FB 525

Rpt. C.11 (Comp.)

For LONDON OFFICE ONLY
Received 29 OCT 1956
Index No.
Govt. Copy
Owners C11

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, ~~SAILING SHIP~~, ~~TANKER~~)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
"CAPELLA"		Netherlands Groningen	499·39 ~~500~~	1956

Moulded Dimensions: Length 52.00m ✓ Breadth 8.80m ✓ Depth 3.85 m ✓

Freeboard Length 52.00m ✓

Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 1057 m^3 ✓ tons

Coefficient of fineness for use with Tables .706 ✓

Port of Survey Zaandam

Date of Survey October 1956

Surveyor's Signature

Particulars of Classification ✠ 100 A1

DEPTH FOR FREEBOARD (D).

Moulded depth ... ... 3850 ✓

Stringer plate ... ... 10 ✓

Wood Sheathing on exposed deck

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

Depth for Freeboard (D) = 3860 ✓

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D—Table depth) R =

393

8·33 (3·860 − 3·467) 13·13 = +43 ✓

(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) 8·800 m. ✓

Standard Round of Beam = $\frac{B \times 12}{50}$ = 176 ✓

Ship's Round of Beam = 176 ✓

Difference —

Restricted to

Correction = $\frac{\text{Diff}^{e}}{4} \times \left(1 - \frac{S_1}{L}\right)$ = NIL. ✓

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S_1)	Height	Height Correction	Effective Length (E)
Poop enclosed Equiv.	12·185 ✓	12·185 ✓	2·052 ✓	—	12·185 ✓
„ overhang Equiv.	·465 ✓	·233 ✓			·233 ✓
R.Q.D. enclosed					
„ overhang					
Bridge enclosed					
„ overhang aft ...					
„ overhang forward ...					
F'cle enclosed	6·350 ✓	6·350 ✓	1·900 ✓	—	6·350 ✓
„ overhang	·550 ✓	·275 ✓		—	·275 ✓
Trunk aft					
„ forward					
Tonnage opening aft ...					
„ „ forward ...					
Total	19·550 ✓	19·043 ✓			19·043 ✓

Standard Height of Superstructure 1830 ✓

„ „ R.Q.D. ✓

Deduction for complete superstructure 586. ✓

Percentage covered $\frac{S}{L}$ = 37·60 ✓

„ „ $\frac{S_1}{L}$ = } 36·62 ✓

„ „ $\frac{E}{L}$ = }

Percentage from Table, Line A. 20·63. ✓
(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 = ·2063 × 586 = 121 mm. ✓

SHEER CORRECTION.

Station	Standard Ordinate	SM	Product	Actual Ordinate	Effective Ordinate	SM	Product
A.P.	687 ✓	1	687 ✓	704	704 ✓	1	704 ✓
$\frac{1}{8}$L from A.P. ...	305 ✓	4	1220 ✓	311	311 ✓	4	1244 ✓
$\frac{2}{8}$L „ ...	76 ✓	2	152 ✓	73	73 ✓	2	146 ✓
Amidships ...	0	4	0	0	0	4	0
$\frac{2}{8}$L from F.P. ...	153 ✓	2	306 ✓	143	143 ✓	2	286 ✓
$\frac{1}{8}$L „ ...	611 ✓	4	2444 ✓	619	619 ✓	4	2476 ✓
F.P.	1374 ✓	1	1374 ✓	1490	1490 ✓	1	1490 ✓
Total ...			6183 ✓				6346 ✓

Mean actual sheer aft / Mean standard sheer aft = Excess. ✓

Mean actual sheer forward / Mean standard sheer forward = Excess. ✓

Length of enclosed superstructure / L forward of amidships = } NIL ✓

„ „ aft of „ = }

Correction = $\frac{\text{Difference between sums of products}}{18}\left(\cdot 75 - \frac{S}{2L}\right)$ = $\frac{163}{18}(\cdot 75 - \cdot 1880)$ = ·5620 ✓ = -5 mm. ✓

If limited on account of midship superstructure. YES - NIL ✓

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

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 3.860 ✓ m. ~~Ft.~~

Summer freeboard = ·400 ✓

Moulded draught (d) = 3.460 ✓

Keel allowance =

Extreme draught =

Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{48}$ ~~inches~~ = 7·208 cms = 7 cms. ✓

Addition for Winter North Atlantic Freeboard (~~if required~~) = 7·208 + 5·1 = 12·308 = 12 cms. ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line

△ = 1132·49

Tons per inch immersion at summer load water line

T = P.T.O. 11·6 m^3/1"

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

= 6·20 cms.

= 6 cms. ✓

TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~ 467 ✓

Correction for coefficient $\frac{\cdot 706 + \cdot 68}{1 \cdot 36}$ = 1·386 ✓ / 1·36. 476

	+	−
Depth Correction	43	— ✓
Deduction for superstructures		121
Sheer correction	—	—
Round of Beam correction	—	—
Correction for Thickness of Deck amidships ...	—	—
Other corrections, scantlings, etc.		
	43	121

- 78

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Summer Freeboard = 398.

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

Tropical Fresh Water Line above Centre of Disc ...	13 cms ✓	Tropical Fresh Water Freeboard	27 cms. ✓
Fresh Water Line „ „ ...	6 cms. ✓	Fresh Water „	34 cms.
Tropical Line „ „ ...	7 cms ✓	Tropical „	33 cms.
Winter Line below „ ...	7 cms ✓	Winter „	47 cms.
Winter North Atlantic Line „ „ ...	12 cms. ✓	Winter North Atlantic „	52 cms.

40 cms.

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Capella.

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Displacement at 3.20 m draught ✱ = 1030 m^3)
" " 3.25 m " = 1048 m^3) $m^3/_{1"}$ = 9.5 m^3
" " 3.30 m " = 1069 m^3) $m^3/_{1"}$ = 10 m^3

3.46 ✱

Poop.

Length of Poop at Side = 11.550 m. ✓

$$+\frac{1.100 \times 5.000}{8.658} = \frac{.635 \text{ m.}}{12.185 \text{ m.}}$$ ✓

O/H = 1.100 − .635 = .465 m ✓

Extrapolation for Δ^T and $m^3/1"$

Change in $m^3/1"$ = .5/.05 m. ✓
∴ for increase in draught of .16 m. ✓
Change in $m^3/1"$ = $\frac{.16}{.05} \times .5 = 1.6\ m^3/1"$
∴ $m^3/1"$ @ 3.460 m draught = 10 + 1.6
= 11.60
Mean $m^3/1"$ between draughts of
3.30 m and 3.46 m = 10.08 ✓
∴ Δ^T @ 3.46 m = $1069 + \frac{160}{25.4} \times 10.08$ ✓
= 1069 + 63.49
= 1132.49. ✓

Trade of ship Ocean going

Names of sister ships -

Builder's name and yard number Scheepswerf Kraaier No. 1168 46166

Owners J. Rusthoven - Haren, Groningen

Fee £7.165.-

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)