

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

4 JUL 1932

Index. No. 18261
(For London Office only.)

27044

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having CLOSED SHELTER DECK & FORECASTLE

Port of Survey ANTWERP

Date of Survey 27th JUNE 1932
29th JUNE 1932

Name of Surveyor A. J. J. J.

Particulars of Classification * 100 AL SHELTER
ON WITH FREEBOARD. 4.29.
S.S. ROT. No. 2-27
3-7.31

| | | | | |
|--------------------------------------|--|--|--------------------------------|---|
| GORICA (Type of Superstructures.) | | Nationality and Port of Registry <u>JUGO SLAV</u> <u>SPLIT</u> | Official Number <u>5684</u> | Date of Build <u>1918</u> <u>11 mo.</u> |
| Ship's Name | | | | |

Moulded Dimensions: Length 399.6 ✓ Breadth 52.66 ✓ Depth 26.11 to Upper Deck
35.5 to Shelter Deck.

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

Coefficient of fineness for use with Tables _____

| | | |
|---|--|--|
| Depth for Freeboard (D) | Depth correction | Round of Beam correction |
| Moulded depth <u>35.5</u> | (a) Where D is greater than Table depth (D—Table depth) R = | Moulded Breadth (B) |
| Stringer plate <u>.05</u> | (b) Where D is less than Table depth (if allowed) (Table depth—D) R = | Standard Round of Beam = $\frac{B \times 12}{50} = \frac{52.66 \times 12}{50} = 12.63$ |
| Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ | If restricted by superstructures | Ship's Round of Beam = <u>12.63</u> |
| Depth for Freeboard (D) = | | Difference <u>.13</u> |
| | | Restricted to |
| | | Correction = $\frac{\text{Diff}^a}{4} \times \left(1 - \frac{S_1}{L} \right) =$ |

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 | ✓ | | | | |
| „ overhang | ✓ | | | | |
| Bridge enclosed... .. | ✓ | | | | |
| „ overhang aft | ✓ | | | | |
| „ overhang forward | ✓ | | | | |
| * F'cle enclosed | <u>37.5</u> | | <u>7.6</u> | | |
| „ overhang | ✓ | | | | |
| runk aft | ✓ | | | | |
| „ forward | ✓ | | | | |
| Tonnage opening aft | ✓ | | | | |
| „ „ forward | ✓ | | | | |
| Total | <u>37.5</u> | | | | |

Standard Height of Superstructure _____

„ „ R.Q.D. _____

Deduction for complete superstructure _____

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

„ „ $\frac{S_1}{L} =$

„ „ $\frac{E}{L} =$

Percentage from Table, Line A.
(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 =

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|----------------------------------|-------------------|---|---|---------|-----------------|--------------------|---|---|---------|
| A.P. | <u>49.96</u> | 1 | | | <u>54</u> | <u>54.00</u> | 1 | | |
| $\frac{1}{6}$ L from A.P. | <u>22.23</u> | 4 | | | <u>24.5</u> | <u>24.40</u> | 4 | | |
| $\frac{2}{6}$ L „ | <u>5.49</u> | 2 | | | <u>6.12</u> | <u>6.12</u> | 2 | | |
| Amidships | <u>.00</u> | 4 | | | <u>0.00</u> | <u>✓</u> | 4 | | |
| $\frac{2}{6}$ L from F.P. | <u>10.99</u> | 2 | | | <u>11.8</u> | <u>11.55</u> | 2 | | |
| $\frac{1}{6}$ L „ | <u>44.46</u> | 4 | | | <u>47.25</u> | <u>47.40</u> | 4 | | |
| F.P. | <u>99.92</u> | 1 | | | <u>108.00</u> | <u>108.00</u> | 1 | | |
| Total | | | | | | | | | |

Mean actual sheer aft =
Mean standard sheer aft =

Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = $\frac{37.5}{399.6}$

„ „ aft of „ =

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

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

| | | |
|---|--|--|
| Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. | Deduction for Fresh Water. | TABULAR FREEBOARD corrected for Flush Deck (if required) |
| Depth to Freeboard Deck = _____ Ft. | Displacement in salt water at summer load water line | Correction for coefficient |
| Summer freeboard = _____ | Δ = _____ | Depth Correction |
| Moulded draught (d) = _____ | Tons per inch immersion at summer load water line | Deduction for superstructures |
| Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = _____ | T = _____ | Sheer correction |
| Addition for Winter North Atlantic Freeboard (if required) = _____ | Deduction = $\frac{\Delta}{40 T}$ inches = _____ | Round of Beam correction |
| | | Correction for Thickness of Deck amidships |
| | | Other corrections, scantlings, etc. |
| | | 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 | ... | Tropical Fresh Water Freeboard | ... |
| Fresh Water Line | „ | Fresh Water | „ |
| Tropical Line | „ | Tropical | „ |
| Winter Line | below | Winter | „ |
| Winter North Atlantic Line | „ | Winter North Atlantic | „ |

