

STEEL STEAMER ~~OR MOTORSHIP~~

Received at London Office

28 MAR 1934

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

Date of completion of report

23RD MARCH 1934

Port of

GREENOCK

No.

19423

Survey held at

PORT - GLASGOW

Date First Survey

11TH MAY 1933

Last Survey

21ST MARCH

1934

On the

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

SINGLE SCREW

"HARTLEBURY"

State Type

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

FULL SCANTLING

State Type of Erections POOP, BRIDGE & POLE

TONNAGE under
Tonnage Deck

4529.81

CLASS ~~X~~100A1State 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 415.0

Launched 30TH JANUARY 1934 Yard No. 865

Total

4529.81

Breadth (greatest moulded)

B 56.0

Builders LITHGOWS LIMITED

Gross Tonnage

5082.13

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

D 27.25

Owners NATIONAL STEAMSHIP COMPANY LIMITED

Register Tonnage

3035.50

1st Longitudinal Number (L x D) = 11308.75

Managers J & C HARRISON LTD.

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

2nd Numeral L x (B + D) = 34548.75

Residence LONDON

REGISTERED DIMENSIONS.

FEET.

Length

418.0

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

23.09

Breadth

56.25

Proportions—Depth to Length—Uppermost con-
tinuous deck to top of keel

15.23

Port of Registry LONDON

Depth

24.6

Do. Long Bridge to top
of keel

11.29

If surveyed while building, afloat, or in dry dock

Draught Moulded

23'-9 1/2"

BUILDING, AFLOAT & 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.
FRAMES, Spacing amidships	26 1/2		Bracket Floors, Frame B.A.	6 3 1/2 37	
" " from 3/4 length to Collision bulkhead	26 1/2		" " Reversed Frame B.A.	5 3 42	
" " in peaks	24		" " Vertical Struts { 2 CHANNEL 1 B.A.	9 3 1/2 x 3 1/2 x 38 5 3 42	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	46 46	
Frame Amidships, Angle, E or C N.B.S.	12 3 1/2 45		" " top Angles	3 3 50	
" " Extends up to	UPPER DECK		" " bottom Angles	4 4 55	
DEEP FRAMING FORWARD			Side Girders, No. each side and thickness	1 2 38	
Reversed Frame Amidships, Angle CHANNEL REV ANGLE	12 x 4 x 4 x 44 5 4 46		Margin Plate depth (excl. of flange) and thickness	44 49	
" " Extends up to	UPPER DECK		" " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem DEEP FRAMING	5 5 43	
Depth of Framing Girder	12		" " Vertical Angle to Tank side Bracket forward 1/4 len. from stem AT DEEP FRAMING	6 6 43	
Frames in Uppermost Continuous 'tween Decks, Angle, E or C	6 3 1/2 30	5/8 x 3 x 34	" " Gussets, spacing and scantling abaft 1/4 len. from stem	38 CONT ² PLATE	
" " Second 'tween Decks, Angle, E or C			" " Gussets, spacing and scantling forward 1/4 len. from stem	38 " "	
" " Third " " " "			Tank Side Brackets, height above base line at toe of Frame and thickness	74 43	
Framing in Peaks, Angle, E or C N.B.S.	7 3 1/2 41		INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amid- ships	7/8 R 2 6 1/8		Breadth and thickness of Middle Line Strake	78 46	
State if Frame Joggled	YES		Thickness of remainder in Holds	41	
PANTING ARRANGEMENTS (Sec. 7), state system and particulars	DEEP FRAME SYSTEM WITH 4 SIDE STRINGERS AS APPROVED		Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room? YES	E.S. 59 49 B.S. 67 56	
STRENGTHENING OF BOTTOM FOR- WARD. State Particulars	5 x 5 x 40 FRAMES TO FLOORS - FORMS OF BELLY FORMS AND ADDITIONAL INTERCOSTAL GIRDER AS APPR.		BEAMS.		
SINGLE BOTTOM.			Uppermost Continuous Deck, amidships in Wells, Angle, E or C	10 N.B.S. 38 AFT 9 3 1/2 43 FORW	
Floors, Depth and thickness at mid-line in Holds			" " in way of Bridge, Angle, E or C	11 3 1/2 52	
Height of Brackets at side above base line at toe of frame			Spacing	EVERY FRAME	
Middle Line Keelson, on Floors, Angles, E or C			Second Deck, amidships, Angle, E or C		
" " Through Plate or Intercostal Plate			Spacing		
" " Foundation Plate on Floors			Third Deck, amidships, Angle, E or C		
" " Flat Plate Keel Angles			Spacing		
Side Keelsons, No. each side			Fourth Deck, amidships, Angle, E or C		
" " thickness of Intercostal Plate			Spacing		
" " Angles			Poop Deck, Angle, E or C N.B.S.	7 3 30	
DOUBLE BOTTOM.			Spacing	EVERY FRAME	
Solid Floors, thickness and spacing	38 EVERY 2 ND		Bridge Deck, Angle, E or C N.B.S.	9 3 1/2 50	
" " Are Frame and Reversed Frame joggled?	YES		Spacing	EVERY FRAME	
Bracket Floors, breadth and thickness at middle line	31 38		Forecastle Deck, Angle, E or C N.B.S.	8 3 42	
" " breadth and thickness at margin plate	31 38		Spacing	EVERY FRAME	

