

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 <i>(Widely spaced tubular Two (P.F.S.))</i>				Stringer Plate, breadth and thickness in way of Bridge		57 x .34	
Pillars in conjunction with girders as approved				Thickness of Plating abreast Deck openings in way of Wells		.42	
" " in 'tween Decks, Size and Spacing		8 x 10 dia x .40		Thickness of Plating abreast Deck openings in way of Bridge		.40 x .30	.36 x .30
" " UPPER " " " "		15 dia x .54 as approved		Thickness of Plating within line of openings		.30 in Bridge	.40 x .36 clear of Bridge
" " MAIN " " " "		19 " x .66 " "		If Sheathed, material and thickness			
" " in Holds " " " "		24 dia. x .74 as approved		Third Deck. (For Mch. Shell only)			
Centre Line Bulkhead.				Stringer Plate, breadth and thickness		51 x .34	
Stiffeners and Spacing				If Plated, state thickness		.40	.36
Plating, thickness of				Fourth Deck.			
STRINGERS AND DECKS.				Stringer Plate, breadth and thickness			
Uppermost Continuous Deck.				If Plated, state thickness			
Stringer Plate, breadth and thickness in Wells		65 1/2 x 1.14	(1.74 x 1.67 in way of BRIDGE ENDS)	Poop Deck.			
" " " " in way of Bridge		65 1/2 x .50 x .46		Stringer Plate, breadth and thickness		.43	.38
" " Angle in Wells		8 8 1.00 8 x 8 x 1.12	(as approved)	Plating, Sheathing, material and thickness		.35 x 2 1/2	Borneo hardwood
Thickness of Plating abreast Deck openings in way of Wells		1.00 .90 x .86 .86 x .80		Bridge Deck.			
Thickness of Plating abreast Deck openings in way of Bridge		.45 x .42		Stringer Plate, breadth and thickness		65 1/2 x .62	
Thickness of Plating within line of openings		.47 x .36		Plating, Sheathing, material and thickness		.62 x .42	.82 1/2 Borneo hardwood (part)
If Sheathed, material and thickness				Forecastle Deck.			
Second Deck.				Stringer Plate, breadth and thickness		.38	
Stringer Plate, breadth and thickness in Wells		51 x .46		Plating, Sheathing, material and thickness		.36	(No sheathing)

SHELL PLATING.

SCANTLINGS.					RIVETING.				
STRAKES.	AS IN VESSEL.				EDGES.		BUTTS.		
	AMIDSHIPS.		FORWARD.	AFT.	State if jogged?	No	No. of Rows of Rivets.	RIVETS.	
	Breadth.	Thickness.	Thickness.	Thickness.				Diam.	Spacing cr. to cr.
Flat Plate Keel	60	1.01	.85	.85		✓			
" Dblg. (if any)									
Bottom Plating, No. of Strakes	3	.71	.65	.56	Side shell in way of F. Peak increased 25% in lieu of stringer, and also increased 25% for 10% abt. the Collision bld.				
Bilge Plating, No. of Strakes	12	.71	.65	.59	At bridge ends F. & A. 1" doubling plating as approved				
Side Plating, No. of Strakes	3	.73	.65	.59					
Upper Deck, Sheer-strake in Wells	1.09	.94	.48	.48					
Upper Deck, Sheer-strake in Bridge	90	.69							
Strake below Sheer-strake in Wells	90	1.00	.48	.50					
Strake below Sheer-strake in Bridge	90	.69							
Poop Side Plating				.42					
Bridge Side Plating		.85 x .66							
Forecastle Side Plating		as approved							

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—

Extending to Upper Deck (Sec. 3 c)

8 (right) ✓

Deck next below

✓

As per Rule

8 (right)

FORGINGS AND CASTINGS.

Casting or Forging. Scantlings. Maker's Name. Any Departure from Approved Plans to be Noted.

