

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

6 AUG 1935

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having 2 Dks (Stl U-Teak S) 3rd Dk (Stl) in Nos 1 & 2 holds
with - Poop, Bridge & Forecastle.
(Type of Superstructures.)

Port of Survey SYDNEY N.S.W

Date of Survey 14/6/35 - 20/6/35.

Name of Surveyor A. J. McEwen

Particulars of Classification 100A1
S.S. Syd No 3-2, 35

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
"ORMISTON"	British Melbourne	146682	5832	1922

Moulded Dimensions: Length 390' Breadth 55' Depth 30'-6"

Moulded displacement at moulded draught = 85 per cent. of moulded depth 11,280 tons

Coefficient of fineness for use with Tables .410.

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... <u>30.5'</u>	(a) Where D is greater than Table depth (D-Table depth) R = <u>30.62 - 26.00 = 4.62</u>	Moulded Breadth (B) <u>55'-0"</u>
Stringer plate ... <u>.04'</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <u>30.62 - 26.00 = 4.62</u>	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{55 \times 12}{50} = 13.2$
Sheathing on exposed deck $F \left(\frac{L-S}{L} \right) = .21 \times .34 = .0714$	If restricted by superstructures	Ship's Round of Beam = <u>13.25</u>
Depth for Freeboard (D) = <u>30.67'</u>		Difference = <u>-.05</u>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.05}{4} \times .3981 = .014$

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure
Poop enclosed ... <u>42.12</u>	<u>42.12</u>	<u>7'-9"</u>	-	<u>42.12</u>	<u>7.40</u>
" overhang ... <u>4'-00</u>	<u>2.00</u>	<u>7'-9"</u>	-	<u>2.00</u>	R.Q.D.
R.Q.D. enclosed ...					Deduction for complete superstructure <u>41.33</u>
" overhang ... <u>141.29</u>	<u>141.29</u>	<u>7'-9"</u>	-	<u>141.29</u>	Percentage covered $\frac{S}{L} = \frac{63.00}{100} = 63.00$
Bridge enclosed ... <u>4'-00</u>	<u>2.00</u>	<u>7'-9"</u>	-	<u>2.00</u>	" $\frac{S_1}{L} = \frac{60.24}{100} = 60.24$
" overhang aft ... <u>4'-00</u>	<u>2.00</u>	<u>7'-9"</u>	-	<u>2.00</u>	" $\frac{E}{L} = \frac{60.24}{100} = 60.24$
" overhang forward ... <u>45.92</u>	<u>41.12</u>	<u>7'-9"</u>	-	<u>41.12</u>	Percentage from Table, Line A. (corrected for absence of forecastle (if required))
Trunk aft ...					Percentage from Table, Line B. (corrected for absence of forecastle (if required)) <u>46.41</u>
" forward ...					Interpolation for bridge less than 2L (if required)
Tonnage opening aft ...					Deduction = <u>41.33</u> x <u>46.41</u> = <u>19.18</u>
" forward ...					
Total ... <u>245.93</u>	<u>234.93</u>			<u>234.93</u>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	Mean actual sheer aft =	Mean standard sheer aft =
A.P. ...	<u>49.00</u>	1		<u>49.00</u>	<u>42.00</u>	<u>42.00</u>	1		<u>42.00</u>	Deficient	
$\frac{1}{2}$ L from A.P. ...	<u>21.80</u>	4		<u>87.20</u>	<u>18.40</u>	<u>18.40</u>	4		<u>73.60</u>	Mean actual sheer forward = Deficient	96.44% of Standard.
$\frac{3}{4}$ L " ...	<u>5.39</u>	2		<u>10.78</u>	<u>4.60</u>	<u>4.60</u>	2		<u>9.20</u>	Mean standard sheer forward	
Amidships ...		4					4			Length of enclosed superstructure forward of amidships =	
$\frac{3}{4}$ L from F.P. ...	<u>10.48</u>	2		<u>20.96</u>	<u>10.50</u>	<u>10.50</u>	2		<u>21.00</u>	" aft of " =	Does not apply.
$\frac{1}{2}$ L " ...	<u>43.61</u>	4		<u>174.44</u>	<u>41.80</u>	<u>41.80</u>	4		<u>167.20</u>	Sheer forward.	
F.P. ...	<u>98.00</u>	1		<u>98.00</u>	<u>95.75</u>	<u>95.75</u>	1		<u>95.75</u>	actual	standard
Total ...				<u>440.98</u>					<u>408.75</u>	10.50 3 31.50 10.48 3 32.34	
										41.80 3 123.40 43.61 3 130.83	
										95.75 1 95.75 98.00 1 98.00	
										252.65 261.14	
Correction =	Difference between sums of products	18			$\left(.75 - \frac{S}{2L} \right) = \frac{32.23}{18} \times (.75 - .315) = + 0.48$					If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.	

