



**National
Transportation
Safety Board**

Coast Guard Application of VTS Authority

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Coast Guard VTS Authority

- Ports and Waterways Safety Act (1972)
- Port and Tanker Safety Act (1978)
- Oil Pollution Act (1990)
- National VTS Regulations (1994)



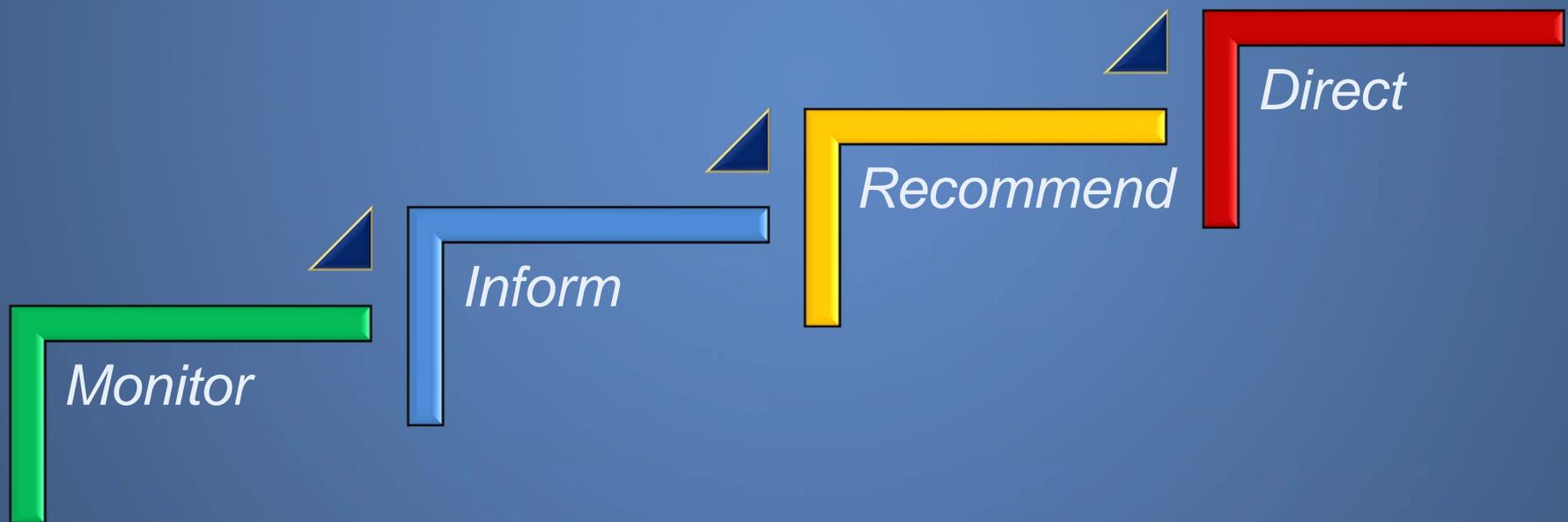
VTS Center Services

- Information
 - Weather and waterway updates
- Traffic organization
 - Advance planning of vessel movements
 - Enforcing rules and regulations
- Navigational assistance
 - Assist mariners' navigational decision-making
 - Provided to mariners on request, or when considered necessary by a VTS center

Traffic Management Activities

- Four levels
 - *Monitor*
 - *Inform*
 - *Recommend*
 - *Direct*

Inconsistent Understanding of Authority to Direct Traffic



San Francisco-Oakland Bay Bridge, San Francisco, California



VTS Watchstander Intervention and Navigational Assistance

- Emphasis on being non-intrusive
- Conflicting statements on when and how to provide navigational assistance services
- Reluctance to intervene when unsure if something is unsafe

