

Empire Wisdom.
No. 36980
(similar)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 36843
(For London Office only).

SOUTH AFRICAN

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Gr. Reg. No. 21863.

Ship's Name FINANCIER	Official Number 168986	Nationality and Port of Registry British Grenner Cape Town	Gross Tonnage 9200 9184 111049	Date of Build 1942	Port of Survey Grenner
Moulded Dimensions: Length 147.5 Breadth 62.75 Depth TO UPPER DN. 40.75 LENGTH ON 18" EXCESS DRAUGHT = 158.08 TO 2" DN. 42.51					Date of Survey While Building
Moulded displacement at moulded draught = 85 per cent. of moulded depth TO UPPER DN. 29225 tons TO 2" DN. 15509					Surveyor's Signature N. L. Swinton
Coefficient of fineness for use with Tables 711					Particulars of Classification * 100 A1 'With Freeboard' (Contingent)

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth TO UPPER DN. 40.75	(a) Where D is greater than Table depth (D - Table depth) R = (40.81 - 30.54) x 3 = +30.81	Moulded Breadth (B) 62.75
Stringer plate AT UPPER DN. 75	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 10.27	Standard Round of Beam = $\frac{B \times 12}{50} = 15.06$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam 15.00
Depth for Freeboard (D) = 40.81		Difference 06
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{06}{4} \times 5104 = +0.01$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	31.37	31.37	8.0	✓	31.37	Standard Height of Superstructure 7.5'
Alc. overhang ...	92	46	8.0	✓	46	" " R.Q.D. 42.00"
R.Q.D. enclosed ...	103.89	103.89	8.0	✓	103.89	Deduction for complete superstructure
" overhang ...	23.60	23.60	8.0	✓	23.60	Percentage covered $\frac{S}{L} = 49.06$
Bridge enclosed ...	64.96	64.96	8.0	✓	64.96	" " $\frac{S_1}{L} = 48.96$
" overhang aft ...						" " $\frac{E}{L} = 48.96$
" overhang forward ...						Percentage from Table, Line A. 31.11
Trunk aft ...						corrected for absence of forecastle (if required) 35.11
" forward ...						Percentage from Table, Line B. 35.11
Tonnage opening aft ...						(corrected for absence of forecastle (if required))
" forward ...						Interpolation for bridge less than 2L (if required)
Total ...	224.74	224.28			224.28	Deduction = 42 x 35.11 = -14.75

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	55.81	1		55.81	60	60	1		60.00	Mean actual sheer aft =
1/2 L from A.P. ...	24.835	4		99.34	27	27	4		108.00	Mean standard sheer aft =
2/3 L " ...	6.14	2		12.28	8.27	8.27	2		16.74	Mean actual sheer forward =
Amidships ...	-	4		-	-	-	4		-	Mean standard sheer forward =
2/3 L from F.P. ...	12.28	2		24.56	14	14	2		28.00	Length of enclosed superstructure forward of amidships = 0.482
1/2 L " ...	49.67	4		198.68	54	54	4		216.00	" " aft of " = 2.1
F.P. ...	111.62	1		111.62	120	120	1		120.00	
Total ...				502.29					548.74	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{L} \right) = \frac{46.45}{18} \times \left(\frac{75-24.53}{50.47} \right) = -1.30$

If limited on account of midship superstructure. = $1.30 \times \frac{14.81}{28.00} = -.96$

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

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line 17035	Correction for coefficient 711 + .68 = 1391 / 1.36
Depth to Freeboard Deck = 40.81	$\Delta = \frac{14604 - 14700}{17035} = .0058$	Depth Correction ... 30.81
Summer freeboard = 11.17	Tons per inch immersion at summer load water line 56.1	Deduction for superstructures ... 14.75
Moulded draught (d) = 29.64	Deduction = $\frac{\Delta}{40 T} = \frac{.0058}{40 \times 56.1} = 7.59$	Sheer correction96
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 7.41 = 7 1/2		Round of Beam correction01
Addition for Winter North Atlantic Freeboard (if required) = ✓		Correction for Thickness of Deck amidships ... 27.25
		Other corrections, scantlings, to compare 6 a summer moulded draught of 29' - 7 3/4"
		Summer Freeboard = 134.00

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

Tropical Fresh Water Line above Centre of Disc ...	15"
Fresh Water Line " " ...	7 1/2"
Tropical Line " " ...	7 1/2"
Winter Line below " " ...	7 1/2"
Winter North Atlantic Line " " ...	✓

Tropical Fresh Water Freeboard ...	9'-11"
Fresh Water " " ...	10'-6 1/2"
Tropical " " ...	10'-6 1/2"
Winter " " ...	11'-9 1/2"
Winter North Atlantic " " ...	✓

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.

Equivalent length
of forward bridge

At side	21.6'	✓
+ $\frac{2}{3} \times 3$	2	✓
Equiv.	23.6'	✓

Equivalent length
of aft bridge.

Recess in aft end.

$$5.5 \times 32.84 \checkmark = 180.62 \checkmark$$

$$5.16 \times 5.88 \checkmark = 30.34 \checkmark$$

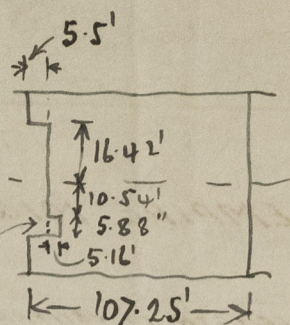
$$\checkmark 210.96 \div 62.5 \checkmark$$

$$= 3.36'$$

$$107.25$$

$$\text{Equiv. under} = 103.89 \checkmark$$

$$\text{Overhang} = \text{nil.}$$



Trade of ship *International*

Names of sister ships *CLAN FRASER (with modifications) G.R. No. 20680.*

Builder's name and yard number *The Greenock Dockyard & Co. Ltd., W. 450.*

Owners *Ministry of War Transport.*

Fee £ *20.*
ESTIMATED.



© 2020

Lloyd's Register
Foundation