

THE BRITISH CORPORATION REGISTER OF  
SHIPPING AND AIRCRAFT  
SURVEY FOR FREEBOARD

381. 1

STEAMER, TANKER, SAILER: "ORCHY" S.S.

WITHOUT TIMBER DECK CARGO

Nationality

British

Builders' Name and No. of Ship

Ailsa S.B. Co. Ltd. Troon N° 415

Port of Registry

Glasgow ✓

Official Number

161920 ✓

Owners

Wm Sloan &amp; Co.

Gross Tonnage

1090 ✓

Date of Build

6/1930

Port and Date of Survey

Glasgow July 1/32

Name of Surveyor

A.R. Baxter

Particulars of Classification

B.S.\*

Names of Sister Ships

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 Coaming: Flush with Boat DK. Fiddle grating 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 Flush Coaming Rings fore end of casing on upper deck } Chain attachments  
2 " " " on Bridge deck aft belows. } provided

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)

Fore to upper at Centre open with steel sides no doors  
one steel enclosed on Br. dk aft end of casing wood door open, either side 4'6" x 2' sill 13"  
To Crew Quarter aft. enclosed in steel house two wood door 4'10" x 1'11" sills 14".

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)

Poop + Bridge. Coals 24" coaming. chain locks 14 1/2"

Coals vents. provided with wood plugs &amp; canvas covers

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

Fore 14 1/2 S.N. 13 1/2. Poop Bridge 14 1/2 S.N.

Scuppers and Sanitary Discharge Pipes (state material, type and number of valves)

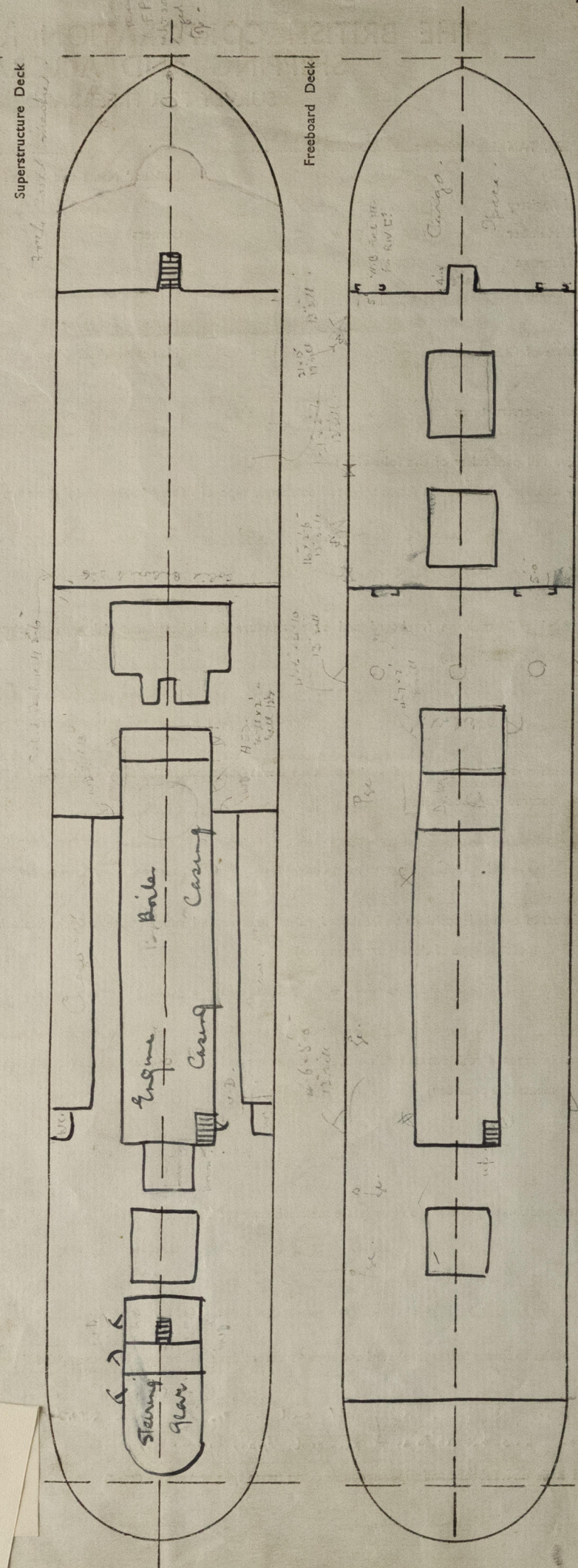
Twelve deck scuppers steel pipes with brass chest at ship side below. UR deck  
Crews quarters aft 2 wc. 2 waste lead from Poop with storm valve  
above upper deck.