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

| HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS | | | | | | | | | |
|---|-------------------------|------------------|-------------------|-------------------------|------------------|-------------------|--|--|--|
| Description of Hatchway | SHELTER DECK | | | UPPER DECK | | | | | |
| | N ^o 1, 2 & 4 | N ^o 3 | N ^o 3A | N ^o 1, 2 & 4 | N ^o 3 | N ^o 3A | | | |
| Dimensions of Hatchway | 29'9" x 20' | 34'0" x 20' | 10'4" x 18' | 29'9" x 20' | 34'0" x 20' | 10'4" x 18' | 8'6" x 3'2" | | |
| COAMINGS | Height above Deck | 30" | 30" | 30" | 30" | 30" | 30" | | |
| | Thickness | 48" | 50" | 46" | 48" | 46" | 40" | | |
| | Stiffeners | 7" x 3" x 48" | 7" x 3" x 48" | 7" x 3" x 48" | 7" x 3" x 48" | 7" x 3" x 48" | 7" x 3" x 48" | | |
| | Brackets, Stays | None | None | None | None | None | None | | |
| HATCH BEAMS | Number | 5 | 6 | 5 | 6 | 5 | 5 | | |
| | Spacing | 4'11" | 4'10" | 5'3 1/2" | 4'11" | 4'10" | 5'3 1/2" | | |
| | Scantling and Sketch | 18" x 9" | 14" x 5" | 14" x 5" | 18" x 9" | 14" x 5" | 18" x 9" | | |
| | Bearing Surface | 3 1/2" | 3 1/2" | 3 1/2" | 3 1/2" | 3 1/2" | 3 1/2" | | |
| FORE AND AFTERS | Number | None | None | None | None | None | None | | |
| | Spacing | None | None | None | None | None | None | | |
| | Unsupported Lengths | None | None | None | None | None | None | | |
| | Scantling and Sketch | None | None | None | None | None | None | | |
| HATCH COVERS | Material | 2 1/2" W.P. | 2 1/2" W.P. | 2 1/2" W.P. | 2 1/2" W.P. | 2 1/2" W.P. | wood | | |
| | Thickness | 3" | 3" | 3" | 3" | 3" | 3" | | |
| | How fitted | F & A | F & A | F & A | F & A | F & A | F & A | | |
| | Bearing Surface | 3" | 3" | 3" | 3" | 3" | 3" | | |
| Spacing of Cleats | 1'9" | 1'9" | 1'9" | 1'9" | 1'9" | 1'9" | 22" | | |
| Number of Tarpaulins | 1 NEW & 3 OLD | 1 NEW & 2 OLD | 1 NEW & 2 OLD | 1 NEW & 3 OLD | 1 NEW & 2 OLD | 1 NEW & 2 OLD | NO TARPULINS ON GUARD FOR UPPER DECK HATCHES. 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; RING BOLTS RIVETED TO COAMING STIFFENERS. (SHELTER DECK)

Particulars of fiddle, funnel and ventilator coamings:—
 Openings in casing top fitted with gratings & hinged steel covers.
 Steel skylight to engine space with steel flap & bull's eyes.
 Fiddle top 4'0" above shelter deck.
 Ventilator coamings on engine & boiler casing strongly constructed.
 2-36" STOKHOLD VENTS (WORKED BY WIRES & PULLEYS); 2-18" ENG. RM VENTS ON CASING TOP & 1 ON ENG. RM SK.

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways:—

None.

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

All Ventilators on Forecastle & Shelter Decks substantially constructed, having 36" coamings (except those of 6" vents to crew spaces, aft, which are 24" in height) & provided with wood flaps & canvas covers.

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

Air pipes, 3" diameter steel tubes of "Goose-neck" type, housed inside of bulwarks & guard-rails have no means of closing at mouths.
 (Fitted on Forecastle & Shelter Decks).
 Flaps with chain attachments provided as closing.

Particulars of Gangway Cargo and Coaling Ports:—

None.

