

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

Existing freeboards, as reassigned, being more favourable than those computed under the Convention	Tropical Fresh Water Line above Centre of Disc	...	9.19" = 234 1/2	Tropical Fresh Water Freeboard	...	49.75" = 1264 1/2
	Fresh Water Line	"	5.19" = 132 "	Fresh Water	...	40.56" = 1030 "
	Tropical Line	"	4.00" = 102 "	Tropical	...	44.56" = 1132 "
	Winter Line	below	4.50" = 114 "	Winter	...	45.75" = 1162 "
	Winter North Atlantic Line	"	6.50" = 165 "	Winter North Atlantic	...	54.25" = 1378 "
					...	56.25" = 1429 "

W497-0058(113)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 22159
(For London Office only.)

10 JAN 1933

28853

 Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~
 having POOP, BRIDGE AND FORECASTLE.
Port of Survey BarnyDate of Survey January 1933.Name of Surveyor George R. ChappelParticulars of Classification 100A.1.S.S. Bld. No. 3-3, 32.

Ship's Name

GUERNICA.

(Type of Superstructures.)

Nationality and Port of Registry
SPANISH
BILBAO.

Official Number

✓

Gross Tonnage

3109.

Date of Build

1920, 5.Moulded Dimensions: Length 99.26 / Breadth 14.31 / Depth 7.58Moulded displacement at moulded draught = 85 per cent. of moulded depth 7750 (metric)³ tonsCoefficient of fineness for use with Tables .847 ✓

Depth for Freeboard (D)

Moulded depth 7.580Stringer plate 13

Sheathing on exposed deck

 $T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) =

7.593

Depth correction

(a) Where D is greater than Table depth

(D - Table depth) R =

823 (7.593 - 6.67) 25.07204

(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) 14.31Standard Round of Beam = $\frac{B \times 12}{50} =$ 286Ship's Round of Beam = 434Difference 300

Restricted to

Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) =$ 14 (5042) 2.

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<u>28.3</u>	<u>8.611</u>	<u>2.514</u>		<u>8.611</u>
" overhang ...	✓		✓		
R.Q.D. enclosed ...	✓		✓		
" overhang ...	✓		✓		
Bridge enclosed ...	<u>99.3</u>	<u>27.226</u>	<u>2.438</u>		<u>27.226</u>
" overhang aft ...	<u>2.260</u>	<u>4.95</u>	<u>4</u>		<u>4.95</u>
" overhang forward ...	<u>2.260</u>	<u>3.30</u>	<u>4</u>		<u>3.30</u>
F'cle enclosed ...	<u>38.6</u>	<u>12.530</u>	<u>2.438</u>		<u>12.530</u>
" overhang ...	<u>2.9013</u>	<u>5.21</u>	<u>4</u>		<u>5.21</u>
Trunk aft ...	✓		✓		
" forward ...	✓		✓		
Tonnage opening aft ...	✓		✓		
" forward ...	✓		✓		
Total ...	<u>52.755</u>	<u>49.213</u>			<u>49.213</u>

Standard Height of Superstructure 2062

" " R.Q.D. ✓

Deduction for complete superstructure 941Percentage covered $\frac{S}{L} =$ 53.15" " $\frac{S_1}{L} =$ 49.58" " $\frac{E}{L} =$ 49.58

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 35.64

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 335

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>1081</u>	<u>1</u>		<u>1081</u>	<u>46.1</u>	<u>1173</u>	<u>1081</u>	<u>1</u>	<u>1081</u>
$\frac{1}{4}L$ from A.P. ...	<u>480</u>	<u>4</u>		<u>1920</u>	<u>19.4</u>	<u>491</u>	<u>480</u>	<u>4</u>	<u>1920</u>
$\frac{2}{4}L$ " ...	<u>120</u>	<u>2</u>		<u>240</u>	<u>4.8</u>	<u>123</u>	<u>120</u>	<u>2</u>	<u>240</u>
Amidships ...	✓	<u>4</u>		✓	✓	✓		<u>4</u>	✓
$\frac{3}{4}L$ from F.P. ...	<u>240</u>	<u>2</u>		<u>480</u>	<u>8.1</u>	<u>208</u>	<u>208</u>	<u>2</u>	<u>416</u>
$\frac{1}{4}L$ " ...	<u>961</u>	<u>4</u>		<u>3844</u>	<u>32.6</u>	<u>830</u>	<u>830</u>	<u>4</u>	<u>3320</u>
F.P. ...	<u>2162</u>	<u>1</u>		<u>2162</u>	<u>90.5</u>	<u>2300</u>	<u>2300</u>	<u>1</u>	<u>2300</u>
Total ...				<u>9727</u>					<u>9727</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ 9727

If limited on account of midship superstructure.

