

Rpt. C.11.

Cloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Index. No. 14821
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having BRIDGE AND FORECASTLE
(Type of Superstructures.)
Port of Survey SOUTHAMPTON
Date of Survey 26th + 27th SEPT. 1932.
Name of Surveyor J. Anderson.
Particulars of Classification +100A1
SHELTER DK. WITH FREEBOARD.
SS 11.4K No. 2-29

Ship's Name <u>B.S. SANDOWN CASTLE</u>	Nationality and Port of Registry <u>BRITISH LONDON</u>	Official Number <u>146167</u>	Gross Tonnage <u>7607</u>	Date of Build <u>1921-4 mo.</u>
Moulded Dimensions: Length <u>424.75</u>	Breadth <u>38.75</u>	Depth <u>38.75</u>		
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons				
Coefficient of fineness for use with Tables				

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) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = <u>17.5</u> Difference Restricted to Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$
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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 ...	<u>130'-0"</u>		<u>8'-6"</u>	<u>+ 3" wood.</u>	
„ overhang aft ...					
„ overhang forward ...					
Fore enclosed ...	<u>45'-0"</u>		<u>8'-0"</u>		
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total ...					

Standard Height of Superstructure
„ „ R.Q.D.
Deduction for complete superstructure
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		
$\frac{3}{8}L$ „ ...		2					2		
Amidships ...		4					4		
$\frac{5}{8}L$ from F.P. ...		2					2		
$\frac{7}{8}L$ „ ...		4					4		
F.P. ...		1					1		
Total ...									

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 $1\frac{1}{2}$ ins. per 100 ft.

Mean actual sheer aft =
Mean standard sheer aft =
Mean actual sheer forward =
Mean standard sheer forward =
Length of enclosed superstructure forward of amidships =
„ „ aft of „ =

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 Winter freeboard = $\frac{d}{4}$ 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 $T =$ Deduction = $\frac{\Delta}{40T}$ 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 =
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc	...	Tropical Fresh Water Freeboard	...
Fresh Water Line	...	Fresh Water	...
Tropical Line	...	Tropical	...
Winter Line below	...	Winter	...
Winter North Atlantic Line	...	Winter North Atlantic	...

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway	TO CHAIN LOCKER	Nº 1.	Nº 2+5	Nº 3+4	Nº 6	BUNKER	BUNKER ON BRIDGE DK	BUNKER ON FREEBOARD DK	Nº 3 ON FREEBOARD DK	
Dimensions of Hatchway	4'-0" x 3'-0"	23'-6" x 18'-0"	33'-0" x 18'-0"	12'-0" x 18'-0"	24'-0" x 18'-0"	16'-0" x 7'-0"	8'-0" x 3'-0"	8'-0" x 3'-0"	12'-0" x 18'-0"	
COAMINGS	Height above Deck	14"	30"	30"	27" N° 3	30"	9" ON ENG. CASING	27"	9"	9"
	Thickness	5/16"	1/4"	1/4"	1/4"	1/4"	5/16"	5/16"	5/16"	5/16"
	Sides									
	Ends									
COAMINGS	Stiffeners	✓	8"x3" B.A.	8"x3" B.A.	8"x3" B.A.	8"x3" B.A.	✓	✓	✓	✓
	Brackets, Stays	✓	✓	✓	✓	✓	✓	✓	✓	✓
HATCH BEAMS	Number		4 EQUAL	6 EQUAL	2 EQUAL	4 EQUAL	ONE CENTRE			
	Spacing		16"x3" a	16"x3" a	16"x3" a	16"x3" a	16"x3" a			
	Scantling and Sketch	✓	T 16"x3" a	T 16"x3" a	T 16"x3" a	T 16"x3" a	T 16"x3" a	✓	✓	9" N° 3
	Bearing Surface		3 1/2"	3 1/2"	3 1/2"	3 1/2"	3"			
FORE AND AFTERS	Number									
	Spacing									
	Unsupported Lengths									
	Scantling* and Sketch	✓	✓	✓	✓	✓	✓	✓	✓	
HATCH COVERS	Material	WOOD	WOOD	WOOD	WOOD	WOOD	WOOD	WOOD	WOOD	
	Thickness	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	
	How fitted	ATH	FPA	FPA	FPA	FPA	FPA	FPA	FPA	
	Bearing Surface	3"	3"	3"	3"	3"	3"	3"	3"	
Spacing of Cleats		18"	22"	22"	24"	24"	19"	24"	24"	
Number of Tarpaulins		2	3	3	3	3	3	2	NONE	NONE
*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"/> Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/>										

Locking bars fitted to nos. hatchways at L.L. 27/5/43

Particulars of fiddle, funnel and ventilator coamings:—

Stokehold gratings covered by strong hinged steel covers.
 Engine Room skylights of steel strongly constructed.
 Fiddle funnel ventilators in efficient condition.

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways:—

None

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

FORECASTLE	BRIDGE DECK	AFTER WELL DECK
3-VENTS 9" DIA. - 18" COAMING	4-VENTS 22" DIA. - 36" COAMING.	6-VENTS 22" DIA. - 36" COAMING.
FORWARD WELL	2- " 12" " - 36" " "	1- " 12" " - 21" " "
2-VENTS 22" DIA. - 36" COAMING.	2- " 6" " - 18" " "	4- " 8" " - 18" " "
2- " 12" " - 36" " "	25 M. VENTS 6" " - 18" " "	2- " 6" " - 18" " "

Efficient means of closing provided

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

FORECASTLE	BRIDGE DECK	AFTER WELL DECK
2 1/2" AIR PIPES - 14" HIGH.	2-2 1/2" AIR PIPES - 30" HIGH.	2-2" AIR PIPES - 22" HIGH. *
2-2 1/2" " - 18" HIGH.		2-3" AIR + FILLING PIPES 24" HIGH. *
FORWARD WELL		2-2 1/2" AIR PIPES - 24" HIGH.
4-2 1/2" AIR PIPES - 18" HIGH.		2-2 1/2" " " - 14" " "

All air pipes, except those marked *, are of the hooded type fitted with a slotted casing.

