

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office JUL 22 1940

Date of writing Report 3-7-40 When handed in at Local Office 19 JUL 1940 Port of HULL  
 No. in Survey held at Hull Date, First Survey 5-9-39 Last Survey 25-6-1940  
 Reg. Book. 5-7-40 (Number of Visits 39)  
 on the Steam Trawler "ST APOLLO" Tons { Gross 608 Net 207  
 Built at Beverley By whom built Cook, Weller & Gemmell Ltd. Yard No. 654 When built 1940-6  
 Engines made at Hull By whom made C.D. Holmes & Co. Ltd. Engine No. 1536 When made do.  
 Boilers made at do. By whom made With Steam Trawling Co. Ltd. Boiler No. 1557 When made do.  
 Registered Horse Power 165 Owners The Admiralty (see sub 4) Port belonging to do.  
 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which Vessel is intended Fishing - (Now commandeered by the Admiralty)

**ENGINES, &c.**—Description of Engines Triple Expansion Revs. per minute 125  
 Dia. of Cylinders 15"-25"-43" Length of Stroke 27" No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 8.37 Crank pin dia. 8 1/2" Crank webs Mid. length breadth shrunk Thickness parallel to axis 5 1/2"  
 as fitted 8 1/2" Mid. length thickness shrunk Thickness around eye-hole 3 1/2"  
 Intermediate Shafts, diameter as per Rule 7.97 Thrust shaft, diameter at collars as per Rule 8.37  
 as fitted 8 1/2" as fitted 8 1/2"  
 Tube Shafts, diameter as per Rule 8.87 Screw Shaft, diameter as per Rule 9" Is the { tube } shaft fitted with a continuous liner { Yes  
 as fitted 9" { screw }  
 Bronze Liners, thickness in way of bushes as per Rule 5.66 Thickness between bushes as per Rule 5.11 Is the after end of the liner made watertight in the  
 as fitted 19/32" as fitted 1/2"  
 Propeller boss Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Solid  
 the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes  
 two liners are fitted, is the shaft lapped or protected between the liners Yes Is an approved Oil Gland or other appliance fitted at the after end of the tube Yes  
 ft. 42" If so, state type Yes Length of Bearing in Stern Bush next to and supporting propeller 42"  
 Propeller, dia. 10 3/4" Pitch 12 ft. No. of Blades 4 Material Brass whether Moveable No Total Developed Surface 43 sq. feet  
 Main Engines, No. 2 Diameter 25 1/2" Stroke 16" Can one be overhauled while the other is at work Yes  
 Auxiliary Engines, No. 2 Diameter 25 1/2" Stroke 16" Can one be overhauled while the other is at work Yes  
 Pumps connected to the Main Bilge Line { No. and size 2 Duplex 7x5x6" } The Donkey Pump 13"  
 How driven Ind. Steam How driven Ind. Steam }  
 Lubricating Oil Pumps, including Spare Pump, No. and size None  
 two independent means arranged for circulating water through the Oil Cooler None Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Pumps:—In Engine and Boiler Room 2 @ 2" dia One @ 2 1/2" dia 1 @ 3" dia (hand pump)  
 In Holds, &c. 2" dia to the following spaces - Fore hold. Fore hold (q/n)  
 Water Circulating Pump Direct Bilge Suctions, No. and size One 5" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 and size 3" dia Sea Ejector Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes  
 the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes  
 all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Yes  
 they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Overboard Discharges above or below the deep water line Above  
 they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes  
 Pipes pass through the bunkers Fore hold bilge ejector How are they protected Wood casings  
 Pipes pass through the deep tanks Yes Have they been tested as per Rule Yes  
 all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes  
 arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one  
 compartment to another Yes Is the Shaft Tunnel watertight None Is it fitted with a watertight door Yes worked from Yes

**MAIN BOILERS, &c.**—(Letter for record S) Total Heating Surface of Boilers 2551 sq. ft.  
 Forced Draft fitted Yes No. and Description of Boilers One S.B. Working Pressure 225 lbs/sq. in.  
 A REPORT ON MAIN BOILERS NOW FORWARDED? Yes  
 A DONKEY BOILER FITTED? No If so, is a report now forwarded? Yes  
 donkey boiler intended to be used for domestic purposes only Yes  
 A.N.S. Are approved plans forwarded herewith for Shafting of Duplex Main Boilers 31-7-39 Auxiliary Boilers Yes Donkey Boilers Yes  
 (If not state date of approval) See Rpt. 30402  
 Heaters Sea main Rpt. General Pumping Arrangements 2-11-39 Oil fuel Burning Piping Arrangements Yes

**SPARE GEAR.**  
 The spare gear required by the Rules been supplied Yes  
 The principal additional spare gear supplied One screw shaft for two screws (ST APOLLO & ST ZENO) [614 LDT. 20-10-39 / 1453 DLH-C29-2-40]  
One main engine feed pump plunger, gland & back ring.  
One bottom water gauge pipe. Main & donkey check valves & seals. One Safety Valve Spring

The foregoing is a correct description.  
 FOR CHARLES D. HOLMES & CO., LTD.

