

Rpt. C.11.

DISCLOSED SECTION 429
Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Index. No. 28292
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Forecastle, Bridge & Raised Quarter Deck

Port of Survey Strood.
Date of Survey 27th June 1932
Name of Surveyor Chas. H. Rocks
Particulars of Classification +100 A1.

(Type of Superstructures.)
Ship's Name S.S. "RACE FISHER"
(ex "ORLEIGH")
Nationality and Port of Registry British Registry 140859
Gross Tonnage 484
Date of Build 1919-12
Moulded Dimensions: Length 150'0" Breadth 25'6" Depth 12'9" UPPER 3'
Moulded displacement at moulded draught = 85 per cent. of moulded depth 849 tons
Coefficient of fineness for use with Tables .717

Depth for Freeboard (D)
Moulded depth ... 12.75
Stringer plate03
Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$
Depth for Freeboard (D) = 12.78

Depth correction
(a) Where D is greater than Table depth
(D-Table depth) R =
(12.78-10.0) 1.154 = 3.21
(b) Where D is less than Table depth (if allowed)
(Table depth-D) R =
If restricted by superstructures

Round of Beam correction
Moulded Breadth (B) 25.5
Standard Round of Beam = $\frac{B \times 12}{50} = 6.12$
Ship's Round of Beam = 7.88
Difference
Restricted to
Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{88}{4} \times (.2384) = .05$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...	84.50	84.50	3.5		84.50
" overhang ...	8.75	8.75	7.46		8.75
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...	20.87	20.87	6.96		20.87
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	114.37	114.24			114.24

Standard Height of Superstructure 6.0
" " R.Q.D. 3.33
Deduction for complete superstructure 21.0
Percentage covered $\frac{S}{L} = \frac{76.1}{150} = .507$
" $\frac{S_1}{L} = \frac{76.1}{150} = .507$
" $\frac{E}{L} = \frac{76.1}{150} = .507$
Percentage from Table, Line A. 70.5A
(corrected for absence of forecastle (if required))
Percentage from Table, Line B.
(corrected for absence of forecastle (if required))
Interpolation for bridge less than 2L (if required)
Deduction = 14.82

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	25.0	1		25.00	22.0	22.0	1		25.00
1/4 L from A.P. ...	11.12	4		44.48	12.5	11.85	4		44.48
2/4 L " ...	2.75	2		5.50	3.2	2.96	2		5.50
Amidships ...		4					4		
3/4 L from F.P. ...	5.50	2		11.00	3.5	3.75	2		7.50
1/4 L " ...	22.25	4		89.00	15.0	15.01	4		60.04
F.P. ...	50.00	1		50.00	36.0	36.0	1		36.00
Total ...				224.98					224.98

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 = 122
" " aft of " = 50

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$
If limited on account of midship superstructure.

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.
Depth to Freeboard Deck = 16.28
Summer freeboard = 3.94
Moulded draught (d) = 12.34
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3.08
Addition for Winter North Atlantic Freeboard (if required) = 5.08

Deduction for Fresh Water.
Displacement in salt water at summer load water line
 $\Delta = 996$
Tons per inch immersion at summer load water line
 $T = 7.8$
Deduction = $\frac{\Delta}{40T}$ inches
 $3.14 = 3\frac{1}{4}$

TABULAR FREEBOARD corrected for Flush Deck (if required)
Correction for coefficient
Depth Correction ... 3.21
Deduction for superstructures ... 14.82
Sheer correction95
Round of Beam correction05
Correction for Thickness of Deck amidships
Other corrections, scantlings, etc. R.O.D. 4200
Summer Freeboard = 47.22

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, WOOD, Steel, Deck:-
Tropical Fresh Water Line above Centre of Disc ... 64
Fresh Water Line " " ... 34
Tropical Line " " ... 3
Winter Line below " " ... 3
Winter North Atlantic Line " " ... 5

RAISED QUARTER
Tropical Fresh Water Freeboard ... 3-11 1/4
Fresh Water " " ... 3-5
Tropical " " ... 3-8
Winter " " ... 4-2 1/4
Winter North Atlantic " " ... 4-4 1/4

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
← UPPER DECK → ← R. Q. Deck → R. Q. Deck									
Description of Hatchway	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...
COAMINGS	Height above Deck	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	Stiffeners	...	...	...	...	...	...	...	...
	Brackets, Stays	...	...	...	...	...	...	...	...
HATCH BEAMS	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
	Scantling and Sketch	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
FORE AND AFTERS	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
	Unsupported Lengths	...	...	...	...	...	...	...	...
	Scantling* and Sketch	...	...	...	...	...	...	...	...
HATCH COVERS	Material	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	How fitted	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
Spacing of Cleats	...	...	...	...	...	...	...	...	...
Number of Tarpaulins	...	...	...	...	...	...	...	...	...

