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THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

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Complete

SURVEY FOR FREEBOARD

STEAMER, TANKER, SAILER: "BERULY" S.S. WITH TIMBER DECK CARGO
Nationality British Builders' Name and No. of Ship Ailsa S.B. Co. Ltd., Green N^o. 386
Port of Registry Glasgow ✓ Owners Wm Sloan & Co.
Official Number 147919 ✓ 1030. Port and Date of Survey Glasgow 20/7/32
Gross Tonnage 1001 4025 ✓ Name of Surveyor A.R. Baxter.
Date of Build 8/1924 Names of Sister Ships "BRORA"
Particulars of Classification B.S.*

Type of Superstructures Combined Poop + Bridge, and Forecastle.

Give full particulars of the following:—

Fiddle and Funnel Coamings (state height of coamings, type of fiddle covers, and if these are permanently attached in their proper positions)

FIDDLE & FUNNEL COAMINGS 4" AB. WOOD BOAT DK. FIDDLER GRATINGS WITH PERMANENT HINGED STEEL COVERS.

Flush Bunker Scuttles on freeboard and superstructure decks (state material, type of joints, etc., and if secured by hinge or permanent chain attachment)

3 ON UPPER DECK SOLID STEEL COVERS 27" DIA. WITH GRATINGS UNDER

2 ON BRIDGE " " " " " " " " " " " "

Rack provided for storage of covers for scuttles.

Companionways on freeboard and superstructure decks (state material, height of doorway sills, type of doors, and if these can be closed and secured from both sides)

1 STEEL ENCLOSED FROM F'LE TO UPPER DK., NO DOOR, SILL 8" AB. WOOD DK.

10 AFT END OF ENG. CASING ON POOP DECK TO UPPER, STEEL ENCLOSED, WOOD DOOR, SILL 13" AND DOOR CAN BE CLOSED AND SECURED FROM BOTH SIDES.

Ventilators in exposed positions on freeboard, raised quarter and superstructure decks (state height of steel coamings, pitch of rivets in deck connection, type of closing arrangements)

F'LE COAL VENTS 30" CMGS., RIVETS 3" 1/4"

UPPER DECK AFT STEEL TUBULAR 6'-0" HIGH AND SLOTTED AT TOP.

Wood plugs & canvas covers provided for coal ventilators.

Airpipes in exposed positions on freeboard, raised quarter and superstructure decks (state height to opening and if satisfactory closing arrangements are provided)

F'LE SWAN NECKS 10", 13", & 14" UPPER TWEEN DECKS ALL SWAN NECKS 8'-0" HIGH. POOP 14" 1/2" SWAN NECK.

Scuppers and Sanitary Discharge Pipes (state material, type and number of valves) ALL W.C. PIPES OF STEEL & DISCHARGE BELOW UPPER DECK AND CLEAR OF BELTING. CREWS W.C. IN F'LE PORTSIDE. 2 W.C. AT AFT END OF ENG. RM. ON BRIDGE DECK DISCHARGE STARBOARD. 1 W.C. AFT END OF BRIDGE DK. PORT DISCHARGES (PORTSIDE DECK SCUPPERS IN WELL OPEN WITH GRATINGS - IN TWEEN DECKS GRATING & STORM VALVES AT SHIPS SIDE BELOW UPPER DECK.

Side Scuttles to spaces below freeboard and superstructure decks (state type or pattern, and if permanent or portable deadlights are supplied)

F'LE: - BRASS FRAMES WITH PERMANENT HINGED DEADLIGHTS
TWEEN DECKS: - HINGED, BRASS FRAMES WITH PORTABLE STEEL DEADLIGHTS PROVIDED.

Guard Rails on freeboard and superstructure decks (state type and where fitted)

F'LE: - 4 RAILS & STANCHIONS.

P. & BR: - 4 " " "

" TO AFT END OF CREWS' QUARTERS - FORWARD IS SOLID BULWARK.