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient
Depth to Freeboard Deck = <u>30.45'</u>	$\Delta =$	
Summer freeboard = <u>5.58'</u>	Tons per inch immersion at summer load water line	
Moulded draught (d) = <u>25.14'</u>	T =	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>6.29 = 6 1/4</u>	Deduction = $\frac{\Delta}{40T}$ inches = <u>6 1/4</u>	Depth Correction ... <u>13.86</u>
Addition for Winter North Atlantic Freeboard (if required) =		Deduction for superstructures ... <u>19.18</u>
		Sheer correction ... <u>.48</u>
		Round of Beam correction ...
		Correction for Thickness of Deck amidships ... <u>1.54</u>
		Other corrections, scantlings, etc. ...
		16.18 19.18 - 3.00
		Summer Freeboard = <u>66.92</u>

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line.

Wood	Steel	Deck
Tropical Fresh Water Line above Centre of Disc ... <u>12 1/2"</u>	Tropical Fresh Water Freeboard ... <u>4'-6 1/2"</u>	
Fresh Water Line " " ... <u>6 1/4"</u>	Fresh Water " " ... <u>5'-0 3/4"</u>	
Tropical Line " " ... <u>6 1/4"</u>	Tropical " " ... <u>5'-0 3/4"</u>	
Winter Line below " " ... <u>6 1/4"</u>	Winter " " ... <u>6'-1 1/4"</u>	
Winter North Atlantic Line " " ...	Winter North Atlantic " " ...	

16 AUG 1935

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MARKING FORM
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Armistone

Particulars of fiddley, funnel and ventilator coamings:—

Particulars of Flush Bunker Scuttles:— *None.*

Particulars of Companionways :—

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

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

Particulars of Gangway Cargo and Coaling Ports:—

Particulars of Scuppers and Sanitary Discharge Pipes —

Particulars of Side Scuttles:

Particulars of Guard Rails :—


Particulars of Gangways, Lifelines, etc. :—

Particulars of Freeing Arrangements.

State position of each freeing port ... { After Well :— Poop → 20' 2" → 13' 0" → 17' 6" → 14' 8" → Bridge
(F. and A. position and height above deck edge) { Forward Well :— Bridge → 9' 0" → 13' 0" → 25' 5" → 22' 6" → Forecastle

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.

Hinged Steel Shutters :—  13" above deck

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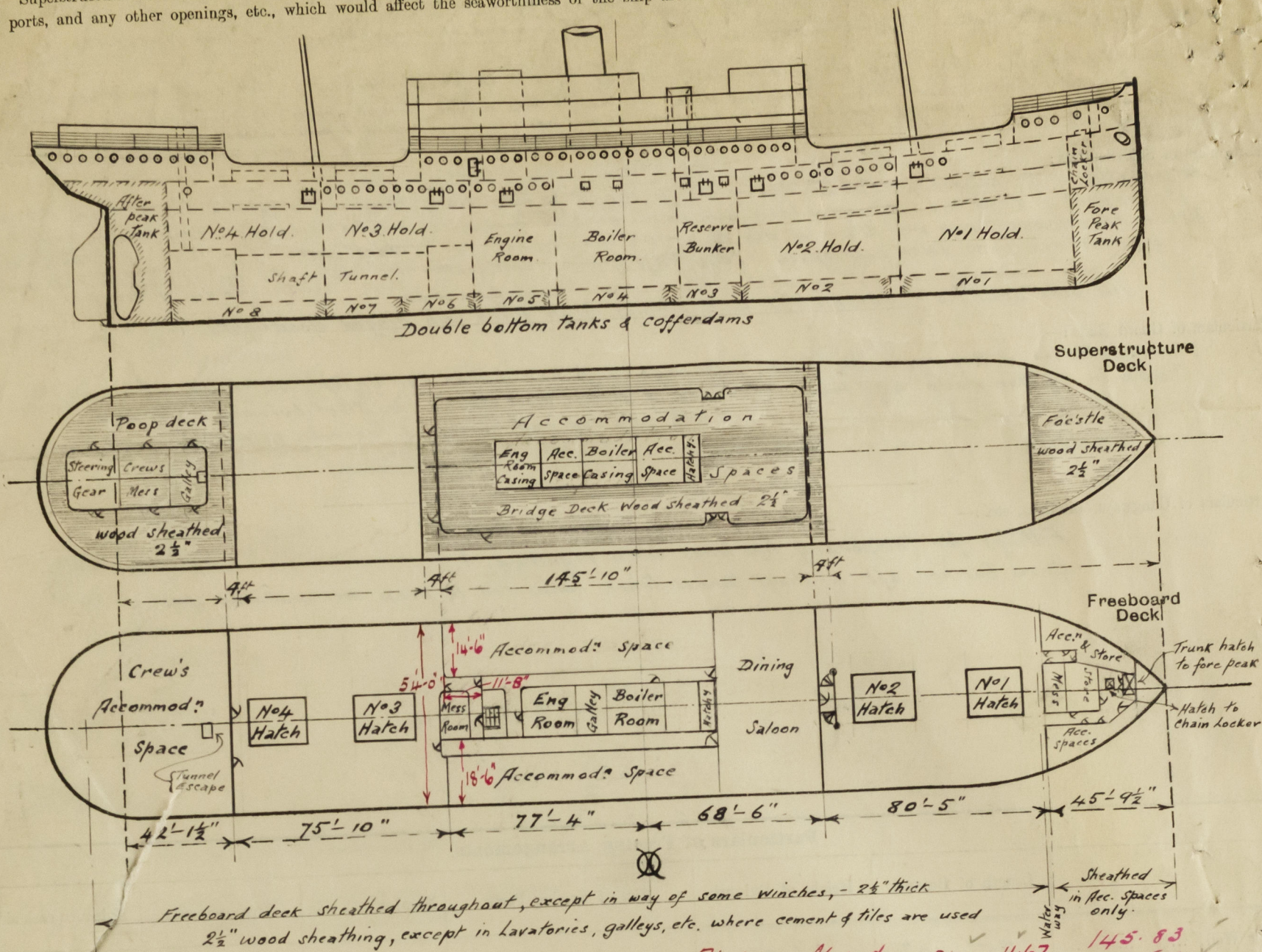
Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.

