Uniform Standards/Databases for Sharing Port Information

CAPT Bill Diehl, USCG (Ret.), P.E.

16 March 2016
Greater Houston Port Bureau

- Founded in 1936 to provide information on the Port of Houston
- Marine Exchange of Texas
- 200+ Member 501(c)6
- Administers 280+ facility Houston Ship Channel Security District
- Led by Board of Industry Directors
  - Dredging Committee
  - Traffic Committee
GHPB Port Information

- Detailed Port Data
- Operating Entities
- Voyage Information
- Contact Information
- Channel/ Harbor Restrictions
- Facility Information
GHPB Traffic Committee

• Develop KPIs to determine root causes of delays on the Houston Ship Channel

• Discuss potential solutions and initiatives that may show value-added support to facilities, operators, and service providers.

• Discuss long-term issues that will allow HSC facilities, operators and service providers to increase productive vessel traffic in the Port of Houston.
Partnerships: Avanti

• Worldwide Port Information
Avanti

• Web-portal providing standardized global port data.
• Driven by Customers

• Ports Involved:
  – Rotterdam
  – Houston
  – Singapore
  – Gothenburg
The Same Language

• Step One: Definitions

• Categories
  • General
  • Depth
  • Restriction
  • Port General
  • Weather & Tidal
  • Reporting

• Regulations
  • Safety
  • Nautical Services
  • Vessel Services
### Underkeel Clearance Policy

Policy to set a minimum difference between the draught of a vessel and the available depth of water.

<table>
<thead>
<tr>
<th>Underkeel Clearance policy</th>
<th>Yearly</th>
<th>Decimal meters or as a percentage of draught or beam with a minimum of xx.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Per type of vessel, on arrival, alongside, or departure</td>
</tr>
</tbody>
</table>

### Maximum Draught without Over the Tide Operations

The maximum depth of the keel below the waterline at any point along the hull, related to a specific water density.

<table>
<thead>
<tr>
<th>Maximum draught without over the tide operations</th>
<th>Yearly</th>
<th>Decimal meters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Related to water density of xxxx kg/m3.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Per type of vessel, on arrival, alongside, or departure</td>
</tr>
</tbody>
</table>

### Maximum Draught with Over the Tide Operations

The maximum depth of the keel below the waterline at any point along the hull, related to a specific water density. Utilizing tidal changes to sail, discharge or load cargo before a low tide level is reached, thus maintaining the vessel “always afloat”.

<table>
<thead>
<tr>
<th>Maximum draught with over the tide operations</th>
<th>Yearly</th>
<th>Decimal meters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Related to water density of xxxx kg/m3.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Per type of vessel, on arrival, alongside, or departure</td>
</tr>
</tbody>
</table>

### Maximum Length

Maximum length Over All

<table>
<thead>
<tr>
<th>Maximum length</th>
<th>Yearly</th>
<th>Decimal meters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Per type of vessel, on arrival, alongside, or departure</td>
</tr>
</tbody>
</table>

### Maximum Beam

Maximum moulded beam

<table>
<thead>
<tr>
<th>Maximum beam</th>
<th>Yearly</th>
<th>Decimal meters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Per type of vessel, on arrival, alongside, or departure</td>
</tr>
</tbody>
</table>

### Maximum Air Draught

Distance from the surface of the water to the highest point on a vessel. Waterline = surface of the water touching the hull so these are equivalent.

<table>
<thead>
<tr>
<th>Maximum air draught</th>
<th>Yearly</th>
<th>Decimal meters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Per type of vessel, on arrival, alongside, or departure</td>
</tr>
</tbody>
</table>

### Vertical Tide Restriction

Restriction due to the height of tide at any point

<table>
<thead>
<tr>
<th>Vertical tide restriction</th>
<th>Yearly</th>
<th>Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Referred to tidal info of location xxxx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Per type of vessel, on arrival, alongside, or departure. Possibly with extra measures (free text)</td>
</tr>
</tbody>
</table>
Port Information Guide Rotterdam

Load Line

Load Line Code
North Atlantic Winter Seasonal Zone II - Winter: 1 Nov to 31 Mar, Summer: 1 Apr to 31 Oct

Maximum Vessel Sizes

<table>
<thead>
<tr>
<th>Maximum Size</th>
<th>Dimension</th>
<th>Supplementary Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.55</td>
<td>Draught</td>
<td>There are no restrictions regarding length and beam. Not every berth can accommodate maximum size vessels. Check the berth information first. Over The Tide Operations is allowed in Port of Rotterdam.</td>
</tr>
</tbody>
</table>

Time Zone

Contact Information

Map Layers

Navigation Sections
- Anchorage
- Approach
- Basin
- Berth
- Bridge
- Canal/Fluvar
- Lock
- Pilot Station

Charts - Rotterdam
- Antwerp A/D Leu to Moerdijk
- Rotterdam: Nieuwe Maas and Oude Maas
- Hook van Holland to Vlaardingen
- Approaches to Europoort and Hook van Holland
- West Hinders and Outer Gables to Vlisingen and Scheveningen

World
The Next Steps

- Pronto: Tracking Local Operations
Questions?