

WRECK
Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.Computation of Freeboard for Steamer, Sailing Ship, Tanker
having POOP & FORECASTLE on shell deckPort of Survey NEWCASTLEDate of Survey 19th JULY 1932Name of Surveyor YoungParticulars of Classification + 100 R.I.S.S. Liv. No. 2-27 shell deck with fwd.

(Type of Superstructures.)

Ship's Name FRESNO STAR. Nationality and Port of Registry BRITISH LONDON Official Number 141930 Gross Tonnage 7998 Date of Build 1919

Moulded Dimensions: Length 449.5 Breadth 58.0 Depth 32.0 To U.D. 40.0 To S.D. 40.0

Moulded displacement at moulded draught = 85 per cent. of moulded depth 19300 tons

Coefficient of fineness for use with Tables .763

Depth for Freeboard (D)

Moulded depth 40.00

Stringer plate05

Sheathing on exposed deck

$T \left(\frac{L-S}{L} \right) =$ ✓

Depth for Freeboard (D) = 40.05

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R = $(40.05 - 29.96) 3.00$
= + 30.27

(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) 58.00

Standard Round of Beam = $\frac{B \times 12}{50} =$ 13.92

Ship's Round of Beam = 12"

Difference Deficient 1.92

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{1.92}{4} \times .8354 = + .40"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<u>31.0</u>	<u>31.00</u>	<u>7'-6"</u>		<u>31.00</u>
" overhang ...	<u>✓</u>				
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Forecastle enclosed ...	<u>43.0</u>	<u>43.00</u>	<u>7'-6"</u>		<u>43.00</u>
" overhang ...	<u>✓</u>				
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<u>74.00</u>	<u>74.00</u>			<u>74.00</u>

Standard Height of Superstructure 7.50

" " R.Q.D. ✓

Deduction for complete superstructure 42.00

Percentage covered $\frac{S}{L} =$ 16.46%

" " $\frac{S_1}{L} =$ 16.46%

" " $\frac{E}{L} =$ 16.46%

Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) 8.23%

Percentage from Table, Line B.
(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required)

Deduction = $42.00 \times .0823 = - 3.46"$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>54.95</u>	1		<u>54.95</u>	<u>60</u>	<u>60.00</u>	1		<u>60.00</u>
$\frac{1}{2}$ L from A.P. ...	<u>24.45</u>	4		<u>97.80</u>	<u>20.5</u>	<u>20.54</u>	4		<u>82.16</u>
$\frac{2}{3}$ L " ...	<u>6.04</u>	2		<u>12.08</u>	<u>5</u>	<u>5.13</u>	2		<u>10.26</u>
Amidships ...	<u>✓</u>	4		<u>✓</u>	<u>0</u>	<u>✓</u>	4		<u>✓</u>
$\frac{3}{4}$ L from F.P. ...	<u>12.09</u>	2		<u>24.18</u>	<u>5</u>	<u>5.01</u>	2		<u>10.02</u>
$\frac{1}{4}$ L " ...	<u>48.91</u>	4		<u>195.64</u>	<u>20.5</u>	<u>20.04</u>	4		<u>80.16</u>
F.P. ...	<u>109.90</u>	1		<u>109.90</u>	<u>60</u>	<u>60.00</u>	1		<u>60.00</u>
Total ...				<u>494.53</u>					<u>302.00</u>

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 " = NIL

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{191.95}{18} (.75 - .0823) = + 7.12"$

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 = 40.05 Ft.

Summer freeboard = 11.04

Moulded draught (d) = 29.01

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 7.25" = 7 $\frac{1}{4}$ "

Addition for Winter North Atlantic Freeboard (if required) = ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$ 16330

Tons per inch immersion at summer load water line

$T =$ 53

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

= 7.70 = 7 $\frac{3}{4}$ "

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction ...	<u>30.27</u>	<u>-</u>
Deduction for superstructures ...	<u>-</u>	<u>3.46</u>
Sheer correction ...	<u>7.12</u>	<u>-</u>
Round of Beam correction ...	<u>.40</u>	<u>-</u>
Correction for Thickness of Deck amidships ...	<u>-</u>	<u>-</u>
Other corrections, scantlings, etc. ...	<u>5.97</u>	<u>-</u>

