

Rpt. G.11.

B.T. COPY WRITTEN

Newcastle-on-Tyne

No. 89152

20 SEP 1932

WEEK 161

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(For London Office only.)

Lloyd's Register of Shipping. SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker				Port of Survey <i>Newcastle upon Tyne</i>	
Having <i>Complete Shelter deck.</i>				Date of Survey <i>19th September. 1932.</i>	
(Type of Superstructures.)				Name of Surveyor <i>Clepherson</i>	
Ship's Name CASTLEMOOR	Nationality and Port of Registry BRITISH LONDON	Official Number 146613	Gross Tonnage 6574	Date of Build 1922-8	
Moulded Dimensions: Length <i>420.0'</i> Breadth <i>53.75'</i> Depth <i>37.0' to Shelter deck.</i>				Particulars of Classification 100A.1.	
Moulded displacement at moulded draught = 85 per cent. of moulded depth 16053 tons				<i>Shelter deck, w/ffed</i>	
Coefficient of fineness for use with Tables .791				<i>S.S. Reg. No. 2-29</i>	

Depth for Freeboard (D)		Depth correction	Round of Beam correction
Moulded depth	37.00	(a) Where D is greater than Table depth (D—Table depth) R = (37.05 - 28.00) 3.0 = 27.15	Moulded Breadth (B) 53.75
Stringer plate05	(b) Where D is less than Table depth (if allowed) (Table depth—D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{53.75 \times 12}{50} = 12.90$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right)$	✓	If restricted by superstructures	Ship's Round of Beam = 13"
Depth for Freeboard (D) = 37.05			Difference .10
			Restricted to
			Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.10}{4} \times 1 = -.02$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>no section</i>				
.. 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

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 = **NIL**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	52.00	1		52.00	48	48.00	1		48.00
$\frac{1}{4}$ L from A.P.	23.14	4		92.56	21	20.93	4		83.72
$\frac{3}{4}$ L "	5.72	2		11.44	5.4	5.23	2		10.46
Amidships		4					4		
$\frac{3}{4}$ L from F.P.	11.44	2		22.88	13	13.03	2		26.06
$\frac{1}{4}$ L "	46.28	4		185.12	52	52.14	4		208.56
F.P.	104.00	1		104.00	120	120.00	1		120.00
Total				468.00					496.80

Mean actual sheer aft = *Deficient, greater than 75% standard*

Mean standard sheer aft =

Mean actual sheer forward = *Excess*

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = *NIL*

.. aft of .. =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{2880}{18} (.75) = -1.20$

If limited on account of midship superstructure.

If limited to maximum allowance of $\frac{1}{4}$ 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	Correction for coefficient $\frac{791 + .68}{1.36} = 1.471$
Depth to Freeboard Deck = 37.05	$\Delta =$	Depth Correction 27.15
Summer freeboard = 9.75	Tons per inch immersion at summer load water line	Deduction for superstructures
Moulded draught (d) = 27.30	T =	Sheer correction 1.20
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.82, 6 $\frac{3}{4}$"	Deduction = $\frac{\Delta}{40T}$ inches	Round of Beam correction02
Addition for Winter North Atlantic Freeboard (if required) =	<i>not available</i>	Correction for Thickness of Deck amidships
		Other corrections, scantlings, etc.
		27.15 1.22 25.93
		Summer Freeboard = 116.89

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 " "

6 $\frac{3}{4}$ "

9' - 9"

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W439-0124 (112)

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
Freeboard deck.											
Description of Hatchway	No.1.	No.2.	No.3.	No.4.	No.5.	No.6.	To Fore Peak Stow	Coal Hatch.	Coal Hatches	Closing Top	
Dimensions of Hatchway	26'-0" x 22'-0"	30'-4" x 22'-0"	23'-10" x 22'-0"	26'-0" x 22'-0"	26'-0" x 22'-0"	26'-0" x 22'-0"	3'-6" x 3'-6"	4'-2" x 22'-0"	2@ 11'-0" x 2'-10 1/2"	4'-4" x 18'	
COAMINGS	Height above Deck	32	32	32	32	32	30	32	32	12	
	Thickness	.46	.50	.46	.46	.46	.38	.44	.44	.38	
	Stiffeners	7 x 3 B.A.	7 x 3 B.A.	7 x 3 B.A.	7 x 3 B.A.	7 x 3 B.A.	7 x 3 B.A.				
	Brackets, Stays	2 @ 2" dia	2 @ 2" dia	2 @ 2" dia	2 @ 2" dia	2 @ 2" dia	2 @ 2" dia				
HATCH BEAMS	Number	5	6	4	5	5	5				
	Spacing	4'-4"	4'-4"	4'-9"	4'-4"	4'-4"	4'-4"				
	Scantling and Sketch	19 lb 9 1/2 x .36	19 lb 9 1/2 x .36	19 lb 9 1/2 x .36	19 lb 9 1/2 x .36	19 lb 9 1/2 x .36	19 lb 9 1/2 x .36				
	Bearing Surface	double angles	1 x 3 x .44								
FORE AND AFTERS	Number	v	v	v	v	v	v	v	v	v	
	Spacing										
	Unsupported Lengths										
	Scantling* and Sketch										
Bearing Surface											
HATCH COVERS	Material	w.p.	w.p.	w.p.	w.p.	w.p.	w.p.	w.p.	w.p.	w.p.	
	Thickness	3"	3"	3"	3"	3"	3"	3"	3"	3"	
	How fitted	F.o.a.	F.o.a.	F.o.a.	F.o.a.	F.o.a.	F.o.a.	F.o.a.	F.o.a.	F.o.a.	
	Bearing Surface	3, 4 + 8	3, 4 + 8	3, 4 + 8	3, 4 + 8	3, 4 + 8	3, 4 + 8	2"	3	2"	
Spacing of Cleats	23	24	23	23	23	23	18	22	23	23	
Number of Tarpaulins	3	3	3	3	3	3	3	3	3	2	
*Are wood fore and afters steel shod at all bearing surfaces? a/es.											
Are battens and wedges efficient and in good condition? a/es.											
Are tarpaulins in good condition and in accordance with rule requirements? a/es.											
Are lashings provided in accordance with rule requirements?											

