

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

16 JUL 1932

W 122

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Freecastle, Bridge R.R.Q.D. Port of Survey Tonsberg

Abel Tasman (Type of Superstructures.) Date of Survey 7th July 1932

Ship's Name (ex NORD.) Nationality and Port of Official Number British 2047.17 Gross Tonnage 2042 Date of Build 1916/7

Moulded Dimensions: Length 275.0 Breadth 40.0 Depth 20.0 Moulded displacement at moulded draught = 85 per cent. of moulded depth 4197 tons

Coefficient of fineness for use with Tables .786 Particulars of Classification +100.A.1

S.S. 86 N.3.4.28.

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... 20.00	(a) Where D is greater than Table depth (D - Table depth) R =	Moulded Breadth (B) <u>40.0</u>
Stringer plate05	<u>(20.05 - 18.33) 2.115 = +3.64</u>	Standard Round of Beam = $\frac{B \times 12}{50} = 9.6$
Sheathing on exposed deck	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Ship's Round of Beam = <u>10</u>
$T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Difference <u>.4</u>
Depth for Freeboard (D) = <u>20.05</u>		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.4}{4} \times .2992 = -.03$

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 ...	156.55	156.55	4.5	✓	156.55
" overhang ...					
Bridge enclosed ...	13.70	13.70	8.0	✓	13.70
" overhang aft ...					
" overhang forward ...					
Forecastle enclosed ...	22.45	22.45	8.0	✓	22.45
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	192.70	192.70			192.70

Standard Height of Superstructure 6.25

" " R.Q.D. 4.33

Deduction for complete superstructure 33.50

Percentage covered $\frac{S}{L} = 70.08\%$

" " $\frac{S_1}{L} = 70.08\%$

" " $\frac{E}{L} = 70.08\%$

Percentage from Table, Line A. 63.10%

(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 = $33.50 \times .631 = -21.14$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	37.50	1		37.50	34.5	36.00	38.04	1	38.04
1/4 L from A.P. ...	16.69	4		66.76	11	13.20	15.24	4	60.96
1/2 L " ...	4.12	2		8.24	2	2.40	4.18	2	8.36
Amidships ...		4			0			4	
3/4 L from F.P. ...	8.24	2		16.48	3	4.00	4.00	2	8.00
1/4 L " ...	33.38	4		133.52	25	23.60	23.60	4	94.40
F.P. ...	75.00	1		75.00	77	77.25	77.25	1	77.25
Total ...				337.50					287.01

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{50.49}{18} \times (.75 - .3504) = +1.12$

If limited on account of midship superstructure.

Mean actual sheer aft = Deficient

Mean actual sheer forward = Deficient

Length of enclosed superstructure forward of amidships = .119

" " aft of " = .50

Sheers aft increased by virtue of excess R.Q.D. height

Actual Hgt = 4.50
Stand " = 4.33
= .17

3996

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 20.05

Summer freeboard = 2.01

Moulded draught (d) = 18.04

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 4.51

Addition for Winter North Atlantic Freeboard (if required) = 2 = 51

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 4499$

Tons per inch immersion at summer load water line

$T = 22.50$

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

= 5.00

= 127

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

$\frac{.786 + .68}{1.36} = \frac{1.466}{1.36}$

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

$37.60 - 16.41 = 21.19$

$40.53 - 16.41 = 24.12$

$24.12 - 2.01 = 22.11$

$22.11 - 5.00 = 17.11$

$17.11 - 1.12 = 16.00$

$16.00 - .03 = 15.97$

$15.97 - .03 = 15.94$

$15.94 - .03 = 15.91$

$15.91 - .03 = 15.88$

$15.88 - .03 = 15.85$

$15.85 - .03 = 15.82$

$15.82 - .03 = 15.79$

$15.79 - .03 = 15.76$

$15.76 - .03 = 15.73$

$15.73 - .03 = 15.70$

$15.70 - .03 = 15.67$

$15.67 - .03 = 15.64$

$15.64 - .03 = 15.61$

$15.61 - .03 = 15.58$

SUMMER 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 " "