Summer Freeboard =

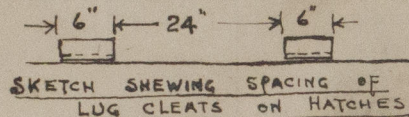
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel Deck:

Tropical Fresh Water Line above Centre of Disc ...	<u>15"</u>	Tropical Fresh Water Freeboard ...	<u>11$\frac{1}{2}$"</u>
Fresh Water Line " " ...	<u>7$\frac{3}{4}$"</u>	Fresh Water " " ...	<u>9$\frac{1}{2}$"</u>
Tropical Line " " ...	<u>7$\frac{1}{4}$"</u>	Tropical " " ...	<u>10$\frac{1}{4}$"</u>
Winter Line below " " ...	<u>7$\frac{1}{4}$"</u>	Winter " " ...	<u>10$\frac{1}{4}$"</u>
Winter North Atlantic Line " " ...	<u>✓</u>	Winter North Atlantic " " ...	<u>11$\frac{1}{4}$"</u>

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
Description of Hatchway	Nº 1	Nº 2	Nº 3	Nº 4	Nº 5	Nº 6	FORW. CROSS BKR. HATCH	AFT CROSS BKR. HATCH	SMALL BUNKER HATCHES	Feet To STOPE	
Dimensions of Hatchway	23'3" x 18'0"	30'0" x 18'0"	24'0" x 18'0"	18'0" x 18'0"	27'0" x 18'0"	27'0" x 18'0"	5'0" x 17'9"	4'5" x 18'0"	5'6" x 3'2"	3'0" x 3'0"	
COAMINGS	Height above Deck	2'6"	2'6"	2'6"	2'6"	2'6"	2'6"	3'0"	19"	2'4"	
	Thickness	.44	.44	.44	.44	.44	.44	.44	.40	.40	
	Sides	.44	.44	.44	.44	.44	.44	.44	.40	.40	
	Stiffeners	7 x 3 x 40	7 x 3 x 40	7 x 3 x 40	7 x 3 x 40	7 x 3 x 40	7 x 3 x 40	7 x 3 x 40	7 x 3 x 40	7 x 3 x 40	
HATCH BEAMS	Number	5	7	5	3	5	5	5	5	5	
	Spacing	3'0" A	4'0" A	5'0" A	3'0" A	3'0" A	3'0" A	3'0" A	3'0" A	3'0" A	
	Scantling and Sketch	2'0" B	3'0" B	3'0" B	2'0" B	2'0" B	2'0" B	2'0" B	2'0" B	2'0" B	
	Bearing Surface	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	
FORE AND AFTERS	Number	WEBS MARKED A	WEBS MARKED B	WEBS MARKED B	WEBS MARKED B	WEBS MARKED B	WEBS MARKED B	WEBS MARKED B	WEBS MARKED B	WEBS MARKED B	
	Spacing	15" to 10 1/4"	15" to 10 1/4"	15" to 10 1/4"	15" to 10 1/4"	15" to 10 1/4"	15" to 10 1/4"	15" to 10 1/4"	15" to 10 1/4"	15" to 10 1/4"	
	Unsupported Lengths	4'0"	4'0"	4'0"	4'0"	4'0"	4'0"	4'0"	4'0"	4'0"	
	Scantling* and Sketch	3 1/2" x 3 1/2" x 45	3 1/2" x 3 1/2" x 45	3 1/2" x 3 1/2" x 45	3 1/2" x 3 1/2" x 45	3 1/2" x 3 1/2" x 45	3 1/2" x 3 1/2" x 45	3 1/2" x 3 1/2" x 45	3 1/2" x 3 1/2" x 45	3 1/2" x 3 1/2" x 45	
HATCH COVERS	Material	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	
	Thickness	3"	3"	3"	3"	3"	3"	3"	3"	3"	
	How fitted	F & A	F & A	F & A	F & A	F & A	F & A	F & A	F & A	F & A	
	Bearing Surface	3"	3"	3"	3"	3"	3"	3"	3"	3"	
Spacing of Cleats	SEE	SKETCH	FOR SPACING	OF CLEATS	3	3	3	3	3	3	
Number of Tarpaulins	3	3	3	3	3	3	3	3	3	3	

*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.
 Are lashings provided in accordance with rule requirements? YES.