Particulars of fiddle, funnel and ventilator coamings:— Engrin Room skylight of steel & of strong construction -
~~7 Bulbeye glasses Broken.~~
 Funnel & Vents in efficient condition -
 Fiddle gratings filled with hinged shut covers.

Particulars of Flush Bunker Scuttles:—

Thone.

Particulars of Companionways:— On foreboard deck to Tween deck fore. In strong steel house. 4'-9" x 3'-9" x 6'-3" high. opening 4'-10" x 2'-3" : 18" sill: steel hinged door operated from both sides.

To Crew quarters in Lower decks aft. In strong steel deckhouse. Openings 2 @ 5'-0 1/2" x 2'-3": 16" sill.
Oak doors. 1 1/2" frames. 3/4" panels. - operated from both sides.

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

On Inboard deck:

1 @ 11" dia 36" high.	34 to Peak Store.	2 @ 6" dia 30" high.	20 to Bunkers.
10 @ 20" " 36" "	36 " H/O ds.	2 @ 7" " 36" "	30 to Tunnel.
8 @ 14" " 36" "	36 " Tween decks.	4 @ 11" " 36" "	34 to Caud.
2 @ 12" " 36" "	36 " Cross Bunker.	1 @ 7 1/2" " 18" "	20 to store aft.
2 @ 7" " 36" "	34 " In decks.	2 @ 6" dia. C.N. Vents 13" to mouth to Tween decks.	

All nests have wood
plugs and canvas covers.

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

On foreboard deck.
1 @ 2" dia 4^{to} mouth to fore peak.
7 @ 2" " 20" " " C. O. B.
5 @ 2" " 7³⁶" " " "
1 @ 2" dia ~~broken off at deck requires brass goose neck band.~~

Particulars of Gangway Cargo and Coaling Ports:—

none.

Particulars of Sewers and Sanitary Discharge Pipes :—

2 ft. discharges from main ship deckhouse led outboard below freeboard deck with S. valves at shell
Engines accom^{ts} S only
Crews quarters (10015)

Particulars of Side Scuttles :—

Side lights to crew's quarters aft have strong hinged deadlights.
2 glasses broken.

Particulars of Guard Rails :—

On freeboard deck. Rails 3' 4" high: 3 rods: stanchions 4'-0" to 4'-9" apart.

Particulars of Gangways, Lifelines, etc. :—

none.
Manilla lifelines are provided on port & starboard on the
freeboard deck. all fast

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Well	✓					
Forward Well	✓					

Position of each freeing port } After Well :—
and A. position and height above deck edge } Forward Well :—
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.