Winter North Atlantic Line " "

30 JUN 1933

W542-0045 1/2

MARKING FORM

RECEIVED

20 NOV 1933

Marking form

received

27/6/33

Abel Tasman

Particulars of fiddle, funnel and ventilator coamings:— Fiddle closed by steel flanged plates, ^{in order} ~~not permanently attached~~
Funnel + Vent. Coamings on top of casing in satisfactory condition

Particulars of Companionways:— On Hole: 3'-4" x 2'-0" x 3'-2" high steel: steel door 25" x 20", 9" sill, handle on both sides
Strong Steel Skylight on R.G. Deck at aft end of casing to mess Room.

In Bale: 2-7' d x 10" x 24 to accm.
2-5' d x 4" x .50 straw pipes to accm.
3 good neck, 3' above dk. to accm.
1-14' d x 36" x 28 ford Loet.
In upper Dk. " " " " " "

1 from neck to F.P. 4" above f.e. d.h. ✓
 1. P.B. " " in food well to D.B. 39" above d.h. ✓
 2 " " a.R. & D.E. " " 33" " " ✓
 1 - " " to A.P. on top of hatch 6" above hatch

none.

~~th~~ means of closing
wood plug

1 Sanitary discharge forward, 5 ft. below deck with W.R.V.
1 " " and ships abt 4 ft. " "
1 " " aft about 4 ft. below R.Q. Deck " "

In File folder with deadlights ✓
1. Pos on Stone under R.Q. D⁺ aff with deadlights

On Ice. 39" high, 3 rods, stanchions about 5'-2" spacing

On top of hatches. Permanent seats for stanchions but no stanchions aboard

State position of each freeing port ... } After Well:— *aft. R. 8 ft 4 in. - 20'-6", 67'-6", 103'-3" and aft. pt. 90'-6"*
(F. and A. position and height above deck edge) } Forward Well:— *for. Br. 8 ft 4 in. - 10'-9", 28'-6", 45'-3", 57'-9"* } *10" above dk*
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— *aft - 1st + 3rd have hinged shutters hung above the middle, 2nd has 12 feet bars. Forw: 2 foremast have pivoted shutters hung above the middle, + 2 aftermost have flat bars*
Additional area where sheer is less than standard.

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

3 hinges steel doors to accom. opening from both sides. ✓
B.R. Steel hinges doors P.S. 4'-7" x 2'-2", 19" side opening from both sides.
E.R. " " " 4'-10" x 2'-1", 19" " opening from both sides.