002471-002476-025 in

As this vessel is less than 250'-0" in length
the Freeboard Report has not been compared with the
approved plans.

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POOP + BRIDGE DECKS SHEATHED

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Lloyd's Register
Foundation

Length on summer load line $241.83'$ Moulded Breadth $34'-0"$ Moulded Depth $17'-0"$ Depth of Keel

Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth 2253 Tons

Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85} = .664$ use .68 min.

Displacement and tons per inch immersion in salt water at summer load line $2624 + 16$

Moulded depth 17.0 Deduction for Fresh Water $\frac{\Delta}{40T} = 4.1 = 4$ inches

Stringer Plate $.5"$ Round of Beam Correction $.042$

Sheathing on exposed deck $T \left(\frac{L - 5}{L} \right)$ Ships' Round of Beam 8.5 inches

Rise of floor (in sailers) Standard Round of Beam $\frac{B \times 12}{50} = \frac{8.16}{.34}$

Depth for Freeboard (D) Difference

Table Depth 17.042 Restricted to

Depth Correction $\frac{L}{130} \times \frac{16.122}{.92} = 1.71$ Correction $\frac{\text{Difference}}{4} \times \left(1 - \frac{E}{L} \right) = .085 \times .2597 = .02$ off.

If restricted by superstructures

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.	30	34.18	30	1	30
$\frac{1}{8}$ L from A.P.	14		14	4	56
$\frac{1}{8}$ L from A.P.	4		4	2	8
Amidships	0		0	4	0
$\frac{1}{8}$ L from F.P.	7		7	2	14
$\frac{1}{8}$ L	25.5		25.5	4	102
F.P.	60	68.37	60	1	60
				18	270
Effective Mean Sheer					15
Standard "	"	.05L + 5			17.09
		Difference			2.09

Mean Actual sheer aft = Less than 1.
 „ Standard „ „

Mean Actual sheer forward = $\frac{19.687}{22.789} = .864$
 „ Standard „ „

Length of enclosed superstructure forward of amidships = Over 1 L
 Length of Ship

Length of enclosed superstructure aft of amidships = Over 1 L
 Length of Ship

Sheer Correction = Difference $\times (75 - \frac{S}{2 L}) = 2.092 \times .3534$
 = .74 in

If limited on account of midship superstructure =
 „ to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. =

	+	-
Depth correction	1.71	-
Deduction for superstructures	-	20.51
Sheer correction	.74	-
Round of Beam correction	-	.02
Correction for thickness of deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	2.45	20.53

DRAUGHTS AND SEASONAL CORRECTIONS

	Sailer, Tanker, Steamer	Timber
Depth to Freeboard Deck in feet	17.042	
Summer Freeboard in feet	1.049	
Moulded Draught (d)	15.993 = 16' @ 1'-0 3/4" (d ₁)	
Addition for Keel		16'-1 1/2"
Extreme draught		
Deduction for Tropical and addition for Winter Freeboard $d/4 = 3.998$ ins.		
Addition for Winter North Atlantic (if required)		= ins.
Deduction for Tropical Timber Freeboard $d/4$		= ins.
Addition for Winter $d/4$		= ins.
" " N.A. Timber Freeboard (if required)		= ins.

SUMMER TIMBER FREEBOARD recommended amidships from centre of disc to top of deck line									
TROPICAL FRESH WATER Timber line above centre of disc					Corresponding Freeboard				
FRESH WATER	22	23	24	25	26	27	28	29	30
TROPICAL	22	23	24	25	26	27	28	29	30
WINTER	22	23	below	25	26	27	28	29	30
WINTER NORTH ATLANTIC	22	23	24	25	26	27	28	29	30

PARTICULARS OF CLOSING APPLIANCES (state if capable of being manipulated from both sides)

