Rpt. 1.

STEEL STEAMER or ~~MOTORSHIP~~.

Received at London Office SEP 24 1938.

State if Report has been sent on the Freeboard of the Vessel

State if Report is sent on the Machinery of the Vessel

Date of completion of report 23rd September 1938 Port of Sunderland No. 324481

Survey held at Sunderland Date First Survey 13th May '38 Last Survey 13th September 1938

On the (*State if Machinery fitted Aft and if Single, Twin or Triple Screw*) S.S. "JOSEPH SWAN" Machinery Aft. ✓

State Type (*Full Scantling, Complete Superstructure with or without Tonnage Openings*) Full Scantling ✓ State Type of Erections R&D., BRIDGE, F'CLE

TONNAGE under Tonnage Deck 1152·92

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

Total ✓

Gross Tonnage 1570·52

Register Tonnage 913·05

REGISTERED DIMENSIONS.

FEET.

Length 239·00

Breadth 38·75

Depth 16·25

CLASS + 100 A.1. *State if with freeboard as condition of Class* No

FEET.

Length *from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a)* L 238·5 ✓

Breadth (*greatest moulded*) B 38·58 ✓

Depth, *at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c)* D 18·25 ✓

1st Longitudinal Number (L × D) = 4353 ✓

2nd Numeral L × (B + D) = 135541 ✓

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

Proportions—*Depth to Length*—*Uppermost continuous deck to top of keel* R&D. 13·07 ✓

Do. ~~Long Bridge~~ *to top of keel* 10·72 ✓

Draught Moulded 16-10 3/4"

Built at Sunderland

Launched 26 July 1938 Yard No. 350

Builders S.P. Austin & Son. Ltd.

Owners London Power Co. Ltd.

Managers Stephenson Clarke & Assoc. Co. Ltd

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

Residence ✓

Port of Registry London

If surveyed while building, afloat, & ~~dry~~ *in dry dock* Yes. ✓

FRAMES, DOUBLE BOTTOM AND BEAMS.

	Inches in Ship.	Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	27	✓
„ „ from ¾ length amidships to Collision bulkhead	27	✓
„ „ in peaks	23	✓
SIDE FRAMING.		
Frame Amidships, Angle, ~~[~~ or [NBS.	6 × 3 × ·41	✓
„ „ Extends up to	R&D.	✓
Reversed Frame Amidships, Angle	✓	
„ „ Extends up to	✓	
Depth of Framing Girder	6	✓
Frames in Uppermost Continuous 'tween Decks, Angle, [or [	✓	
„ „ **Second 'tween Decks,** Angle, [or [	✓	
„ „ **Third** „ „ „ „	✓	
„ **from ½ len. for'd. to 15% len. from Stem**	5½ × 3 × ·46 [	✓
„ **in Peaks,** Angle or [	5½ × 3 × ·35	✓
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	¾ 4⅞	✓
State if Frame Joggled	Yes.	✓
Are the scantlings and arrangements in the **Panting Area** in accordance with the Rules and/or as approved ?	Yes.	✓
Are the scantlings and arrangements in way of the **Bottom Forward** in accordance with the Rules and/or as approved ?	Yes.	✓
SINGLE BOTTOM. (In Boiler Room)		
Floors, Depth and thickness at mid-line in Holds	23½ × ·50	✓
Height of Brackets at side above base line at toe of frame	Level	✓
Middle Line Keelson, on Floors, Angles, ~~[~~ or ~~[~~	5 × 3½ × ·46	✓
„ „ „ Through Plate ~~or Intercostal Plate~~	27½ × ·51	
„ „ „ Foundation Plate on Floors	12 × ·51	✓
„ „ „ Flat Plate Keel Angles	3½ × 3½ × ·40	✓
Side Keelsons, No. each side	One	✓
„ „ thickness of Intercostal Plate	·46	✓
„ „ Angles	6 × 3½ × ·48	✓
DOUBLE BOTTOM.		
Solid Floors, thickness and spacing	·34 every frame	✓
„ „ Are Frame and Reversed Frame joggled ?	Yes. Rev. " No.	✓ ✓
Bracket Floors, breadth and thickness at middle line	✓	
„ „ breadth and thickness at margin plate	✓	