KEEL, Box	UPPER	Flat plate		
STEM	LOWER	M. S. Fashion plate		
STERN FRAME	Propeller Post	Cast		
	Rudder	Steel	16 1/2 x 11	As The Wolsingham Steel Co., Ltd.
Speed of Vessel			15 knots	
RUDDER—Type			Ordinary	
" A x D.			843	
" Diam. of head			13 3/4	13 1/2
" Mainpiece at top pintle			10 1/2 x 13 3/4	As
" " heel			9 x 13 3/4	as approved
" how constructed			Build & Welded	
" double or single plate coupling, vertical or horizontal			Double	
			Horizontal	

MIDSHIP BULKH'D, Upper 'tween decks	Plating Thickness.	STIFFENERS.			
		VERTICAL.		HORIZONTAL.	
		Scantlings.	Spacing.	Scantlings.	Spacing.
(FR. 97) ✓	.26	5 x 3 x .25			
" Second (FR. 97) ✓	.28	2 as approved	30-35		
" Third	.28	5 7 x 3 x .34			
" Holds (FR. 97) ✓	.35	5 7 x 3 x .34	28-35		
COLLISION (in Hold) (FR. 187) ✓	.30	11 x 3 1/2 x .40	24-30		
AFTER PEAK (FR. 10) ✓	.27	7 x 3 x .33	24-30		
	.27	6 x 3 x .30	24-30		

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) *Siemens Open Hearth* ✓
South Durham Steel & Iron Co., Ltd.; Consett Iron Co., Ltd.; Dorman Long & Co., Ltd.; Cargo Fleet Iron Co., Ltd.; Appleby-Frodingham Steel Co., Ltd.; and Skinningrove Iron Co., Ltd.

Has the Steel been tested as required by the Rules?

Yes

EQUIPMENT No. 49939 ✓										LETTER ef ✓		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.					
50728	1st Bower	86	1	14	✓	-	-	61	17	2	0	✓	85½	Byas Stockless ✓	-	LPH-S, 31/3/47, F.W.D. ✓
50730	2nd "	85	2	21	✓	-	-	61	10	0	0	✓	85½	" " ✓	-	LPH-S, 3/4/47, F.W.D. ✓
50814	3rd "	73	2	7	✓	-	-	55	15	0	0	✓	73½	" " ✓	-	LPH-S, 30/4/47, F.W.D. ✓
	Collective weight	245	2	14									244½			
50836	Stream	31	3	0	✓	-	-	29	18	3	0	✓	31¼	" " ✓	✓	LPH-S, 1/5/47, F.W.D. ✓

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.	Statu-tory.	Break-ing.	Supplied.		Per Rule.	Length.	Diam.	Length.					Ins.	Fathoms.		Ins.	Fathoms.	Ins.
6974	300 ^{2/3}	2 1/4	127 1/6	178 1/5	823-2.0			989	300	2 9/16	Tayco S. Taylor & Sons (Brisley Hill), Ltd.	LPH-N, 19.5.47 J.A.R.	TOWLINE	130	6	99.1	130	5 1/2		
6975	205				28-2.7								HAWSERS & WARPS	60	100	3 1/2	25.7	40	100	2 3/4
					852.0.7															
1000 Stream Chain or Steel Wire	120	5 1/4	✓	77.5					120	4 3/4	F.S.W.R. (6x24)									

Gear, Type (Power or hand) Electric Hydraulic (Hastie & Co., Ltd.) Alternative Means of Steering Standby motor ✓
with telemotor control

Chains (Size and Test) Steel bilge timber plates fitted ✓ Windlass Electric - Clarke Chapman { Steel 1 @ 24.0 x 8.0 x 3.3 (Note) ✓
Boats 3 @ 24.0 x 8.0 x 3.3 ✓

n Holds, thickness and material Tank top plating increased .08" under hatchways ✓ Cargo Battens, thickness, material and spacing 6x2 W.W. - 9" spacing ✓
Nº 1 - Strong steel plates & stiffeners riveted to dk. ✓ Nº 2, 3, 4, 5 & 6 - Steel plates & built angles (recessed for roller beams) ✓ Thickness of Hatches Nº 3, 4 & 6 - 3" W.W. rivet cover ✓
atchways. (Upper Deck) Nº 2, 3, 4, 5 & 6 - Steel plates & built angles (recessed for roller beams) ✓

atchways No. 1 (Fwd.) 15'-9" x 18'-0" No. 2 38'-1 1/2" x 21'-0" No. 3 27'-11 1/2" x 20'-0" No. 4 15'-0 1/2" x 20'-0" No. 5 27'-11 1/2" x 20'-0" No. 6 25'-5" x 20'-0" ✓
of Shifting Beams } No beams. ✓ 6 ✓ 4 ✓ 2 ✓ 4 ✓ 4 ✓
Fore and Afters } Angled steel plate cover efficiently stiffened ✓

Builder's Signature James Laidlaw & Sons Limited. Managing Director

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. Yes ✓
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).

