

OWERRI

For LONDON OFFICE ONLY

LLOYD'S REGISTER OF SHIPPING
UNITED WITH THE BRITISH CORPORATION REGISTER
SURVEYS FOR FREEBOARD
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received _____
Index No. 46497
Govt. Copy _____
Owners C11 _____

Ship's Name "ONDO"	Official Number 187146	Nationality and Port of Registry BRITISH LIVERPOOL.	Gross Tonnage 5435	Date of Build 10, 56.	Port of Survey Belfast
Moulded Dimensions: Length 425'-0" Breadth 62'-0" Depth 25'-6"				Date of Survey during construction	
Freeboard Length 425'-9 1/2" to centre of Rudder stock				Surveyor's Signature A. S. Fletcher.	
Moulded displacement at moulded draught = 85 per cent. of moulded depth 12100 tons				Particulars of Classification * 100 A1.	
Coefficient of fineness for use with Tables .735 .740				(CLASS CONTEMPLATED.)	

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth	<u>25.5'</u>	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B) <u>62'-0"</u>
Stringer plate : <u>29"</u>	<u>.02'</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>14.88"</u>
Wood Sheathing on exposed deck			Ship's Round of Beam $\frac{6' \text{ UPPER DECK}}{15' \text{ SHELTER "}} =$ <u>6.00"</u>
T ($\frac{L-S}{L}$) =		<u>(29.39 - 25.52) 3 = - 8.61"</u>	Difference <u>8.88"</u>
Depth for Freeboard (D) =	<u>25.52</u>	If restricted by superstructures	Restricted to
			Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{8.88}{4} \times .0067 = +.02"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	40'.54'	40.84	8.5'		40.84
" overhang	2.56	1.25			1.25
R.Q.D. enclosed	✓				
" overhang	✓				
Bridge enclosed	377.75'	377.75	SEE SKETCH OVER		377.75
" overhang aft ... ..	.56	.38			.38
" overhang forward ...	✓				
F'cle enclosed	✓				
" overhang	✓				
Trunk aft	✓				
" forward	✓				
Tonnage opening aft ...	4.56	2.94	8.5'		2.94
" forward	✓				
" Total	425.79'	422.86			422.86

Standard Height of Superstructure 7.50

" " R.Q.D. _____

Deduction for complete superstructure 42.00

Percentage covered $\frac{S}{L} = 100$

" " $\frac{S_1}{L} =$ } 99.32

" " $\frac{E}{L} =$

Percentage from Table, Line A. +8 99.16

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than $\cdot 2L$ (if required)

Deduction = $42.00 \times .9916 = -41.65$

SHEER CORRECTION.

Station	Standard Ordnate	S M	Product	Actual Ordnate	Effective Ordnate	S M	Product
A.P. ...	52.58	1	52.58	51.875	63.88	1	63.88
$\frac{1}{2}$ L from A.P. ...	23.40	4	93.60	23.06	28.43	4	113.72
$\frac{2}{6}$ L " ...	5.78	2	11.56	5.8	7.03	2	14.06
Amidships ...	0	4	0	0	0	4	0
$\frac{2}{6}$ L from F.P. ...	11.57	2	23.14	11.25	12.66	2	25.32
$\frac{1}{2}$ L " ...	46.77	4	187.16	45.68	51.23	4	204.92
F.P. ...	105.16	1	105.16	103.125	115.13	1	115.13
Total ...			478.20	+12			537.03

$$\frac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}} =$$
$$\frac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}} = 7.1$$

$\frac{\text{Length of enclosed superstructure}}{L}$ forward of amidships =

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18}$
 If limited on account of midship superstructure.

$$\left(.75 - \frac{S}{2L} \right) = \frac{64.73}{18} (.75 - .50) = -.90''$$

If limited to

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

Deduction for Tropical Freeboard.		
Addition for Winter and Winter North Atlantic Freeboard.		
		Ft.
Depth to Freeboard Deck	=	25.52
Summer freeboard	=	2.67
Moulded draught (d)	=	22.85
Keel allowance	=	
Extreme draught	=	
Deduction for Tropical freeboard and addition for	=	
Winter freeboard	= $\frac{d}{4}$ inches =	5.71 = 5.74
Addition for Winter North Atlantic Freeboard (if required)=		

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 12659$

Tons per inch immersion at summer load water line

$T = 52.39$

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

$= 6.04" = 6"$

FULL DRAFT. Full A. T.P.