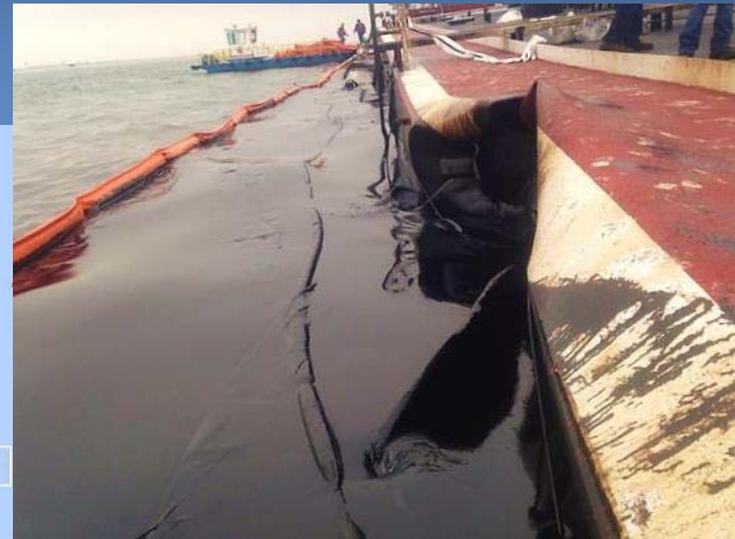
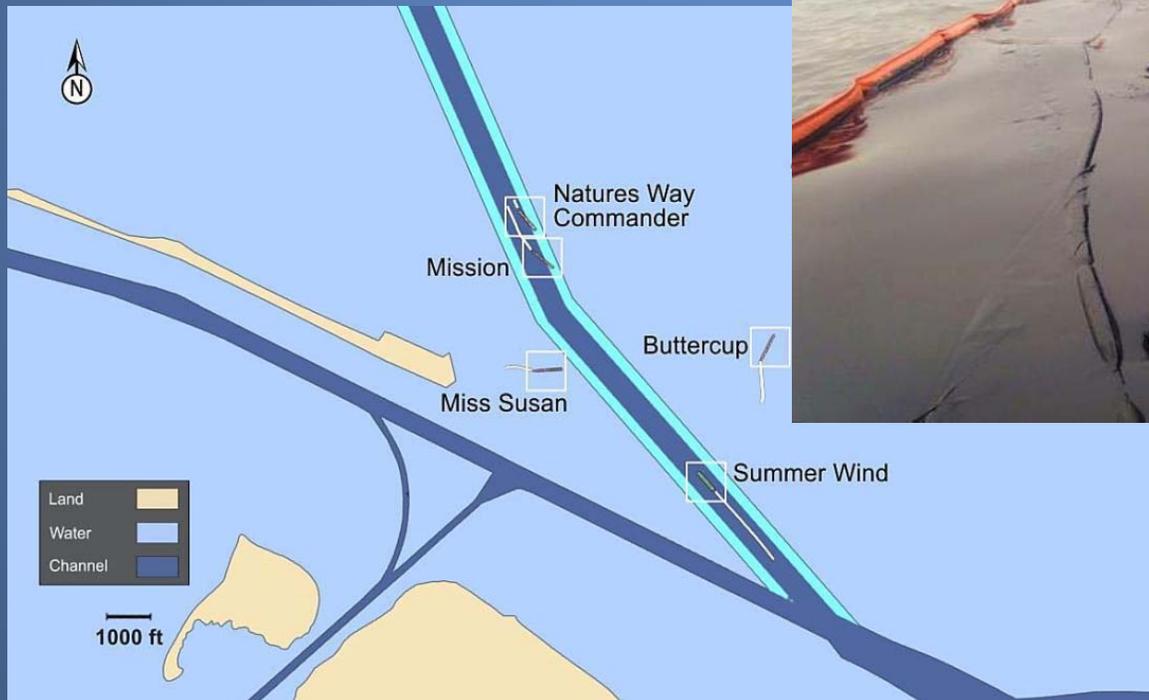
Sabine-Neches Canal, Port Arthur, Texas



Pilots' Perceptions of VTS Watchstanders

- Generally satisfied with VTS system
- VTS watchstanders (at times) provide too much information
- VTS centers should not provide vessel maneuvering orders to mariners

Houston Ship Channel, Lower Galveston Bay, Texas



VTS System Limitations Affecting Watchstander Performance

- Early detection of unsafe traffic situations
 - VTS center monitoring of the bridge-to-bridge radio frequency
 - Display of vessel traffic data in VTS centers

Bridge-to-Bridge Radio Frequency

- Used by mariners to coordinate vessel meeting, crossing, and passing arrangements
- VTS watchstanders monitor this frequency to identify problems and help resolve communication errors

AIS Data Displays in VTS Centers

- A surveillance technology used in VTS centers
- Helps watchstanders monitor the movement of vessels on visual displays
- May not provide an accurate representation of certain types of vessel operations on the waterway