*Are wood fore and afters steel shod at all bearing surfaces? *Yes*

Are battens and wedges efficient and in good condition? *Yes*

Are tarpaulins in good condition and in accordance with rule requirements? *Yes, except Hatch in Fore & Bunker Hatchways on R. Q. Deck and Casing Top which require to be renewed.*

Are lashings provided in accordance with rule requirements? *Yes*

Particulars of fiddle, funnel and ventilator coamings:— *Fiddle, funnel & vent coamings in satisfactory condition.*

Fiddle openings fitted with steel gratings and hinged steel covers.

Engine Room skylight of 2" Teak in satisfactory condition.

Bunker Hatch 13'0" x 3'6" Coaming 11" x 40. 2 1/2" wood covers fitted F&A.

Cleats spaced 36" 2 Tarps. Bearing surface 2"

Particulars of Flush Bunker Scuttles:—

Nil

Particulars of Companionways:— *Companion to Bridge Space - Entrance from R. Q. Deck - Steel construction with 1 3/8" panelled door (see openings in Bridge After Bulkhead).*

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

Fore Deck:— 2 @ 8" dia Coaming 29" x 30 To Crew Space

Upper Deck:— 1 @ 12" " 42" x 40 " No. 1 Hold protected by Fore Bld

Bridge Deck:— 2 @ 4 1/2" " 7" x 40 S.N. to Bridge Space

R. Q. Deck:— 1 @ 12" " 43" x 40 To No. 2 Hold fitted between fore end of casing and aft end Coaming of No. 2 Hatch.

Temporary closing appliances require to be made good. wood plugs & canvas covers

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

Fore peak:— On Fore Deck 3" dia S.N. Height 4" to opening

Aft peak:— (1 p 15) On R. Q. Deck 3" dia S.N. Height 5" to opening.

Temporary closing appliances are provided, wood plugs and canvas covers

Particulars of Gangway Cargo and Coaling Ports:—

Nil



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Particulars of Scuppers and Sanitary Discharge Pipes:—

Scuppers & Sanitary discharges fitted with open ends discharging above upper & raised Q-decks.

Particulars of Side Scuttles:—

In Teste & Bridge spaces of substantial construction and efficient condition. all fitted with hinged deadlights.

Particulars of Guard Rails:—

Teste Deck:— Height 3'0 2 rails stanchion spaced 4'0.
 For' Well:— Height 4'2 30 plating 5" BA Top Rail Stays T Bar 5x3 spaced 5'3
 Bridge Deck:— Height 3'2 25 plating 4x2 Teak Rail Stays T Bar 5x3 spaced 4'6 to 5'0
 R. Q. Deck:— Height 3'4 25 plating 5" BA Top Rail Stays T Bar 5x3 spaced 5'3

Particulars of Gangways, Lifelines, etc.:—

No permanent fittings.
 Suitable provision is made for noggling lifelines between the brags & etc

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ...	84'6	3'4	1'9 x 1'3 3'0 x 9"	4 4	8.75 sq ft 17	16.9.
Forward Well ...	32'8	4'2	2'0 x 1'3 3'0 x 9"	2 2	5.0 sq ft 9.34	9.75

State position of each freeing port (F. and A. position and height above deck edge) } After Well:— B 11'6 18'6 18'0 22'0
 } Forward Well:— 12'6 15'6 4'9
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Sill 11"
 Sill 11"
 Additional area where sheer is less than standard. Fitted with planks no rails
 Steel retaining clips fitted.

Particulars of Superstructures, Trunks, Casings, Deckhouses.

