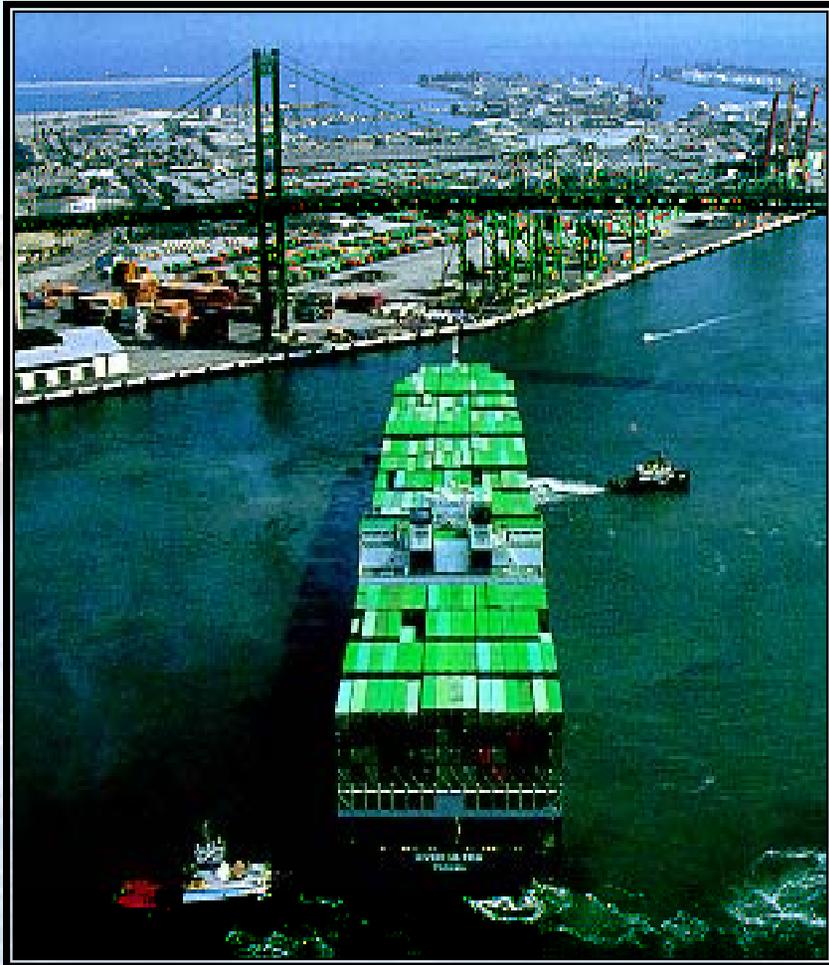


# **CMTS**

*U.S. Committee on the Marine Transportation System*

**Commerce and Transportation  
Goal Team  
October 30, 2008**

# MTS Challenges



- **ECONOMY** – Total volume of maritime trade will more than DOUBLE in 20 years
- **INFRASTRUCTURE** – Crumbling, undersized, aging; compromises safety
- **TRAFFIC** – More ships, more CONGESTION
- **SECURITY** – Fewer overseas bases ... rely on deployment
- **ENVIRONMENT** – Increasing coastal stresses: recreation, development, invasive species, dredging

# What is the CMTS?

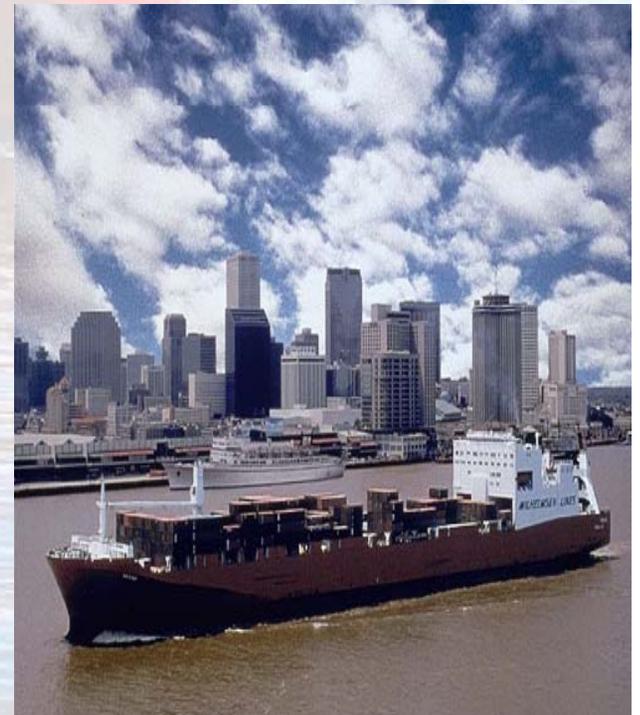
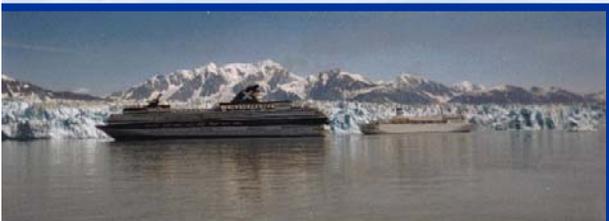
- President-directed, Cabinet-Level Interagency Partnership
- Commission on Ocean Policy Recommendation
- U.S. Ocean Action Plan Action
- 18 Department/Agency Members, including White House Offices
- Secretary of Transportation Chair
- Primary MTS Policy Body to the President

