

STEEL STEAMER ~~or MOTORSHIP~~

Received at London Office. 1941

State if Report has been sent on the Freeboard of the Vessel. YES.State if Report is sent on the Machinery of the Vessel. YES.

Date of completion of report

24<sup>TH</sup> MAY 1932

Port of

GREENOCK

No.

1941

Survey held at

PORT - GLASGOW.

Date First Survey

31<sup>ST</sup> AUGUST 1931

Last Survey

23<sup>RD</sup> MAY

1932.

On the

(State if Machinery fitted Aft and if Single, Twin or Triple Screw)

SINGLE SCREW

"HARMATRIS"

State Type

(Full Scantling, Complete Superstructure with or without Tonnage Openings)

FULL SCANTLING

State Type of Erections POOP, BRIDGE &amp; FOUL

TONNAGE under Tonnage Deck...

4931.09

CLASS 100A1

State if with freeboard as condition of Class

No.

Built at

PORT - GLASGOW.

Do. of space or spaces between Tonnage Dk. and Upper Dk.

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a)

L 425.0

Launched 20<sup>TH</sup> APRIL 1932 Yard No. 853

Builders LITHGOWS LIMITED

Total

4931.09

Breadth (greatest moulded)

B 56.0

Owners WILLIS STEAMSHIP COMPANY LIMITED.

Gross Tonnage

5395.31

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c)

D 28.75

Managers J &amp; C HARRISON, LD.

(Where necessary to be entered in Reg. Book.)

Register Tonnage

3194.7

1st Longitudinal Number (L x D) = 12218.75

2nd Numeral L x (B + D) = 36018.75

Residence 66 MARK LANE, LONDON.

## REGISTERED DIMENSIONS.

FEET.

Length

428.0

Breadth

56.25

Depth

26.0

Framing Depth "d," at middle of length. See Sec. 3 (1d)

24.52

Proportions—Depth to Length—Uppermost continuous deck to top of keel

14.78

Do. Long Bridge to top of keel

11.25

Draught Moulded

24'-7 1/4"

Port of Registry LONDON

If surveyed while building, afloat, or in dry dock

BUILDING, AFLOAT &amp; IN DRY DOCK.

## FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
<b>FRAMES, Spacing amidships</b>	27 1/2"	✓	<b>Bracket Floors, Frame</b>	B.A. 6 3 1/2 38	
" " from 3/4 length to Collision bulkhead	27"	✓	" " Reversed Frame	B.A. 5 1/2 3 38	
" " in peaks	24"	✓	" " Vertical Struts	2 CHANNEL 10 x 3 1/2 x 3 1/2 42	
<b>SIDE FRAMING.</b>			" " Vertical Struts	1 B.A. 5 1/2 3 38	
<b>Frame Amidships, Angle, E or F</b>	N.B.S. 12 3 1/2 56		<b>Centre Girder, depth and thickness amidships</b>	47 48	
" " Extends up to	UPPER DE		" " top Angles	3 3 50	
<b>DEEP FRAMING FORWARD</b>	CHANNEL 12 x 4 x 4 50		" " bottom Angles	4 4 56	
<b>Reversed Frame Amidships, Angle</b>	WITH 5 x 4 x 6 1/2 REV BAR.		<b>Side Girders, No. each side and thickness</b>	1 2 38	
" " Extends up to	UPPER DE		<b>Margin Plate depth (excl. of flange) and thickness</b>	44 50	
<b>Depth of Framing Girder</b>	12"	✓	" " Vertical Angle to Tank side	5 5 44	
<b>Frames in Uppermost Continuous tween Decks, Angle, E or F</b>	6 3 1/2 36	✓	" " Bracket abaft 1/2 len. from stem	6 6 44	
" " Second tween Decks, Angle, E or F	ON EVERY FRAME.		" " Vertical Angle to Tank side	6 6 44	
" " Third " " " "	N.B.S. 7 1/2 3 1/2 37		" " Bracket forward 1/2 len. from stem	39 CONTINUOUS PLATE	
<b>Framing in Peaks, Angle, E or F</b>	7 1/2 3 1/2 37		" " Gussets, spacing and scantling abaft 1/2 len. from stem	39	
<b>Diameter and Spacing of Rivets through Frame and Shell Plating amidships</b>	7/8 R 2 6 1/4"		" " Gussets, spacing and scantling forward 1/2 len. from stem	39	
<b>State if Frame Joggled</b>	YES.		<b>Tank Side Brackets, height above base line at toe of Frame and thickness</b>	6'-2" x 44	
<b>PANTING ARRANGEMENTS (Sec. 7), state system and particulars</b>	DEEP FRAME SYSTEM WITH 4 SIDE STRINGERS BELOW UPPER DE AS APPD	✓	<b>INNER BOTTOM PLATING.</b>		
<b>STRENGTHENING OF BOTTOM FORWARD. State Particulars</b>	5 x 5 x 42 FRAMES WITH 2 ROWS RIVETS AND ADDITIONAL INTERCOSTAL GIRDERS FOR 2/3 LTH AS APPROVED.	✓	<b>Breadth and thickness of Middle Line Strake</b>	78 47	
<b>SINGLE BOTTOM.</b>			<b>Thickness of remainder in Holds</b>	42	
<b>Floors, Depth and thickness at mid-line in Holds</b>			<b>Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. &amp; B. space and framing in Bunkers and Boiler Room?</b>	E. S. 60 50 B. S. 67 56	
<b>Height of Brackets at side above base line at toe of frame</b>			<b>BEAMS.</b>		
<b>Middle Line Keelson, on Floors, Angles, E or F</b>			<b>Uppermost Continuous Deck, amidships in Wells, Angle, E or F</b>	11 3 1/2 44	
" " Through Plate or Intercostal Plate			" " in way of Bridge, Angle, E or F	11 3 1/2 51	
" " Foundation Plate on Floors			" " Spacing	EVERY FRAME	
" " Flat Plate Keel Angles			<b>Second Deck, amidships, Angle, E or F</b>		
<b>Side Keelsons, No. each side</b>			<b>Spacing</b>		
<b>thickness of Intercostal Plate</b>			<b>Third Deck, amidships, Angle, E or F</b>		
<b>Angles</b>			<b>Spacing</b>		
<b>DOUBLE BOTTOM.</b>			<b>Fourth Deck, amidships, Angle, E or F</b>		
<b>Solid Floors, thickness and spacing</b>	39 EVERY 2ND		<b>Spacing</b>		
" " Are Frame and Reversed Frame joggled?	YES		<b>Poop Deck, Angle, E or F</b>	7 3 34	
<b>Bracket Floors, breadth and thickness at middle line</b>	32" 39		<b>Spacing</b>	EVERY FRAME	
" " breadth and thickness at margin plate	32" 39		<b>Bridge Deck, Angle, E or F</b>	N.B.S. 9 3 1/2 40	
			<b>Spacing</b>	EVERY FRAME	
			<b>Forecastle Deck, Angle, E or F</b>	N.B.S. 8 3 48	
			<b>Spacing</b>	EVERY FRAME	