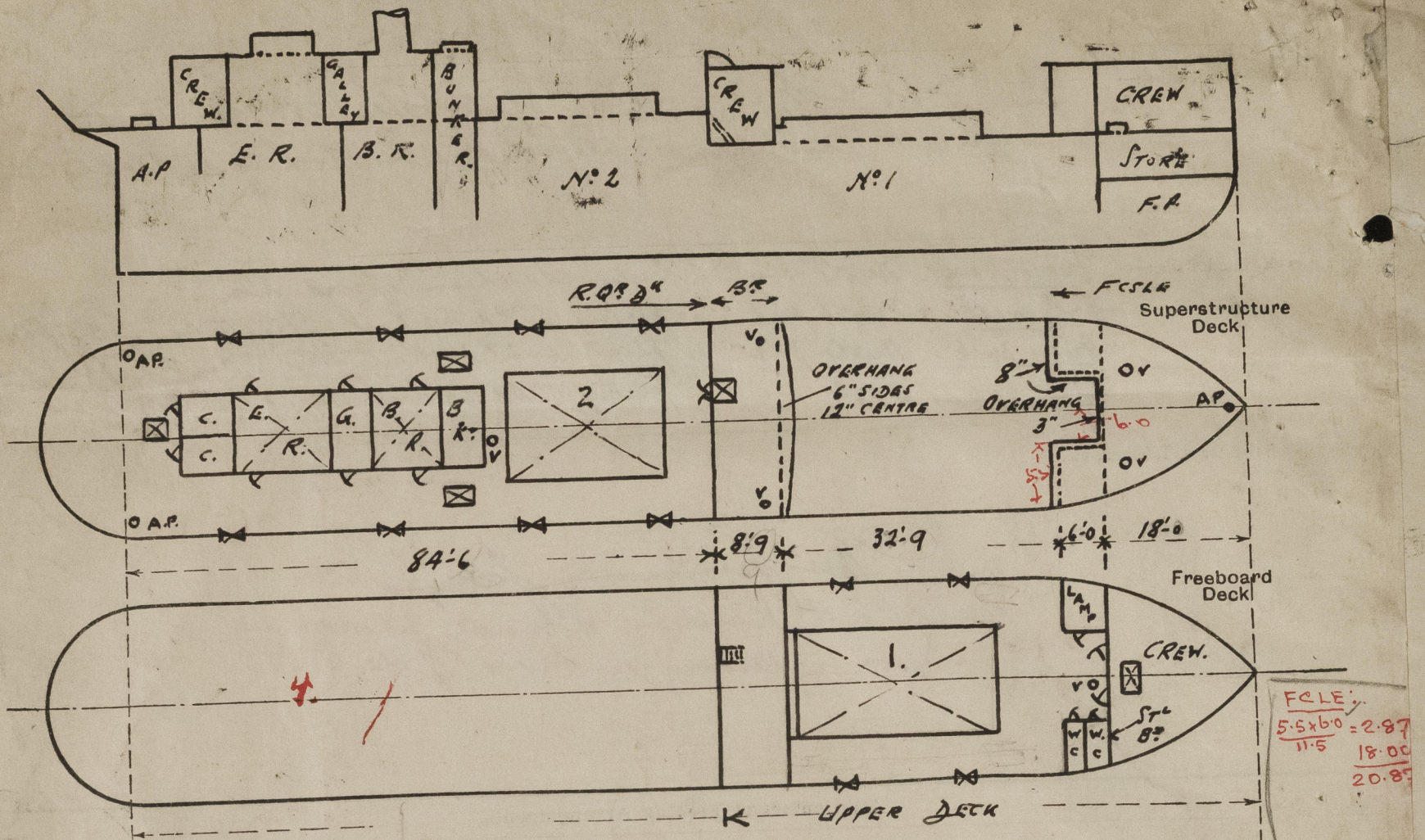
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ...	✓							
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead ...	30	30	5" BA & A	30"	A 4" T & B	Nil	15"	3'6
Bridge, Forward Bulkhead ...	30	30	5x3x.44 BA	30	A 4" T & B	4'10 x 2'3	15"	7'5
Forecastle Bulkhead ...	30	26	3x2 1/2 x 40 A	42"	Nil	Nil	18"	7'5
Trunk, Aft ...	✓					4'4 x 1'10	18"	6'11
Trunk, Forward ...	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	30	26	2 1/2 x 2 1/2 x 26	30	B 4" Top	4'4 x 1'10	18"	6'6
Exposed Machinery Casings on Superstructure Decks ...	✓							
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	✓							
Deckhouses on Flush Deck Ships ...	✓							

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead ...	✓
Raised Quarter Deck Bulkhead ...	Nil
Bridge, After Bulkhead ...	1 3/8 (panel) hinged wood door operated both sides. (Fastenings to the plate in section)
Bridge, Forward Bulkhead ...	Nil
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Superstructure Decks ...	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	✓
Deckhouses on Flush Deck Ships ...	✓

no openings
 no openings
 Hinged steel doors operated both sides.
 Hinged steel doors operated both sides

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



2 1/2" Sheathing on Upper Deck in Fore & Bridge (Accomd.)

State any special features in the construction of the ship:—

from Draft scale on board:—

Draft	Draft	T.P.I
12'-3	975	7.8
11'-0	858	7.63
10'-0	765	7.51

modered depth 12.95
35% = 10.84.
Keel = 10.
10.94

11'-0" draught Δ = 858.
0.06x12x7.63 = 5
Δ 2 10.94 = 853.
Small = 849.

Survey held afloat - vessel discharging.
Vessel leaving Stroud 28th June, future movements not known on board.

Builder's name and yard number... Robert Cook & Son L^d, Appledore Yard Nº 185

Names of sister ships... S. S. "ORTONA" (?)

Owners... James Fisher & Sons L^d Barrow-in-Furness.

Fee £ 5 : 2 : 0 Received by me

Exp 1-0-0 2/30/6/32



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