Efficient means of closing provided

Particulars of Gangway Cargo and Coaling Ports:—

4- Gang doors (P & S for turn table forward & aft) - opening 5'-10" x 3'-10" - 12" above deck, strong hinged steel doors secured by 3 - 3"x3" strong bolts.
 Doors stiffened all round by double 3 1/2"x3 1/2" angles.



Particulars of Scuppers and Sanitary Discharge Pipes:— *Sanitary discharges (4 in Bridge & 4 aft) 3½" Bore. lead pipes & gunmetal storm valves.*
2. Scuppers 3" bore (10+15) in bridge & 2 in pipes no storm valves.

Particulars of Side Scuttles:—

Side scuttles in fore-castle fitted with hinged deadlights
Side scuttles in Bridge fitted with hinged or portable deadlights.
Side scuttles aft end fitted with hinged deadlights.

Particulars of Guard Rails:—

Guard Rails - fore-castle 3 tier rail, 3'-6" high, stanchions pitched 5 ft apart.
Guard Rails - aft end 3 " " , 3'-6" " , " " 5 ft. " .

Particulars of Gangways, Lifelines, etc.:—

Agreement Lifelines have been provided for use in any part of the ship which might have to be used by the crew in the regular working of the ship.

Particulars of Freeing Arrangements.

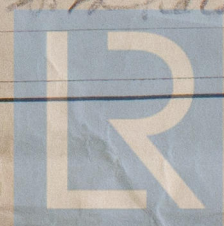
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ...	158'-0"	3'-6"	3'-0" x 1'-4"	7	25.34 sq	3 1/2
Forward Well ...	92'-6"	3'-6"	3'-0" x 1'-4"	5	18.1 sq	18 1/2
State position of each freeing port ... (F. and A. position and height above deck edge)						
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—						
Additional area where sheer is less than standard.						

Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ...								
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ...	✓	3/8"		3'-0"	BRACKETS TOP	2@ 5'-6" x 3'-4" 1@ 5'-2" x 2'-0"	18" 20"	8'-6"
Bridge, Forward Bulkhead ...	✓	3/8"		3'-6"	BRACKETS TOP	NONE		8'-6"
Fore-castle Bulkhead ...	✓	5/16"	3 3/4" x 3 3/4" a	3'-6"	BRACKETS TOP	2@ 4'-6" x 3'-0" 1@ 4'-6" x 2'-0"	21" 19"	8'-0"
Trunk, Aft ...								
Trunk, Forward ...						4@ 4'-3" x 2'-0" 4@ 4'-9" x 2'-0"	18" 16"	
Exposed Machinery Casings on Free-board or Raised Quarter Deck Aft	✓	5/16"	PLATE FRAMED 4"	3'-6"	BRACKETS TOP	1@ 5'-0" x 3'-0"	18"	8'-0"
Exposed Machinery Casings on Super-structure Decks ...	✓	3/8"	4" x 3" a	2'-6"	BRACKETS TOP	4@ 4'-6" x 2'-0"	15"	3'-6" AND 8 FT.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...								
Deckhouse on Flash Deck Ships ...	✓	5/16"	PLATE FRAMED 4"	3'-9"	ON SIDE	4@ 4'-9" x 2'-0"	16"	8'-0"

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

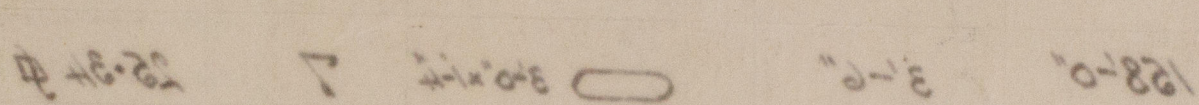
Poop Bulkhead ...	✓	
Raised Quarter Deck Bulkhead ...	✓	
Bridge, After Bulkhead ...	✓	<i>Hing openings fitted with channels for storm boards - no storm boards. Outer door of strong construction to insulated chamber</i>
Bridge, Forward Bulkhead ...	✓	<i>Intact</i>
Fore-castle Bulkhead ...	✓	<i>open</i>
Exposed Machinery Casings on Free-board or Raised Quarter Deck Aft	✓	<i>4. Hinged wood doors 1 3/4" thick, 5 hinged steel doors, strongly constructed. All operated from both sides</i>
Exposed Machinery Casings on Super-structure Decks ...	✓	<i>2. Hinged wood doors 1 3/4" thick, 2 hinged steel doors, strongly constructed. All operated from both sides.</i>
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	✓	<i>Hinged steel doors port side operated both sides</i>
Deckhouse on Flash Deck Ships ...	✓	<i>4. Hinged wood doors 1 3/4" thick, operated from both sides.</i>



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BRIDGE BULWARK 3'6" HIGH
1.5. FACING PORT (P.S.) AND STB. DE. LASHING.



20-11-4 0-29 0-12 0-20 0-24 0-28 0-31
 0-27 0-10 0-04 0-02 0-01
 20-11-4 0-29 0-12 0-20 0-24 0-28 0-31
 0-27 0-10 0-04 0-02 0-01

Builder's name and yard number SHORT BROS. LD.

Builder's name and yard number. SHORT BROS. LD.

Names of sister ships.....

Owners UNION-CASTLE MAIL S.S. CO. LD.

Fee £ 15 : 6 : 0 Received by me