US Army Corps of Engineers
Future of Navigation

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Presentation Outline
- Inland Electronic Charts
- Hydrographic Survey Data
- Lock Operations
- Marine Safety Information
- Data Framework
Inland Electronic Navigation Charts

More consistent and reliable channel data from Corps for NOAA charts

Coordination of adjoining charts for seamless use by chart systems
Jefferson County Port Authority Proposed Fleeting Area
Will It Affect Navigation?
Chart U37UM079 with Proposed Fleet & Low Water Buoy Overlay (3UAJCPAF)

Proposed Fleet Locations

Low Water Buoys from USCG (St. Louis -3.5’)

Chart U37UM079 with Proposed Fleet & Low Water Buoy Overlay (3UAJCPAF)
Overlay Chart 3UAJCPAF Overlay Area
This is a testing area for a proposed fleet. The virtual fleets will never change position and virtual buoys are indicative of where they have been set in the past at -3.5 St. Louis River Gage. This is not the actual buoy positions in current state.

The U.S. Coast Guard is asking for feedback from all pilots transiting that area on whether this would be considered a hazard to navigation in the “Extreme Low Water Phase”. Please send feedback to SLMRWaterways@uscg.mil.

Please provide feedback no later than 11 June 2014.
## eHydro Condition Assessment

### COLUMBIA 43 FOOT FY2012

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Lock Operations Management Application (LOMA)

- **Purpose:**
  - Provide end users information needed for decision support

- **Goals:**
  - Increase lock operator situational awareness
  - Provide vessel operators better information
  - Provide better information to Corps management
  - Exchange information with external users

- AIS is the central LOMA technology
LOMA Operational Capabilities

- Lock operator situational display
- AIS vessel information
- Zone management
- Playback capability
• Additional information provided as overlay to IENC:
  • Weather
  • Water levels
  • Lock status
Lock Approach Current Modeling

- Vessel operators need river current information at critical locations (e.g., lock approaches)
- Sensors are expensive to install and maintain; provide limited information
Marine Safety Information (MSI) “Notices to Skippers”

U.S. Department of Homeland Security
United States Coast Guard

LOCAL NOTICE TO MARINERS WEEKLY EDITION

District: 17  Week: 01/06

Notice to Navigation Interests
In Reply Refer to:
OP-TN, P.O. Box 2288, Mobile, AL 36628
251-694-3710

Navigation Notices
Integrated “eMSI Bulletin” concept

NOAA

USCG

NGA

USACE

IMSIB

1. 

2. 

3. 

4. 

Olmsted Lock and Dam Construction Project

[Map of Olmsted Lock and Dam Construction Project]
Navigation Data Integration Framework

Navigation DIF Components
- Source Databases
- Hub Catalog
- Tools
- Web Services
- Portals

Navigation Sub-categories
- Dredging
- River Information Services
- Surveying & Mapping
- Infrastructure & Asset Management
- Engineering With Nature & Regional Sediment Management
- Marine Transportation System
Thank you for your attention!

USACE Emerging Capabilities

- Inland Electronic Charts & Expanded use of AIS
- eHydro
- Lock Operations Management Application
- Enhanced Marine Safety Information (eMSI)
- Data Framework

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