

W. 124 Lloyd's Register of Shipping. SURVEYS FOR FREEBOARD.

14 FEB 1936
15 FEB 1936

W 124

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Prop, Bridge, & ForecastlePort of Survey Newcastle-on-TyneDate of Survey 13th & 14th Feb 1936Name of Surveyor R. J. EasthopeParticulars of Classification 100 A-1W 124
15 FEB 1936

Ship's Name FORTUNATA (Type of Superstructures.)
ERINOULLA
 Nationality and Port of Registry GREEK ANDROS
 Official Number 180
 Gross Tonnage 2415
 Date of Build 1905-1

Moulded Dimensions: Length 312.14 Breadth 46.25 Depth 23'-0 1/2"
 Moulded displacement at moulded draught = 85 per cent. of moulded depth 6623 (estimated) tons
 Coefficient of fineness for use with Tables .820

Depth for Freeboard (D)
 Moulded depth 23.04
 Stringer plate04
 Sheathing on exposed deck none
 $T \left(\frac{L-S}{L} \right) =$
 Depth for Freeboard (D) = 23.08

Depth correction
 (a) Where D is greater than Table depth 2.27
 $(D - \text{Table depth}) R = (23.08 - 20.81) 2.401$
 $= + 5.45"$
 (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) 46.25
 Standard Round of Beam = $\frac{B \times 12}{50} = 11.10"$
 Ship's Round of Beam = 11 1/4"
 Difference Excess .15"
 Restricted to
 Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.15}{4} \times .3178 = -.01"$

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>7.25'</u>	<u>✓</u>	<u>31.00</u>
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed...	<u>152.0'</u>	<u>152.00</u>	<u>7.0'</u>	<u>✓</u>	<u>152.00</u>
" overhang aft ...					
" overhang forward					
F'cle enclosed <u>equis.</u>	<u>29.8</u>	<u>29.96</u>	<u>7.0'</u>	<u>✓</u>	<u>29.96</u>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	<u>212.96</u>	<u>212.96</u>			<u>212.96</u>

Standard Height of Superstructure 6.622
 " " R.Q.D. ✓
 Deduction for complete superstructure 36.14"
 Percentage covered $\frac{S}{L} = 68.22\%$
 " " $\frac{S_1}{L} = 68.22\%$
 " " $\frac{E}{L} = 68.22\%$
 Percentage from Table, Line A.
 (corrected for absence of forecastle (if required))
 Percentage from Table, Line B. 59.97%
 (corrected for absence of forecastle (if required))
 Interpolation for bridge less than 2L (if required)
 Deduction = 36.14 × .5997 = - 21.67"

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>44.22</u>	1	✓	<u>44.22</u>	<u>45.00</u>	<u>45.00</u>	1	✓	<u>45.00</u>
1/4 L from A.P. ...	<u>18.34</u>	4	✓	<u>73.36</u>	<u>20.50</u>	<u>20.50</u>	4	✓	<u>82.00</u>
1/2 L " ...	<u>4.53</u>	2	✓	<u>9.06</u>	<u>5.10</u>	<u>5.10</u>	2	✓	<u>10.20</u>
Amidships ...	✓	4	✓	✓	✓	✓	4	✓	✓
3/4 L from F.P. ...	<u>9.05</u>	2	✓	<u>18.10</u>	<u>10.90</u>	<u>10.90</u>	2	✓	<u>21.80</u>
1/4 L " ...	<u>36.68</u>	4	✓	<u>146.72</u>	<u>44.00</u>	<u>44.00</u>	4	✓	<u>176.00</u>
F.P. ...	<u>82.44</u>	1	✓	<u>82.44</u>	<u>98.00</u>	<u>98.00</u>	1	✓	<u>98.00</u>
Total ...				<u>370.90</u>					<u>433.00</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{62.10}{18} \left(.75 - \frac{34.11}{11} \right) = -1.41"$
 If limited on account of midship superstructure. ✓

Mean actual sheer aft = Excess
 Mean standard sheer aft

Mean actual sheer forward = Excess
 Mean standard sheer forward

Length of enclosed superstructure forward of amidships = > .16
 " " aft of " = > .16

Deduction for Tropical Freeboard.
 Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 23.08
 Summer freeboard = 2.80
 Moulded draught (d) = 20.28

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 5.07
 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 =