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.	
PILLARS, No. of Rows.....					Stringer Plate, breadth and thickness in way of Bridge				
" "									

SHELL PLATING.												
SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if joggled? <u>ORDINARY.</u>			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.			Diam.	Spacing or to cr.		Diam.	Spacing or to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.	
FLAT PLATE KEEL	49"	.75	.66	.66	-	DOUBLE	7/8"	3.5	4R - 3R	1"	4"	Lapped.
" <u>Base (if any)</u>		SHELL FORWARD IN WAY OF DEEP FRAMING. .67										
		BOTTOM SHELL FORWARD OF 1/2 LTH FORWARD. .65										
BOTTOM PLATING, No. of Strakes1.....		.59	.46	.46	-	DOUBLE	"	"	3R	7/8"	3 1/2"	"
BILGE PLATING, No. of Strakes1.....		.59	.46	.46	-	"	"	"	"	"	"	"
SIDE PLATING, No. of Strakes2.....		.58	.44	.44	-	"	"	"	"	"	"	"
UPPER DECK, Sheer- strake in Wells.....	72" 85"	1.12 FORW 1.10 AFT	.44	.44	-	"	1"	3.5	4R - 3R	1"	4"	"
UPPER DECK, Sheer- strake in Bridge58			-	"	7/8"	3.5	3R	7/8"	3 1/2"	"
STRAKE BELOW Sheer- strake in Wells.....	58" 76"	.78 FORW .64 AFT	.44	.44	-	.65 FORW.	"	"	"	"	"	"
STRAKE BELOW Sheer- strake in Bridge58			-	"	"	"	"	"	"	"
POOP SIDE PLATING38	-	SINGLE	3/4"	3.0	1R	3/4"	2 1/2"	"
BRIDGE SIDE PLATING60			-	DOUBLE	7/8"	3.5	3R	7/8"	3 1/2"	"
FOREC'TLE SIDE PLATING			.41		-	SINGLE	3/4"	3.0	1R	3/4"	2 1/2"	"

WATERTIGHT BULKHEADS. /						FORGINGS AND CASTINGS.			
Total No. of W.T. BULKHEADS in Vessel— 7									
Extending to Upper Deck (Sec. 3 c) 7									
" Deck next below ✓									
As per Rule 7									
Plating Thickness.		STIFFENERS.				KEEL, Bar ✓ STEM STERN FRAME { Propeller Post " STERNFRAME IN AIS APPS Rudder " " 10 1/2 x 7 1/2 RUDDER—A x D OERTZ PATENT. Speed of Vessel 10 K. RUDDER mainpiece at head FORGING. 10 1/2 x 6 1/2 " " " how constructed RUDDER BUILT OF STEEL PLATES & ANGLES AS APPS " double or single plate 52 " coupling, vertical or horizontal HORIZONTAL.			
		VERTICAL.		HORIZONTAL.					
		Scantlings.	Spacing.	Scantlings.	Spacing.				
MIDSHIP BULKHD., Upper tween decks						T.S. FOSTER SONS L ^{DS} DENNYSTON FORGE.			
" " Second "									
" " Third "									
" " Holds		44 x 26	11 x 3 1/2 x 45	29					
COLLISION " (in Hold)		49 x 26	8 x 3 x 38	24	25 MIBOX BEAMS & CHAIN LOCKER FLAT.				
AFTER PEAK " "		48 x 30	6 x 3 x 40	24	25 MIBOX BEAMS & TUNNEL RECESS.				
Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture).						Open Hearth process.			
STEEL. Colvilles L ^{ds} ; Steel Company of Scotland; Lonssett Iron Company L ^{ds} ; Larnach & Co. L ^{ds} .									
Has the Steel been tested as required by the Rules? Yes									

EQUIPMENT No. 3769457										LETTER Z		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.				
47494	1st Bower	64	2	18	300KLESS	50	17	2	0	63 1/4	BRITANNIC	R. SYKES & SON LTD	CRADLEY HEATH, 24-11-33.	
47492	2nd "	64	1	24	"	50	15	0	0	63 1/4	"	"	"	
47490	3rd "	55	0	14	"	45	9	0	7	54 1/2	"	"	"	
	Collective weight.	184	1	0						182				
47493	Stream	17	3	14	4 2 6	18	18	0	14	17 1/2	ORDINARY	"	"	