Particulars of fiddle, funnel and ventilator coamings:—

Fiddle gratings are protected by steel plate cover permanently attached to structure.
 Funnel & Vents in efficient condition.
 E.R. Skylight strongly constructed of Steel

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways:—

Entrance to Ref. Macky. Space. between Wº 4 & 5 Hatches
 Hinged Steel door 2'0" x 4'9" Sill 18"
 operated both sides.

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

Foyle Dk to Store 12' diam. 3'0" high.
 Foyle Dk to Hold. 20" Diam 3'0" high.
 Shelter Dk to Holds 20" " 3'0" "
 " " Bk's 30" " 3'0" "
 " " 15" " 3'0" "
 Poop to Funnel 20" " 2'4" "
 Lower Cross. 12" " 2'2" "
 Vents are well constructed in accordance with Rule requirements.
 Wood plugs & canvas covers are on board.

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

Foyle & F.P. 4" diam. 2'1" to mouth
 S.D. & D.B. Joints 2 1/2" " 1'8 1/2" "
 Poop to A.P. 3 1/2" " 2'1 1/2" "

Efficient means of closing provided for all air pipes

Particulars of Gangway Cargo and Coaling Ports:—

Coaling Door in Shelter Tween Dk. amidships.
 3'0" x 5'6" Sill 12"
 Secured by 9-1/8 toggle bolts.



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Particulars of Scuppers and Sanitary Discharge Pipes — Shelter Dk Scuppers. Bent Pipe thro deck & shell ✓
Lower Crew Space aft and Ref. Machy Space Bent pipes
thro. deck & shell. Closed inboard by screw down covers.
Sanitary Discharges all iron pipe fitted with M.C.I. Storm Valves. ✓

Particulars of Side Scuttles: In Poop and Lower Crew Spaces. —
9" diam. all fitted with hinged iron deadlights. ✓

Particulars of Guard Rails: —
Hocks 3'-7" high. Stanchions 4'-10" apart 2 Rails ✓
Shelter Dk 3'-9" " " 4'-10" " 3 " ✓
Poop Dk 3'-6" " " 4'-10" " 2 " ✓