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient

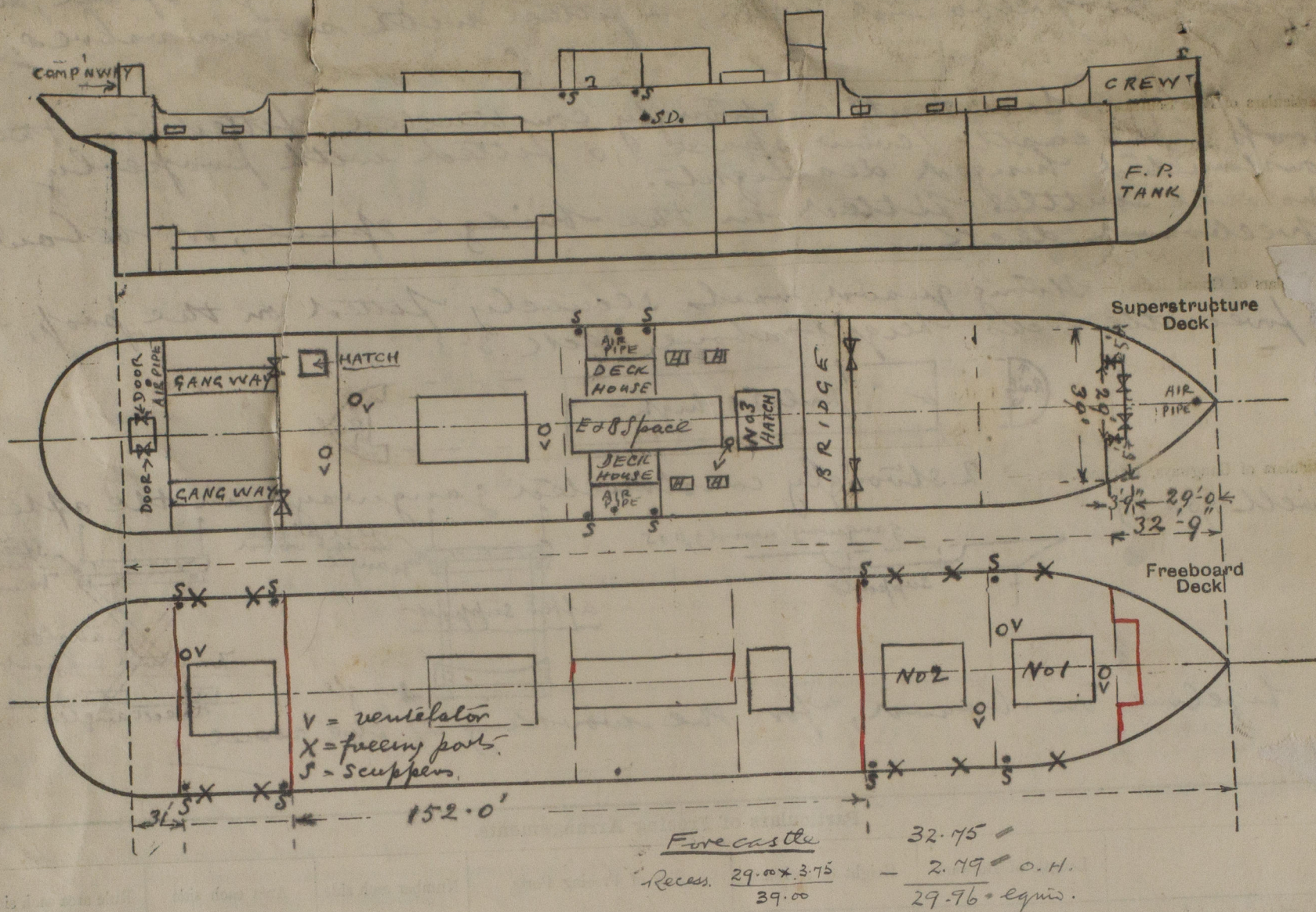
	+	-
Depth Correction ...	<u>5.45</u>	<u>-</u>
Deduction for superstructures ...	<u>-</u>	<u>21.67</u>
Sheer correction ...	<u>-</u>	<u>1.41</u>
Round of Beam correction ...	<u>-</u>	<u>.01</u>
Correction for Thickness of Deck amidships ...	<u>-</u>	<u>-</u>
Other corrections, scantlings, etc. ...	<u>-</u>	<u>-</u>
	<u>5.45</u>	<u>23.09</u>

Summer Freeboard = 33.57SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

Existing freeboard reassigned, being more favourable than those computed under the Convention regulations
 Tropical Fresh Water Line above Centre of Disc ... 216
 Fresh Water Line " " ... 127
 Tropical Line " " ... 89
 Winter Line below " " ... 102
 Winter North Atlantic Line " " ... 152

Tropical Fresh Water Freeboard ... 864
 Fresh Water " ... 648
 Tropical " ... 737
 Winter " ... 775
 Winter North Atlantic " ... 966
 " ... 1016

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:—

Timber freeboard assignment not required.

Builder's name and yard number. Lundevland T. B. Co. Ltd.

Names of sister ships.

Owners N. J. TSATSOMIROS.

Fee £ 13 : - : -

Received by me