1450If 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 = 7.593Summer freeboard = 1.300Moulded draught (d) = 6.293

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 131

for Winter North Atlantic Freeboard (if

red =

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

847+6315271.261.26+-Depth Correction 204Deduction for superstructures 335Sheer correction 12Round of Beam correction 2

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

216337-121Summer Freeboard = 1,300SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc

Fresh Water Line " "

Tropical Line " "

Winter Line below " " 131

Winter North Atlantic Line " "

Tropical Fresh Water Freeboard

Fresh Water " "

Tropical " "

Winter " "

Winter North Atlantic " "

1300 2019

Lloyd's Register
Foundation

W497-0058(213) 1906 reassignment

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

Description of Hatchway		FREEBOARD DK.					SUPERSTRUCTURE DK'S.	
		No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 3.	POOP.
Dimensions of Hatchway		24'6" x 18'0"	24'6" x 18'0"	12'2" x 18'0"	24'6" x 18'0"	24'6" x 18'0"	12'2" x 18'0"	8'0" x 8'0"
COAMINGS	Height above Deck	34"	34"	18"	34"	34"	18"	27"
	Thickness Sides	45"	45"	43"	45"	45"	43"	43"
	Stiffeners	7x3" B.A.	7x3" B.A.	-	7x3" B.A.	7x3" B.A.	-	-
	Brackets, Stays	2.6" B.P.	2.6" B.P.	-	2.6" B.P.	2.6" B.P.	-	-
HATCH BEAMS	Number	5	5	2	5	5	2	1
	Spacing	4'1"	4'1"	4'1"	4'1"	4'1"	4'1"	4'0"
	Scantling and Sketch	14" x 35" web.	14" x 35" web.	12" x 29" web.	14" x 35" web.	14" x 35" web.	12" x 29" web.	14" x 35" web.
	Bearing Surface	4x3" x 43" 3x0.45	4x3" x 43" 3x0.45	4x3" x 43" 3x0.45	4x3" x 43" 3x0.45	4x3" x 43" 3x0.45	4x3" x 43" 3x0.45	wood. 2'0"
FORE AND AFTERS	Number	-	-	-	-	-	-	-
	Spacing	-	-	-	-	-	-	-
	Unsupported Lengths	-	-	-	-	-	-	-
	Scantling and Sketch	-	-	-	-	-	-	-
HATCH COVERS	Material	Wood.	-	-	-	-	-	-
	Thickness	2 3/4"	-	-	-	-	-	-
	How fitted	F&A.	-	-	-	-	-	-
	Bearing Surface	4" x 3"	-	-	-	-	-	-
Spacing of Cleats		24"	-	-	-	-	-	-
Number of Tarpaulins		2	2	1	2	2	2	2

*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, funnel & ventilator coamings in efficient condition. Fiddle grating covered by hinged steel plates. Engine room skylights of steel strongly constructed, with hinged steel flaps fitted with ball eyes.**

Particulars of Flush Bunker Scuttles: **None.**

Particulars of Companionways: **None.**

Particulars of Ventilators in exposed positions on freeboard and superstructure decks: **One well. Two 20" vents, ht. of coaming 35", thickness 38". Ventilators in wells, on bridge & poop decks, pass thro' Samson posts 10' in height of substantial construction. Wood plugs & canvas covers supplied for closing all ventilators.**

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks: **Air pipes flush with deck, with brass deck fitting closed by screwed plugs, except on forecastle dk. one 3" air pipe to F.P. ht. 13' closed by wood plug.**