	Inches in Ship.	Any Departure from Approved Plans to be Noted.
Bracket Floors, Frame	✓	
„ „ Reversed Frame	✓	
„ „ Vertical Struts	✓	
Centre Girder, depth and thickness amidships	33 × ·40	✓
„ „ top Angles	3 × 3 × ·36	✓
„ „ bottom Angles	3½ × 3½ × ·40	✓
Side Girders, No. each side and thickness	One 5½ × 3 × ·38 [·30 plate fwd	✓
Margin Plate depth (excl. of flange) and thickness	·50 & ·38	✓
„ „ Vertical Angle to Tank side Bracket abaft ¼ len. from stem	3 × 3 × ·32	✓
„ „ Vertical Angle to Tank side Bracket from forward ¼ len. from stem to Panting Area	3 × 3 × ·32	✓
„ „ Gussets, spacing and scantling abaft ¼ len. from stem	✓	
„ „ Gussets, spacing and scantling from forward ¼ len. from stem to Panting Area	✓ side tank 8'-3" high	✓
Tank Side Brackets, height above base line at toe of Frame and thickness	frame foot conns. as appd	✓
INNER BOTTOM PLATING. Breadth and thickness of Middle Line Strake	66 × ·50	✓
Thickness of remainder in Holds	·50	✓
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.	✓
BEAMS.		
Uppermost Continuous Deck, amidships in Wells, Angle, ~~[~~ or ~~[~~	4 × 3 × ·34	✓
„ „ in way of Bridge, Angle, ~~[~~ or [	8 × 3 × ·54	✓
Spacing	every	✓
~~Second~~ R.Q. Deck, amidships, Angle, ~~[~~ or [	7 × 3 × ·49 ½ beams 4 × 3 × ·34	✓ ✓
Spacing	every	✓
Third Deck, amidships, Angle, [or [	✓	
Spacing	✓	
Fourth Deck, amidships, Angle, [or [	✓	
Spacing	✓	
Poop Deck, Angle, [or [	✓	
Spacing	✓	
Bridge Deck, Angle, ~~[~~ or ~~[~~	5 × 3 × ·30	✓
Spacing	every	✓
Forecastle Deck, Angle, ~~[~~ or ~~[~~	6 × 3 × ·46	✓
Spacing	every	✓

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PILLARS AND DECKS.

	Inches in Ship.	Any Departure from Approved Plans to be Noted.
PILLARS, No. of Rows	✓	
„ in 'tween Decks, Size and Spacing	✓	
„ „ „ „ „	✓	
„ in Holds „ „	deep brackets ·34 ✓ spaced 9-0" apart ✓	
„ „ „ „ „	✓	
Centre Line Bulkhead. Stiffeners and Spacing	✓	
Plating, thickness of	✓	
STRINGERS AND DECKS. **Uppermost Continuous Deck.** Stringer Plate, breadth and thickness in Wells	7½ × ·63 ✓	
„ „ „ „ in way of Bridge	✓	
„ Angle in Wells	5×5×·60 ✓	
Thickness of Plating abreast Deck openings in way of Wells	·63 ✓	
Thickness of Plating abreast Deck openings in way of Bridge	✓	
Thickness of Plating within line of openings	·34 ✓	
If Sheathed, material and thickness	✓	
R.Q. Deck. Stringer Plate, breadth and thickness in Wells	65×·50 ✓	

	Inches in Ship.	Any Departure from Approved Plans to be Noted.
Stringer Plate, breadth and thickness in way of Bridge	✓	
Thickness of Plating abreast Deck openings in way of Wells	·50 ✓	
Thickness of Plating abreast Deck openings in way of Bridge	✓	
Thickness of Plating within line of openings	·30 × ·40 ✓	
If Sheathed, material and thickness	✓	
Third Deck. Stringer Plate, breadth and thickness	✓	
If Plated, state thickness	✓	
Fourth Deck. Stringer Plate, breadth and thickness	✓	
If Plated, state thickness	✓	
Poop Deck. Stringer Plate, breadth and thickness	✓	
Plating, Sheathing, material and thickness	✓	
Bridge Deck. Stringer Plate, breadth and thickness	33×·30 ✓	
Plating, Sheathing, material and thickness	·26 2½" W.P. ✓	
Forecastle Deck. Stringer Plate, breadth and thickness	·30 ✓	
Plating, Sheathing, material and thickness	·30 ✓	

SHELL PLATING.

