



The View from the Bridge  
*Commercial Vessel Perspective*

# Large Commercial Vessels

Vessels calling on the Port of Hamilton:

- Built to Seaway max. size.
- Loaded to Seaway draft.
- Cargoes, trades and docks.
- Domestic and ocean going vessels.





# Discussion

- Draft and Under keel clearance.
- Stopping distance – manoeuvrability.
- Visibility.
- Navigational Equipment.
- Routes in and out of the harbour.
- Summary – key points to remember.

# Draft and Under keel clearances

- Vessels load to 8.15 metre drafts with under keel clearances as little as 30 cm.
- Loaded vessel tonnages—up to 30,000 MT.



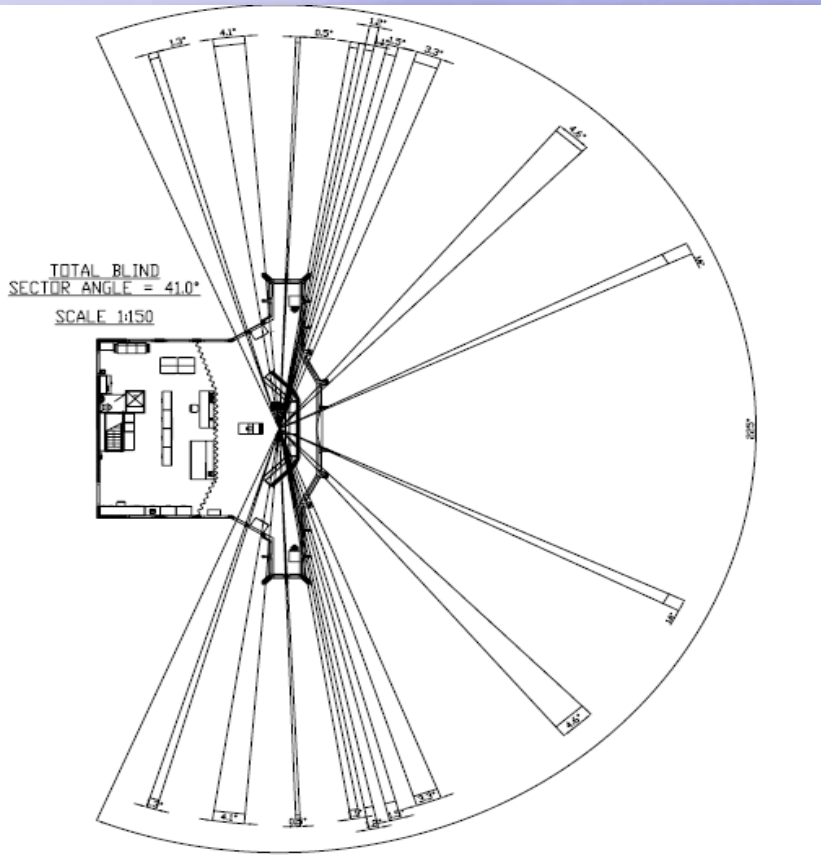
# Vessel Stopping Distance

- From one to 1.0 to 2.0 km even if going from full ahead to full astern.
- Even greater if deeply loaded or in confined channel.
- Large vessels must keep up speed in order to steer and they need to stay in the channel.





# Vessel Visibility



- Restricted from the bridge – looking forward, aft and alongside (port and starboard).
- Further restricted – vessel draft, cranes, deck cargo, booms, weather and other blind spots.
- Their 'blind spot' can extend well ahead of the vessel, even up to 500 metres in front of them.

# Navigational Equipment





# Navigational Equipment

Includes:

- Radar – positioning and collision avoidance.
- VHF Radio – Security calls, Ship to Ship
- AIS – navigation safety.
- Electronic charting systems – integration and display of positioning and target information.
- Whistle signals.
- Lookout.
- Shapes and lights.



# Navigational Routes



- Transit in/outbound via the Burlington Canal.
- Security call – Ch. 16, Ch. 12 – Bridge.





# Navigation Features

# Main Channels.

# Docks.

# Anchorage.

# Shoals.



# Key Points to remember

- Large commercial vessels are constrained by draft, stopping distance and visibility.
- Large commercial vessels will have fixed routes in and out of harbour.
- Be aware of getting too close – bow wake, propeller and thruster wash. Vessel may be working with tugs or being towed.



# Key Points to Remember

- Maintain a lookout – by sight, sound and any other available means.
- Follow the Rules of the Road – conduct of vessels, meeting and passing arrangements, lights and shapes.
- Always carry and know how to use the required safety equipment for your vessel.
- Steer clear of shipping lanes.
- Yield to large vessels and stay clear. Rule 9 b.





# In closing

- Plan before you go. Check the weather for your route, and let others know where you are going and when you will return.
- Be aware of your surroundings and of other vessels. Know where you are and what is going on around you.
- 5 SHORT BLASTS OF A HORN means DANGER— a ship is nearby.