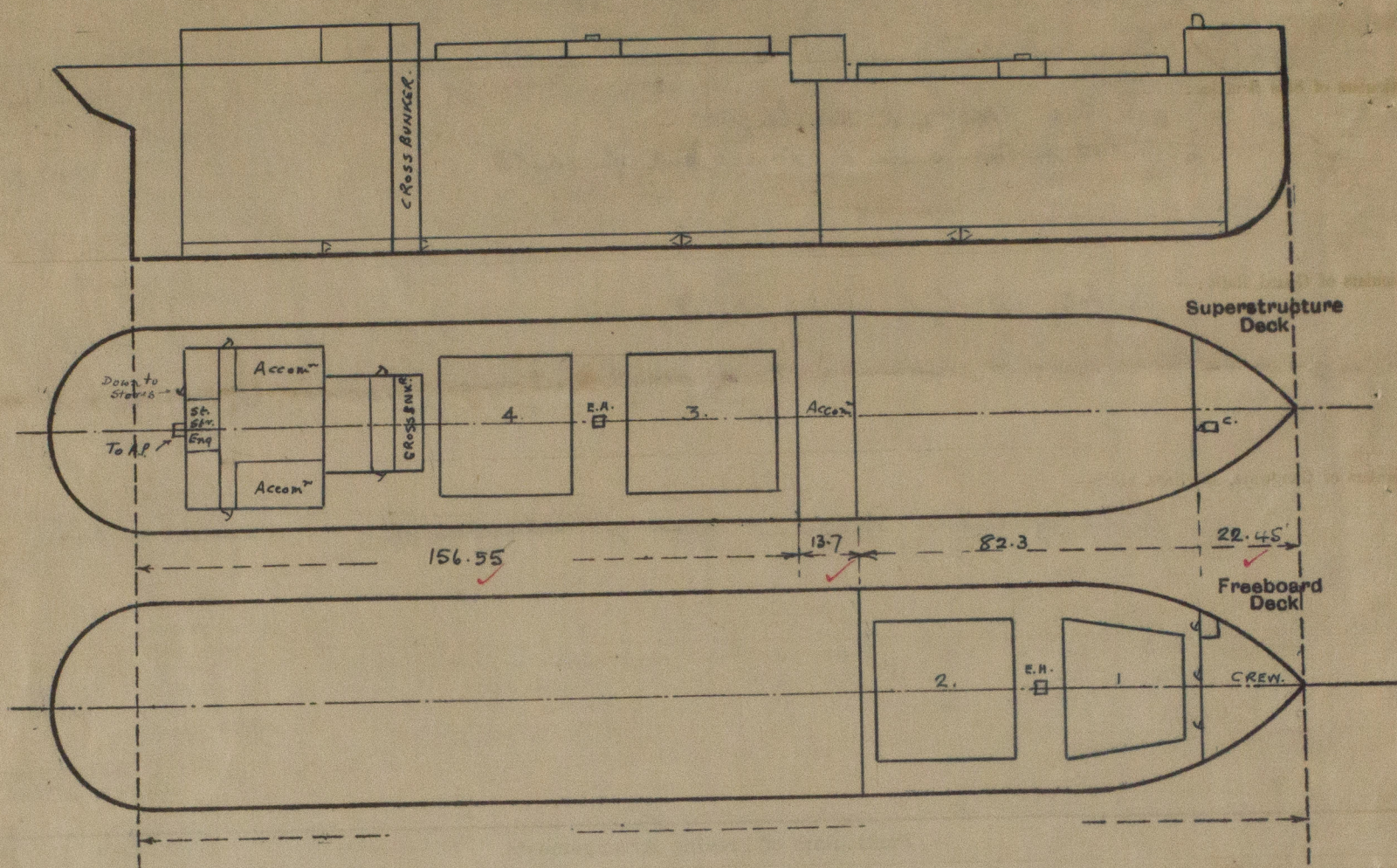
Steel door (hinges) at aft end of casing, 4'-9" x 2'-4" 18" side

and wood door to E.R. on deck below

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Foundation

W542 - 0045 2/2

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:— The Owner desires to know what timber allowance he can obtain and he will decide later if he will have this freeboard marked. See attached sheet for particulars.

Displacements taken from plan on board:— at $\begin{cases} 16-0 & 3930 \\ 17-0 & 4190 \\ 18-0 & 4460 \end{cases}$

Present N.V. freeboard from certificate on board:—

$\left. \begin{array}{l} F.W. = 1-8\frac{1}{2}'' \\ T = 1-10'' \\ S = 2-1'' \\ W = 2-4\frac{1}{2}'' \\ N.N.A. = 2-7'' \\ B.d.T = 2-2'' \end{array} \right\} \begin{array}{l} \text{from steel deck} \\ \text{Certificate dated} \\ 30/11/27. \end{array}$

The survey has been carried out afloat & only a general examination has been made. The owner has the permission of the London Office to defer the survey which is due till next year (see letter 26/2/32).

Builder's name and yard number.

Jonker & Stano (Hendrik Ido Ambracht.)

Names of sister ships

Owners

Mrs. Jac. Engers Dampskolsk. (Jac. Enger mgr)

Fee & No. 187.00

Received by me

Low Exp. 25.00



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