SCANTLINGS.

Strakes.	As in Vessel. Amidships. Breadth. Inches.	Amidships. Thickness. Inches.	Forward. Thickness. Inches.	Aft. Thickness. Inches.	Any Departure from Approved Plans to be Noted.
Flat Plate Keel	42	·52 ✓	·48 ✓	·48 ✓	
„ Dblg. (if any)	✓	✓			
Bottom Plating, No. of Strakes A.B.C.		·46 ✓	·38 ✓	·42 ✓	
Bilge Plating, No. of Strakes 2		·46 ✓	·42 ✓	·42 ✓	
Side Plating, No. of Strakes 2 U.D. 2 R.Q.D.		·46 ✓	·46 ✓	·38 ✓	
Upper Deck, Sheerstrake in Wells	62	·60 ✓	·38 ✓	✓	
R.Q. Deck, Sheerstrake ...	50½	·50 ✓	✓	·38 ✓	
Strake below Sheerstrake in Wells	62	·46 ✓	·46 ✓	✓	
Strake below Sheerstrake in R.Q.D.	62	·46 ✓	✓	·38 ✓	
Poop Side Plating	✓	✓			
Bridge Side Plating		·31 ✓	✓	✓	
Forec'tle Side Plating		✓	·31 ✓	✓	

RIVETING.

Strakes.	Edges. State if joggled? No. Single or Double.	Edges. Rivets. Diam. Inches.	Edges. Rivets. Spacing c. to c. Inches.	Butts. No. of Rows or Rivets.	Butts. Rivets. Diam. Inches.	Butts. Rivets. Spacing c. to c. Inches.	Butts. Strapped or Lapped.
Flat Plate Keel	D	3/4	3	✓ 3	7/8	3¼	L
„ Dblg. (if any)	D	3/4	3	✓ 3	3/4	2⅝	L
Bottom Plating, No. of Strakes A.B.C.	D	3/4	3	✓ 3	3/4	2⅝	L
Bilge Plating, No. of Strakes 2	D	3/4	3	✓ 3	3/4	2⅝	L
Side Plating, No. of Strakes 2 U.D. 2 R.Q.D.	D	3/4	3	✓ 2	3/4	2⅝	L
Upper Deck, Sheerstrake in Wells	D	7/8	3⅜	✓ 3	7/8	3⅛	L
R.Q. Deck, Sheerstrake ...	D	3/4	3	✓ 3	3/4	2⅝	L
Strake below Sheerstrake in Wells	D	3/4	3	✓ 2	3/4	2⅝	L
Strake below Sheerstrake in R.Q.D.	D	3/4	3	✓ 3	3/4	2⅝	L
Poop Side Plating							
Bridge Side Plating	S	3/4	3	✓ 1	3/4	2⅝	L
Forec'tle Side Plating	S	3/4	3	✓ 1	3/4	2⅝	L

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel— 4BH in R.B.

