

The Big Picture

Property of Capt. William Band
Association of Maryland Pilots

Introduction

- Collision avoidance through education and communication
- All countries require pilot services in their territorial waters
- Pilots are experts in ship handling, local knowledge, and navigation of their routes

Topics of Discussion

- Watch standing routine aboard ships
- Ship profiles
- Rules of the Road
- Maneuvering and maneuvering limitations of ships
- Communication



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Modern Wheelhouse



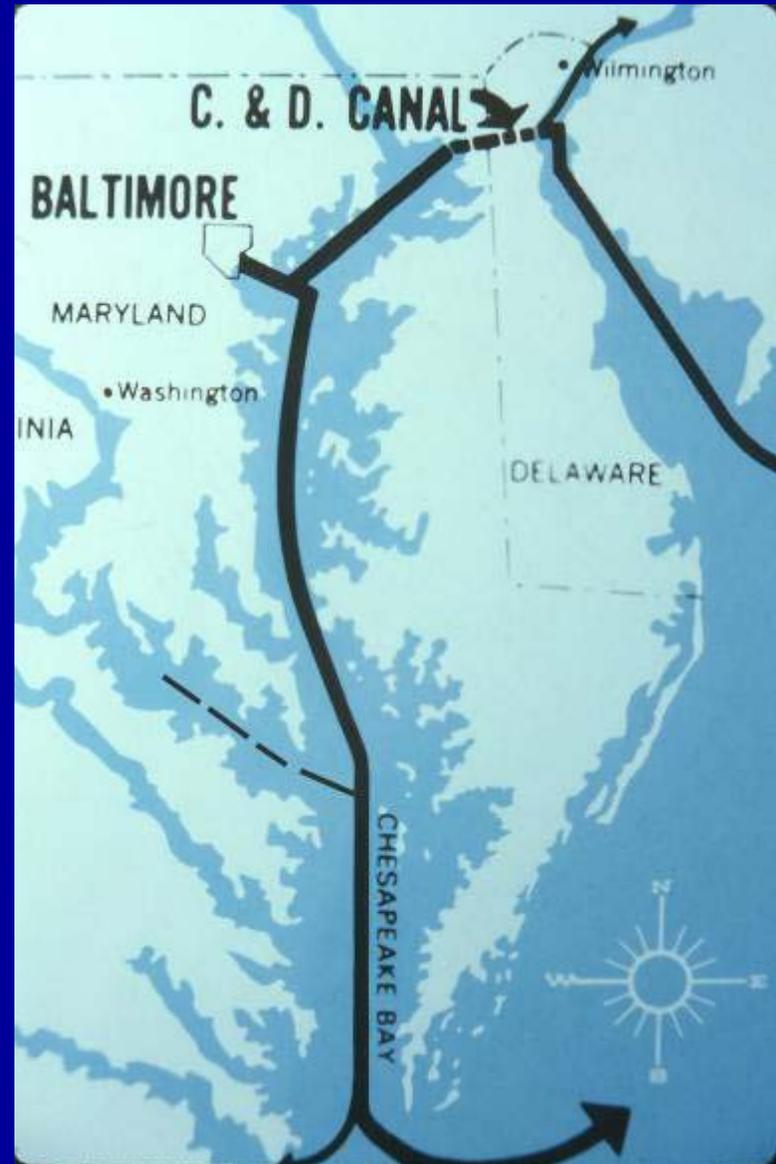
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Typical Chesapeake Bay Pilot Routes

- Cape Henry to Baltimore
- Baltimore to the C&D Canal



Types of Ships

- Ship profiles
- Tugs and barges
- Dredges

Container Ship



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Tanker



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Roll on Roll Off (RORO)



Car Carrier (RORO)



Passenger Ship



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Bulk Carrier



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Breakbulk Ship



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Tall Ships



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LNG Ships



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Naval Vessels



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Naval Vessel Protection Zone

- All vessels within 500 yards of a U.S. Naval vessel shall operate at minimum steerageway
- No vessels are allowed within 100 yards of a U.S. Naval vessel unless given permission on VHF-FM channel 16