Poop Bulkhead
R.Q.D. "
Bridge Aft Bulkhead
 " Forward "
Forecastle Bulkhead
Exposed Machinery Casings on }
 Freeboard or R.Q. decks }
Exposed Machinery Casings on }
 superstructure decks }
Machinery Casings within super- }
 structures not fitted with Cl. 1. }
 Closing Appliances }
Deck houses on Flush Deck ships

PARTICULARS OF FREEING ARRANGEMENTS

	Length of Bulwark	Height of Bulwark	No. and size of Freeing Ports each side	Area each side	Rule Area
After Well					
Forward Well	50'-0"	7'-0"	1 @ 2.5 x 1.5, 2 @ 2.5 x 1.75	11.5 sf	11.5 sf
State fore and aft position and height above deck to bottom of port, for each port		After Well Forward Well			
State whether freeing ports are fitted with shutters, bars or rails, and give particulars			SEE PAGE 2 SILLS 12"	FITTED WITH SHUTTERS & 2 HORIZONTAL BARS	

Give particulars of freeing port area, etc., on superstructure decks

PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Number and description of Hatchway from forward	UPPER DK. 1	UPPER DK. 2	BRIDGE DK. 3	UPPER DK. 3
Dimensions of Hatchway	12'-0" x 12'-0"	18'-0" x 12'-0"	20'-0" x 12'-0"	14'-3" x 12'
Height of steel above deck	24"	24"	36"	12' SIDES 16' CENTRE
Thickness of sides	.5	.5	.5	3' 1/2
Stiffeners	7 x 3 BA. ENDS.	As 1	As 1	-
Brackets or Stays			18 P. 7" @ CENTRE	-
Number	2	3	3	2
Spacing	4'-0"	4'-6"	5'-0"	4'-9"
Scantling and Sketch	3 x 3 x 4 12' x 5' 1/2	as N° 1	as N° 1	As 1.
Bearing Surface and thickness of carriers or sockets	3' x 1 1/2	3' x 1 1/2	3' x 1 1/2	3' x 1 1/2
Number				
Spacing				
Unsupported lengths				
Scantling and Sketch				
Bearing Surface and thickness of carriers or sockets				
Material	W.P. 3" ENDS	W.P. 3" AS 1	W.P. 3" AS 1	W.P. 3" AS 1.
Thickness	3"	3"	3"	3"
How Fitted	F + A.	F + A.	F + A.	As 1.
Bearing Surface	3"	3"	3"	3"
Spacing of Cleats	22"	"	"	20"
Number of Tarpaulins	3	"	"	3

[Surveyors are to note that wood fore and afters are to be steel shod at all bearing surfaces.]

Are wood fore and afters steel shod at all bearing surfaces? **yes**
 Are battens and wedges efficient and in good condition? **yes**
 Are tarpaulins in good condition and in accordance with rule requirements **yes**
 Are lashings provided in accordance with rule requirements? **yes**

GANGWAY DISPENSED WITH. **K. 18/5/38. (PHOTOSTAT ALTERED ON BOARD SHIP)**

Gangways and Lifelines **ONE STARBOARD SIDE 2'-4" WOODEN GANGWAY WITH STANCHIONS AND ROWS OF CHAINS.**

Gangway, Cargo and Coaling Ports in sides of ship **SEE PAGE 2.**

SUPPLEMENTARY REQUIREMENTS FOR STEAMER CARRYING TIMBER DECK CARGOES

Do Superstructures and Machinery Casings comply with rules?

Is provision made for protection of steering gear, and is emergency steering gear provided?

Are efficient uprights, sockets and lashings provided according to rules?

State particulars of longitudinal subdivision in double bottom

State particulars of Bulwarks and Rails

Approval date of plans and full particulars of arrangements for stowing and securing timber

The scantlings and protective arrangements being in accordance with the Freeboard rules it is submitted that the freeboard be assigned

Passed at a meeting of the Committee of Management of the British Corporation Register of Shipping and Aircraft

on the **31st August 1932**

Lloyd's Register
 Chief Surveyor.
 Secretary.