# NOAA and the CMTS

- NOAA and ITA represent DOC
- NOAA is charter member of the CMTS
- VADM Lautenbacher is past chair and NOAA representative to the CMTS Coordinating Board
- Jack Dunnigan is VADM Lautenbacher's alternate
- NOAA will chair Coordinating Board in 2011
- NOAA is CMTS lead for HMTF Policy Talks
- NOAA leads Navigation Technology IAT

# CMTS Work Areas

- MTS National Assessment
- MTS National Strategy
- Review of HMTF/National Dredging Policy
- Integration of MTS Technologies
- Coordination of MTS Data
- Communications Plan
- Short Sea Shipping
- Federal MTS Budget Cross-Cut
- Arctic Transportation Policy



# MTS National Strategy

## *National Strategy for the Marine Transportation System: A Framework for Action*

- Proposed policy framework for addressing:
  - critical MTS issues for the next five years
  - future system needs
- Divided into five priority areas with 34 actions
- Reviewed by 13 Commerce bureaus and NOAA
- Approved by CMTS July 2008

# National Strategy

## Priority Areas

- **Capacity**
  - addresses capacity issues, improve efficiency, & reduce congestion
- **Safety and Security**
  - strengthen maritime safety and coordinate maritime security
- **Environmental Stewardship**
  - Protect environmental health of the MTS
- **Resilience and Reliability**
  - Increase MTS reliability and ability to withstand/or recover from damaging incidents
- **Finance and Economics**
  - Maintain and improve infrastructure

# National Strategy Actions

- Described broadly to achieve consensus and provide flexibility for implementation
- Recognized Framework building blocks
- Prioritized for implementation

# Priority Action Examples

- **Deliver timely, relevant, accurate navigation safety information to mariners**
- **Enhance and improve existing frameworks that plan for, operate, maintain, and mitigate risks to vessels and the environment, and respond to accidents and natural disasters**
- **Work collaboratively to foster the collection of data and information that will underpin EISs and decision-making in MTS planning**
- **Support research and develop practical strategies to control and mitigate effects on the marine environment**
- **Consult and coordinate with other policy facilitation structures, such as the COP**
- **Coordinate existing Federal navigation programs to ensure collaboration, reduce duplication, and standardize terminology**

# National Strategy Activities

- Are specific steps to achieve measurable outcomes
- Aligned with and advances a particular National Strategy action
- May be single agency programs which seek the support of the CMTS, new programs, or a multiple agency effort

# Activity Examples

- Integrate NOAA air gap technology with USCG bridge program
- Support interagency National Response Team
- Support interagency National Dredging Team
- Advance marine transportation objective of IOOS
- Establish MTS baseline data to improve decision making
- Broaden abandoned vessel program/inventory
- Establish national PORTS program
- Develop interagency marine weather initiative
- Integrate Federal marine navigation technologies and convert data to a single standard

# Activity Worksheet

- National Strategy Priority
- National Strategy Action
- Proposed Activity - **What**
- Performance Measure
- Agencies Involved - **Who**
- Planned Outcome - **Why**
- Schedule - **When**

# Navigation Technology IAT

CMTS Coordinating Board established the Navigation Technology IAT October 2006.

Coordination between CMTS Agencies for the integration of their technologies, data, and services to enhance navigational safety and efficiency.