Extending to Upper Deck (Sec. 3 *c*) 5 (2 Deep Tank Bulks)

„ Deck next below

As per Rule 3 ✓

	Plating Thickness.	Stiffeners. Vertical. Scantlings.	Stiffeners. Vertical. Spacing.	Stiffeners. Horizontal. Scantlings.	Stiffeners. Horizontal. Spacing.
MIDSHIP BULKH'D. Upper tween decks	✓				
„ „ Second „	✓				
„ „ Third „	✓				
„ „ Holds Nos 26-28	42-30	9"×3½"×66 L	30"		
COLLISION „ (in Hold)	46-31	6×3×·47 L	24"	L. Lacks, flat & stringers	
AFTER PEAK „ „	41-30	6×3×32 L	24"	semi-bon bean	

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar				
STEM	Rolled steel	7¼×1⅞	Consett ✓	
STERN FRAME Propeller Post	forging	7⅞×5⅞	✓	
STERN FRAME Rudder „		18-5¼ tapered		
Speed of Vessel		9½ knots	✓	
RUDDER—Type		ordinary		
„ A×D		188	✓	
„ Diam. of head		6¾	✓	
„ Mainpiece at top pintle		5⅜×6⅞	✓	
„ „ heel		5¼×3½	✓	
„ how constructed		riveted	✓	
„ double plate		·38	✓	
„ coupling, vertical or horizontal		vertical	✓	

STEEL. Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) Open Hearth ✓

Shiningroove, Forman Long, Consett, Cargo Fleet, South Durham

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

EQUIPMENT No. 14413 ✓ LETTER P ✓.

ANCHORS.

Number of Certificate.	Anchors.	Weight, Ex. Stock. Cwts.	qrs.	lbs.	Weight of Stock. Cwts.	qrs.	lbs.	Test, per Certificate. Tons.	cwts.	qrs.	lbs.	Weight Required by Table 53. Cwts.	Description of Anchor.	Makers.	Where and when tested and Superintendent.
38401	1st Bower	30	2	14	✓			29	1	3	14	✓ 30½ ✓	Byers Improved	✓	L.P.H.S. 23.6.38 J.H.B.
38402	2nd „	30	2	14	✓			29	1	3	14	✓ 30½ ✓	Stocktess	✓	do. 24.6.38 do.
38403	3rd „	26	1	14				25	18	0	14	✓ 26 ✓	do	✓	do.
	Collective weight.	87	2	14								87			
38300	Stream	9	3	14		✓		11	17	3	7		do	✓	do 29.6.38 J.H.B.

CHAIN CABLES.

Number of Certificate.	Length and size supplied. Length. Fathoms.	Diam. Ins.	Test per Certificate. Statutory. Tons.	Breaking. Tons.	Weight of Chain Cable. Supplied. Cwts.	qrs.	lbs.	Per Rule. Cwts.	Length and Size per Table 53. Length. Fathoms.	Diam. Ins.	Description.	Makers of Cables.	Where and when tested, and Superintendent.
108494	240 ✓	1⅝ ✓	47 10/20	66 10/20 ✓	321	3	21 ✓	319½ ✓	240 ✓	1 10/16 ✓	Stud Link	✓	L.P.H.N. 6.6.38 J.A.R.
Iron Stream Chain or Steel Wire	75 ✓	Cir. 1 ✓	18 ✓	27 ✓	41	1	25 ✓	38¼ ✓	75 ✓	Cir. 1 ✓	Stud Link	✓	L.P.H.N. 26.1.38 J.C.F.

HAWSERS AND WARPS.

Material.	Length and Size supplied. Length. Fathoms.	Cir. Ins.	Breaking Test of Steel Wire. Tons.	Length and Size per Table 53. Length. Fathoms.	Cir. Ins.
Towline	90 ✓	3¼ ✓	21 11/20 ✓	90 ✓	3¼ ✓
Hawsers & Warps	6@90 ✓	2½ ✓	13 11/20 ✓	2@90 ✓	2¼ ✓
„				2@90 ✓	1¾ ✓
„					

Steering Gear, Type (Power or hand) (electric) Hydraulic Sonkin & Co. **Alternative Means of Steering** (Hand) Sonkin & Co.

Steering Chains (Size and Test) Telemotor ✓ **Windlass** Emerson Walker ✓ **Boats** 2 - 19'-0" Lifeboats

Ceiling in Holds, thickness and material NONE **Cargo Battens,** thickness, material and spacing NONE.