CHAIN CABLES.										HAWERS 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.		Cwts.	qrs.						lbs.	Length.		Diam.	Length.	Diam.		
35884	270	2 1/2	91 1/2	127 1/2	698-0-21	632 1/4	270	2 1/2	STUD LINK.	R. SYKES & SON LTD	CARDIFF 20-11-33	L.L. HEIGHT.	TOWLINE	120	4 1/4	6 1/2	120	4 1/4
													HAWERS & WARPS	2 1/2	2 1/2	21.1	2 1/2	2 1/2
														2 1/2	2 1/2	17.7	2 1/2	2 1/2
														2 1/2	3	25.7		

Steering Gear, Steam by *Hastie & Co. Greenock.* Steering Gear, Hand by *reducing tackle to Post Winch.*

Boats *2 Lifeboats & 2 Sigs* Steering Chains, Size and Test *Telemeter Gear.* Windlass *Steam by Emerson Walker, Ltd.*

Ceiling in Holds, thickness and material *2 1/2" W.P. throughout holds* Cargo Battens, thickness, material and spacing *6" 2" W.P. spaced 9" apart in Holds & Bridge space.*

Cargo Hatchways, (Upper Deck) *Steel beamings & angles.* Thickness of Hatches *3" Solid Cover.*

Size of No. 1 Hatchway (Forward) *24' 3 1/2" x 24' 0"* No. 2 *33' 1 1/2" x 20' 0"* No. 3 *22' 1" x 20' 0"* No. 4 *35' 4" x 20' 0"* No. 5 *28' 8 1/2" x 24' 0"* No. 6 ✓

Number of Shifting Beams *and for Fore and Aft.* No. 1 Hatch *4 webs*; No. 2 Hatch *6 webs*; No. 3 Hatch *4 webs*; No. 4 Hatch *6 webs*; No. 5 Hatch *5 webs*.

Builder's Signature *For LITHGOWS 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 ✓

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 as required by the Rules & found satisfactory.

Weather Decks; Shaft Tunnel; N.T. Bulkheads; & the Chain Locker were also tested & found satisfactory.

Freeboards verified & marks put in on vessel's sides.

Duplicate Classification Certificate requested.

The amount of Entry Fee £ 9 : 0 : 0

Special Survey Fee.... £ 327 : 1 : 0

FREEBOARD

Travelling Expenses, if any £ 16 : 0 : 0

Fees applied for, 22nd March 1934

Received by me, 26/3/34

I am of opinion the Vessel should be Classed *100A1*

State whether the Vessel has been built under Special Survey *yes*

Signature *R. Dundas*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute *GLASGOW 27 MAR 1934*

Character assigned *+ 100A1*

Lloyd's A.C.P.

+ L.M.C. 3. 34. F.D.

Exhaust Turbine driving Steam compressor.

Elec. Light.

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.)

This is a sister vessel to S. S. "HARBURY" Greenock Rep No 19636

— List of Plans —

Midship Section; Profile & Decks; Sternframe; Rudder; Bulkheads; Tunnel;
Side Stringers; Cruiser Stern; Hatches; Strengthening at Bridge Ends;
Hatch-end beams; Additional strengthening in Double Bottom forward;
Escape Hatches; Pumping Arrangements;
Midship Section; Profile & Decks; (As built).

Logging Reports: Sternframe; Rudder; Quadrant & Tiller; Stern.

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	WEIGHT HEAD & PIN. 40 - 2 - 12	SURV INITS R. L.	CERTIFICATE NO 3569	DATE OF TEST. 13. 9. 33.
	2nd "	40 - 1 - 21	R. L.	3592	29. 9. 33.
	3rd "	34 - 1 - 0	R. L.	3574	13. 9. 33.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 38.33 ft., R.Q.D. ☒ ft., Bridge 276.04 ft., Forecastle 33.88 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. 163443 : Signal Letters _____ Is bottom of Vessel coated with cement YES if not give particulars of composition BOTTOM WHOLLY CEMENTED THROUGHOUT.

PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	130.29	420	Fore peak tank,		140
Double bottom, under Engines and Boilers,	22.08	112	After peak tank,		212
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only, (DRY TANK W.T. Com)	17.66		Deep tank, forward,		
Double bottom, forward,	183.29	804	Other tanks, if fitted,		
Total capacity of double bottom		1336	(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. 3341

Date 15th MARCH. 1933.

Dates of Surveys held while building

(1933) May 11. 19. June 1. 6. 13. 21. July 12. 21. Sept. 19. 21. 26. 29. Oct. 3. 4. 6. 10. 18. 20. 23. 24. 30. Nov. 1. 8. 10. 14. 20. 21. 24. 29.
Dec. 1. 5. 11. 13. 14. 18. 19. 20. 22. 25. 28. (1934) Jan. 10. 11. 12. 15. 16. 18. 19. 22. 23. 24. 25. 29. 30. Feb. 19. Mar. 6. 21.

Lloyd's Register
Foundation

Total No. of Visits 54