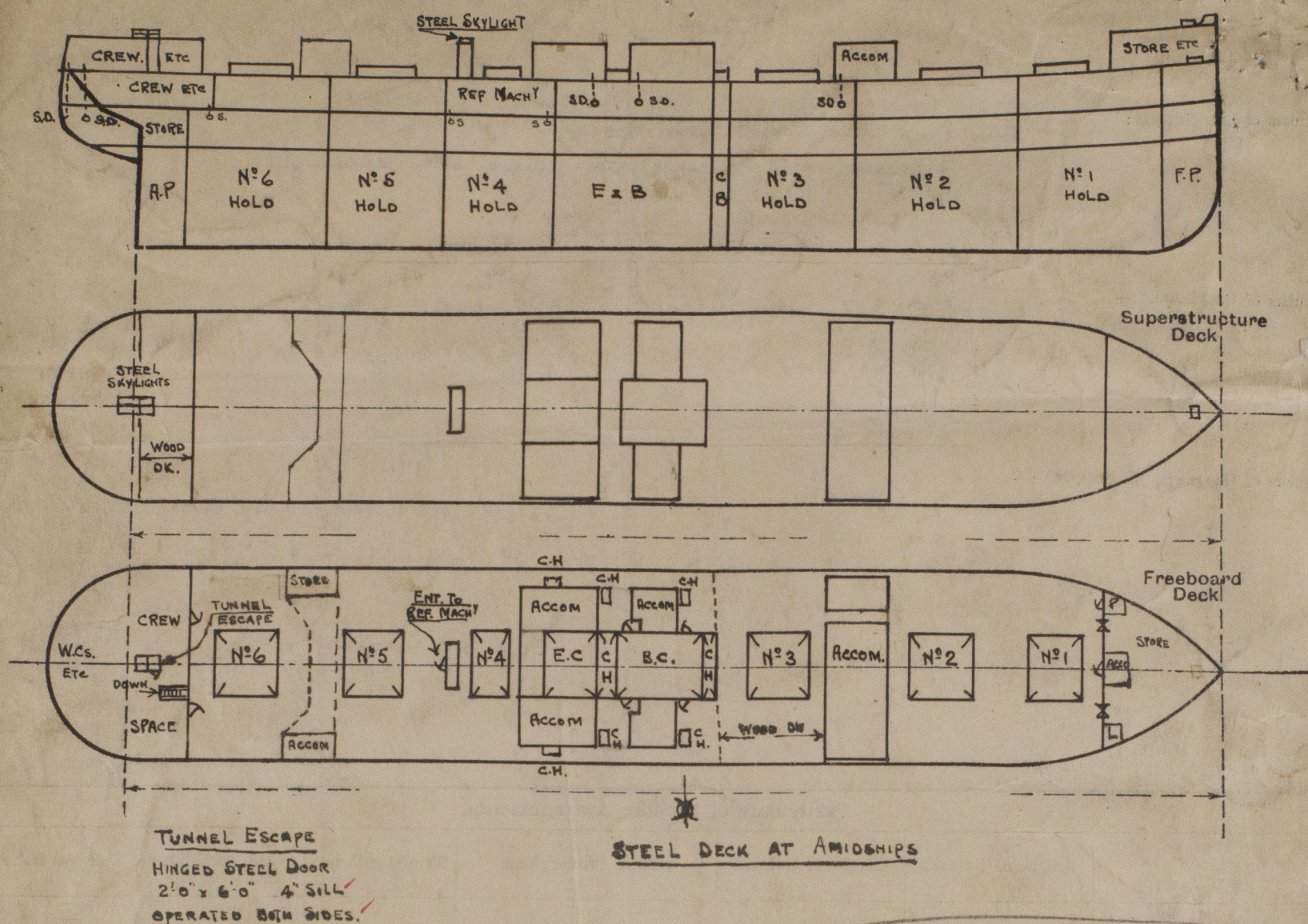
Particulars of Gangways, Lifelines, etc.: —
~~None~~ ✓
Suitable provision made for rigging lifelines which are available for use in any part of the ship which might have to be used by the crew in the regular working of the ship.

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	open Rails					
Forward Well	" "					
State position of each freeing port } After Well:— (F. and A. position and height above deck edge) } Forward Well:— State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Additional area where sheer is less than standard.						

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 ... ..	.40 ✓	.40 ✓	6" x 3 1/2" x .50 ✓	2'-5" ✓	Lugs ✓	2'-0" x 5'-0" ✓	16" ✓	7'-6"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead ... ..	.28 ✓	.28 ✓	3 1/2" x 3" x .40 ✓	2'-3" ✓	None ✓	2'-0" x 5'-4" ✓ 3'-3" x 5'-4"	15" ✓	7'-6"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	.40 ✓	.40 ✓	3" x 3" x .45 ✓	2'-9" ✓	✓	2'-2" x 5'-2" ✓	18" ✓	8'-0"
Exposed Machinery Casings on Super-structure 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	Hinged Steel W.T. Doors secured by 8 Clip handles operated both sides ✓
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead	
Bridge, Forward Bulkhead	
Forecastle Bulkhead	
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	
Exposed Machinery Casings on Super-structure Decks	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships ...	

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 shown on the following sketches:—



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

VESSEL WAS SURVEYED
AFLOAT WHEN LAID UP

OMT

FROM DEADWEIGHT SCALE

Draft	Δ	T.P.I.
29'-0"	15975	52.6
28'-0"	15350	52.25
27'-0"	14750	51.8

Builder's name and yard number **MESSRS. BARCLAY CURLE & CO. GLASGOW.**

Names of sister ships **"ROYAL STAR"**

Owners **BLUE STAR LINE LTD**

Fee £ **15 : 6 : 0**

Received by me



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