Particulars of Gangway Cargo and Coaling Ports: **None.**

Particulars of Scuppers and Sanitary Discharge Pipes: **Scuppers from weather dk. pass overboard thro' bulwarks. No scuppers in bridge space. Sanitary discharges, discharge overboard, above freeboard dk. amidships & below freeboard deck in forecastle. All fitted with storm valves at ship's sides.**

Particulars of Side Scuttles: **Side scuttles in crew accommodation in forecastle, of sound construction & fitted with hinged deadlights.**

Particulars of Guard Rails: **On poop, bridge & forecastle: 3 rails, height 38", 4'0" between stanchions.**

Particulars of Gangways, Lifelines, etc.: **None.**

Provision is made for lifelines fore & aft

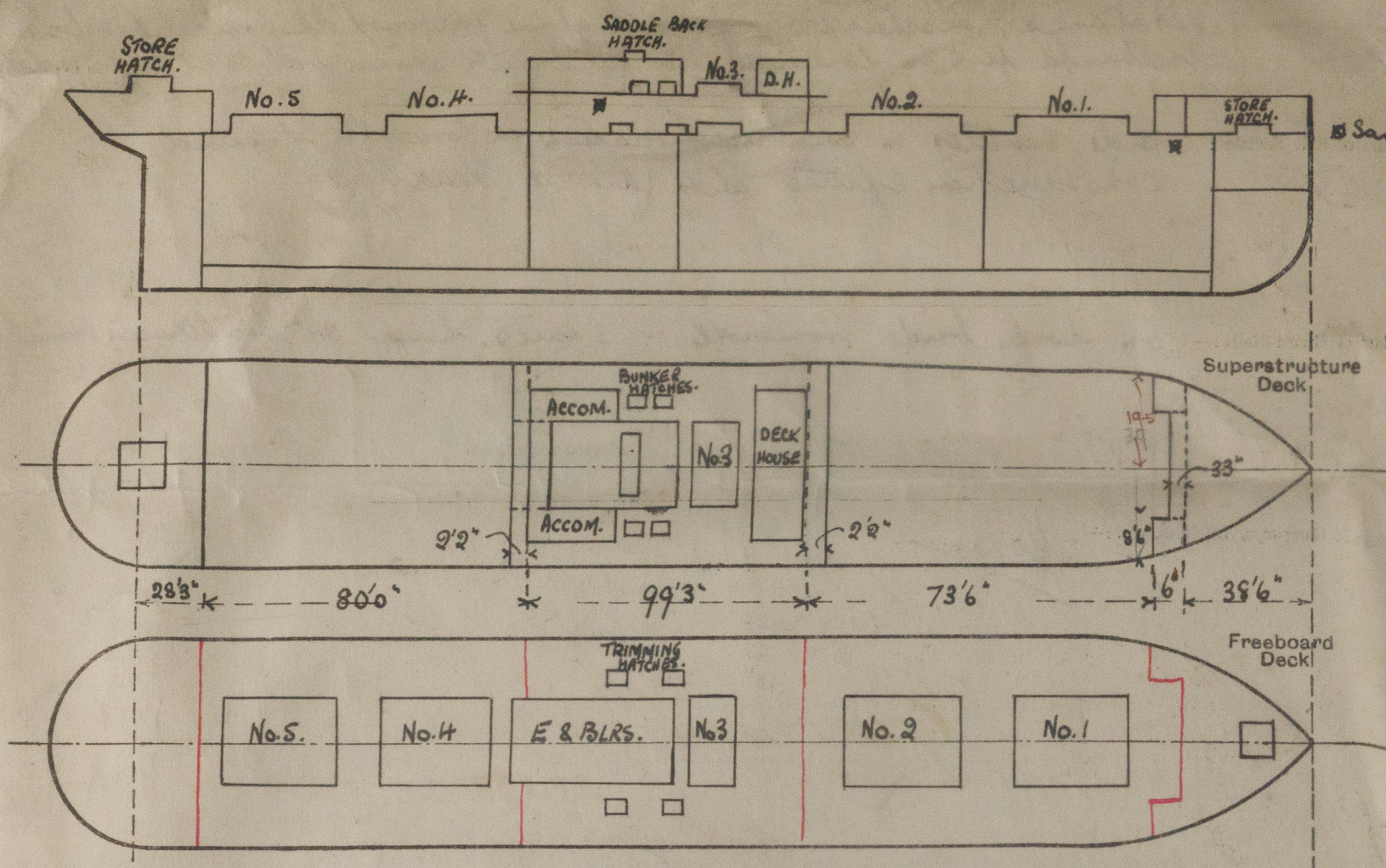
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	80'0" ^{77.83}	4'0"	31" x 24"	4.	20.6 ft. ^{15.57}	16 ft.
Forward Well	73'6" ^{71.33}	4'0"	31" x 24"	4.	20.6 ft. ^{14.66}	15 ft.

