003409-003416-0035

Rpt. C.11 (Comp.).

Index No. 30176.
(For London Office only.)

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER.~~)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
GLENCULLEN.	144974	EIRE DUBLIN.	448	1921-10

Port of Survey

Date of Survey   12-1-46.

Surveyor's Signature

Particulars of Classification

Moulded Dimensions : Length 142·00′   Breadth 25·83′   Depth 12·50′

Moulded displacement at moulded draught = 85 per cent. of moulded depth   765′   tons

Coefficient of fineness for use with Tables   ·687

DEPTH FOR FREEBOARD (D).

Moulded depth ... ... 12·50′

Stringer plate ... ... ·03′

Sheathing on exposed deck

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

Depth for Freeboard (D) = 12·53′

DEPTH CORRECTION.

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

$(12·53 - 9·47) \cdot 1·092 = +3·34''$
3·06

(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) = 25·83′

Standard Round of Beam $= \dfrac{B \times 12}{50}$ = 6·20″

Ship's Round of Beam = 6·50″

Difference   EXCESS = ·30″

Restricted to

Correction $= \dfrac{Diff^o}{4} \times \left(1 - \dfrac{S_1}{L}\right) = \dfrac{·30}{4} \times ·172 = -·01$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
„ overhang ...					
R.Q.D. enclosed	84·50	84·50	3·75	✓	84·50
„ overhang ...					
Bridge enclosed	8·75	8·75	6·75	✓	8·75
„ overhang aft ...					
„ overhang forward ...					
F'cle enclosed EQUIVALENT.	23·50	23·50	6·45	✓	23·50
„ overhang ...	1·67	·83	6·45	✓	·83
Trunk aft					
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total	118·42	114·58			117·58

Standard Height of Superstructure   6·00′

„ „ R.Q.D.   3·28′

Deduction for complete superstructure   20·20″

Percentage covered $\dfrac{S}{L}$ = 83·40

„ „ $\dfrac{S_1}{L}$ = 82·80

„ „ $\dfrac{E}{L}$ = 82·80

Percentage from Table, Line A.   78·77
(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 = 20·20 × ·7877 = 15·91″

SHEER CORRECTION.

ACTUAL HEIGHT OF R.Q. DK = 3·75′
STANDARD „ „ „ = 3·28′
= ·47′

| Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	24·20	1	24·20	+5·64 / 33·00	38·64	1	38·64
⅙L from A.P. ...	10·77	4	43·08	14·61	17·20	4	68·80
⅔L ...	2·66	2	5·32	3·65	4·25	2	8·50
Amidships ...	–	4	–	–	–	4	–
⅔L from F.P. ...	5·32	2	10·64	6·22	6·22	2	12·44
⅙L „ ...	21·54	4	86·16	24·88	24·88	4	99·52
F.P. ...	48·40	1	48·40	60·00	60·00	1	60·00
Total ...			217·80				287·90

Mean actual sheer aft / Mean standard sheer aft = EXCESS.   5·64

Mean actual sheer forward / Mean standard sheer forward = EXCESS.

Length of enclosed superstructure / L   forward of amidships = ·157 L.

„ „ „ aft of „ = ·50 L.

Correction $= \dfrac{\text{Difference between sums of products}}{18}\left(·75 - \dfrac{S}{2L}\right) = \dfrac{70·10''}{18}(·75 - ·417) = -1·30''$
·333

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.

RAISED QUARTER

	Ft.
Depth to ~~Freeboard~~ Deck =	16·28
Summer freeboard	3·92
Moulded draught (d) =	12·36

Deduction for Tropical freeboard and addition for Winter freeboard $= \dfrac{d}{4}$ inches = 3·09 = 3″

Addition for Winter North Atlantic Freeboard (if required) = 3″ + 2″ = 5″

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\triangle$ = 920

Tons per inch immersion at summer load water line

T = 7·65

Deduction $= \dfrac{\triangle}{40\,T}$ inches
= 3·01
= 3″

TABULAR FREEBOARD ~~corrected for Flush Deck~~ (if required)   14·46″

Correction for coefficient $\dfrac{·687 + ·68}{1·36} = \dfrac{1·367}{1·36}$ 14·53″