This ship has been built in conformity with the Society's Rules & Regulations, and the tank's letters. The scantlings and arrangements are in accordance with or equivalent to those shown on the approved plans. The materials and workmanship are of good quality. Double bottom, peaks, deep oil fuel & water ballast tanks, cofferdams, decks, bulkheads, tunnel, door, steering gear, hand pumps, & windlass have been tested & found satisfactory. Freeboards assigned by the Committee have been verified, and cut-in on the vessel's sides. Oil is carried as fuel in the oil fuel cross tanks (P. & S.) at forward end of machinery space, and in the Nº 1, 2, 3, 4, 6 & 7 double bottom tanks. The flash point of oil is not lower than 150°F. Section 20 of the Rules has been complied with.

NOTE:- The necessary piping to enable the Nº 4 Hold deep tank immediately abaft the machinery space to carry fuel oil if necessary has been dispensed with in this ship.

The amount of Entry Fee £ : : Fees applied for, JAN - 5.1948 (Special notations, where part of class, to be stated.)

Special Survey Fee £554: 0:0 Received by me, FREEBOARD 19: 0: 0 I am of opinion the Vessel should be Classed +100A.1.

Travelling Expenses, if any £ : : 19

State whether the Vessel has been built under Special Survey Yes Signature N. Forsyth
Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to SUNDERLAND Date of issue 6/2/48

Committee's Minute/ FEB. 30 JAN 1948
Character assigned +100A1
12.47 Sld. Fitted for oil fuel 12.47 F.P. above 150°F
Lloyd's A+C.P.
+LMC 12.47
F.D. C.L.
2 WTB 490lb (Spt. 475lb) 12B. 105lb 12B. 40lb
Note for S.R.L.

This ship is the second of this type to be built by Messrs. Sir James Laing & Sons, Ltd., Sunderland, and is a sister ship to the S.S. ASIA (Yard No. 769) by the same Builders (see Sunderland Rpt. No. 34664).

The following casting certificates are enclosed:—Sternframe, Rudder head & rudder frame, Tiller & Certificate for Steering gear.

The Nos 2 & 3 upper & Lower Tween decks, and the Nos 5 & 6 upper Tween decks are arranged in 14 insulated chambers suitable for the carriage of refrigerated cargoes.

Vessel placed in drydock, shell plating & rudder cleaned, examined & recoated.
Note:- Whilst the vessel was fitting out damages were stated to have been caused by:—
(a) the vessel coming in contact with dockwall whilst coming alongside Prince Quay, West Hartlepool, for installation of main machinery, on the 6th July, 1947;
(b) the vessel coming in contact with the S.S. "VIGSNES" at Sunderland on the 12th December, 1947; and
(c) Cause and date unknown.

Repair effected (a) Shell plate G7 from aft (S.S.) failed in place where slightly set-in;
(b) " " L6 " " (S.S.) " " " " " indented;
and (c) " " F5 " " (P.S.) & 1 frame in way failed in place where slightly set-in.
On completion of these repairs same satisfactorily hose tested.

NOTE:-

Subsequent to satisfactory sea trials the vessel left Sunderland en route for Liverpool on the 24th December, 1947, but due to a machinery break down attributed to temporary loss of oil in the thrust shaft, returned to Sunderland for the necessary repairs. (See Sunderland Rpt. No. 9. for details). No apparent damage sustained to structure in way.