State position of each freeing port: After Well: from bridge 16'0" - 32'0" - 50'6" - 65'6" } 12' above dk. edge.
 (F. and A. position and height above deck edge) Forward Well: 13'9" - 28'6" - 46'6" - 62'3" }
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: **fitted with 3 cross rails.**
 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	42"	38"	6" x 3" B.A.	30"	Lugs T&B.	37" x 56"	20"	8'3"
Raised Quarter Deck Bulkhead	✓	-	-	-	-	-	-	-
Bridge, After Bulkhead	42"	38"	6" x 3" B.A.	30"	Bolts T&B.	37" x 56"	18"	8'0"
Bridge, Forward Bulkhead	42"	38"	8" x 3 1/2" B.A.	30"	Bolts T&B.	37" x 56"	21"	8'0"
Forecastle Bulkhead	42"	36"	4" x 3" x 40" O.A.S.	31"	Bolts T&B.	2' x 4'6"	20"	8'0"
Trunk, Aft	✓	-	-	-	-	-	-	-
Trunk, Forward	✓	-	-	-	-	-	-	-
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	42"	38"	6" x 3" B.A.	30"	Bolts T&B.	NONE	✓	8'0"
Exposed Machinery Casings on Superstructure Decks	38"	32"	4" x 3" O.A.S.	21"	NONE TOP CONTIN. BOTTOM.	21" x 4'6"	20"	7'3"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	32"	28"	4" x 3" O.A.S.	31"	CONTIN. FROM OK. ABOVE.	NONE	✓	8'0"
Deckhouses on Flush Deck Ships	✓	-	-	-	-	-	-	-

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	Portable steel plates, secured by 16. 7/8" bolts, pitch abt. 12", thro' plate & bulkhead.
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	Weather boards in riveted channels, full height of opening.
Bridge, Forward Bulkhead	Portable steel plates, secured by 16. 7/8" bolts, pitch abt. 12", thro' plate & bulkhead.
Forecastle Bulkhead	Hinged wood doors, with locks manipulated from both sides.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓
Exposed Machinery Casings on Superstructure Decks	Hinged steel doors with bolts inside.
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 shewn on the following sketches:—



Saddle back hatch on main deck. casing top. 6'0" x 18'0". coaming 12". 2 3/4 wood covers F&A. 3" rests, cleats 24" apart. 2 tarpaulins.

Bunker hatches on bridge dk. 6'0" x 3'3". coaming 18". 2 3/4 wood covers thut. 2 3/4" rests, cleats 18" apart. 2 tarpaulins.

Store hatch in forecabin. 4'3" x 3'4". coaming 13". 2 3/4 wood covers thut. 2 3/4" rests. no cleats, locking bar only fitted.

Trimming hatches on fbd. dk. { 8'3" x 3'3" } coaming 16". 2 3/4 wood covers thut. { 5'9" x 3'3" } 2 3/4 rests, cleats 20". 1 tarpaulin.

FORECASTLE.

$$38.5 + \frac{8.5 \times 60}{19.5} = 38.5 + 2.61 = 41.11 = 12.58$$

$$0.14 = 2.75 - 2.61 = .14 = .04$$

Dispt Scale.

4.	Metric Tons.	M.Tons/in.
20'9 1/8	4950.	
20'0"	4650.	32.
19'0"	4290.	
18'0"	—	31.5.

NOT for Spanish Government

Vessel measured afloat for re-assignment of freeboard only.

Builder's name and yard number. Soc. Anon. Astilleros del Nervion, Bilbao.

Names of sister ships.

Owners. Auxilias Maritima S.A.

Fee £ 11 : 18 : 0.

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