Tugs and Tows

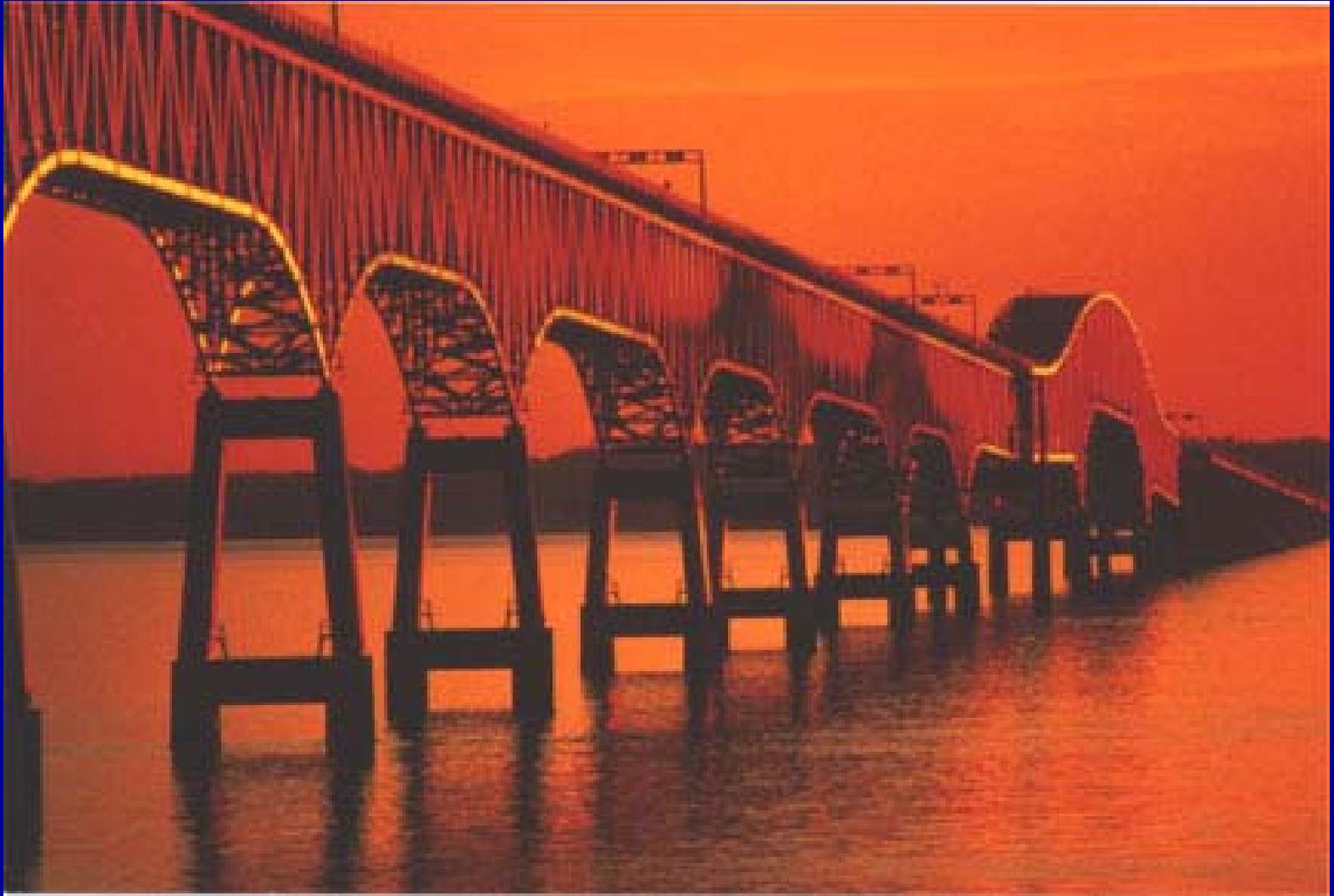


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Dredges



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Pilot Operations

- Boarding Ships
- Maneuvering to make a lee

- Pilot tower



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Pilot boats



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Cape Henry Pilot Tower

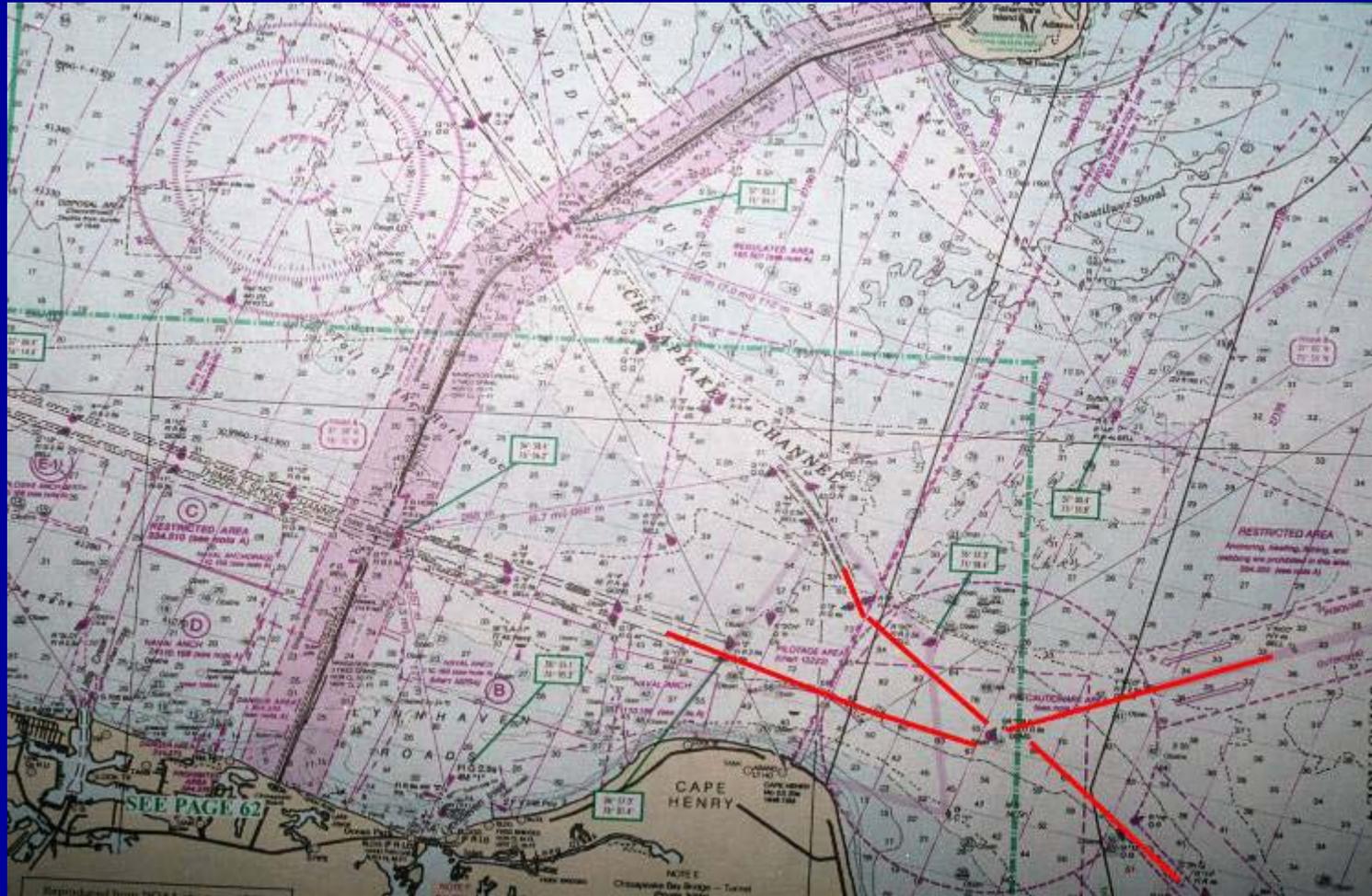
- Monitors VHF Channels 16 and 11
- Both Maryland and Virginia Pilots





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Cape Henry Traffic Scheme





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Collision Avoidance



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Automatic Identification System

AIS



Collision Avoidance

- Always stand a good watch
- Know the Rules of the Road
- Take early and substantial action when maneuvering
- Use radar reflectors
- Know the proper use of radios
- Know the meaning of whistle signals
- Keep bright, proper running lights

Collision Avoidance

- In poor visibility, if uncertain what to do stop and let the ship maneuver around you
- Chances are good that large ships will not hear whistle signals from small vessels
- Be aware of the fast relative speed of ships and that they are generally quiet

