

# United States Coast Guard

## Office of Navigation Systems



**“Enhancing Mariners’ Situational Awareness”**

**Navigation Technology and Risk Management Division**  
**(CG-NAV-3)**

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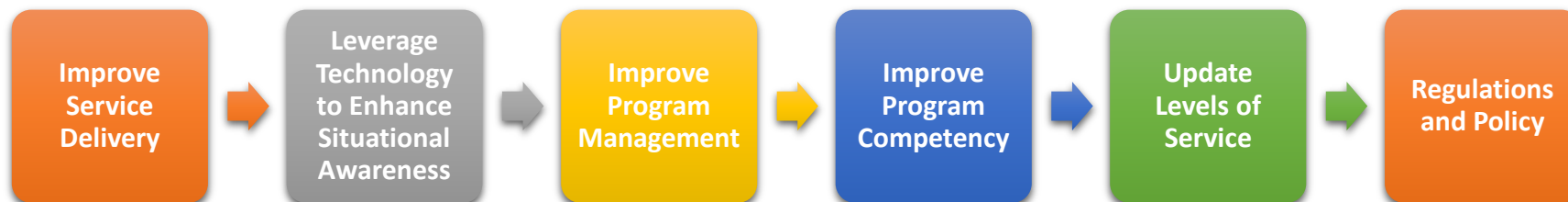


# Marine Board Future of Navigation



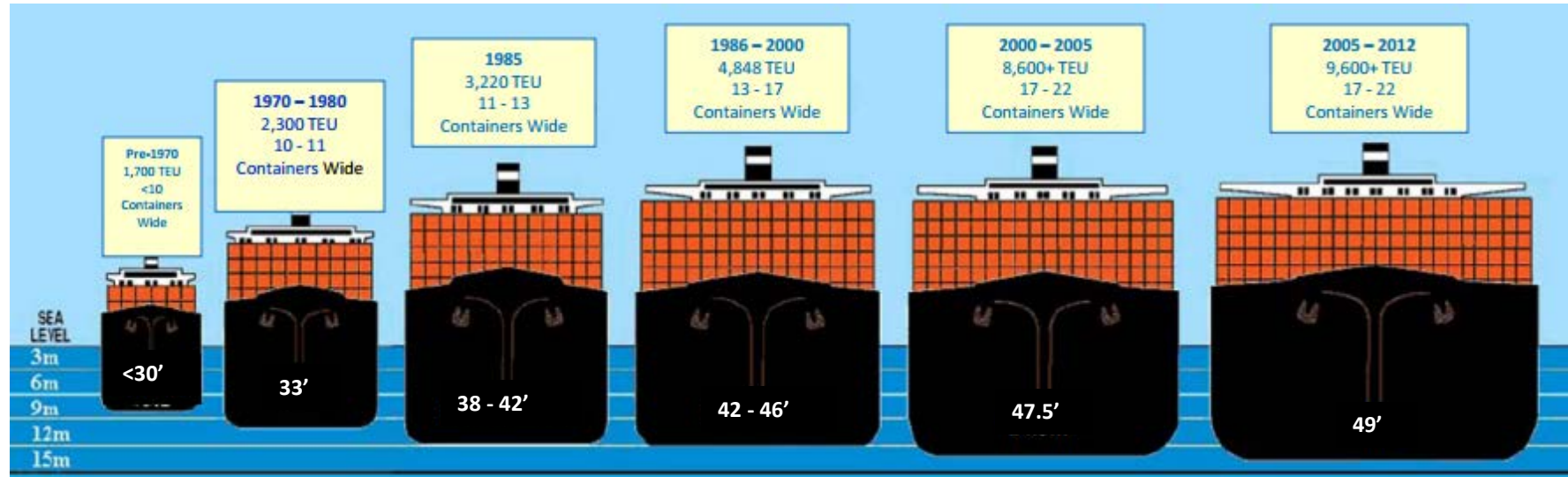
## Current Initiatives:

- Understand current waterway user requirements and update Level of Service policy
  - *Conduct Nationwide Waterways Analysis and Management Studies*
- Modernize delivery of Marine Safety Information
  - *Implement Enhanced Marine Safety Information (eMSI)*
- Incorporate eATON into waterway system design, management, and recovery
  - *Implement and utilize AIS-ATON through NAIS and deployable means.*