010328-010337-0178



## PILLARS AND DECKS.

	INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.
<b>PILLARS</b> , No. of Rows.....				<del>Stringer Plate, breadth and thickness in way of Bridge .....</del>			
" in 'tween Decks, Size and Spacing.....				<del>Thickness of Plating abreast Deck openings) in way of Wells .....</del>			
" " " " " "				<del>Thickness of Plating abreast Deck openings) in way of Bridge .....</del>			
" in Holds " "				<del>Thickness of Plating within line of openings...</del>			
" " " " " "				<del>If Sheathed, material and thickness .....</del>			
<b>Centre Line Bulkhead. HOLDS</b>				<b>Third Deck.</b>			
Stiffeners and Spacing..... 11 x 3 1/2 x 54 BA 2 55"				Stringer Plate, breadth and thickness.....			
Plating, thickness of .....	375	30		If Plated, state thickness.....			
D <sup>2</sup> BRIDGE SPACE 5 x 3 x 31 ANG AND PLATING	375	26		<b>Fourth Deck.</b>			
<b>STRINGERS AND DECKS.</b>				Stringer Plate, breadth and thickness.....			
<b>Uppermost Continuous Deck.</b>				<del>If Plated, state thickness .....</del>			
Stringer Plate, breadth and thickness in Wells	56" x 130 AFT x 121 FORWARD	118 AFT 110 FORWARD		<b>Poop Deck.</b>			
" " " " in way of Bridge	60" x 148 x 142	140		Stringer Plate, breadth and thickness .....	36	x 38	36" x 35
" Angle in Wells .....	6 6 72			Plating, Sheathing, material and thickness ...	26	SHEATHED 5 x 2 1/2 PP.	
Thickness of Plating abreast Deck openings) in way of Wells .....	81 FORWARD 88 AFT.	74 FORWARD 80 AFT.		<b>Bridge Deck.</b>			
Thickness of Plating abreast Deck openings) in way of Bridge .....	EX. B. CHINA 146 40	38 446 38		Stringer Plate, breadth and thickness.....	58	x 72	58" x 60
Thickness of Plating within line of openings...	IN WELLS 142 IN BRIDGE 36	140 34		Plating, <del>Sheathing, material and</del> thickness ...	59	x 64	54
If Sheathed, material and thickness .....	✓			<b>Forecastle Deck.</b>			
<b>Second Deck.</b>				Stringer Plate, breadth and thickness.....	35	x 39	35" x 36
Stringer Plate, breadth and thickness in Wells...				Plating, <del>Sheathing, material and</del> thickness ...	37		34

## SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if jogged? <i>ORDINARY.</i>			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		NO. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.			Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.	
FLAT PLATE KEEL .....	49"	.78	.68	.68		DOUBLE	7/8	3.4	4R - 3R	1"	4"	LAPPED.
„ — <i>DECK (if any)</i>												
BOTTOM PLATING, No. of Strakes ..4.....	1 2	.60	.61	.46	.46 For°	"	"	"	3R	7/8	3 1/8	"
BILGE PLATING, No. of Strakes .....1.....		.61	.60	.46	.46 "	"	"	"	"	"	"	"
SIDE PLATING, No. of Strakes .....2.....		.60	.69	.44	.44 "	"	"	"	"	"	"	"
UPPER DECK, Sheer- strake in Wells.....	80°	1.02 AFT 1.04 For°	.44	.44		"	1"	3.9	4R - 3R	1 1/8	5"	"
UPPER DECK, Sheer- strake in Bridge ...	1	.60				"	7/8	3.4	3R	7/8	3 1/8	"
STRAKE BELOW Sheer- strake in Wells.....		.66 AFT .72 For°	.53	.44	For° .60 to .44	"	1"	3.9	3R	7/8	3 1/8	"
STRAKE BELOW Sheer- strake in Bridge ...	4	.60				"	7/8	3.4	3R	7/8	3 1/8	"
POOP SIDE PLATING .....				.38		SINGLE	3/4	3	1R	3/4	2 5/8	"
BRIDGE SIDE PLATING ...		.60				DOUBLE	7/8	3.4	3R	7/8	3 1/8	"
FOREC'TLE SIDE PLATING			.42			SINGLE	3/4	3	1R	3/4	2 5/8	"

## WATERTIGHT BULKHEADS.

FORGINGS and CASTINGS.

STIFFENERS.					
	Plating Thickness.	VERTICAL.		HORIZONTAL.	
		Scantlings.	Spacing.	Scantlings.	Spacing.
<b>MIDSHIP BULKH'D,</b>	Upper tween decks				
" "	<del>Second</del>				
" "	<del>Third</del>				
" "	Holds .....	45-26	11 1/2 x 3 1/2 x 48 BA	30"	
			BA		2 SEMI BOX BEAMS
<b>COLLISION</b>	(in Hold) .....	50-26	7 x 3 x 46	24"	CHAIN LOCKER FLAT
			BA		2 SEMI BOX BEAMS
<b>AFTER PEAK</b>	" .....	49-30	7 x 3 x 34	24"	TUNNEL RECESS.