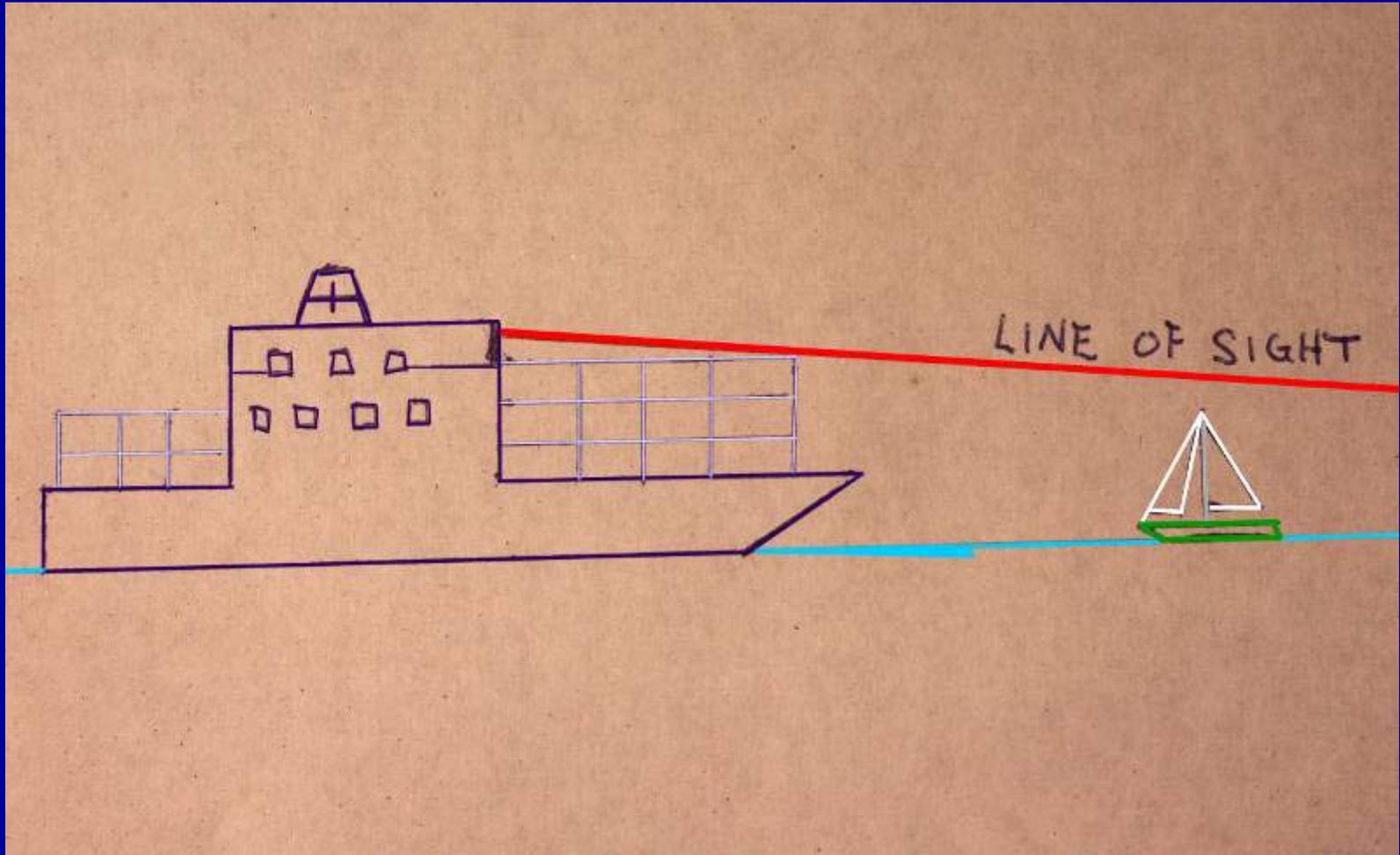
Collision Avoidance

- When possible, stay to the sides or out of shipping channels
- Stay clear of the center span of bridges
- Anticipate ship maneuvers in pilot transfer areas, shipping channels, and anchorages

Collision Avoidance

- Height of eye and the whole picture
- Inadvertently maneuvering into the ship's lee

Obstructed View





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Large Bulk Carrier

- Channel project depth of 50 feet in the Chesapeake Bay
- Pilots move 47 feet 6 inches in draft
- Ships can weigh 200,000 tons +





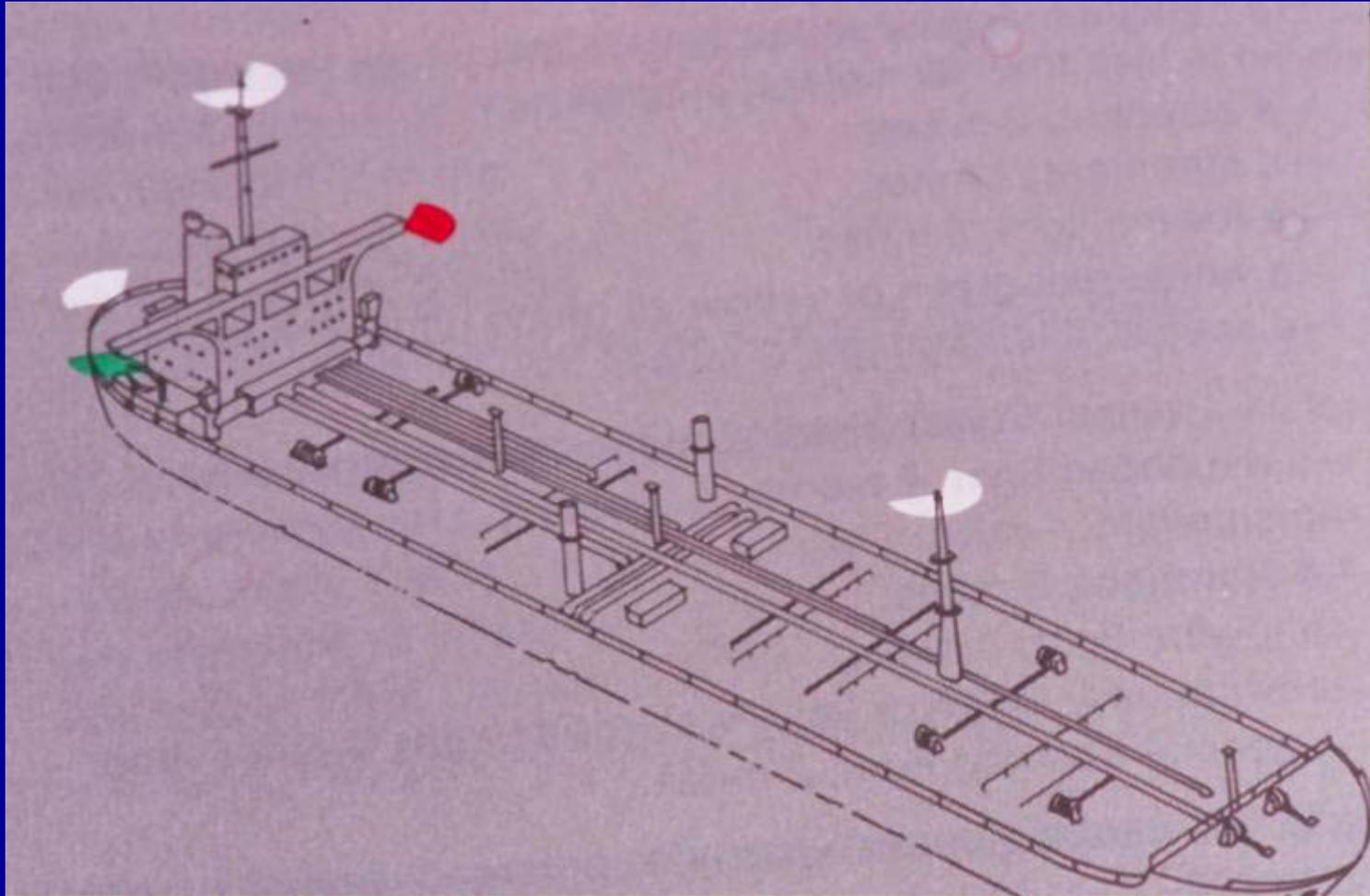
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Dangerous Wake