Cargo Hatchways.—(Upper Deck) steel plates and angles Reill Patent **Thickness of Hatches** 3"

Size of Hatchways **No. 1** (Fwd.) 45-6×8 24'-0" U.D. 26'-0" R.Q.D. **No. 2** 39-6×27' **No. 3** 39-6×27' ✓ **No. 4** ✓ **No. 5** ✓ **No. 6** ✓

Number of **Shifting Beams** ~~and Bars and Adzes~~ No. 1 - 7, Nos 2 & 3 - 6

Builder's Signature For S. P. AUSTIN & SON, LIMITED.

Walter Seadon. SECRETARY.

GENERAL DECLARATION. *It should be stated (a) whether the vessel (if not a motorship) 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 (where required to be inserted in the Notation).*

The vessel has been built in accordance with the approved plans, the Secretary's Rules, & the Society's Rules ✓

The materials and workmanship are good. ✓

The freeboard marks have been verified and cut in on the vessel's sides. ✓

The double bottom tanks, fore & after peaks, deep tank, have been tested in accordance with the Rules ✓

The decks, bulkheads, hand pumps, ash sloat, have been tested and found good. ✓

The windlass & steering gear have been tried under working conditions. ✓

The auxiliary steering gear has been rigged and worked. ✓

The following forging certificates are enclosed :— Stern Frame, Rudder Frame, Tillet, Hand Gear Quadrant, Pinion ✓

The amount of Entry Fee £ 5 : : Freeboard £ 11 : 0 Special Survey Fee £ 153 : 11 : . *Travelling Expenses, if any* £ : :

Fees applied for, 23 SEP. 1938

Received by me, 11/10 1938 JMK 12/10.

State whether the Vessel has been built under Special Survey YES.

Certificate(s) to be sent to SUNDERLAND. Date of issue 12/10/38

(Special notations, where part of class, to be stated.)

I am of opinion the Vessel should be Classed +100 A1. ✓

Signature W. C. Mullen

Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 30 SEP 1938

Character assigned +100 A1

cargo battens not fitted +LMC 9.38

F.D. C.L.

Lloyd's A & A.

The Surveyor will be requested not to write on or below the Committee's Minute.

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.*)

The following plans as built are enclosed :- Midship Section; Profile & Decks.

PARTICULARS OF ELECTRIC WELDING (*if employed*) ✓

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

Particulars of **Drop Test** of Cast Steel Anchors, viz. :— Weight, Surveyor's Initials, Number of Certificate, Date of Test.							
	1st Bower (Including pin)	19	2	14 ✓	G.B.	30072	13·5·38
	2nd ,,	19	2	14 ✓	F.H.	20056	20·5·38
	3rd ,,	17	0	21 ✓	J.F.R.	2670	10·9·37

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ✓ ft., R.Q.D. 147·42 ft., Bridge 17·25 ft., Forecastle 21·33 ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated ✓

Official No. 166572 Signal Letters ✓ Extreme Breadth over Belting (Circ. 1611) ✓ Over-all Length (Circ. 1703) 246'-9" ✓

No. and Material of Decks 1 Deck ✓ (Steel)

Parts of Bottom of Vessel coated with cement or approved composition under boilers only. Pt Cem.

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,	✓	✓	Fore peak tank,	21·0	150 ✓
Double bottom, under Engines and Boilers,	✓	✓	After peak tank,	5.75	10 ✓
Double bottom, if under Engines only, DB m E	22·5	31 ✓	Deep tank, [redacted]	45-9.0	100 ✓
Double bottom, if under Boilers only,	✓	✓	Deep tank, forward,		
Double bottom, forward,	164·25	569 ✓	Other tanks, if fitted,		
Total length (if continuous) and Capacity	186·75	600 ✓	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 5873

Date 12. 8. 37

Dates of Surveys held while building: 1938. May. 18.26. June 3.9.16.17.20.23. July. 11.12.14.15.19.20.22.23. Aug. 3.4.8.9.11.12.15. 23.29. Sep. 5.6.7.8.9.10.13

Total No. of Visits 32

FOR S.S.O.F SEE SLD. RPT. NO. 32438 – "LEONARD PEARCE"