

As a full scantling vessel with
 sections as shown on plan.
 Provisional Assignment.

Lloyd's Register of Shipping.

Index. No. _____
 (For London Office only).

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Odense 79-80.</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <i>465.0'</i> Breadth <i>62.0'</i> Depth <i>40.5'</i>					Date of Survey <i>6/7/34.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature
Coefficient of fineness for use with Tables <i>assumed .74.</i>					Particulars of Classification <i>+ 100 RI.</i>

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth <i>40.50'</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>(40.54 - 31.00) 3 = + 28.41'</i>	Moulded Breadth (B) <i>62.0</i> Standard Round of Beam = $\frac{B \times 12}{50} = 14.88$ Ship's Round of Beam = <i>12.00</i> Difference <i>2.88 def.</i>
Stringer plate <i>.04'</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Restricted to
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{2.88}{4} \times \frac{44.98}{62} = + .54.$
Depth for Freeboard (D) = <i>40.54'</i>		

DEDUCTION FOR SUPERSTRUCTURES.

Taken from plans.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed	<i>83.54</i>	<i>83.54</i>	<i>8.5'</i>	<i>✓</i>	<i>83.54</i>
„ overhang aft					
„ overhang forward					
F'cle enclosed	<i>32.44</i>	<i>32.44</i>	<i>4.5'</i>	<i>✓</i>	<i>32.44</i>
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft ...					
„ „ forward					
Total	<i>116.34</i>	<i>116.34</i>			<i>116.34</i>

Standard Height of Superstructure *7.5'*
 „ „ R.Q.D. *✓*
 Deduction for complete superstructure *42.0.*
 Percentage covered $\frac{S}{L} = 25.02'$
 „ „ $\frac{S_1}{L} = 25.02'$
 „ „ $\frac{E}{L} = 25.02'$
 Percentage from Table, Line A. *12.51'*
 (corrected for absence of forecastle (if required))
 Percentage from Table, Line B. *15.86'*
 (corrected for absence of forecastle (if required))
 Interpolation for bridge less than 2L (if required) $12.51 + \left(\frac{83.54}{93.0} \times 3.35 \right)$
12.51 + 3.01 = 15.52.
 Deduction = *42.0 x .1562 = - 6.52.*

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	<i>56.50</i>	1		<i>48.00</i>	<i>48.00</i>	1	<i>48.00</i>
$\frac{1}{4}$ L from A.P.		4		<i>24.44</i>	<i>24.44</i>	4	<i>97.76</i>
$\frac{2}{4}$ L „		2		<i>7.12</i>	<i>7.12</i>	2	<i>14.24</i>
Amidships		4		<i>0</i>	<i>0</i>	4	<i>0</i>
$\frac{3}{4}$ L from F.P.		2		<i>12.25</i>	<i>12.25</i>	2	<i>24.50</i>
$\frac{1}{4}$ L „		4		<i>46.06</i>	<i>46.06</i>	4	<i>184.24</i>
F.P.	<i>113.00</i>	1		<i>102.00</i>	<i>102.00</i>	1	<i>102.00</i>
Total			<i>508.50</i>				<i>470.74</i>

Mean actual sheer aft = *Deficient*
 Mean standard sheer aft =
 Mean actual sheer forward = *Deficient*
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
 „ „ aft of „ = *Does not apply.*

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{37.76}{18} \times (.75 - .1251) = + 1.31.$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *40.54'*
 Summer freeboard = *10.00*
 Moulded draught (d) = *30.54'*

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = *7.64*
= 7.34

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\Delta}{40 T}$ inches

= *4 3/4*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction	<i>28.41</i>	<i>✓</i>
Deduction for superstructures	<i>6.52</i>	<i>✓</i>
Sheer correction	<i>1.31</i>	<i>✓</i>
Round of Beam correction	<i>.54</i>	<i>✓</i>
Correction for Thickness of Deck amidships	<i>✓</i>	<i>✓</i>
Other corrections, scantlings, etc.	<i>✓</i>	<i>✓</i>

30.56 6.52 + 24.04

Summer Freeboard = *119.84*

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc	<i>15 1/2'</i>	Tropical Fresh Water Freeboard	<i>8' - 8 1/2"</i>
Fresh Water Line „ „	<i>7 3/4'</i>	Fresh Water „ „	<i>9' - 4 1/4"</i>
Tropical Line „ „	<i>7 3/4'</i>	Tropical „ „	<i>9' - 4 1/4"</i>
Winter Line below „ „	<i>7 3/4'</i>	Winter „ „	<i>10' - 7 3/4"</i>
Winter North Atlantic Line „ „	<i>✓</i>	Winter North Atlantic „ „	<i>✓</i>

Moulded Summer draft. *20' - 6 3/4"*

1102
367