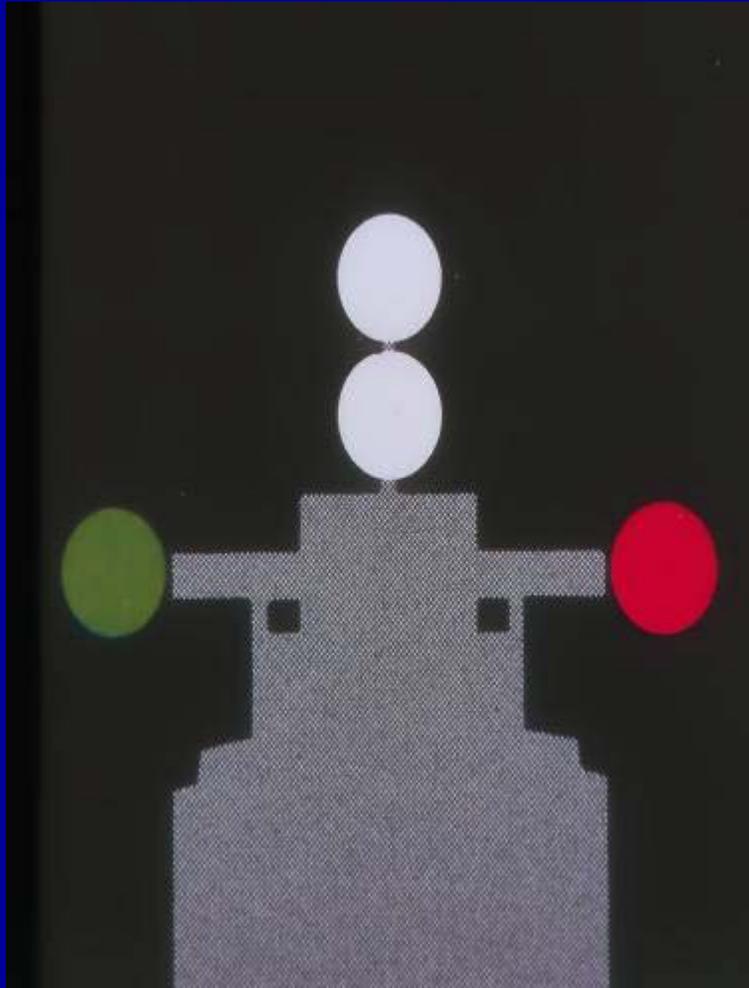


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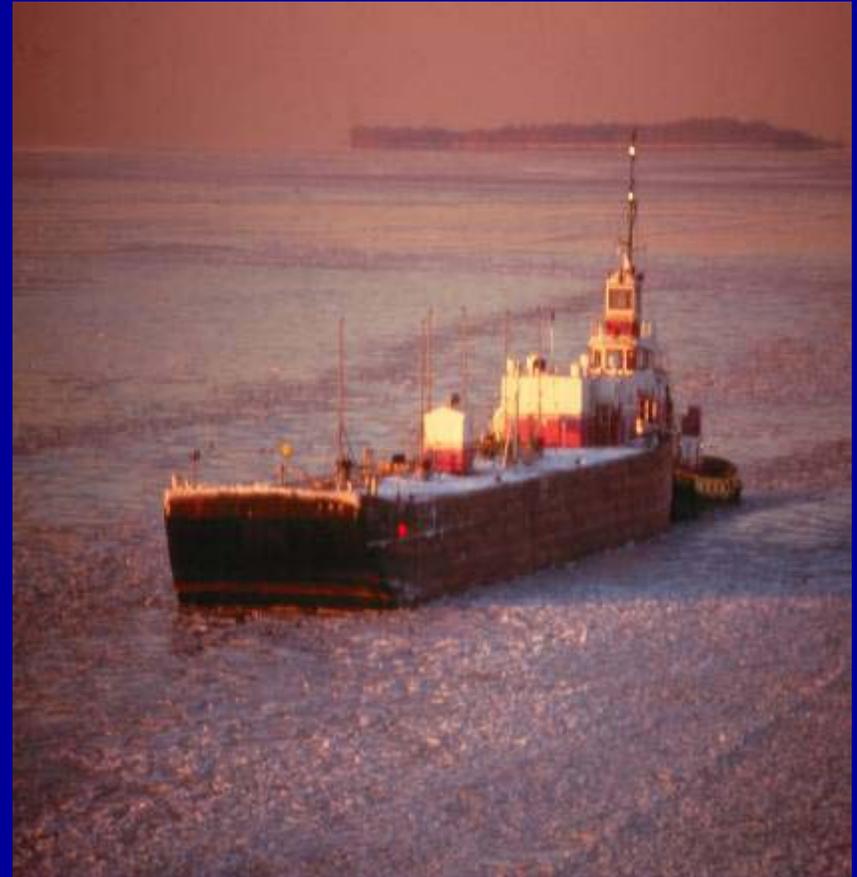
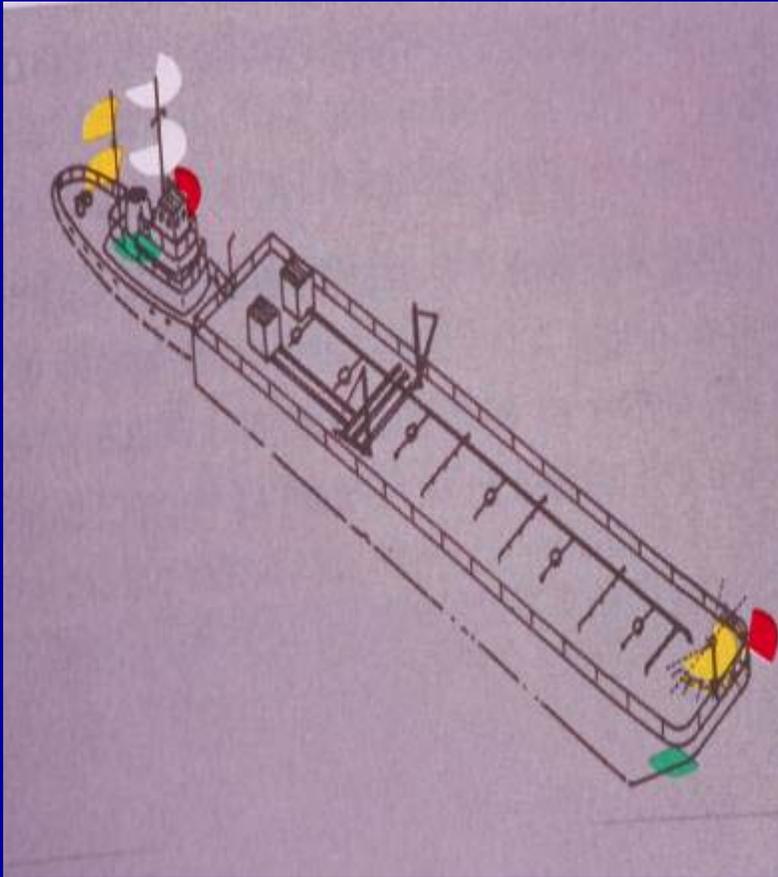
Navigation Lights