	+	−
Depth Correction	3·34	—
Deduction for superstructures	—	15·91
Sheer correction	—	1·30
Round of Beam correction	—	·01
Correction for ~~Thickness of~~ Deck amidships ...	45·00	—
Other corrections, scantlings, etc.	—	—
	48·34	17·22

+31·12″

HEIGHT OF RAISED QUARTER

RAISED QUARTER

Summer Freeboard = 45·65″
= 3′ 11″ (LIMITED)

82 R.
15·1·46

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

17·1·46

Tropical Fresh Water Line above Centre of Disc ...	3″	Tropical Fresh Water Freeboard ...	3′ 8″
Fresh Water Line „ „	3″	Fresh Water „	3′ 8″
Tropical Line „ (LIMITED)	NIL	Tropical „	3′ 11″ (LIMITED)
Winter Line below „	3″	Winter „	4′ 2″
Winter North Atlantic Line „ ...	5″	Winter North Atlantic „	4′ 4″

5m T 11/41. McC.
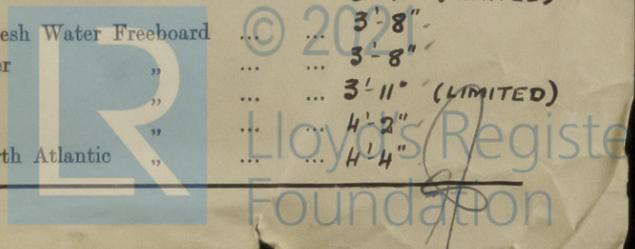
A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.
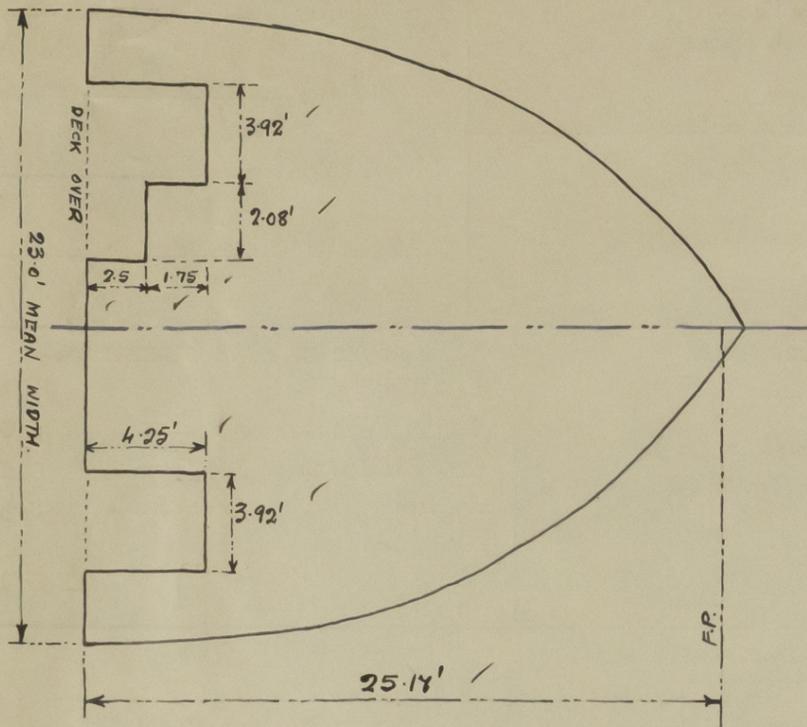
Forecastle Equivalent Bulkhead.

$$25.17' - \frac{(3.92' \times 4.25) + (2.08' \times 2.50) + (3.92 \times 4.25)}{23.0}$$

$$= 25.17' - \frac{38.52}{23.0}$$

$$= 25.17' - 1.64' = \underline{23.50'}$$

Equivalent Overhang $= \underline{1.64'}$

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____ : _____ : _____