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

Fore. Brass frames with solid hinged covers permanent  
2 in twen dk from fore to aft end of casing plain bolted glass frame no deadlights 25% wood plugs provided  
3 each P.S. at aft end. hinged brass frame (no deadlights. 25% wood plugs provided)  
Guard Rails on freeboard and superstructure decks (state type and where fitted)Fore. 3 rails - stanchions  
Poop + bridge aft end 3 Rails + stanchions



## Superstructure Deck



### Statement of special features in the construction of the ship

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Length on summer load line 246.0' Moulded Breadth 36.0' Moulded Depth 17.0' Depth of Keel

Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth 2370 Tons

Co-efficient of fineness for use with tables  $\frac{\Delta \times 35}{L \times B \times D \times .85} = .648$  Use .68 min.

Displacement and tons per inch immersion in salt water at summer load line 2697 + 16.45

Moulded depth 17.0 ✓ Deduction for Fresh Water  $\frac{\Delta}{40T} = 4.1' = 4$  inches

Stringer Plate .5' .042 ✓ Round of Beam Correction

Sheathing on exposed deck T  $(\frac{L-S}{L})$  ✓ Ships Round of Beam 9 inches

Rise of floor (in sailers) 17.042 ✓ Standard Round of Beam  $\frac{B \times 12}{50} = 8.64$  ✓

Depth for Freeboard (D) 16.4 ✓ Difference .36 ✓

Table Depth 246 / 130 x .642 = 121.4 ✓ Restricted to

Depth Correction Difference / 4 x  $(1 - \frac{E}{L}) = .09 \times .2625 = .02$  ✓

If restricted by superstructures

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)	Standard Height of Superstructure
Poop		58.75 L			9.562		6' ✓
Raised Quarter Deck		F 29	7'-4"	144.81	138.2	138.34 ✓	" " R.Q.D.
Bridge	144.52						Percentage covered S/L = 76.4 ✓
Forecastle	43.48			43.13		43.13 ✓	" " E/L = 73.75
Trunk Aft	43.13						" " from Table line A-B, (corrected for absence of forecastle if required) 67.61 ✓
" Forward							Percentage from Table by interpolation for Bridge less than .2L if required =
Tonnage Opening Aft							Deduction = $30.6 \times .6761 = 20.69$
" Forward							Percentage from Table for Tankers (or Timber ships) =
Totals				187.94 ✓		181.41 ✓	Deduction =

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.	32 "	34.6	32	1	32
1/2 L from A.P.	15 "	15.4	15	4	60
1/2 L from A.P.	5 "	3.81	5	2	10
Amidships	0 "	0	0	4	0
1/2 L from F.P.	8 "	7.61	8	2	16
1/2 L	32.5	30.79	32.5	4	130
F.P.	53.0	69.2	63	1	63
			18		311
Effective Mean Sheer					17.278 ✓
Standard		-.05L + 5			17.3 ✓
Checked by: <i>W. J. J.</i>		Difference			.022 ✓

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Mean Actual sheer aft = less than 1  
 " Standard " " "

Mean Actual sheer forward = less than 1  
 " Standard " " "

Length of enclosed superstructure forward of amidships ✓  
 Length of Ship

Length of enclosed superstructure aft of amidships ✓  
 Length of Ship

Sheer Correction = Difference X (75 -  $\frac{S}{2L}$ ) = .022 X .368 = .008 ✓  
 = .01 on ✓

If limited on account of midship superstructure = ✓  
 " to maximum allowance of 1 1/2 ins. per 100 ft. = ✓

TABULAR FREEBOARD corrected for flush deck if required = 31.5' ✓  
Correction for co-efficient = 31.5' ✓

	+	-	
Depth correction	1.21	-	✓
Deduction for superstructures	-	20.69	✓
Sheer correction	.01	-	✓
Round of Beam correction	-	.02	✓
Correction for thickness of deck amidships	-	-	
Other corrections, scantlings, etc.	-	-	
	1.22	20.71	✓ 19.49

Summer Freeboard in inches	=	12.01	Addition for Winter North Atlantic (if required)	=	6.01 ins.
		4.01			
Additional allowance for superstructures on	T.	8.00	Deduction for Tropical Timber Freeboard	$\frac{d}{4}$	= ins.
Timber carrying ships	= W	16.02	Addition for Winter	$\frac{d}{3}$	= ins.
Summer Timber Freeboard in inches	=		" " N.A. Timber Freeboard (if required)	=	ins.