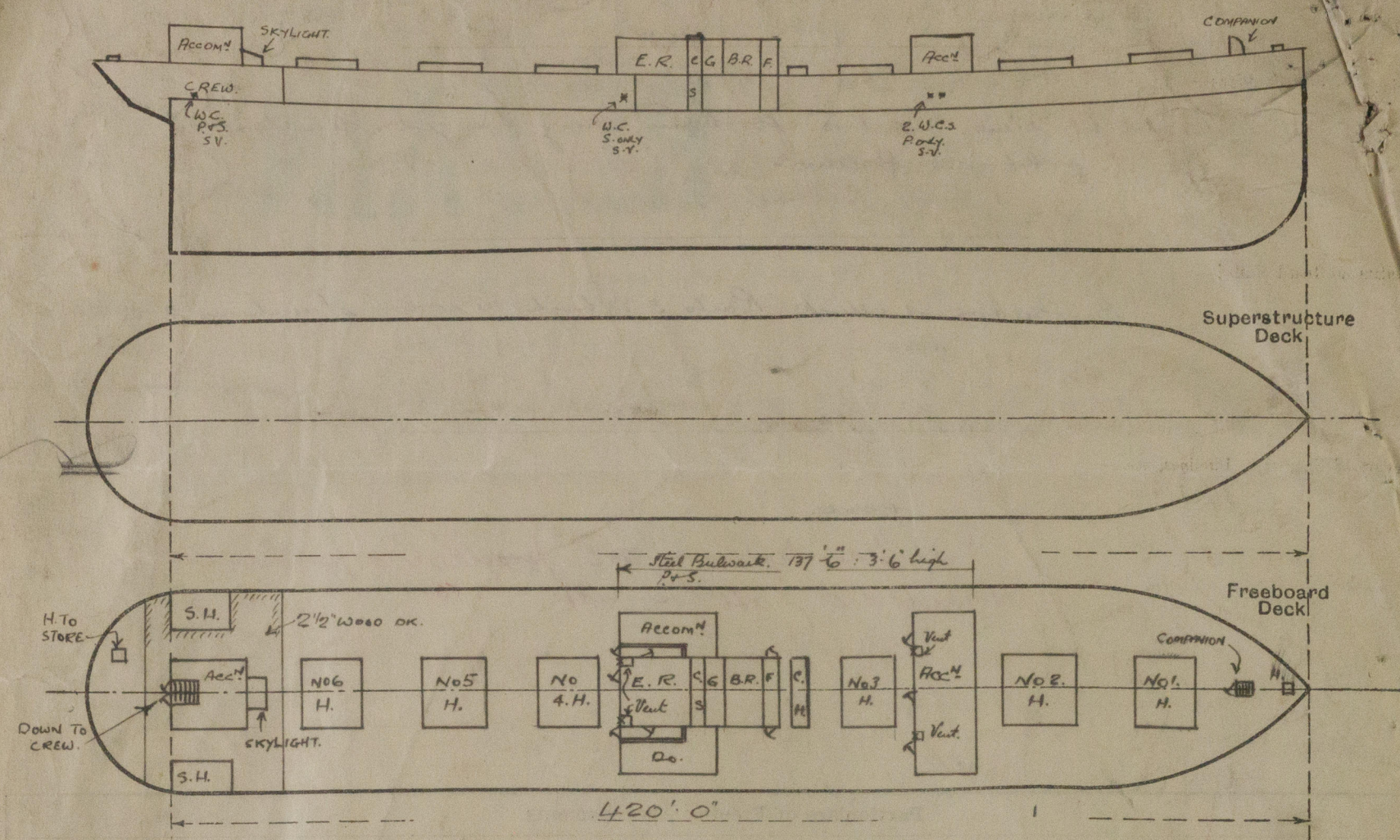
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	✓							
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead	✓							
Bridge, Forward Bulkhead	✓							
Forecastle Bulkhead	✓							
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	140	34	3 1/2 x 3 x 36	26	none	2 @ 4'-8" x 22" 1 @ 4'-9" x 27"	17" 18"	7'-6"
Exposed Machinery Casings on Superstructure Decks								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships ...	38	34		36	not available	3 @ 4'-8" x 24"	18"	7'-6"

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

Poop Bulkhead	✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	✓
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	✓
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	Ordinary steel hinged doors operated from both sides.
Exposed Machinery Casings on Superstructure Decks	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships ...	Leak doors 1 1/2 frames 5/8" panels operated from both sides.

Castlemore

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



Doors to E.R. alleyways.
 2 @ 4'-8" x 24" 18" sill.
 Leak doors. 1/8 frame. 3/4" panel.
 operated both sides.
 Port side door is reinforced with 3/4" Leak boards secured on inside, as temporary
 repairs. Panel stuck in & needs repair.

State any special features in the construction of the ship:—

Additional Hatches.

To Store aft.
 2' 11" x 2' 11" 18" x 34 Coaming.
 Beaming surface 2" Corus. W.P. 2 1/2" F.O.A.
 Cleats 22" 2 Tanpaulins.

Bulwark. 3' 6" high. 137' 6" long. amidships
 2 steering ports each side. 30" x 18" 13" above deck.
 Open ports with 2 high rods.
 36' 0" and 49' 9" from after end of engine accom.

Vents.

4 Vents to holds. Built into After end
 Engine Casings and. Under ship deckhouse.
 Opening in Casings. 24" x 18" 5' 0" above deck.
 Closed with 1 1/2" wood sliding door secured
 by slip bolt.

Skylight to crew's quarters.
 4' 3" x 5' 11" 3' 6" to 1' 6" high.
 Steel and of strong construction with hinged
 teak top. 2 1/2" frame. 2" panel. secured by quadrant
 & screw.

Vessel measured afloat.

Particulars
 On Tonnage
 1000
 1000
 1000
 1000
 1000

W. D. 11

Builder's name and yard number W. Doxford & Son Ltd

Names of sister ships.

Owners Moore Line Ltd

Fee £ 14 : 9 : -

Received by me

[Signature]



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