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

Raised Quarter Deck Bulkhead ...		✓ Port alleyway - open for 12 ft.
Bridge, After Bulkhead	Starboard side - to alleyway, Hardwood (1 3/4") door, operated both sides	{ Hardwood door to passage in Acc Space ✓ " " companion way to lower deck - operated both sides }
Bridge, Forward Bulkhead	2 - 1 3/4" Hardwood doors in Housing at Bridge front - operated both sides - Each fitted with 4' x 6" Thick steel hinged storm covers with wedge cleats - operated from outside only	
Forecastle Bulkhead	Open passages 4ft (pr.s) to Acc spaces & stores , 6 Hardwood & 3 steel doors to these spaces,	operated from both sides
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	At after end of Eng Room, amidships, opening to passage (see sketch overleaf)	Hardwood door (1 3/4") - operated from both sides.
Deckhouses on Flush Deck Ships ...		Lloyd's Register

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:—



Bridge aft end. $\frac{21.0 \times 11.67}{54.0} = \frac{145.83}{41.29}$

State any special features in the construction of the ship:— None

Single screw (Turbine) Passenger & Cargo Vessel, employed in the Australian Coastal Trade. Vessel surveyed afloat on completion of S.S. No. 3. Bridge front opening is in a steel housing, flush with fore overhang, wood doors port & starboard sides of same have hinged, steel, folding, storm covers with wedge cleats (operated outside only). Mess room at after end of Bridge is additional since Vessel was built. Door to port alleyway 12 ft back from after end of Bridge (1 3/4" thick) 3'-6" x 5'-4", 14" sill. Door to companionway (to lower deck) 3'-2" x 5'-2" 1 3/4" teak, folding, (hinged also in centre) 13" sill. Larpaullins & battening down. Hatch to chain locker, on freeboard deck, 24" x 20", 15" coaming, wood hatch covers 2 1/2" thick, 1 1/4" bearing surface. Opening to fore peak spaces (freeboard deck) trunked to fore-castle deck, steel casing 26" thick with double hinged steel doors on after side 20" x 60", operated from both sides, 18" sill. Tunnel escape connected to Crew's Acc. space aft, & Ventilator on top of Poop erection. Wood door inside Acc. space 5'-4" x 2'-2", operated from both sides, 9" sill.

Fore-castle $\frac{45.79}{10L} = \frac{39.00 \times .9674}{6.49 \times .50} = \frac{34.73}{41.12}$

Builder's name and yard number N. Stephen & Sons Ltd, Glasgow. Yard No. 498.

Names of sister ships S.S. "Orungal." Yard No. 499.

Owners Eastern Traders Ltd

(Full) Fee £ 16 : 0 : 0

Received by me