

## STEEL STEAMER or MOTORSHIP.

Received at London Office

APR 25 1940

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 April 1940 Port of Sunderland No. 32855  
 Survey held at Sunderland Date First Survey 1 May 39 Last Survey 19 April 1940  
 On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw) Single Screw Steamer "HARPAGUS"  
 State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) Complete Superstructure with Tonnage Openings State Type of Erections Focle on C.S.S.

TONNAGE under Tonnage Deck... 4520.57 CLASS +100 A1 State if with freeboard as condition of Class Yes Built at Sunderland  
 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 428 Launched Nov 27<sup>th</sup> 1939 Yard No. 282  
 Total Breadth (greatest moulded) B 58.21 Builders Bartram & Sons Ltd.  
 Gross Tonnage 5172.92 Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) D 38.25 Owners Gowland Steamship Co Ltd  
 Register Tonnage 2979.70 1st Longitudinal Number (L x D) = 15729 Managers J & C Harrison Ltd  
 2nd Numeral L x (B + D) = 40638 (Where necessary to be entered in Reg. Book.)  
 REGISTERED DIMENSIONS. FEET. Framing Depth "d," at middle of length. See Sec. 3 (1d) 24.0 Residence 66 Mark Lane London EC3  
 Length 437 Proportions—Depth to Length—Uppermost continuous deck to top of keel 11.19 Port of Registry London  
 Breadth 58.5 Do. Long Bridge to top of keel If surveyed while building, afloat, or in dry dock Yes  
 Depth 25.05 Draught Moulded 25'-6 3/4"

## 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	31 ✓		Bracket Floors, Frame	5 6 1/2 44 ✓	
" " from 3/4 length amidships to Collision bulkhead	27 ✓		" " Reversed Frame	5 5 1/2 3 44 ✓	
" " in peaks	24 ✓		" " Vertical Struts	5 5 1/2 3 44 ✓	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	47 54 ✓	
Frame Amidships, Angle, [ or ]	12 3 1/2 65 ✓		" " top Angles	3 1/2 3 1/2 48 ✓	
" " Extends up to	2nd Dk ✓		" " bottom Angles	4 3 1/2 66 ✓	
Reversed Frame Amidships, Angle			Side Girders, No. each side and thickness	One 38 ✓	
" " Extends up to			Margin Plate depth (excl. of flange) and thickness	39 1/4 54 ✓	
Depth of Framing Girder	12 ✓		" " Vertical Angle to Tank side	5 5 45 ✓	
Frames in Uppermost Continuous 'tween Decks, Angle, [ or ]	6 3 1/2 37 ✓		Bracket abaft 1/4 len. from stem	5 5 45 ✓	
" " Second 'tween Decks, Angle, [ or ]	✓		" " Vertical Angle to Tank side	8 8 50 ✓	
" " Third " " " "	✓		Bracket from forward 1/4 len. from stem to Panting Area	42 CONTINUOUS ✓	
" " from 1/4 len. for'd. to 15% len. from Stem	12 + 3 1/2 + 65 67 ✓		Gussets, spacing and scantling abaft 1/4 len. from stem	42 " ✓	
" " in Peaks, Angle or [	8 3 1/2 35 ✓		Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area	69 1/4 45 ✓	
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 6 1/4 + 3 1/2 as approved ✓		Tank Side Brackets, height above base line at toe of Frame and thickness		
State if Frame Joggled	Yes. ✓		INNER BOTTOM PLATING.		
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	Yes. ✓		Breadth and thickness of Middle Line Strake	75 50 54 + 52 ✓	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	Yes. ✓		Thickness of remainder in Holds	44 1/2 40 ✓	
SINGLE BOTTOM.			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 ✓	
Floors, Depth and thickness at mid-line in Holds	✓		BEAMS.		
Height of Brackets at side above base line at toe of frame	✓		Uppermost Continuous Deck, amidships	8 + 3 1/2 + 38 39 ✓	
Middle Line Keelson, on Floors, Angles, [ or ]	✓		" " in Wells, Angle, [ or ]	10 + 3 1/2 + 40 ✓	
" " Through Plate or Intercoastal Plate	✓		" " in way of Bridge, Angle, [ or ]	9 3 1/2 38 ✓	
" " Foundation Plate on Floors	✓		Spacing	31 ✓	
" " Flat Plate Keel Angles	✓		Second Deck, amidships, Angle, [ or ]	9 3 1/2 38 ✓	
Side Keelsons, No. each side	✓		Spacing	10 3 1/2 40 ✓	
" " thickness of Intercoastal Plate	✓		Third Deck, amidships, Angle, [ or ]	12 3 1/2 + 61 67 ✓	
" " Angles	✓		Spacing	31 ✓	
DOUBLE BOTTOM.			Fourth Deck, amidships, Angle, [ or ]	✓	
Solid Floors, thickness and spacing	42 62 ✓		Spacing	✓	
" " Are Frame and Reversed Frame joggled?	Yes ✓		Poop Deck, Angle, [ or ]	✓	
Bracket Floors, breadth and thickness at middle line	33 1/4 42 ✓		Spacing	✓	
" " breadth and thickness at margin plate	35 42 ✓		Bridge Deck, Angle, [ or ]	✓	
			Spacing	✓	
			Forecastle Deck, Angle, [ or ]	9 3 1/2 48 ✓	
			Spacing	8 3 48 ✓	