# Marine Board Current Trends



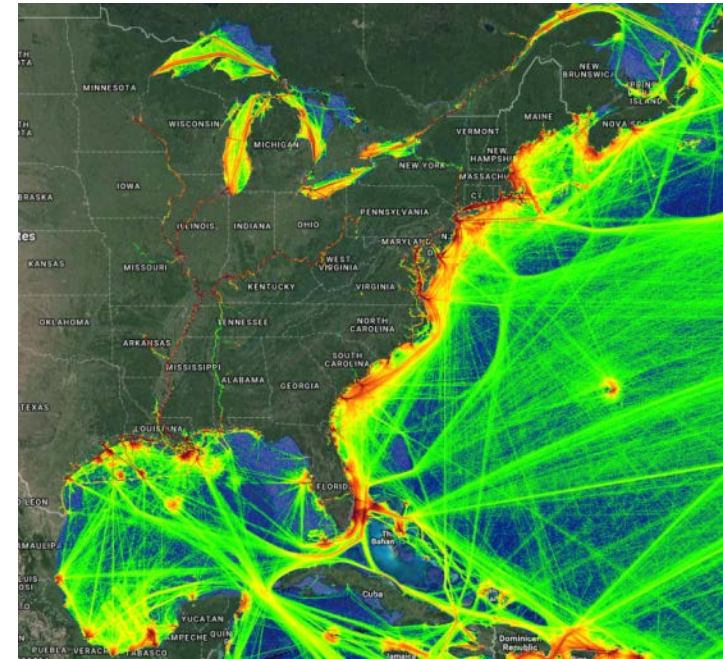


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## Nationwide WAMS



- A holistic and systematic analysis of our waterway systems to determine consistent levels of service and optimize the mix of emerging technologies and legacy methods for the modern mariner.
- Studies:
  - Atlantic and Gulf Coast Seacoast
  - Pacific Seacoast
  - Western Rivers
  - Deep Water (>12 ft)
  - Shallow Water (<12 ft)
  - Intracoastal Waterway
- Methodology:
  - International Considerations – IMO, IALA
  - AIS Vessel Tracking Data
  - User Feedback
  - Carriage Requirements







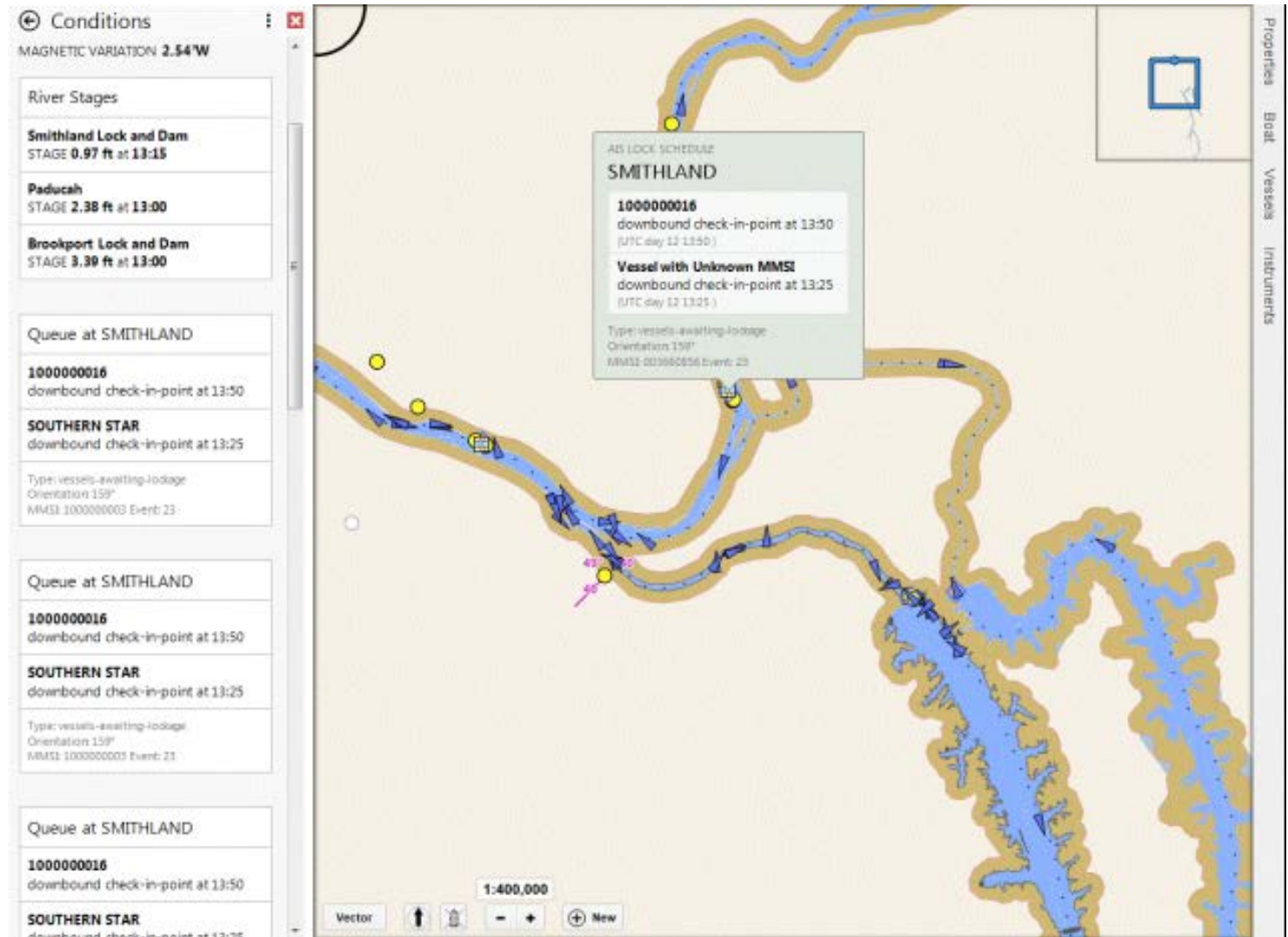
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## Joint Capabilities Technical Demonstration