## DRAUGHTS AND SEASONAL CORRECTIONS

	Satter, Tanker, Steamer	Timber
Depth to Freeboard Deck in feet	17.042	
Summer Freeboard in feet	1.001	
Moulded Draught (d)	16.041	(d1.)
Addition for Keel		
Extreme draught		

Deduction for Tropical and addition for Winter freeboard	$d/4 = 14.0$	ins.
Addition for Winter North Atlantic (if required)	$= 6.0$	ins.
Deduction for Tropical Timber Freeboard	$\frac{d}{4}$	= ins.
Addition for Winter	$\frac{d}{3}$	= ins.
" " N.A. Timber Freeboard (if required)		= ins.

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SUMMER FREEBOARD recommended amidships from centre of disc to top of deck line, (wood, steel)			
TROPICAL FRESH WATER LINE	above centre of disc	8'	Corresponding Freeboard
FRESH WATER LINE	" " "	4'	" "
TROPICAL LINE	" " "	4'	" "
WINTER LINE	below " " "	4"	" "
WINTER NORTH ATLANTIC LINE	" " "	6	" "

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	11	11	11	11	11				
TROPICAL	11	11	11	11	11				
WINTER	11	11	below	11	11				
WINTER NORTH ATLANTIC	11	11	11	11	11				

	Coaming	Plating	Stiffeners	Spacing	End Attachments	No. and size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	25	25	3 x 3 x .3	36"	none	—	—	
R.Q.D. "								
Bridge Aft Bulkhead								
" Forward "	5	5	7 x 3 x .36	26" + 28"	Brackets T & B. do.	2 @ 5' x 6'-2"	none	
Forecastle Bulkhead	5	5	do	do	do	do	none	
Trunk, Aft								
" Forward								
Exposed Machinery Casings on Freeboard of R.Q. Deck	3	26	3 x 3 x .3	33"	none	1 at 5' x 2'	18"	7'-6" 1/2 fwd.
Exposed Machinery Casings on superstructure decks								6'-9" aft
Machinery Casings within Superstructures not fitted with Cl. 1. closing appliances								
Deckhouses on flush deck ships								

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 Bulkhead	Height of Bulkhead	No. and size of Freeing Ports each side	Area each side	Rule Area
After Well	—	—	—	—	—
Forward Well	57'-8 1/2"		1 @ 24" x 14", 1 @ 24" x 17.5", 2 @ 17.2" x 12.5"	12.27 sq	12.27 sq
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 <i>shutters &amp; horizontal bars</i>					

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



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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PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Number and description of Hatchway from forward	Upper dk.		Upper dk.		Roof dk.		N <sup>23</sup> upper dk.	
	12'-0" x 12'-0"	18'-0" x 12'-0"	18'-0" x 12'-0"	20'-0" x 12'-0"	20'-0" x 12'-0"	14' x 12'	14' x 12'	14' x 12'
Height { steel above deck	24"	24"	36"	36"	36"	17"	17"	17"
Thickness { sides ends	.5	.5	.5	.5	.5	.5	.5	.5
Stiffeners	7" C	7" C	7" C	7" C	7" C	7" C	7" C	7" C
Brackets or Stays	none	none	none	none	none	none	none	none
Number	2	3	3	3	3	2	2	2
Spacing	4'-0"	4'-6"	5'-0"	5'-0"	5'-0"	4'-8"	4'-8"	4'-8"
Scantling and Sketch	1F-3x3x.4 -12x.5	as no. 1	3x3x.4 18x.5	3x3x.4 18x.5	3x3x.4 18x.5	3x3x.4 18x.5	3x3x.4 18x.5	3x3x.4 18x.5
Bearing Surface and thickness of carriers or sockets	3"	3"	3"	3"	3"	3"	3"	3"
Number	2	2	2	2	2	2	2	2
Spacing	14"	14"	14"	14"	14"	14"	14"	14"
Unsuported lengths								
Scantling and Sketch								
Bearing Surface and thickness of carriers or sockets								
Material	wp.	wp.	wp.	wp.	wp.	wp.	wp.	wp.
Thickness	3"	3"	3"	3"	3"	3"	3"	3"
How Fitted	F. + A.	F. + A.	F. + A.	F. + A.	F. + A.	F. + A.	F. + A.	F. + A.
Bearing Surface	3"	3"	3"	3"	3"	3"	3"	3"
Spacing of Cleats	14"	14"	14"	14"	14"	14"	14"	14"
Number of Tarpaulins	2	2	2	2	2	2	2	2

[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*

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Gangways and Lifelines *none*

Gangway, Cargo and Coaling Ports in sides of ship

*See page 2.*  
*Hinged steel doors with strongbacks + chain attachments.*

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 *17<sup>th</sup> August 1932*



© *[Signature]* Chief Surveyor.

Lloyd's Register  
*[Signature]* Secretary.

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