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) OPEN HEARTH PROCESS.

COLVILLES LIMITED ; CONSETT IRON CO L<sup>D</sup> ; STEEL COMPANY OF SCOTLAND L<sup>D</sup> ;

Has the Steel been tested as required by the Rules? *Yes.*



EQUIPMENT No 38723.91											LETTER <i>a</i>	ANCHORS.			
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.			WEIGHT REQUIRED BY TABLE 53.	Description of Anchor.	Makers.	Where and when tested and Superintendent.	
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.			
46544	1st Bower ...	68	0	0	Stockless			52	12	2	0	68	BRITANNIC	R. SYKES & SONS L <sup>D</sup>	CRADLEY HEATH 23-12-31 S. C. PAUL
63171	2nd „ ...	67	0	7	„			52	2	2	0	68	D <sup>s</sup>	D <sup>s</sup>	TIPTON 20-1-30 H. A. DRYSDALE
64402	3rd „ ...	60	0	0	„			48	7	2	0	58½	D <sup>s</sup>	D <sup>s</sup>	D <sup>s</sup> 3-12-30
	Collective weight.	195	0	7								194½			
46545	Stream .....	19	1	20	5	0	12	20	4	0	7	19	ORDINARY	D <sup>s</sup>	CRADLEY HEATH 23-12-31 S. C. PAUL.

CHAIN CABLES.													HAWSERS AND WARPS.							
Number of Certificate.	Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.			Length and Size per Table 53.		Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and Size supplied.		Breaking Test of Steel Wire.	Length and Size per Table 53.			
	Length.	Diam.	Statutory.	Breaking.	Supplied.	Per Rule.	Length.	Diam.	Length.					Cir.	Tons.		Fathoms.	Cir.		
																			Fathoms.	Ins.
35358	240	2½	96¼	134¾	659-0-0	720¾	270	2½	STUD LINK.	R. SYKES & SONS L <sup>td</sup>	CAROLIFF 28-12-31 L. L. WRIGHT.	TOWLINE...	120	4¾	64.6	120	4¾			
67913	30¼	"	"	"	81-2-10				D <sup>s</sup>	D <sup>s</sup>	TIPTON 29-12-31 H. A. DRYSDALE.		HAWSERS & WARPS	2290	3	25.7				
	270¼	✓			740-2-10	✓						"		2290	2¾	21.1	2290	2¾		
		Cir.							Cir.			"		2290	2½	17.7	2290	2½		
Stream Cable in Steel Wire	90	5			70.9			90	5	4 S.W.										

Steering Gear, Steam BY HASTIE & Co. GREENOCK.										Steering Gear, Hand BY RELIEVING TACKLE TO POOP WINCH.																			
Boats 2 LIFEBOATS & 2 GIGS.					Steering Chains, Size and Test TELENOTOR GEAR.					Windlass STEAM BY EMERSON WALKER LTD																			
Ceiling in Holds, thickness and material 2½" W.P. LAID ON 2" BATTENS THROUGHOUT HOLDS.					Cargo Battens, thickness, material and spacing 2½" W.P. SPACED 9" APART IN HOLDS & BRIDGE SPACE.																								
Cargo Hatchways.—(Upper Deck)					STEEL CORNING & ANGLES.					Thickness of Hatches 3" SOLID COVERS.																			
Size of No. 1 Hatchway (Forward) 29'-3" x 24'-0"					No. 2 32'-1" x 20'-0"					No. 3 21'-5½" x 20'-0"					No. 4 36'-8" x 20'-0"					No. 5 32'-1" x 24'-0"					No. 6 ✓				
Number of Shifting Beams and/or Fore and Afters					6 WEBS IN HATCHES NOS 1, 2 & 5; 1 WEB IN EACH NOS 3 HATCH; 7 WEBS IN NOS 4 HATCH;																								
Builder's Signature										FOR LLOYD'S LIMITED.										R. Campbell									

GENERAL DECLARATION. It should be stated (a) whether the vessel is fitted for the carriage and burning of oil used as fuel No (b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo No. The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point.