### JCTD

- 15 Month Test performed In Sector Ohio Valley AOR
- AIS centric testing using AIS-Application Specific Messages (ASM)
- Transmitted ASMs:
  - ✓ Weather & Environmental Data
  - ✓ eATONs & ATON Discreps
  - ✓ Lock Queue Information
  - ✓ Geographic Notices (Security & Safety Zones)

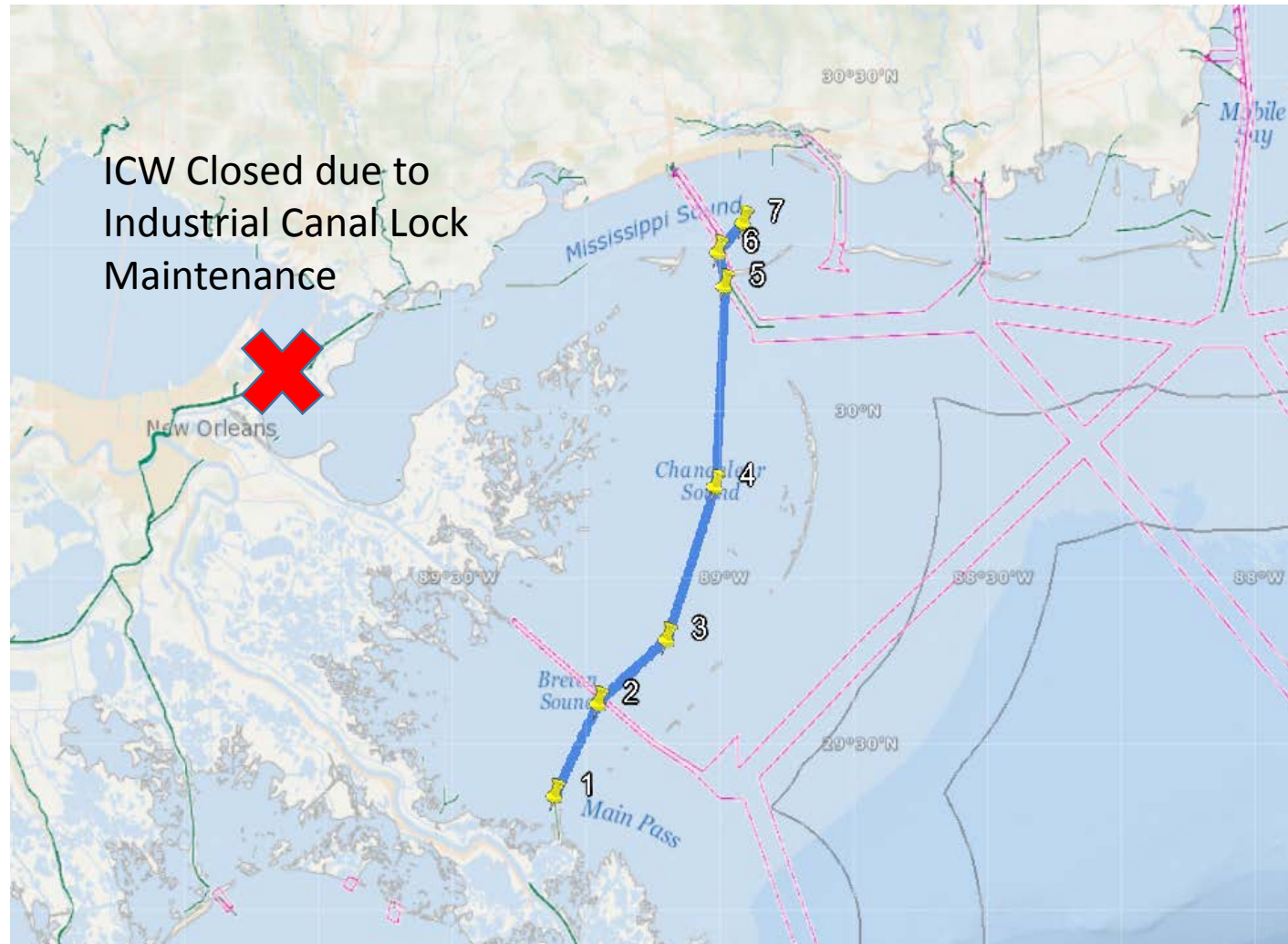




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## AIS-ATON Use Case:

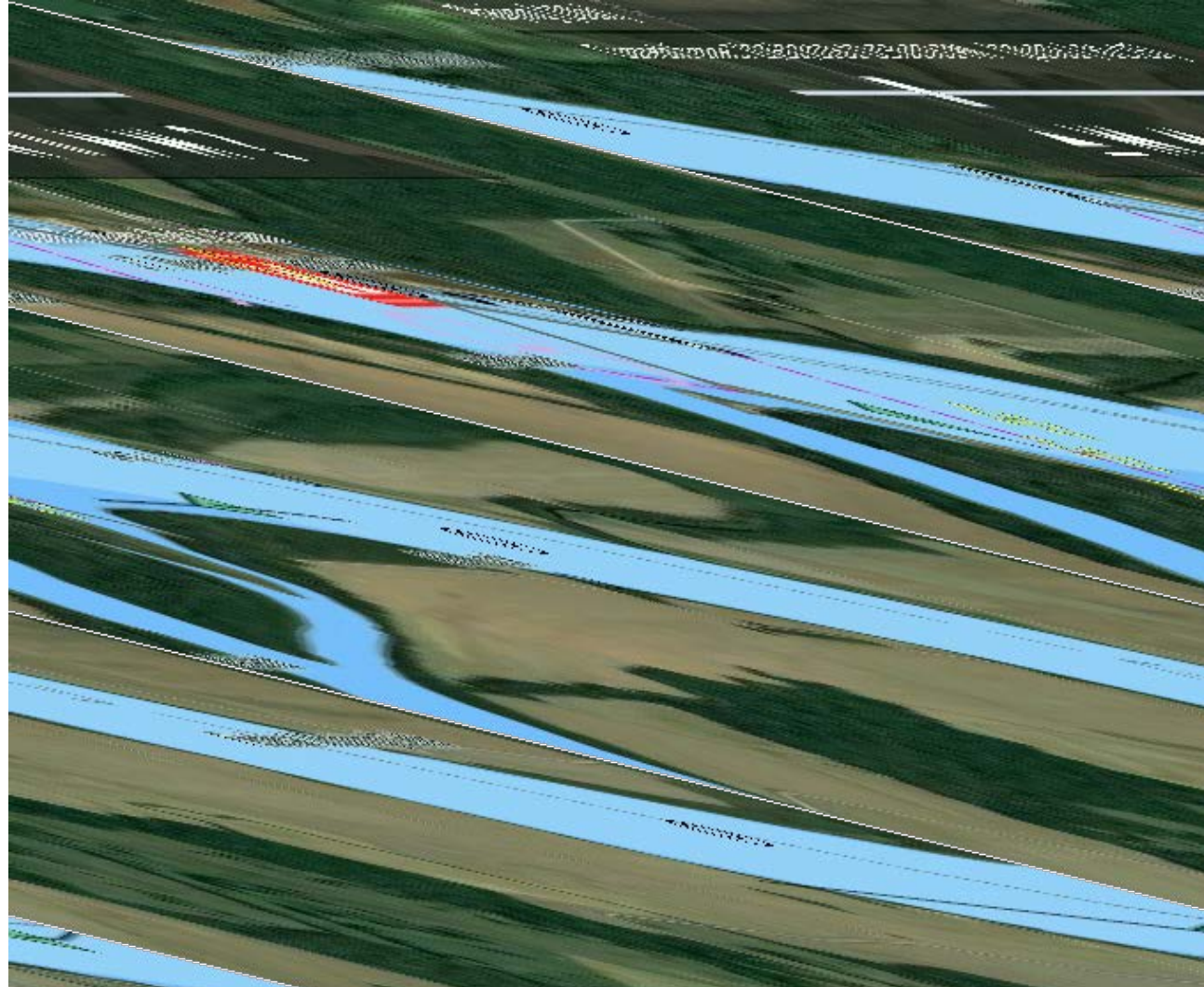
### Breton Sound Temporary Route







# Marine Board AIS-ATON Use Case: Ohio River High Water Event



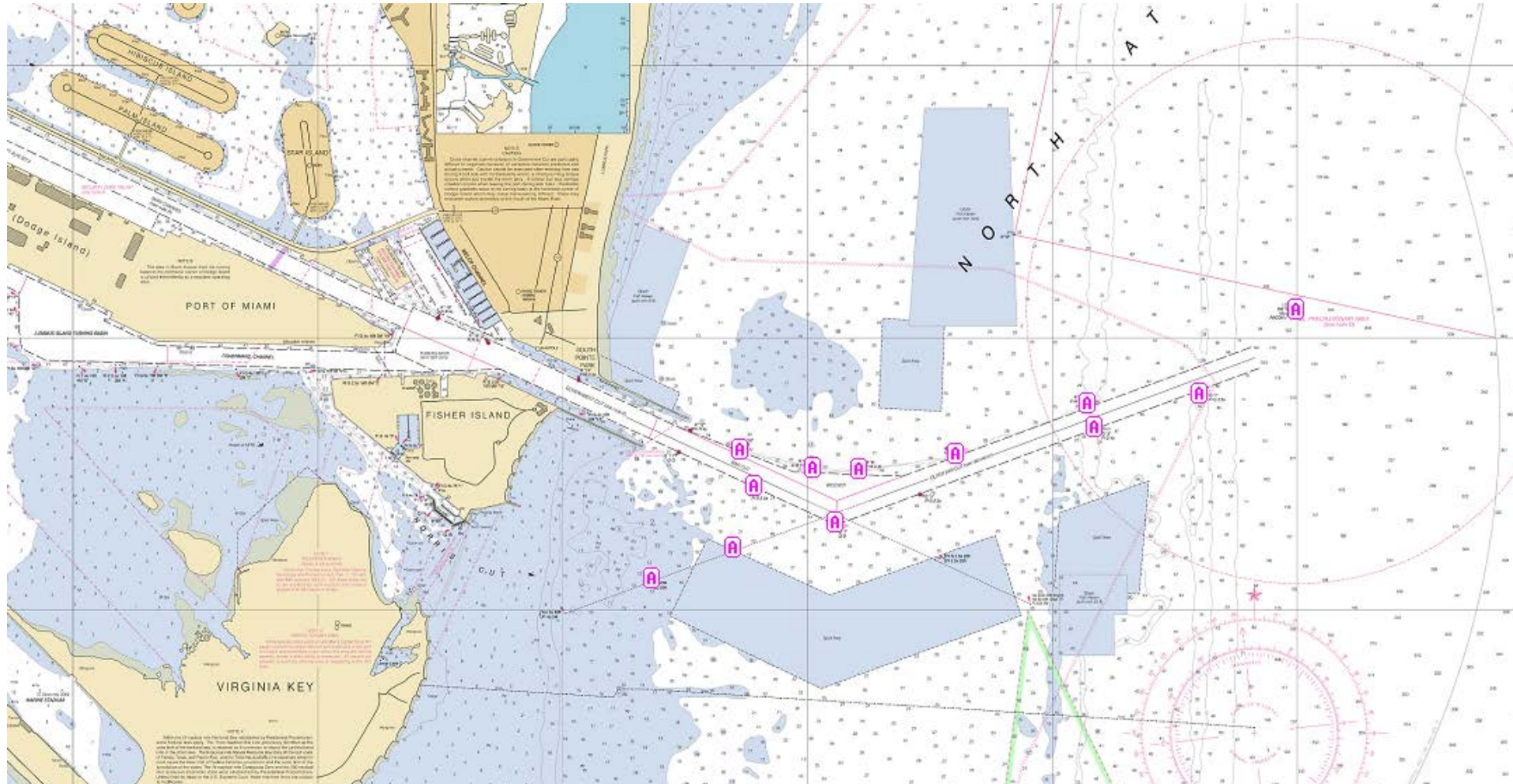




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## AIS-ATON Use Case:

### 2017 Hurricane Response







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## Questions?