22' - 0"	12124 Tons.	51.95.
24' - 0"	13383 "	52.98.

TABULAR FREEBOARD corrected for Flush Deck (if required)			
Correction for coefficient			
$\frac{.74 + .68}{1.36}$			
Depth Correction	...	...	...
Deduction for superstructures	...	...	...
Sheer correction	...	...	...
Round of Beam correction	...	...	...
Correction for Thickness of Deck amidships	...	...	...
Other corrections, scantlings, etc.	...	...	...

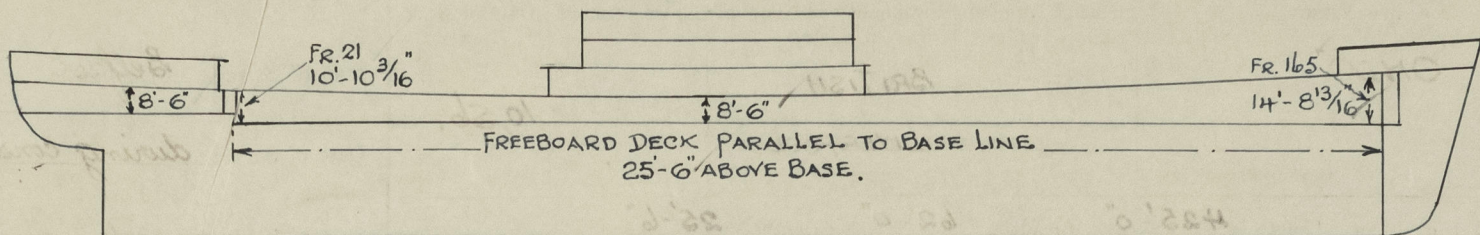
Deck (if required)		79.59
		83.10
+	-	
	8.61	
	41.65	
	90	
.02		
		AR
		21.9.5
.02	51.16	- 51.14
Summer Freeboard =		31.96

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

Tropical Fresh Water Line above Centre of Disc	...	11 3/4"	Tropical Fresh Water Freeboard
Fresh Water Line	" "	6 "	Fresh Water "
Tropical Line	" "	5 3/4	Tropical "
Winter Line	below "	5 1/4	Winter "
Winter North Atlantic Line	" "	...	Winter North Atlantic "

Endo.

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.



Tonnage opening aft :- 4'-6" x 18'-0". Efficient temporary means of closing are to be provided.
 End Bulk heads of the Superstructures :- Are to be closed by means of portable steel plates secured by hooked bolts, which will not pass thro' the bulkhead and spaced not less than 12" apart, openings 5'-0" x 3'-1" with sills 12" high.
 Openings in tween dk. bulkheads other than tonnage well are 5'-0" x 3'-1" with 12" sills and are closed with portable steel plates with hooked bolts.

The following information is given in the event of the Tonnage Opening being closed at some future date :-

Moulded displacement at moulded draft = 85% of moulded depth = 1654.3 tons.

Coefficient of fineness for use with table = .755.

Moulded Depth. 34'-0"

Stringer plate thickness at Shelter deck amidship. .40"

Moulded draft	Full Δ	T.P.I.
24'-0"	13389 tons	53.01
26'-0"	14667 "	53.95.