W43-0010 (1/2)



## 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, No. of Rows.....</b>	One		Stringer Plate, breadth and thickness in way of Bridge .....	
" in 'tween Decks, Size and Spacing.....	C. L. Bhd. .31 5 3 .32 L 1/8 ✓ 7 3 .31 5 spaced 62" ✓		Thickness of Plating abreast Deck openings } <del>in way of Wells</del> .....}	.38 ✓ includes
" " " " "			Thickness of Plating abreast Deck openings } in way of Bridge E.T.B. casing.....}	.40 ✓ .02 owners
" in Holds " " "	✓		Thickness of Plating within line of openings...	.34 ✓
" " " " "	7 3 1/2 .38 1/8 ✓		If Sheathed, material and thickness .....	✓
<b>Centre Line Bulkhead.</b>			<b>Third Deck.</b>	
Stiffeners and Spacing.....	10 3 1/2 .50 5 ✓ as approved		Stringer Plate, breadth and thickness.....	✓
Plating, thickness of .....	.375 ✓		If Plated, state thickness.....	✓
<b>STRINGERS AND DECKS.</b>			<b>Fourth Deck.</b>	
<b>Uppermost Continuous Deck.</b>			Stringer Plate, breadth and thickness.....	✓
Stringer Plate, breadth and thickness in Wells	See Builders letter 28/4/29 6 3 3/4 x .64 includes includes .03 owners		If Plated, state thickness .....	✓
" " " " , in way of Bridge	✓		<b>Poop Deck.</b>	
" Angle in Wells .....	6 6 .65 ✓ includes .03 owners where exposed		Stringer Plate, breadth and thickness .....	✓
Thickness of Plating abreast Deck openings ) in way of Wells .....	.61 ✓ includes .02 owners where exposed		Plating, Sheathing, material and thickness ...	✓
Thickness of Plating abreast Deck openings ) in way of Bridge E.T.B. casing.....)	.50 ✓ includes .02 owners where exposed		<b>Bridge Deck.</b>	
Thickness of Plating within line of openings...	42 ✓ includes .02 owners		Stringer Plate, breadth and thickness.....	✓
If Sheathed, material and thickness .....	✓		Plating, Sheathing, material and thickness ...	✓
<b>Second Deck.</b>			<b>Forecastle Deck.</b>	
Stringer Plate, breadth and thickness in Wells...	8 2 See Builders letter 28/4/29 40 ✓		Stringer Plate, breadth and thickness.....	.38 ✓ includes
			Plating, Sheathing, material and thickness ...	.36 ✓ .02 owners

## SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if joggled? <i>No</i>			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 or.		Diam.	Spacing or. to or.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.	
FLAT PLATE KEEL .....	<i>68 1/2</i>	<i>.77</i>	<i>.67</i>	<i>.67</i>		<i>double</i>	<i>1</i>	<i>3 1/4</i>	<i>4</i>	<i>1</i>	<i>3 1/8</i>	<i>lapped</i>
" DBLG. (if any)	<i>4 1/2</i>		<i>.50</i>	<i>.50</i>								
BOTTOM PLATING, No. of Strakes ..... <i>4</i> .....	<i>.61</i>	<i>.61</i>	<i>.50</i>	<i>.50</i>		<i>"</i>	<i>7/8</i>	<i>3 1/4</i>	<i>3</i>	<i>7/8</i>	<i>3 1/8</i>	<i>lapped</i>
BILGE PLATING, No. of Strakes ..... <i>1</i> .....	<i>.61</i>	<i>.61</i>	<i>.50</i>	<i>.50</i>		<i>"</i>	<i>7/8</i>	<i>3 1/4</i>	<i>3</i>	<i>7/8</i>	<i>3 1/8</i>	<i>"</i>
SIDE PLATING, No. of Strakes ..... <i>2</i> .....	<i>.61</i>	<i>.61</i>	<i>.47</i>	<i>.47</i>		<i>"</i>	<i>7/8</i>	<i>3 1/4</i>	<i>3</i>	<i>7/8</i>	<i>3 1/8</i>	<i>"</i>
UPPER DECK, Sheer- strake <del>in Wells</del> .....	<i>56</i>	<i>.70</i>	<i>.47</i>	<i>.47</i>		<i>"</i>	<i>7/8</i>	<i>3 1/4</i>	<i>4</i>	<i>7/8</i>	<i>3 1/2</i>	<i>"</i>
UPPER DECK, Sheer- strake in Bridge ...	<i>59 1/2</i>	<i>.64</i>	<i>.47</i>	<i>.47</i>		<i>"</i>	<i>7/8</i>	<i>3 1/4</i>	<i>4</i>	<i>7/8</i>	<i>3 1/8</i>	<i>lapped</i>
STRAKE BELOW Sheer- strake <del>in Wells</del> .....												
STRAKE BELOW Sheer- strake in Bridge ...												
POOP SIDE PLATING .....			<i>✓</i>									
BRIDGE SIDE PLATING ...			<i>✓</i>									
FOREC'TLE SIDE PLATING			<i>.42</i>	<i>✓</i>		<i>Single</i>	<i>7/8</i>	<i>3"</i>	<i>1</i>	<i>7/8</i>	<i>3</i>	<i>lapped</i>

## WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—		Extending to Upper Deck (Sec. 3 c)		Deck next below		As per Rule	
		1	✓	6	✓	7	✓

  

		Plating Thickness.	STIFFENERS.				
			VERTICAL.		HORIZONTAL.		
			Scantlings.	Spacing.	Scantlings.	Spacing.	
MIDSHIP BULKH'D,	Upper two decks	Frame 42	46-26	12 x 3½ x 45	30"	✓	
	"	Frame 70	46-26	11 x 3½ x 51	30"	✓	
	"	Second	46-26	11 x 3½ x 51	30"	✓	
	"	Frame 133	46-26	11 x 3½ x 51	30"	✓	
	"	Third	46-26	11 x 3½ x 51	30"	✓	
"	Hold	89 x 94	46-31	12 x 1½ x 45	26½"	✓	S B Beam ✓
COLLISION	(in Hold)		49-34	12 x 3½ x 36	24"	✓	6' ✓
			33-31	12 x 3 x 37	24"	✓	8' ✓
AFTER PEAK				6 x 3 x 40	24"	✓	8' ✓

## FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted
<b>KEEL, Bar</b> .....		Flat Plate		
<b>STEM</b> .....		Rolled.		
<b>STERN FRAME</b> {	Propeller Post .....	Forging $10\frac{1}{2} \times 8\frac{1}{2}$	Wolshingham	
	Rudder " .....	$10\frac{1}{2} \times 8\frac{1}{2}$	Steel Co	
<b>Speed of Vessel</b> .....		$10\frac{1}{2}$ knots		
<b>RUDDER—Type</b> .....		"Oer 13"		
" A x D .....		Not stated		
" Diam. of head .....		Forging $11\frac{1}{4}$	Wolshingham	
" Mainpiece at top pintle .....			Steel Co	
" " heel .....				
" how constructed .....		Steel plates	angles	
" double or single plate .....		double		
" coupling, vertical or .....		horizontal		

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) *Open Hearth.*  
*Consett Iron Co., South Durham, Dorman Long & Co. Appleby Frodingham*  
*Skinner's Grove, Cargo Fleet, Colville's, Steel Co of Scotland.*  
 Has the Steel been tested as required by the Rules? *Yes*

Has the Steel been tested as required by the Rules?