# Navigation Technology IAT Working Groups

1. Utilization of Coast Guard's Automatic Identification System capabilities (**USCG lead**)
2. Charting data collection and distribution (**NOAA lead**)
3. Navigational data collection and distribution (**USACE lead**)
4. Operational Coordination Issues (**USCG lead**)

# WG 1 – AIS Communications with Mariner

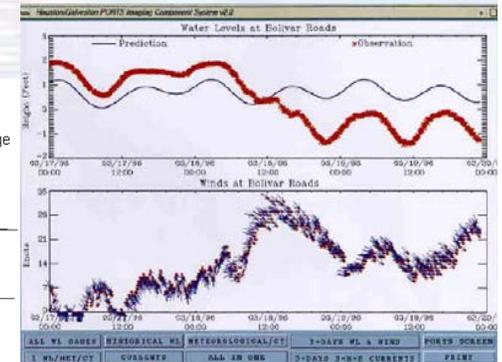
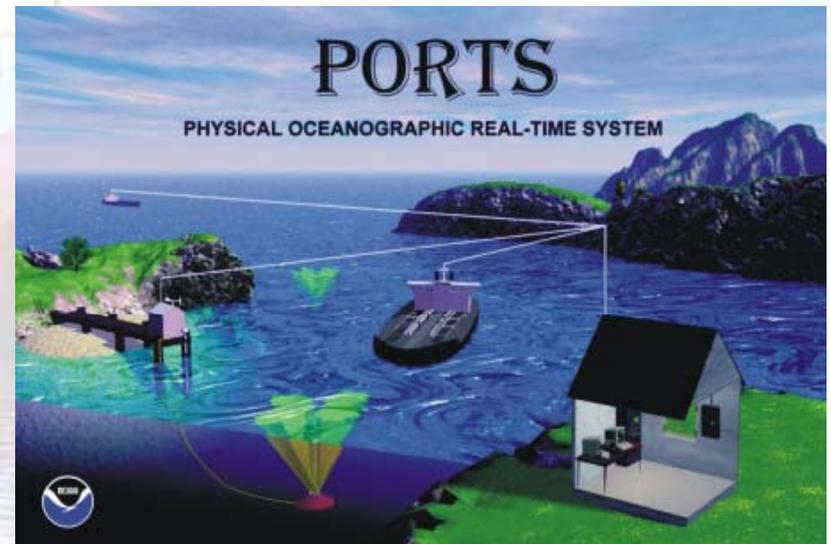
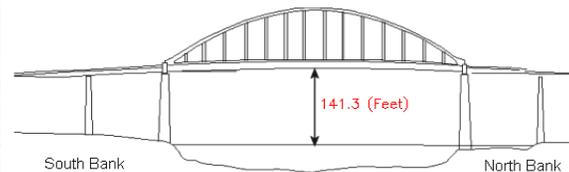
## Exploitation of Coast Guard's Automatic Identification System Technology

Transmit real-time environmental information to mariners to improve safety and efficiency of navigation.

- a. NOAA PORTS Data
- b. COE real-time current data
- c. Data for Coastal and River Information System



Air Gap at the Navigation Light on the East Side of the Chesapeake City Bridge





# AIS Transmission of PORTS Data

GOES



# WG 2 – Charting Improvements

## Charting data collection and distribution

Improve the accuracy of navigational products.

- a. Providing precise digital positions for Aids to Navigation - USCG & NOAA
- b. Providing precise digital channel limit data – NOAA & USACE
- c. Providing depth survey data in standard data exchange format - USACE & NOAA



# WG 3 – Navigation Data Collection and Distribution

**PROJECTS: Increase the quality of oceanographic data available to mariners to improve safety of navigation.**

- a. Use of common water level datums
- b. Distribution of COE wave data to mariners in port areas
- c. Coordination with NOAA, COE, and US Geological Survey on tide and current measurement standards
- d. Vertical datum transformation tool (VDATUM)
- e. LIDAR standards for bathymetric and topographic data



