouzes, Pacific Northwest National Laboratory

Advances in Large Container Inspection Technology
Robert Armistead, Aracor

SESSION 3B: MTS ECONOMICS II

Session Coordinator: Deborah Johnson, Bureau of Transportation Statistics
Moderator: Larry Daggett, Waterway Simulation Technology, Inc.

Decision Strategies for Economic Maintenance of Navigation Channels
Robert H. Mayer, U.S. Naval Academy

Decision Support for Intermodal Transportation Using Simulation Technologies
Sandra Knight, U.S. Army Engineer Research and Development Center and Mark Valeri and J. Michael Walters, Regal Decisions, Inc.

Potential Benefits from Improved Observing Systems on Transportation Economics
Hauke L. Kite-Powell, Woods Hole Oceanographic Institution

U.S. Transportation Satellite Accounts, 1997
Brian Sloboda, Bureau of Transportation Statistics and Bingson Fang and Xiaoli Han, Macrosys Research and Technology

Digital Maritime Limits for Improved Coastal Zone Management
Meredith Westington, NOAA/NOS Office of Coast Survey

SESSION 3C: ADVANCED TECHNOLOGIES AND HUMAN FACTORS

Session Coordinator: Alex Landsburg, Maritime Administration
Moderator: Fenton Carey, Consultant

International Credentialing of Seafarers via Smart Cards
James Zok and Todd Ripley, Maritime Administration

Fatigue Management Tools for Transportation
Stephen Popkin, USDOT Human Factors Coordinating Committee

Early Adoption of Technology Performance Impacts: AIS on the St. Lawrence Seaway
Martha Grabowski, LeMoyne College

Visualization and Display Technologies In Support of Maritime Domain Awareness
Clinton M. Jenkin, USCG R&D Center

Optonics and Photonics for Transportation Challenges – Results from a Workshop
Fenton Carey, Consultant

LUNCH
12:30 – 1:30 p.m.

Technical Sessions (3 Concurrent Tracks):
1:30 – 3:30 p.m.

SESSION 4A: SAFE & EFFICIENT NAVIGATION

Session Coordinator: Sandra Knight, U.S. Army Corps of Engineers
Moderator: Michael Briggs, U.S. Army Engineer Research and Development Center

Research into Interactions between Traffic and Moored Vessels to Improve Safety of Waterway/Harbor Operations
Larry Daggett, Waterway Simulation Technology; Wei-Yuan Hwang, U.S. Merchant Marine Academy; and Alexander Landsburg, Maritime Administration

The Declining Reliability of the U.S. Inland Waterway System
David Grier, U.S. Army Corps of Engineers
Replacing Existing Lock 4 - Innovative Designs for Charleroi Lock
Steven Stoltz, U.S. Army Corps of Engineers and Lisa Pierce, INCA Engineers

Use of Nonlinear Incremental Structural Analysis in the Design of the Charleroi Lock Miter Gate and Emptying Valve Monoliths
Randy James, ANATECH Corp.; Carol Tasillo, U.S. Army Corps of Engineers; and Lisa Pierce, INCA Engineers

SESSION 4B: ENVIRONMENTAL TOPICS II

Session Coordinator: Bruce Parker, National Ocean Service, NOAA
Moderator: James Clausner, U.S. Army Engineer Research and Development Center

Modeling Marine Traffic and Environmental Impacts
James Corbett and Chenfeng Wang, University of Delaware

A Prototype Aquatic Inventory and Invasive Species Warning System for U.S. and Canadian Recreational Waters
Donna Turgeon, National Ocean Service, NOAA

A Wider Look at the Risk of Ocean Disposal of Dredged Material
Thomas O’Connor, National Ocean Service, NOAA

SESSION 4C: MTS CAPACITY

Session Coordinator: Jennifer Waters, U.S. Naval Academy
Moderator: Carolyn Q. Judge, U.S. Naval Academy

Understanding Potential Freight Bottlenecks in the United States: A Look at the GeoFreight Visual Display Tool
Felix Ammah-Tagoe, Macrosys Research and Technology and Deborah Johnson, Bureau of Transportation Statistics

Long-Term Development Trends of US Ports
Asaf Ashar, National Ports & Waterways Institute

Current Shifts in U.S. Trade
Michael Bomba, University of Texas at Austin

Landside Surface Transportation Impact of Short Sea Shipping in Southern California
Le Dam Hanh, University of Southern California

PLENARY SESSION:
4:00 – 5:00 p.m.

“How Cooperative Research Can Help Measure Performance and Target Improvement of the Nation’s Marine Transportation System”
Margaret Blum, Maritime Administration, Co-chair, Interagency Committee on the MTS
Robert Reilly, Director, TRB Cooperative Research Programs Division
Dr. William L. Fornes, Program Coordinator, National Oceanographic Partnership Program Office