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.)

Plans of midship Section, Profile & Decks as built are enclosed together with 4 certificates of forgings & castings also list of plans.

Damage to the main mast & shrouds sustained during testing of iron derrick has been satisfactorily repaired.

Chromador Steel has been used in the following parts:-

Shell at fore end, deep tank shell,

Engine & Boiler room d.b. Tanks:- all floors, girders, tank margin,

tank top, frames, reverse frames, stiffeners, ribs, & all connection angles

Deep Tank tank margin, inner bottom, tank side brackets, bulkheads,

other plating, beams, bulkhead stiffeners (excepting C.L. Bhd) facebars, connection angles.

Second Deck stringer & plating.

Upper Deck stringer, & deck plating where exposed.

Forecastle Deck

PARTICULARS OF ELECTRIC WELDING (if employed) Electrodes employed:- Murex

Parts welded:- Settling Tanks, Air Generator Storage Tank.

SPECIAL NOTATIONS:- Either as part of the vessel's class or for record in the Register Book

Cruiser Stern, D.F., E.S.D.

Particulars of Drop Test of Cast Steel Anchors, viz.:- Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
	47	47	41	2	3	2	14 (incl pins)	10	1873	23/3/39
							27	10	1960	22/5/39
							0	10	1879	23/3/39

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. ☒ ft., Bridge ☒ ft., Forecastle 33.83 ft. ☒

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 167421 Signal Letters Extreme Breadth over Belting ☒ Over-all Length 450'-10" (Circ. 1705)

No. and Material of Decks One Dk (Ste) & Shelter Dk (Ste) (Circ. 1611)

Parts of Bottom of Vessel coated with cement or approved composition Peaks, Cofferdam & Engine room feed Tank.

Particulars of composition (if fitted) and of approval ☒

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Tanks (if tested) are to be included.)

Where Fitted.	Length. Feet.	Water Capacity. Tons.	Where Fitted.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	136.92	469.5	Fore peak tank,	24.5	150.0
Double bottom, under Engines and Boilers,	41.33	227.0	After peak tank,	28.0	245.0
Double bottom, if under Engines only,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Deep tank, aft,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Double bottom, if under Boilers only,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Deep tank, forward,	MT 23.25	977.0
Double bottom, forward,	187.0	800.7	Other tanks, if fitted,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Total length (if continuous) and Capacity	365.25	1497.2	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 5929

Date 5.6.39

Dates of Surveys held while building

1939. May 4, 5, 8, 10, 11, 12, 15, 16, 17, 18, 19, 22, 23, 24, 26, 30, 31. June 1, 2, 6, 8, 9, 12, 14, 15, 19, 20, 22, 23, 26, 27, 28, 29, 30. July 3, 4, 6, 7, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 24, 25, 26, 27, 28. Aug 8, 9, 10, 18, 22, 25, 28, 30. Sep 1, 5, 6, 8, 11, 13, 15, 18, 20, 22, 24, 26, 29. Oct 2, 4, 6, 9, 10, 11, 13, 14, 16, 18, 20, 23, 24, 25, 27, 30. Nov 2, 3, 6, 8, 10, 13, 15, 17, 20, 22, 24, 25, 27, 29. Dec 1, 4, 6, 8, 11, 13, 14, 15, 16, 18, 20, 22, 27, 29. 1940. Jan 4, 9, 19, 24, 29. Feb 7, 9, 14, 16, 21, 23, 26, 28. Mar 1, 8, 11, 13, 15, 18, 20, 27, 29. Apr 1, 2, 3, 5, 6, 8, 10, 12, 15, 17, 18, 19. Total No. of Visits 152