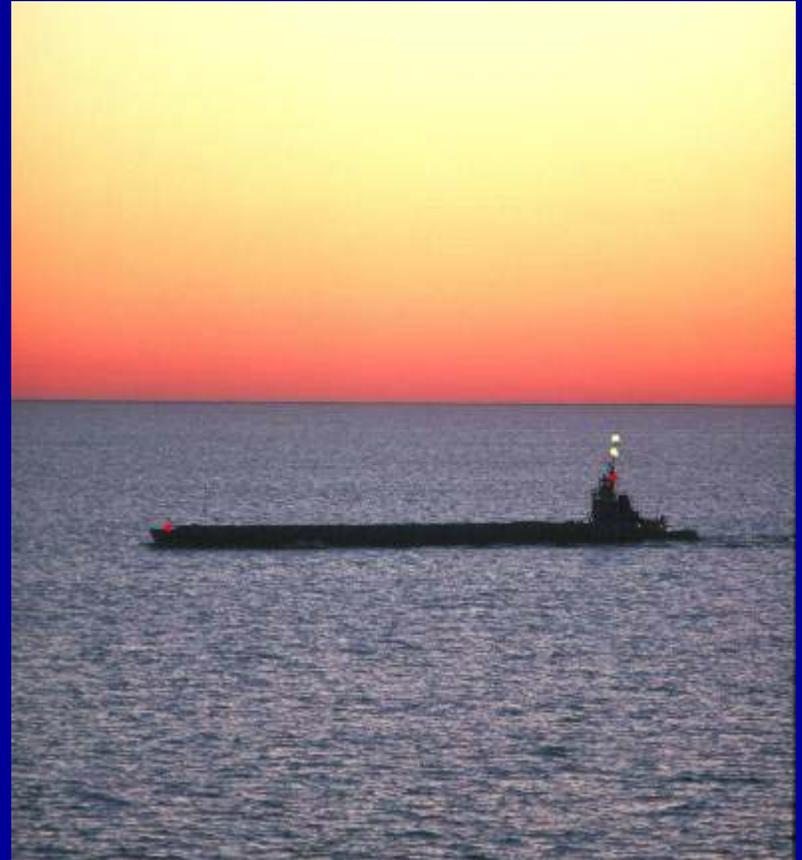
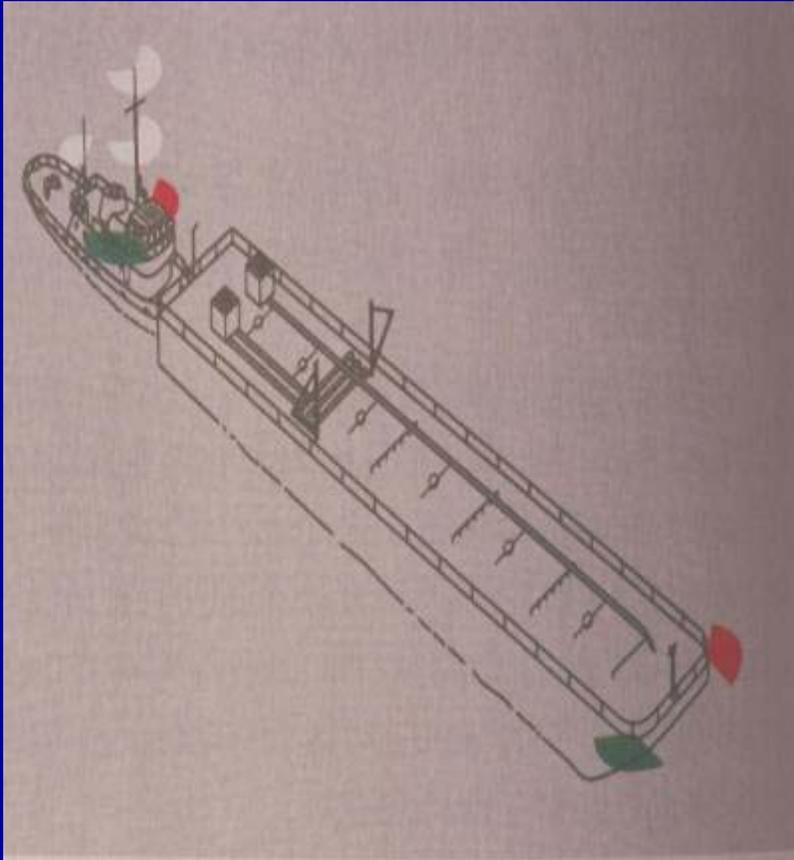
Ship End On



