

CORNWALL
36890 Etc.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 37361
(For London Office only).

No 33765

Ship's Name COLLINGBOURNE WRENWOOD	Official Number 169604	Nationality and Port of Registry BRITISH LONDON	Gross Tonnage 2846.84 2850	Date of Build 1943	Port of Survey SUNDERLAND
Moulded Dimensions: Length 312.40 Breadth 44.25 Depth 22.08					Date of Survey WHILST BUILDING
Moulded displacement at moulded draught = 85 per cent. of moulded depth (18.77) 5596 tons					Surveyor's Signature P. Norwood
EXTERNAL 00 755 19.0 5665 T.P.I. 27.54 20.0 6000 27.80 21.0 6333 28.08					Particulars of Classification +100A1 (CONT)
Coefficient of fineness for use with Tables 21.0 6333 28.08					

Depth for Freeboard (D). Moulded depth ... 22.08 Stringer plate ... 62 05 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 22.13	Depth correction. (a) Where D is greater than Table depth (D - Table depth) R = $(22.13 - 20.83) 12.403 = +3.12''$ 1.30 (b) Where D is less than Table depth (if allowed) (Table depth - D) R = <input checked="" type="checkbox"/> If restricted by superstructures <input checked="" type="checkbox"/>	Round of Beam correction. Moulded Breadth (B) 44.25 Standard Round of Beam = $\frac{B \times 12}{50} =$ 10.62 Ship's Round of Beam = 11 Difference 38 Restricted to <input checked="" type="checkbox"/> Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{38}{4} \times 3027 = -.03$
--	--	---

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
„ overhang ...	190.86				
R.Q.D. enclosed ...	188.69	190.86	4'-10 1/2	<input checked="" type="checkbox"/>	190.86
„ overhang ...	191.94				
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
F'cle enclosed ...	25.00	25.00	7'-0	<input checked="" type="checkbox"/>	25.00
„ overhang ...	2.00	2.00			2.00
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ forward ...					
Total ...	217.86	217.86			217.86

Standard Height of Superstructure **6.624**
 „ „ R.Q.D. **4.832**
 Deduction for complete superstructure **36.16**
 Percentage covered $\frac{S}{L} =$
 $\frac{S_i}{L} =$ **69.73**
 $\frac{E}{L} =$
 Percentage from Table, Line A. ☒
 (corrected for absence of forecastle (if required)) ☒
 Percentage from Table, Line B. **62.54**
 (corrected for absence of forecastle (if required)) ☒
 Interpolation for bridge less than 2L (if required) ☒
 Deduction = **36.16 x .6254 = -22.61**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	41.24	1	41.24	42	42.52	1	42.52
1/4 L from A.P. ...	18.355	4	73.42	18 1/2	18.92	4	75.68
2/4 L „ ...	4.54	2	9.08	4 1/2	4.68	2	9.36
Amidships ...	-	4	-	-	-	4	-
3/4 L from F.P. ...	9.075	2	18.15	10 1/2	10.50	2	21.00
1/4 L „ ...	36.71	4	146.84	41	41.00	4	164.00
F.P. ...	82.48	1	82.48	92	92.00	1	92.00
Total ...			371.21				404.56

Mean actual sheer aft =
Mean standard sheer aft =Mean actual sheer forward =
Mean standard sheer forward =Length of enclosed superstructure forward of amidships = **7.16**
L„ „ aft of „ = **.52**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) = \frac{33.35}{18} (75 - .3486) = -.74''$
 If limited on account of midship superstructure. ☒

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **27.01**
 Summer freeboard = **7.27**
 Moulded draught (d) = **19.74**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **4.93 = 5''**Addition for Winter North Atlantic Freeboard (if required) = **7''**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ **5946**

Tons per inch immersion at summer load water line

 $T =$ **27.76**Deduction = $\frac{\Delta}{40T}$ inches $=$ **5.35''****5 1/4''**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.755 + .68}{1.36} = 1.435/1.36$

+ -

Depth Correction ... **3.12** -Deduction for superstructures ... **22.61**Sheer correction ... **.74**Round of Beam correction ... **.03**Correction for Thickness of Deck amidships ... **58.50**

Other corrections, scantlings, etc. ...

61.62 23.38 + 38.24
Summer Freeboard = **87.30**

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

Tropical Fresh Water Line above Centre of Disc ...	10 1/4''
Fresh Water Line „ „ ...	5 1/4''
Tropical Line „ „ ...	5''
Winter Line below „ „ ...	5''
Winter North Atlantic Line „ „ ...	7''

Tropical Fresh Water Freeboard ...

6'-5''Fresh Water „ „ **6'-10''**Tropical „ „ **6'-10 1/4''**Winter „ „ **7'-8 1/4''**Winter North Atlantic „ „ **7'-10 1/4''**

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.

Raised Quarter Deck.

Length at Centre 191.94
 Side 188.69
 $3.25 \times \frac{2}{3} = 2.17$
 $\frac{188.69}{190.86}$

Trade of ship. COLLIER.

Names of sister ships. SS "CORMULL" & "BUSHWOOD" MESSRS S. P. AUSTIN & SON N^o 363 & 365

Builder's name and yard number. MESSRS S. P. AUSTIN & SON N^o 368.

Owners. W. FRANCE, FENWICK & CO. LD

Fee £ 13 : 0 : 0

Will be charged on F. E. Report.



© 2020

Lloyd's Register Foundation