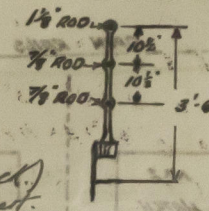
Particulars of Scuppers and Sanitary Discharge Pipes — 8 Scuppers (P & S) 3" diam. steel tubes, led from Shelter Deck to ship's side in 'tween decks (see sketch) — 5-2 1/2" dia. pipe scuppers, with gratings, led down from upper deck to bilge (P & S), from Nos 1, 2, 3 & 4 'tween decks & cross bulkhead 'tween decks.
 Sanitary Discharge pipes from Officers, Engineers & crew's quarters led through ship's side in shelter 'tween decks — all fitted with suitable Horn Return Valves.

Particulars of Side Scuttles:—

6 Side Scuttles in crew spaces & stores (aft), 21" to centres from inside of shelter deck, fitted with permanently attached deadlights of substantial construction.

Particulars of Guard Rails:—

Forecastle Handrail Carried down to deck.
 2 Rails spaced 18" apart.



Open rails fitted (as shown in sketch) on Forecastle Deck, and on Shelter Deck from Fide Front to a point about fore end of Bridge D.K. house; also from 8'0" aft of Eng. sidehouse to aft end of No 4 Hatch.

Particulars of Gangways, Lifelines, etc.:—

None fitted.

Portable Stanchions fitted in hatchways, attached to hatch coamings on B/A side & lifelines provided elsewhere, fore & aft over entire deck. Lifelines can be fitted to the sides.

Particulars of Freeing Arrangements.

| SHELTER DECK. | Length of Bulwark | Height of Bulwark | Size of Freeing Ports | Number each side | Area each side | Rule area each side |
|--|--|-------------------|-----------------------|------------------|----------------|---------------------|
| AMIDSHIPS — FROM FORE END OF SIDEHOUSE TO FOREMOST OF BRIDGE HOUSE FRONT FROM AFT END OF FORWARD WHEEL TO STEERN | 78'0" | 3'6" | 36" x 22" | 1 | 5.5 sq. ft. | Open rails |
| State position of each freeing port (P. and A. position and height above deck edge) | After Well — AMIDSHIPS: — 91 & 93 FRAMES Forward Well — BOTTOM OF FREEING PORTS 10' ABOVE DECK EDGE. | | | | | |
| State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— | STEEL SHUTTERS FITTED, 3 HINGES TO EACH, WITH AMPLE CLEARANCE & IN GOOD WORKING ORDER. ALSO 2-7/8" ROUND BARS SPACED 7" APART FITTED F & A. ACROSS EACH OPENING. | | | | | |
| Additional area where sheer is less than standard. | NONE. | | | | | |

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 | | | None. | | | | | |
| Raised Quarter Deck Bulkhead | | | None. | | | | | |
| Bridge, After Bulkhead | | | None. | | | | | |
| Bridge, Forward Bulkhead | | | None. | | | | | |
| Forecastle Bulkhead | 25" | 25" | 4" x 3 1/2" x 40" | 48" | NONE. | (2 OFF) 5'2" x 48" | 2'1 1/2" | 7'6" |
| Trunk, Aft | | | None. | | | | | |
| Trunk, Forward | | | None. | | | | | |
| Exposed Machinery Casings on Freeboard or Raised Quarter Decks | 34" | 30" | 4" x 3 1/2" x 35" | 40" | 10" x 8" at top, 12" x 8" at bottom | 4'6" x 24" | 1'9" | 7'0" |
| 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).