*[Signature]*

Manufacturer.



© 2020  
 Lloyd's Register  
 Foundation

7 1/2  
 21  
 21.

51.

1939. Sept. 5, 11, 20. Oct. 11. Nov. 1, 7, 15, 17, 24, 26. Dec. 4, 6, 7, 9, 12, 13, 18, 20, 21.  
 26, 28. 1940. Jan. 4, 5, 8, 9, 12, 13. Feb. 9, 20, 21, 23, 26, 28, 29. Mar. 8, 20.  
 June 18, 21, 25.  
 Total No. of visits 39.

ALL SHAFING STAMPED 1449. DLHC or UHM not data as inspected.

Dates of Examination of principal parts—Cylinders 20/12/40 Slides 24/11/39 Covers 24/11/39  
 Pistons 24/11/39 Piston Rods 7/11/39 Connecting rods 7/11/39  
 Crank shaft 28-12-39 Thrust shaft 28-12-39 Intermediate shafts 18-1-40  
 Tube shaft 28-12-39 Screw shaft 28-12-39 Propeller 13/12/39  
 Stern tube 13/12/39 Engine and boiler seatings 18/12/39 Engines holding down bolts 20/2/40  
 Completion of fitting sea connections 13/12/39  
 Completion of pumping arrangements 8-3-40 Boilers fixed 20/2/40 Engines tried under steam 25-6-40  
 Main boiler safety valves adjusted 8-3-40 Thickness of adjusting washers 7 3/32" 5 1/2"  
 Crank shaft material Steel Identification Mark CSP. 332-28839 Thrust shaft material Steel Identification Mark 396. J.H. 20  
 Intermediate shafts, material Steel Identification Marks 718 L.T. 5-1-40 Tube shaft, material Steel Identification Mark  
 Screw shaft, material Steel Identification Mark 311. LDT. 10839 Steam Pipes, material Steel Test pressure 675 lbs/sq. in. Date of Test 26/2/40  
 Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. Yes  
 Have the requirements of the Rules for the use of oil as fuel been complied with Yes  
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No If so, have the requirements of the Rules been complied with Yes  
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with Yes  
 Is this machinery duplicate of a previous case Yes. If so, state name of vessel Engines duplicate of Lady Selan  
 H.M.S. 442-2-1039. Lists Manual. Differences in details.

General Remarks (State quality of workmanship, opinions as to class, &c.)  
 The Machinery of this vessel has been constructed & fitted on board under Special Survey in accordance with the approved plans & the Rules. The workmanship & material are good & when tried under full working conditions it was found satisfactory in every respect. It is eligible, in my opinion, to be classed with the notation of L.M.C. 6-40 & the notations of -T. 3 Cy. 15", 25" & 42" (S) 225 lb. 1.SB (Spt) 3 cf. GS 64. HS 2551.

The amount of Entry Fee ... £ 3 : 0 :  
 Special ... £ 41 : 5 :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, 28.6.1940  
 When received, 5.7.1940  
 JWB.

*Robert Johnson*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
 Assigned + LMC 6.40  
 F.D. CL.



pt. 5a.  
 of writing Report  
 in Survey held  
 Book.  
 on the  
 at  
 lines made at  
 lers made at  
 iminal Horse Power  
 ULTITUBUI  
 nufacturers of St  
 al Heating Surfa  
 and Description  
 sted by hydraulic  
 rea of Firegrate i  
 rea of each set of  
 case of donkey bo  
 smallest distance be  
 smallest distance be  
 rgest internal di  
 ickness 1 1/2  
 g. seams T.R  
 ercentage of stren  
 ercentage of stren  
 ickness of butt s  
 aterial  
 length of plain p  
 imensions of stiff  
 nd plates in stea  
 low are stays sec  
 ube plates: Mar  
 lean pitch of sta  
 irders to combu  
 t centre 9"x  
 n each 3  
 ensile strength  
 Pitch of stays to a  
 front plate at  
 Thickness 3  
 Pitch of stays at  
 ain stays: M  
 Diameter { At body  
 Over the  
 screw stays: A  
 Diameter { At turn  
 Over the