Difference of Freeboard length between open & closed tonnage opening

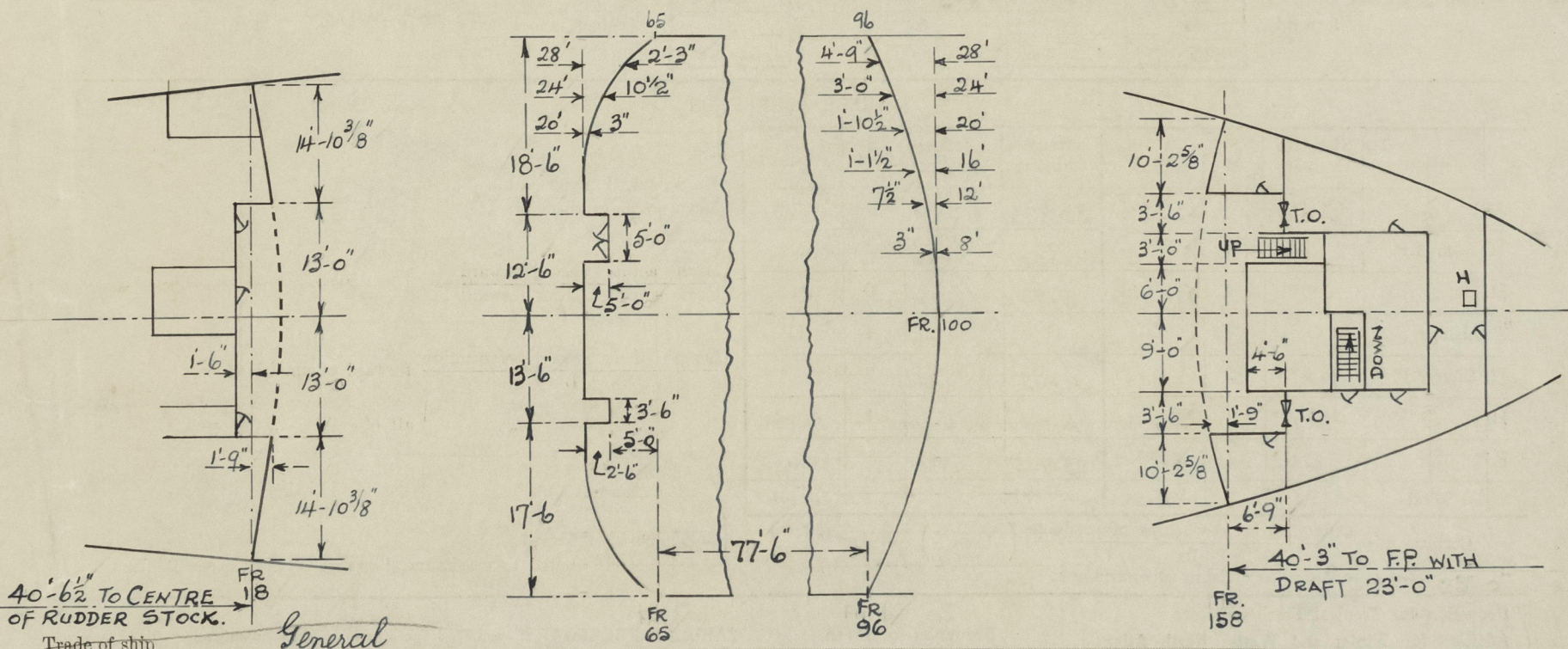
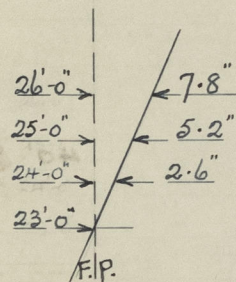
Particulars of closing appliances :-

In Forecastle front :- Tonnage openings P. & S. sides, 5'-0" x 3'-1" with 18" sills, 2 steel doors 6'-6" x 2'-6" with 18" sills.

In Bridge front :- One 2" solid wood doors 5'-6" x 2'-6" with 18" sills, operated from both sides.

In Bridge End :- One double & one single 2" wood doors with 18" sills " " "

In Poop Front :- Two 2" solid wood doors & one steel door, all with 18" sills, " "



Names of sister ships

"Omni"
 OTI Yard No 1546.

Builder's name and yard number

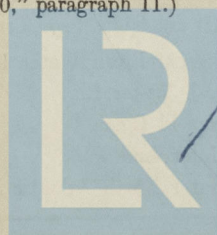
Harland & Wolff Ltd, Belfast. Yard No 1554.

Owners

Elder Dempster Lines Ltd.,

Fee £

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



© 2020

Lloyd's Register
 Foundation