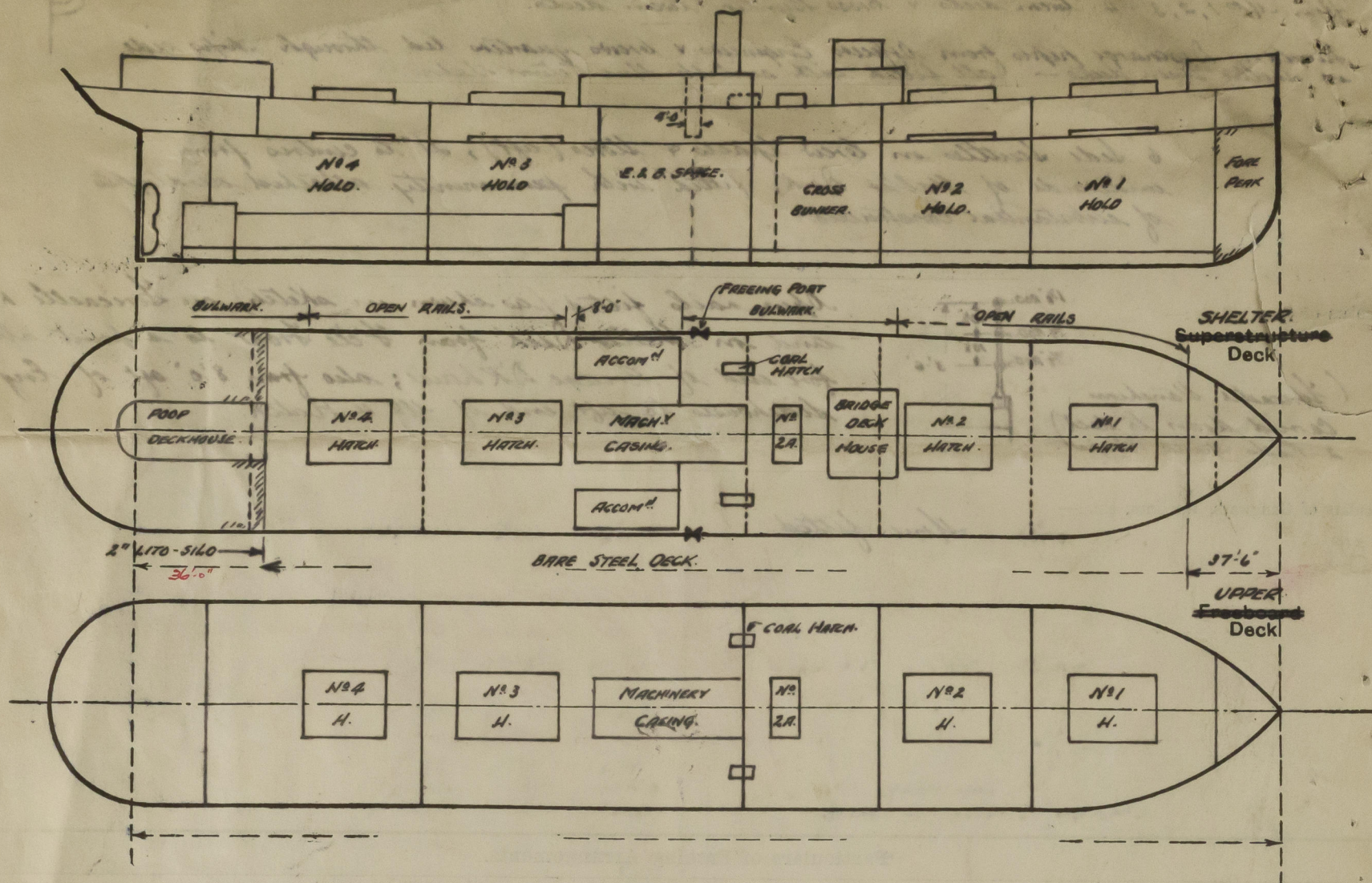
| | |
|---|--|
| Poop Bulkhead | ✓ |
| Raised Quarter Deck Bulkhead | ✓ |
| Bridge, After Bulkhead | ✓ |
| Bridge, Forward Bulkhead | ✓ |
| Forecastle Bulkhead | Shifting boards fitted full height (see sketch). |
| Exposed Machinery Casings on Freeboard or Raised Quarter Decks | Hinged steel doors 4'6" x 24", 2" sills, capable of being worked from both sides. |
| Exposed Machinery Casings on Superstructure Decks | ✓ |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances | ✓ |
| Deckhouses on Flush Deck Ships | Bridge Deckhouse: — 2" Lock doors, 4'6" x 24". Eng. Deckhouse: — 2" Lock doors with keys, available from both sides. Sills 20" high. |

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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:—



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

Vessel examined afloat. No part of Special Survey carried out.

No tonnage opening.

See attached letter regarding particulars of displacements. The following figures were taken from a small Displacement Scale on board the vessel:—

| | |
|-------------------------------|-----------------------------------|
| <i>at 26'3½" (Load Draft)</i> | <i>Displacement = 11,920 tons</i> |
| <i>" 26'0"</i> | <i>" = 11,775 tons</i> |
| <i>" 27'0"</i> | <i>" = 12,270 tons</i> |

Builder's name and yard number *Northumberland Shipbuilding Co. Ltd, Newcastle*

Names of sister ships

Owners

Jugoslavnski Lloyd. d. d.

Fee £ *3300 francs*

Received by me

Exp. 212.50 francs



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