*This vessel has been built in accordance with the approved Plans & in general conformity with the Society's Rules for the class contemplated.*

*The workmanship & materials are of good quality.*

*All the Double Bottom Tanks, the Fore Peak Tank & the After Peak Tank were tested in accordance with Rule requirements & found satisfactory. Dry tank test?*

*The Double Bottom Tanks have also been constructed suitable to carry oil fuel.*

*The weather decks, shaft tunnel, W.T. Bulkheads & Chain Locker were hose tested & found satisfactory.*

*The Freeboards were verified & the marks cut in on vessel's sides.*

*The Pumping Arrangements in the Holds have been fitted in accordance with approved Plans, & tested & found satisfactory.*

The amount of Entry Fee ..... £ 9 : 0 : 0			Fees applied for, 24 <sup>TH</sup> MAY 1932 Received by me, 26 <sup>TH</sup> MAY 1932	<i>am</i>	I am of opinion the Vessel should be Classed <b>100A1</b>
Special Survey Fee.... £ 334 : 17 : 6					
<del>Travelling Expenses, if any</del> £ 16 : 0 : 0					
FREEBOARD.					
State whether the Vessel has been built under Special Survey <u>YES</u> .				Signature <u>R. Dundas</u>	Surveyor to Lloyd's Register of Shipping.
Certificate to be sent to <u>GREENOCK</u> Date of issue <u>4/6/32</u>					

Committee's Minute **GLASGOW 31 MAY 1932**

Character assigned **100A1.**

*5.32.*

*Lloyd's accp*

*+ L.M.C. 5.32.*

*72.*



GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

— List of Plans —

Midship Section; Profile & Becks; Sternframe; Rudder; Bulkheads; Parting Arrangements; Strengthening in Double Bottom forward; Hatch-end beams; No 2 & 3 Hatch Side beamings; Cargo Hatches; Cruiser Stern; Profile showing H.T. Bulkheads; Bridge-end Strengthening; Tunnel; Bunkers; Pumping Arrangements; Midship Section, & Profile & Becks (as built).

Logging Reports: Sternframe; Rudder; Stem; Quadrant;

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	WEIGHT HEAD & PIN	SURV INITIALS	NO CERTIFICATE	DATE OF TEST
		40 - 3 - 7	K.H.	7728	27.3.30
	2nd "	40 - 1 - 2	M.B.	7416	20.12.29
	3rd "	36 - 2 - 7	K.H.	8549	27.8.30

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 40.66 ft., R.Q.D. ✓ ft., Bridge 270.2 ft., Forecastle 37.88 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated ✓

No. and Material of Decks (this information is to be given as it should appear in the Register Book) 1 DK (STL)

Official No. 162711 : Signal Letters Is bottom of Vessel coated with cement YES if not give particulars of composition WHOLLY CEMENTED THROUGHOUT.

PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	132.92	441	Fore peak tank,		167
Double bottom, under Engines and Boilers,	25.2	132	After peak tank,		240
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only, DRY TANK. (W.T.C.)	16.04		Deep tank, forward,		
Double bottom, forward,	189.08	824	Other tanks, if fitted,		
	Total capacity of double bottom	1397	(If necessary, furnish further information by sketch.)		

\* The wells are not to be included in the lengths of the tanks.

Order for Special Survey No. 3329

Date 10-9-31

Dates of Surveys held while building

(1931) Aug. 31. Sept. 29. Oct. 13. 14. 16. 24. 29. 30. Nov. 2. 4. 6. 11. 12. 16. 14. 18. 20. 25. 26. Dec. 1. 3. 4. 8. 9. 10. 11. 15. 14. 22. 25. 29. 30.

(1932) Jan. 13. 18. 21. 25. 24. Feb. 1. 3. 4. 9. 12. 15. 14. 19. 23. 29. Mar. 3. 4. 9. 11. 16. 14. 18. 22. 23. 24. 25. 29. 31. Apr. 1. 4. 5. 4. 8.

12. 14. 15. 19. 20. May 4. 14. 20. 23.

Total No. of Visits 44