PARTICULARS OF ELECTRIC WELDING (if employed) Butts of keel, G. girder, shell, tank top & margin, upper, 2nd & 3rd decks, poop, bridge & fore'side dk. plating welded; tank top plating in way Nos 1, 4 (deep tank) 5 & 6 holds & machy. spaces welded to shell; tunnel recess top, 2nd & 3rd dk. plating, poop & fore'side dk. plating welded to shell; after deep tank top plating welded to shell & terminal bds. & stringers of welded construction; W.T. bds. & tunnel welded to tank top & D.B. tank end divisional floors welded to shell; deep O.F. cross bunker & settling tanks of welded construction; dk. girders welded to 2nd & 3rd dk. plating in way hatches. Pillars welded at head & heel; machy. seating & steering gear seating part welded construction; rudder welded. Small hatches & vent coamings & other items of minor importance welded. Electrodes complying with Sect. 4 of the Rules have been employed for manual welding. The Rules for the application of electric arc welding have been complied with where applicable.

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

Butts of shell & deck plating electrically welded; Cruiser Stern; Fitted for oil fuel 12,47, F.P. above 150°F.; Echo Sounding; Gyro Compass; Direction finding; Wireless and Radar (Type 268) supplied by Messrs. W.H. Smith & Co. (Elect. Engrs.) Ltd., Manchester; R.M.C., with date, on completion of Survey at Liverpool.

Particulars of Drop Test of Cast Steel Anchors, viz.:—
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

	1st Bower	2nd "	3rd "	STREAM
ENTR - 405 - 405	54 - 3 - 21 ✓	55 - 0 - 14 ✓	46 - 2 - 7 ✓	20 - 0 - 0 ✓
	A.E.G., 8955	A.E.G., 8993	J.H.J., 8411	J.H.J., 8504
	29-10-46	12-11-46	18-12-46	22-1-47

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 44.00 ft., R.Q.D. ✓ ft., Bridge 168.0 ft., Forecastle 54.17 ft.

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

Official No. 182394 Signal Letters G.L.K.F. Extreme Breadth over Belting No belting Over-all Length 508'-9 1/2" ✓

No. and Material of Decks Two (2) Steel decks (Upper & Second); Third dk., fore'side, and Poop, Bridge & fore'side - steel.

Parts of Bottom of Vessel coated with cement or approved composition F. & A. peak tanks cemented on bottom shell, and in Nos 5 & 808, feed & fresh water tanks cement filllets & elsewhere in these tanks cement washed; Bilge, & drain wells & tunnel well coated with bitumastic solution & enamel.

Particulars of composition (if fitted) and of approval Wailers Dove Bitumastic Solution & enamel.

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.	Water Capacity.	Where Fitted.	Length.	Water Capacity.
Double bottom, aft,	132.18	661.0	Fore peak tank,	26.50	67.0 ✓
Double bottom, under Engines and Boilers,	54.15	247.0	After peak tank,	18.00	85.0 ✓
Double bottom, if under Engines only,	—	—	Deep tank, aft, (No. 4 Hold) ✓	35.58	1172.0 ✓
Double bottom, if under Boilers only,	—	—	Deep tank, forward,	—	—
Double bottom, forward,	219.67	746.0	Other tanks, if fitted,	—	—
Total length (if continuous) and Capacity.	406.00	1654.0 ✓	(If necessary furnish further information by sketch.)	—	—

Order for Special Survey No. 6180

Date 19-6-45

Dates of Surveys held while building

1946 Sep 16 Oct 1, 2, 15, 29 Nov 12, 13, 18, 25 Dec 2, 4, 6, 10, 17, 19, 20, 24, 27
1947 Jan 2, 8, 15, 20, 28 Feb 10, 14, 24 Mar 5, 6, 10, 28 Apr 8, 10, 11, 15, 24, 30 May 6, 12, 13, 19, 21, 30 June 5, 9, 11, 12, 17, 18, 19, 24, 26, 27, 30 July 1, 3, 7, 8, 9, 10, 14, 15, 16, 17, 18, 20, 23, 24, 25, 30 Aug 1, 2, 7, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 29, 30
Dec 1, 2, 3, 5, 7, 9, 10, 11, 12, 16, 17, 18, 19, 20, 22, 23, 24, 27, 29, 30

Total No. of Visits 103