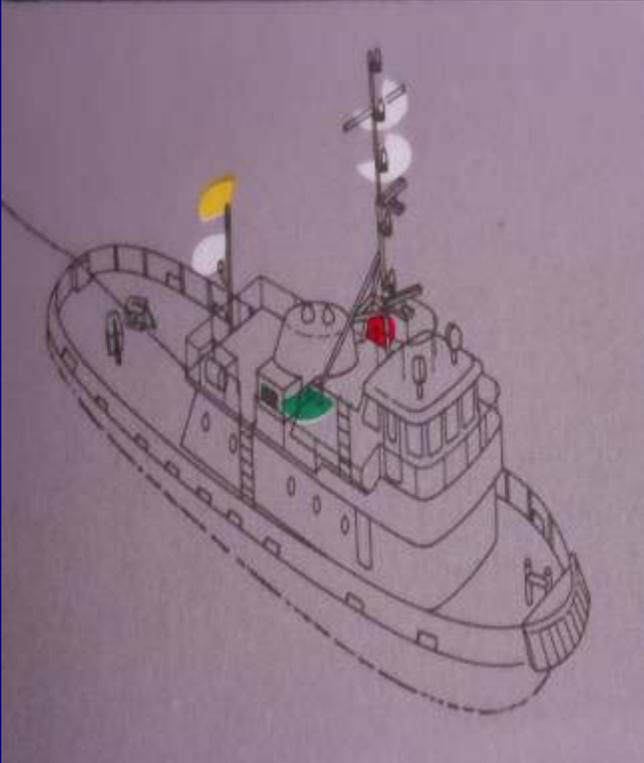
Tug Pushing Inland



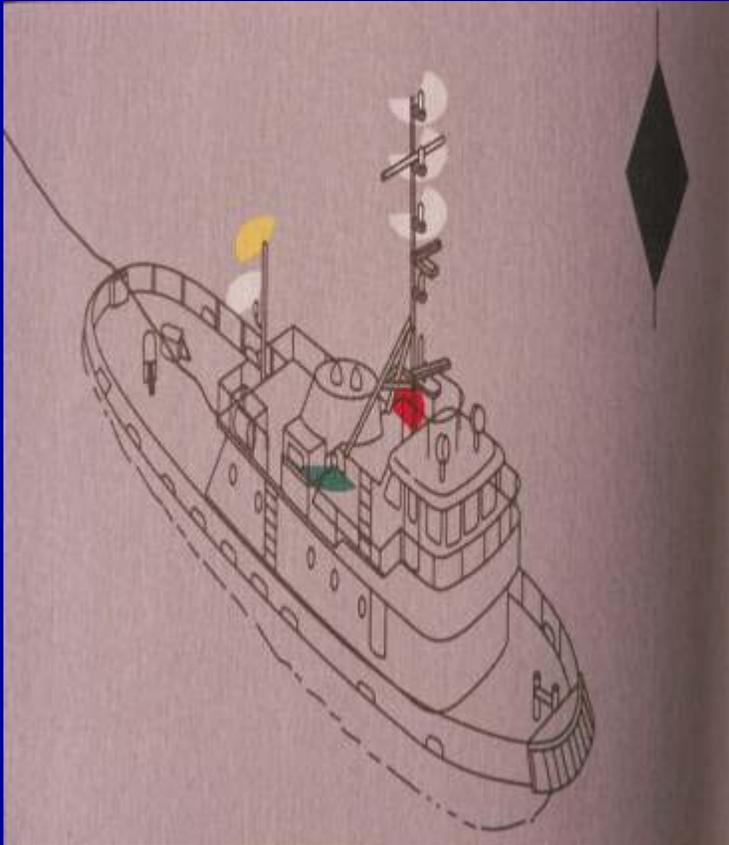
Tug Pushing International



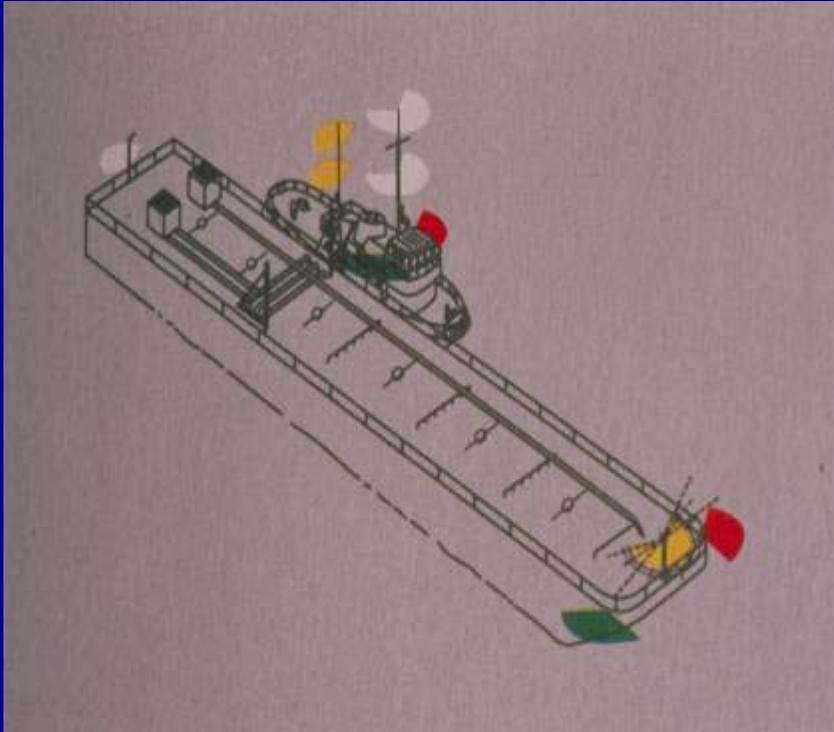
Tug Towing Less Than 200 meters



Tug Towing, Tow in Excess of 200 meters



Tug Alongside

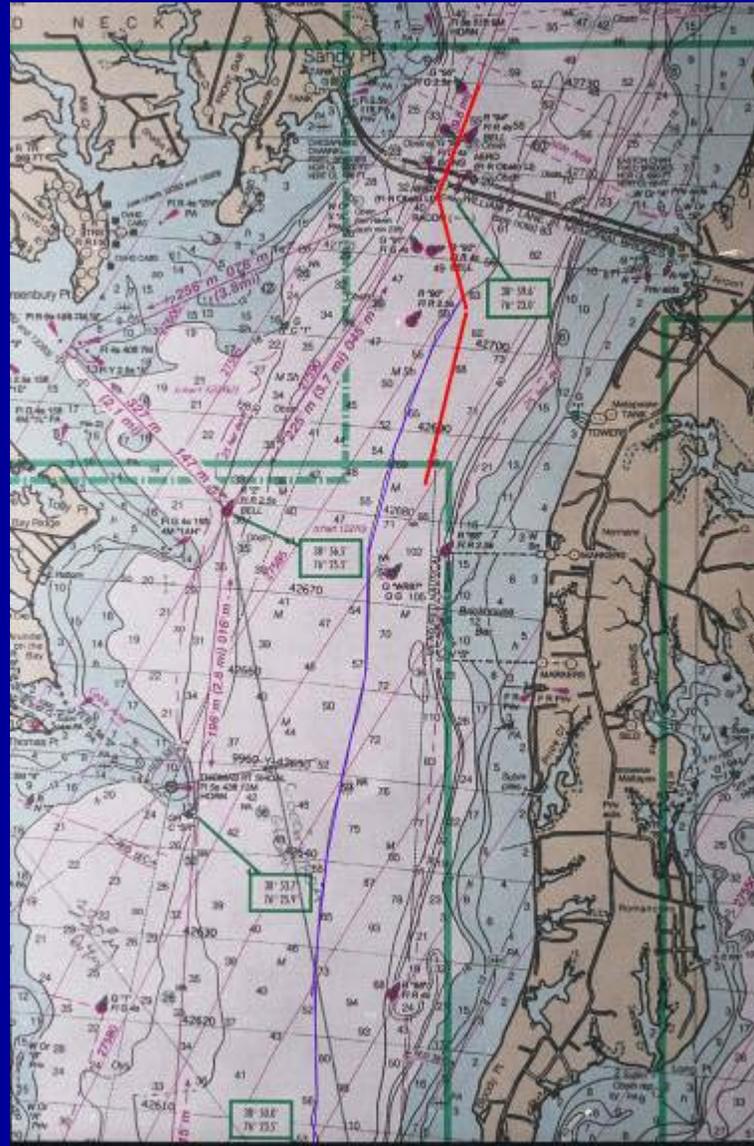




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Bay Bridge to Bloody Point

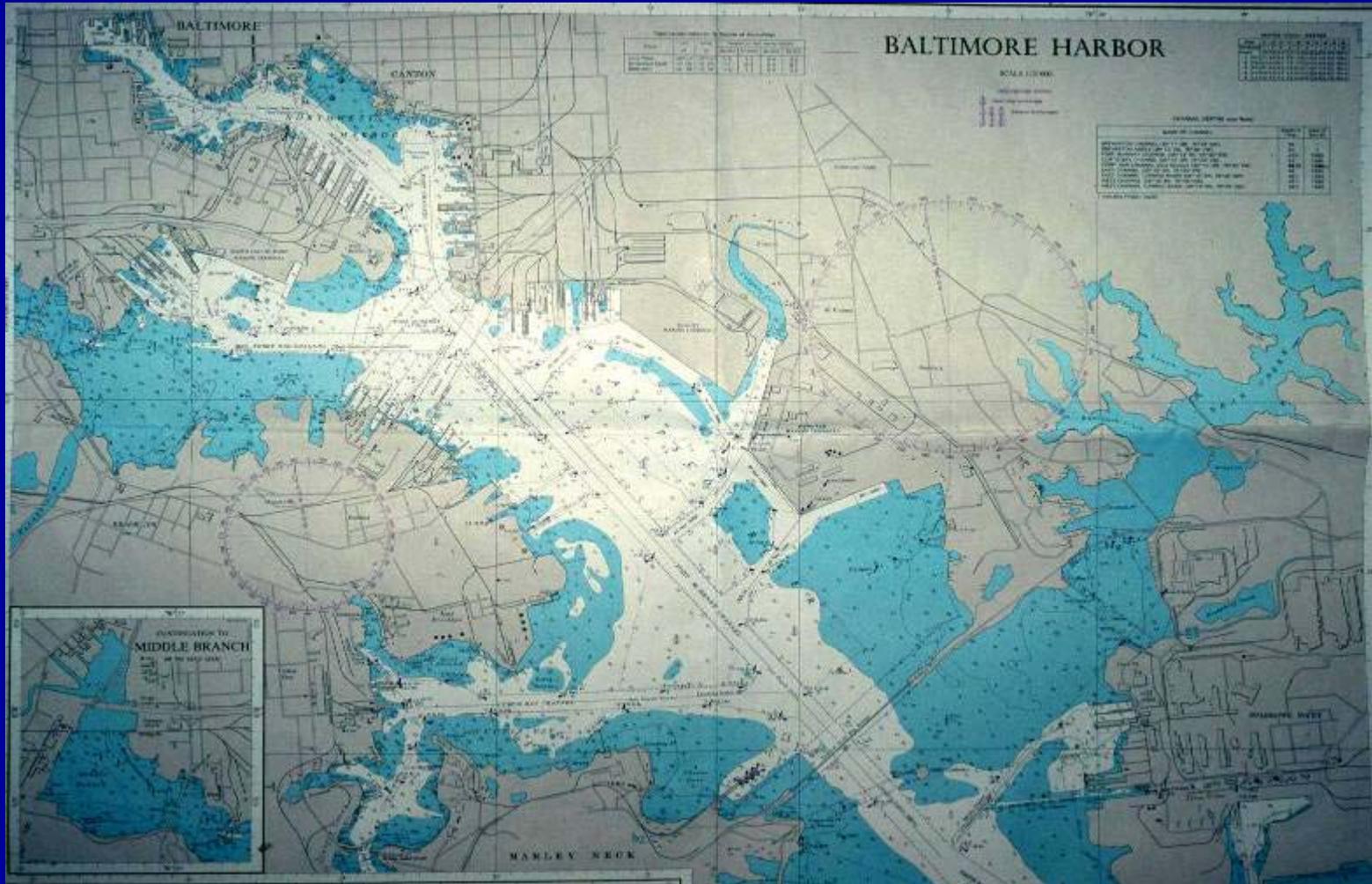