Wave Measurement



Visibility Measurement



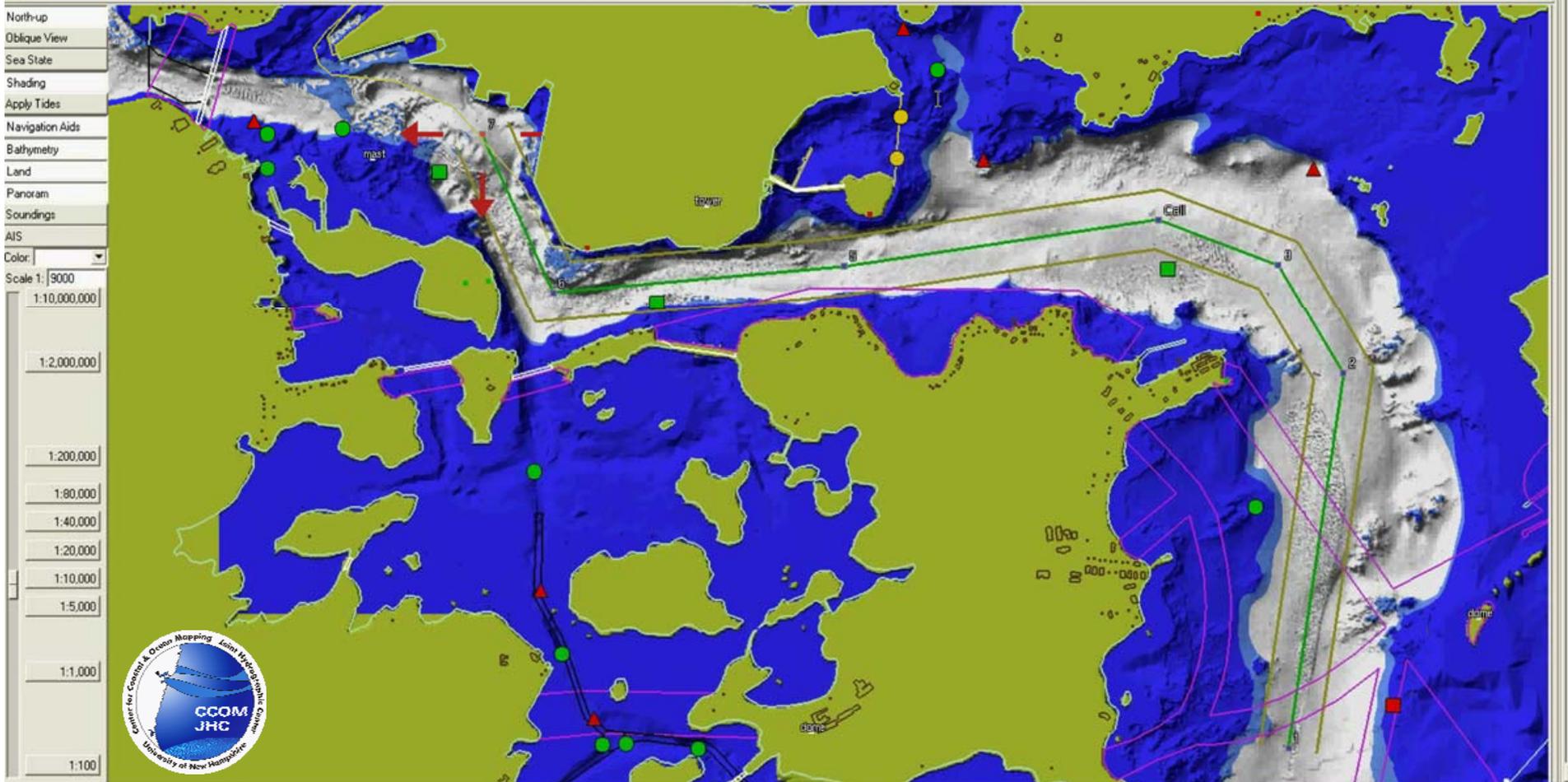
# WG 4 – Local Operational Coordination Issues

Improve local operational coordination between the Coast Guard, Corps of Engineers, and NOAA.

