## METHOD

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$C_B S_2^{2/3} V_e^{2/8}$</td>
<td>$f \left( \frac{1}{h}, \frac{1}{A_2}, \frac{1}{A_w} \right)$</td>
<td>$0.298 \frac{h^2}{L} \left( \frac{V}{T} \right)^{2.289} (h^{0.192}) K_s$</td>
<td>$1.96 \frac{V}{L_{pp}} \frac{F_{nh}^2}{\sqrt{1 - F_{nh}^2}}$</td>
<td>$2.4 \frac{V}{L_{pp}} \frac{F_{nh}^2}{\sqrt{1 - F_{nh}^2}}$</td>
</tr>
</tbody>
</table>

## SHIP

**Largest FISHING BOAT**

**CONDITION:** Barrier Transit, draft = 0.5 Depth, 8.0 kts water speed.

<table>
<thead>
<tr>
<th>LBP</th>
<th>BEAM</th>
<th>Block Co-eff</th>
<th>Draft fwd</th>
<th>Daft Aft</th>
<th>Mean Draft</th>
<th>SPEED</th>
<th>WATER Depth</th>
<th>Channel Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>b</td>
<td>Cb</td>
<td>Df</td>
<td>Da</td>
<td>h</td>
<td>V</td>
<td>T</td>
<td>B2</td>
</tr>
<tr>
<td>14.00 m</td>
<td>6.00 m</td>
<td>0.8000</td>
<td>1.80 m</td>
<td>1.60 m</td>
<td>1.70 m</td>
<td>8.00 kt</td>
<td>3.40 m</td>
<td>25.00 m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deep / Shallow Water</th>
<th>Deep</th>
<th>Shallow</th>
<th>Shallow</th>
<th>Deep</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQUAT (max)</td>
<td>0.53 m</td>
<td>0.49 m</td>
<td>0.97 m</td>
<td>0.10 m</td>
<td>0.12 m</td>
</tr>
</tbody>
</table>

| Depth / Draught ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Blockage factor S     | 0.120 | 0.120 | 0.120 | 0.120 | 0.120 |
| Velocity Return Factor S2 | 0.136 | 0.136 | 0.136 | 0.136 | 0.136 |
| Width of Influence    | 51.06 m | 51.06 m | 51.06 m | 51.06 m | 51.06 m |
| Width of Influence    | 0.028 nm | 0.028 nm | 0.028 nm | 0.028 nm | 0.028 nm |
| Fwd Pressure Field Extent | 2.00 L | 2.00 L | 2.00 L | 2.00 L | 2.00 L |
|                        | 102.12 m | 102.12 m | 102.12 m | 102.12 m | 102.12 m |
|                        | 0.055 nm | 0.055 nm | 0.055 nm | 0.055 nm | 0.055 nm |

**Vessel will trim/ squat by:** Bow
### METHOD

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LBP L</td>
<td>14.00 m</td>
<td>14.00 m</td>
<td>14.00 m</td>
</tr>
<tr>
<td>BEAM B</td>
<td>6.00 m</td>
<td>6.00 m</td>
<td>6.00 m</td>
</tr>
<tr>
<td>Block Co-eff Cb</td>
<td>0.8500</td>
<td>0.8000</td>
<td>0.8000</td>
</tr>
<tr>
<td>Draft fwd Df</td>
<td>1.60 m</td>
<td>1.80 m</td>
<td>1.80 m</td>
</tr>
<tr>
<td>Daft Aft Da</td>
<td>1.60 m</td>
<td>1.60 m</td>
<td>1.60 m</td>
</tr>
<tr>
<td>Mean Draft h</td>
<td>1.70 m</td>
<td>1.70 m</td>
<td>1.70 m</td>
</tr>
<tr>
<td>SPEED V&lt;sub&gt;k&lt;/sub&gt;</td>
<td>8.00 kt</td>
<td>8.00 kt</td>
<td>8.00 kt</td>
</tr>
<tr>
<td>WATER Depth T</td>
<td>3.40 m</td>
<td>3.40 m</td>
<td>3.40 m</td>
</tr>
<tr>
<td>Channel Width B2</td>
<td>25.00 m</td>
<td>25.00 m</td>
<td>25.00 m</td>
</tr>
</tbody>
</table>

#### SUMMARY

<table>
<thead>
<tr>
<th>Vessel</th>
<th>Largest FISHING BOAT</th>
<th>Method</th>
<th>SQUAT</th>
<th>Width of Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barass [3]</td>
<td>0.53</td>
<td>51.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jachowski</td>
<td>0.49</td>
<td>51.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eryuzlu et al</td>
<td>0.97</td>
<td>51.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hooft &amp; Tuck</td>
<td>0.10</td>
<td>51.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICORELS</td>
<td>0.12</td>
<td>51.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barass [1]</td>
<td>0.54</td>
<td>46.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millward [2]</td>
<td>0.14</td>
<td>51.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td>5.60</td>
<td>51.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average of All</td>
<td>1.06</td>
<td>See Note Below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ave EXCL Japanese</td>
<td>0.30</td>
<td>Bow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Squat</td>
<td>0.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Squat</td>
<td>5.60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min Influence width</td>
<td>46.88</td>
<td>m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or 0.025 nm</td>
<td>51.0615 m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max Influence width</td>
<td>0.028</td>
<td>nm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fwd Pressure Field</td>
<td>89.06</td>
<td>m Minimum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or 0.055 nm</td>
<td>102.12 m</td>
<td>Maximum</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Note:
- Japanese methodology consistently delivers high results, therefore, comparisons are provided that exclude this method.

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