Preferred Ship Route



Pilot Transfer Station PTS



Baltimore Harbor



Fog



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Thunderstorms



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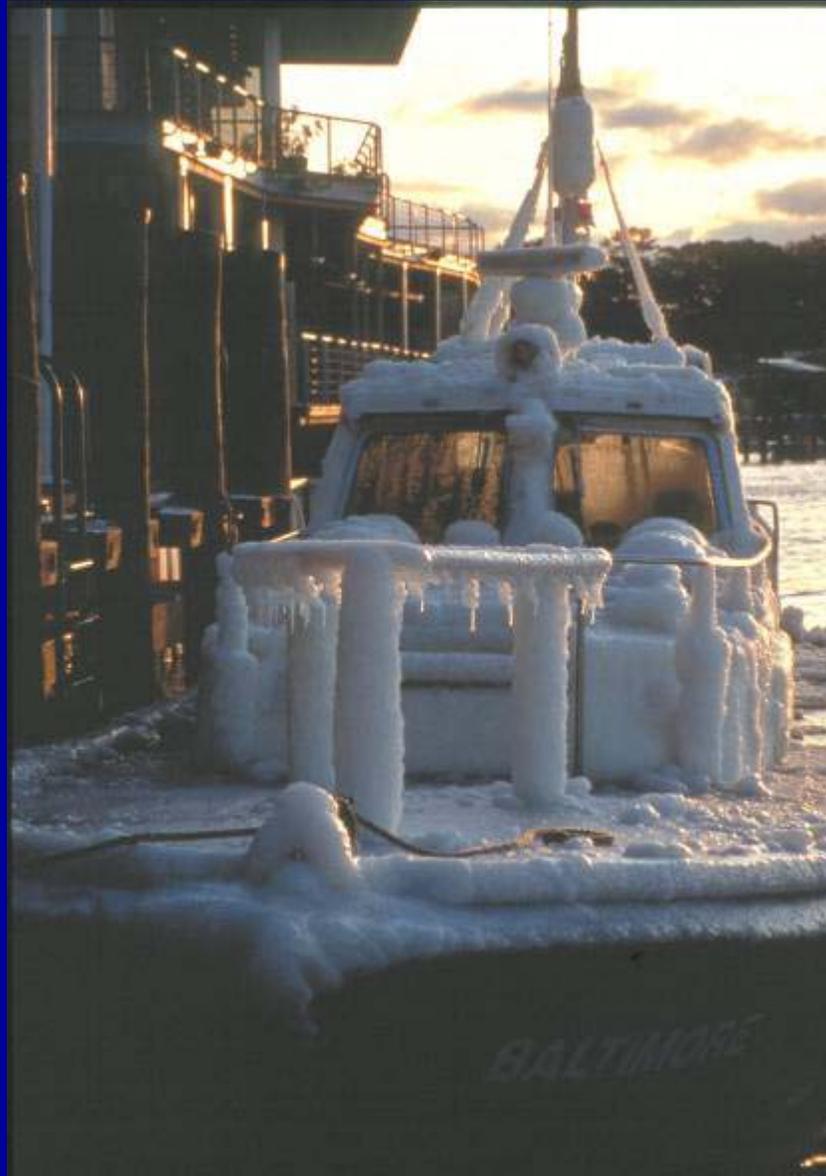
Snow & Ice



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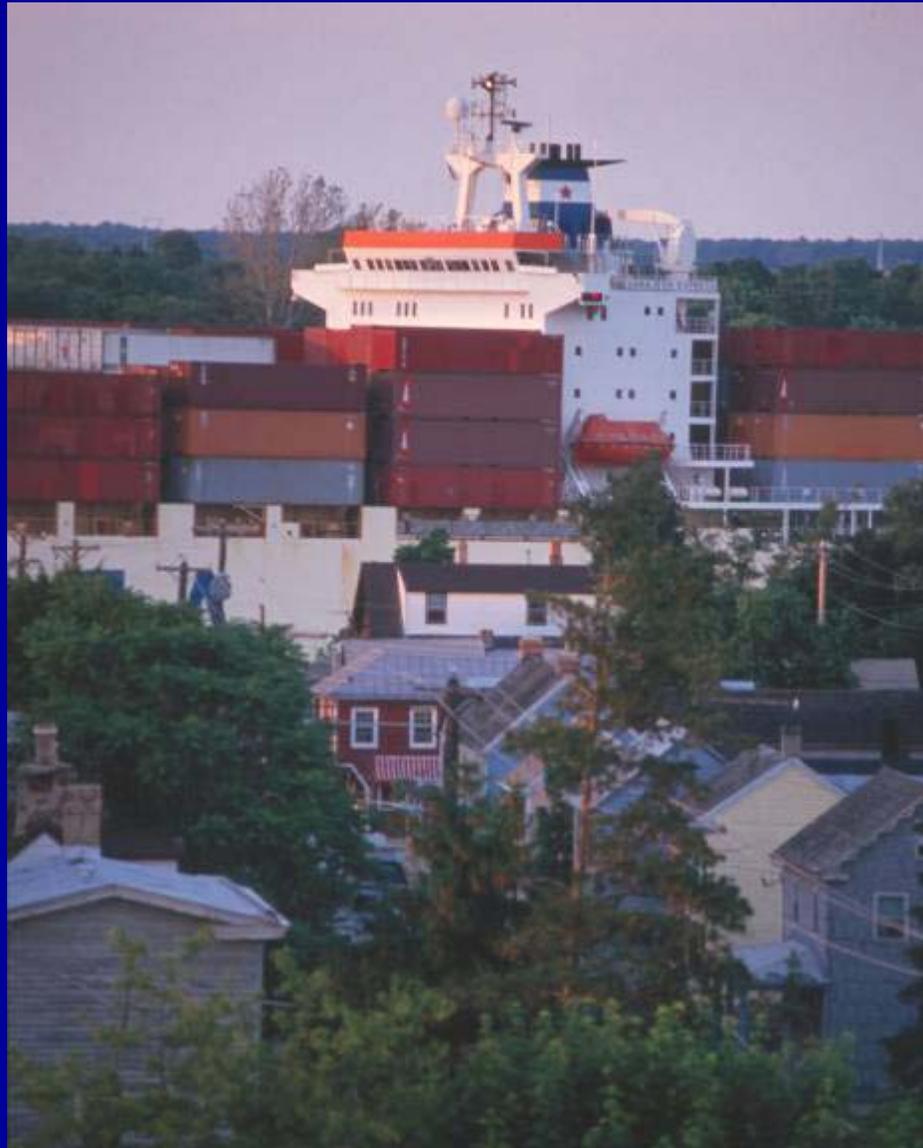
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C & D Canal and Approaches

- Channel project depth of 36 feet
- Maximum draft for pilots 33'6"
- Maximum width 400 feet
- Distance from Baltimore to pilot change at Chesapeake City is 40 miles



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Docking Ships



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Heavy Weather



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H Flag



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