

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

21 NOV 1935

GLASGOW REPORT No

56354

Computation of Freeboard for Steamer, Sailing Ship, Tanker

Having

Port of Survey

Glasgow

(Type of Superstructures.)

Date of Survey

20th November 1935

Ship's Name
"BIRKER FORCE"
EX
ELLOUGHTON

Nationality and Port of Registry
BRITISH
WHITEHAVEN

Official Number
142761

Gross Tonnage
952.53

Date of Build
1919-1920

Name of Surveyor

R. Dunsmuir

Moulded Dimensions: Length

Breadth

Depth

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

Coefficient of fineness for use with Tables

Particulars of Classification

100A1

1-34

S.S. Hull N° 3-12-31

Depth for Freeboard (D)

Moulded depth ...

Stringer plate ...

Sheathing on exposed deck

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

Depth for Freeboard (D) =

Depth correction

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

(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)

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

$$\text{Ship's Round of Beam} =$$

Difference

Restricted to

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

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 ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...					

Standard Height of Superstructure

" " R.Q.D.

Deduction for complete superstructure

$$\text{Percentage covered} \frac{S}{L} =$$

$$\frac{S_1}{L} =$$

$$\frac{E}{L} =$$

Percentage from Table, Line A.

(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 =

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...		1				1	
$\frac{1}{8}L$ from A.P. ...		4				4	
$\frac{2}{8}L$ " ...		2				2	
Amidships ...		4				4	
$\frac{2}{8}L$ from F.P. ...		2				2	
$\frac{1}{8}L$ " ...		4				4	
F.P. ...		1				1	
Total ...							

Mean actual sheer aft =
Mean standard sheer aft =

Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
L

" " aft of " =

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

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.

Depth to Freeboard Deck = Ft.

Summer freeboard =

Moulded draught (d) =

Deduction for Tropical freeboard and addition for

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

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$$\Delta =$$

Tons per inch immersion at summer load water line

$$T =$$

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ...
Deduction for superstructures ...
Sheer correction ...
Round of Beam correction ...
Correction for Thickness of Deck amidships ...
Other corrections, scantlings, etc. ...

+	-

Summer Freeboard =

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 " " ...	

Tropical Fresh Water Freeboard ...	
Fresh Water " " ...	
Tropical " " ...	
Winter " " ...	
Winter North Atlantic " " ...	

ALTERATION TO HATCHES.

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
				UPP D ^s	R. Q ^s D ^s				
Description of Hatchway	...	...	...	N ^o 1 HATCH	N ^o 2 HATCH		ESCAPE HATCH ON Q ^s D ^s AT FORE END OF BUNKER CASING (P) SIDE		
Dimensions of Hatchway	...	...	...	38'-2" x 17'-0"	46'-10 1/2" x 17'-0"		2'-0" x 2'-0"		
COAMINGS	Height above Deck	...	...	36"	36"		24"		
	Thickness	Sides	...	50	50		40		
		Ends	...	44	44		40		
	Stiffeners	...	...	9 x 3 x 3/8 BA WITH 6 x 40 RIDER	10 x 4 x 5/8 BA WITH 7 x 40 RIDER		✓		
HATCH BEAMS	Brackets, Stays	...	...	3 P&S	4 P&S				
	Number	...	...	7	9		3" COVER. F & A.		
	Spacing	...	...	12'-3 1/2" & 6'-2 1/2" & 5'-4"	22'-3 1/2" & 7'-2 1/2" & 5'-4"		WITH 3 BEARING.		
	Scantling and Sketch	...	...	PL 13 x 33 1 WEB ANG 4 x 3 x 40	PL 11 x 30 2 WEBS ANG 4 x 3 x 40		CLEATS 18"		
FORE AND AFTERS	Bearing Surface	...	...	PL 15 x 36 6 WEBS ANG 4 x 3 x 40	PL 15 x 36 7 WEBS ANG 4 x 3 x 40		2 TARPULINS.		
	Number	...	...				ESCAPE HATCH ON UPP D ^s AT FORE BHP		
	Spacing	...	...				S. SIDE		
	Unsupported Lengths	...	...				2'-0" x 2'-0"		
HATCH COVERS	Scantling* and Sketch	...	...				COAMING 24" x 40		
	Bearing Surface	...	...				3" COVER.		
	Material	...	...	N.P	N.P		3" BEARING.		
	Thickness	...	...	3"	3"		CLEATS 18"		
HATCH COVERS	How fitted	...	...	FORE & AFT.			2 TARPULINS.		
	Bearing Surface	...	...	3" & 3 1/4"					
	Spacing of Cleats	...	...	24"	24"				
	Number of Tarpaulins	...	...	TWO	TWO				
*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/> Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/> YES. Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> YES. Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/> YES.									

Particulars of fiddle, funnel and ventilator coamings:—

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Particulars of Flush Bunker Scuttles:—

Particulars of Companionways:—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

Particulars of Gangway Cargo and Coaling Ports:—

