

MARINE BOARD

Fall 2018 Focus Session Proposal –  
"Future Marine Navigation  
Technology - Advantages and  
Challenges"



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# IMO – the International Maritime Organization

- IMO – is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships.
- E-navigation is the harmonized collection, integration, exchange, presentation and analysis of marine information on board and ashore by electronic means to enhance berth to berth navigation and related services for safety and security at sea and protection of the marine environment.
- The overall goal is to improve safety of navigation and to reduce errors. However, if current technological advances continue without proper co-ordination there is a risk that the future development of marine navigation systems will be hampered through a lack of standardization on board and ashore, incompatibility between vessels and an increased and unnecessary level of complexity.

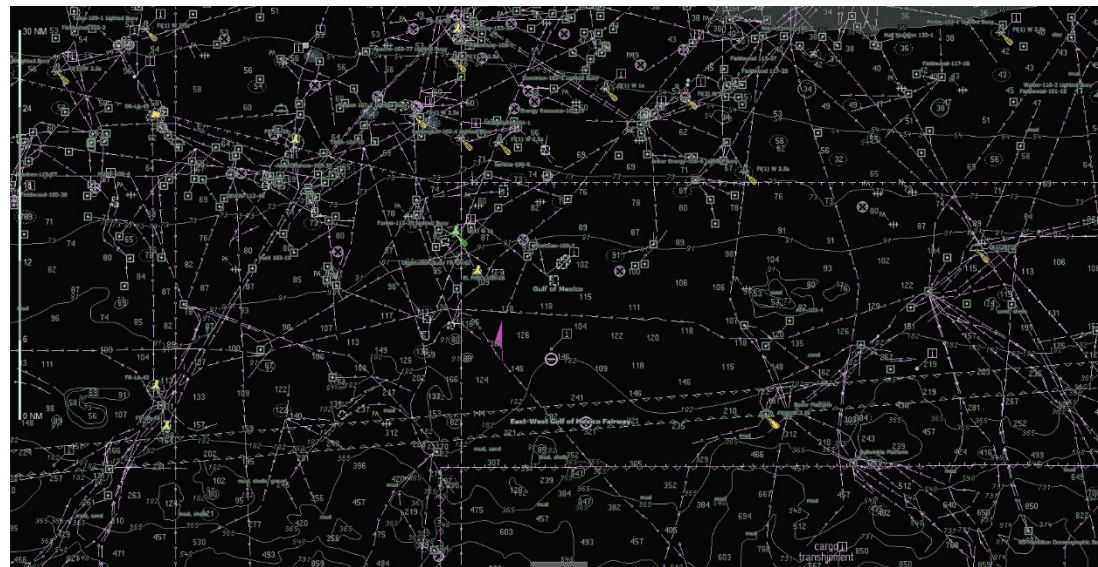
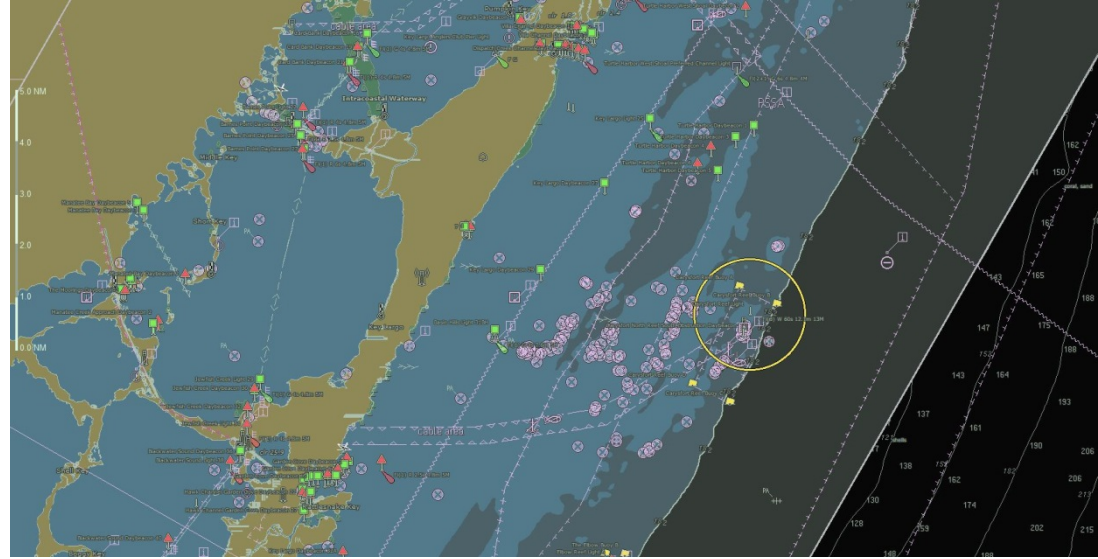
# CMTS Future of Navigation IAT



The CMTS Future of Navigation IAT will facilitate modernized 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.

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

Using data from **LIDAR** and **GPS**, the **IA** system builds a **3D representation** of the area around the ship. "It provides an advisory solution to supplement basic information available from ECDIS and radar, with the LIDAR 3D map creating an accurate bird's-eye view of the surrounding area," says Rolls Royce.



## Proposed 2018 fall nav focus session

### “The Future of Maritime Navigation Technology... Advantages and Challenges”

#### Panel One:

- Fed agencies with regulatory nav requirements [45 mins]
- NOAA/Adm Smith, USCG Adm Nadeau (inv), ACE GenSpellmon[tent]

Guidance to panel one: What are the latest nav technologies your organizations have implemented and what are the benefits and challenges to their introduction?

#### Panel Two:

- Nav user, researcher, and TBD (vendor, comm/rec boaters/pilots..)
- Tom J LB, A.Armstrong UNH, TBD\*[45mins]

Guidance to panel two: What is the latest nav technology implemented, studied, used or proposed by your organization?