- a. USCG VTS personnel share best practices with NOAA
- b. USCG and COE coordination on vessel operations, processes, and requirements
- c. USCG and SLSDC coordination on vessel operations, processes, and requirements

# Tide Aware ENC – Concept Only!

#	Label	SMG	DTNW	TTG	Heading	ETA (UTC)	Lat	Lon	Cost	Notes
1		5.00	0.82	000:08:30	8.47	Fri Nov 12 22:20:00 2004	43° 03' 34.70" N	070° 42' 20.39" W	\$ 211.08	
2		5.00	0.28	000:02:52	329.04	Fri Nov 12 22:28:30 2004	43° 04' 16.89" N	070° 42' 13.01" W	\$ 71.23	
3		5.00	0.28	000:02:55	290.66	Fri Nov 12 22:31:23 2004	43° 04' 29.05" N	070° 42' 23.43" W	\$ 72.40	
4	Call	5.00	0.69	000:07:11	261.59	Fri Nov 12 22:34:18 2004	43° 04' 33.92" N	070° 42' 42.19" W	\$ 178.49	Call lift bridge
5		5.00	0.63	000:06:36	264.95	Fri Nov 12 22:41:30 2004	43° 04' 27.93" N	070° 43' 30.57" W	\$ 163.88	
6		5.00	0.37	000:03:53	335.50	Fri Nov 12 22:48:06 2004	43° 04' 24.34" N	070° 44' 15.36" W	\$ 96.41	
7	Wait	5.00		000:00:00		Fri Nov 12 22:52:00 2004	43° 04' 41.85" N	070° 44' 26.85" W	\$ 0.00	
<b>TOTAL</b>			<b>4944.72</b>	<b>000:32:00</b>					<b>\$ 793.50</b>	

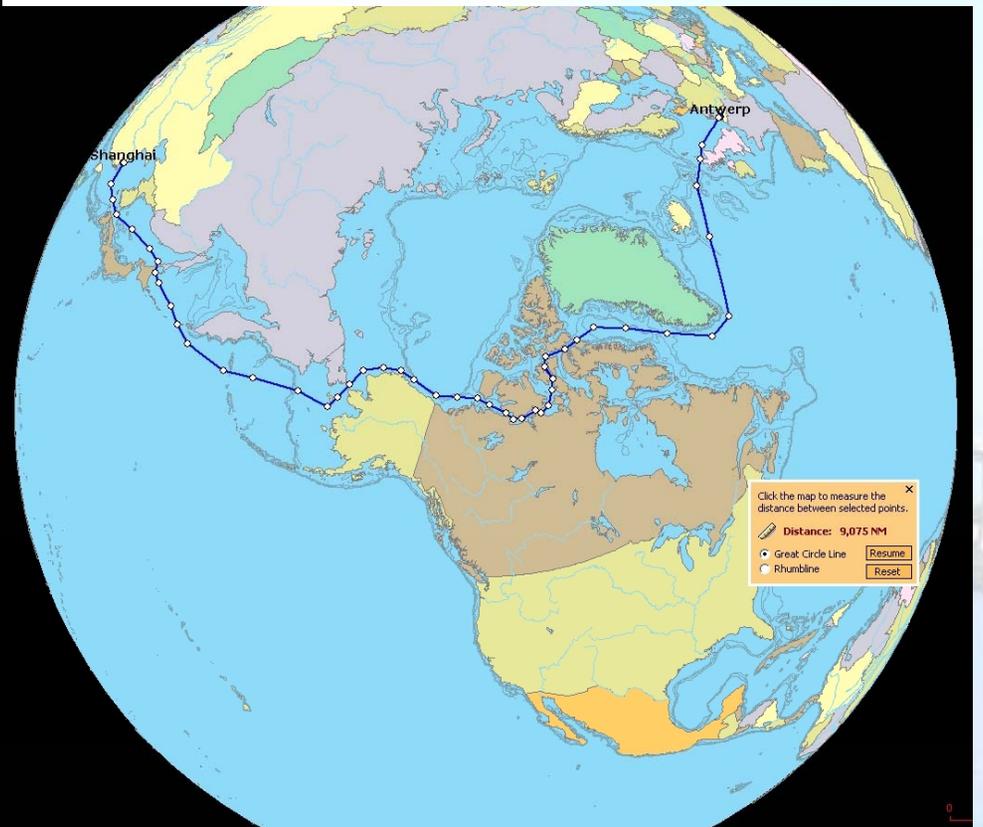


Cursor Info: Lat 43°04'46.49"N Lon 070°43'17.05"W Depth -0.3m Distance 1083.0m Bearing 020° Rel. Bearing 206°

# Northwest Passage



10,458 N. Miles  
29 days @ 15 knots



9,075 N. Miles  
25 days @ 15 knots

# Example of Basic Requirements for Safe Navigation



# NOAA POCs for CMTS National Strategy

- Bruce Vogt, NOS
- Dave MacFarland, CO-OPS, NOS
- Gary Magnuson, NOS, CMTS