

REPORT ON OIL ENGINE MACHINERY.

No. 15293

Date of writing Report 19... When handed in at Local Office 27. 11. 1951 Port of BELFAST Received at London Office 29 NOV 1951
 No. in Survey held at BELFAST Reg. Book. Date, First Survey 1st Dec. 1949 Last Survey 15 Oct. 19 51
 Number of Visits 436

Single on the Twin Triple Quadruple Screw vessel M.S. "JUAN PERON"
 Built at BELFAST By whom built HARLAND & WOLFE LTD. Yard No. 1384. When built 10/51.
 Engines made at BELFAST By whom made HARLAND & WOLFE LTD. Engine No. 1384. When made 10/51.
 Donkey Boilers made at BELFAST By whom made HARLAND & WOLFE LTD. Boiler No. When made 10/51.
 Brake Horse Power 3500 Owners COMPANIA ARGENTINA DE PESCA S.A. Port belonging to BUENOS AIRES.
 N. Power as per Rule 1390 Is Refrigerating Machinery fitted for cargo purposes YES Is Electric Light fitted YES.
 Made for which vessel is intended OCEAN GOING.

ENGINES, &c. — Type of Engines 2 SETS HEAVY OIL. 2 or 4 stroke cycle 4 Single or double acting SINGLE.
 Maximum pressure in cylinders 700 lbs/sq. in. Diameter of cylinders 740 mm. Length of stroke 1600 mm. No. of cylinders 6 (EACH). No. of cranks 6 (EACH).
 Indicated Pressure 128 lbs/sq. in. Ahead Firing Order in Cylinders 1-5-3-6-2-4. Span of bearings, adjacent to the crank, measured from inner edge to inner edge 972 mm.
 Is there a bearing between each crank YES. Revolutions per minute 110-114 MAX.

Wheel dia. 2489 mm. Weight 2590 Kgs. Moment of inertia of flywheel (lbs. in² or Kg. cm²) 23520000 Means of ignition COMP. Kind of fuel used DIESEL OIL.
 Crank pin dia. 585 mm. Crank webs Mid. length breadth 980 mm. Mid. length thickness 310 mm. Thickness parallel to axis 310 mm. Thickness around eye hole 292 mm.
 dia. of journals as per Rule AS APPROVED. Crank pin dia. 585 mm. Intermediate Shafts, diameter as per Rule AS APPROVED. Thrust Shaft, diameter at collars as per Rule AS APPROVED.
 Wheel Shaft, diameter as per Rule AS APPROVED. Screw Shaft, diameter as per Rule AS APPROVED.

Liner thickness in way of bushes as per Rule AS APPROVED. Thickness between bushes as per Rule AS APPROVED. Is the after end of the liner made watertight in the peller boss YES.
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner. YES.
 If 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 tube shaft. NO. If so, state type... Length of bearing in Stern Bush next to and supporting propeller 6'-0" YES.
 Material BRONZE. whether moveable. YES. Total developed surface 80 sq. feet
 Kind of damper, if fitted.

Method of reversing Engines DIRECT-AIR Is a governor or other arrangement fitted to prevent racing of the engine when disengaged YES. Means of lubrication FORCED. Thickness of cylinder liners 53 mm. Are the cylinders fitted with safety valves YES. Are the exhaust pipes and silencers water cooled with non-conducting material LAGGED. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned to the engine. YES. Cooling Water Pumps, No. 3 S.W. 2 F.W. Is the sea suction provided with an efficient strainer which can be cleared within the vessel. YES.
 Pumps worked from the Main Engines, No. Diameter Stroke. Can one be overhauled while the other is at work. YES.
 Pumps connected to the Main Bilge Line (No. and size) BILGE PUMPS (2) 110 TONS/HR. BALLAST PUMP 250 TONS/HR. GEN. SER. PUMP 110 TONS/HR.
 How driven STEAM. STEAM. STEAM. If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements.

Oil Pumps, No. and size 1- 250 TONS/HR. Power Driven Lubricating Oil Pumps, including spare pump, No. and size 3- 100 TONS/HR.
 Independent means arranged for circulating water through the Oil Cooler YES. Suctions, connected to both main bilge pumps and auxiliary pumps, No. and size:—In machinery spaces 3- 4" In pump rooms FOR. AFT. 2- 4" YES.
 Discharges, &c. FOREHOLD 2 1/2" P.S. STOREROOM FOR 1- 2 1/2". FOR AUX. PUMP ROOM 1- 2 1/2".
 Independent Power Pump Direct Suctions to the engine room bilges, No. and size BILGE PUMP 1- 6" BALLAST PUMP 1- 6" YES.

Are the bilge suction pipes in holds and tunnel well fitted with strum-boxes YES. Are the bilge suction pipes in the machinery spaces led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES (WHERE PRACTICABLE).
 Sea Connections fitted direct on the skin of the Ship YES. Are they fitted with valves or cocks BOTH. Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates YES. Are the overboard discharges above or below the deep water line BELOW.
 Are 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.
 How are they protected. Have they been tested as per Rule.

Are the 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 room from one compartment to another YES. Is the shaft tunnel watertight YES. Is it fitted with a watertight door worked from...
 Means provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork.

Air Compressors, No. No. of stages diameters stroke driven by.
 Main Air Compressors, No. 2 No. of stages 2 diameters 5 3/4"-12 1/2" stroke 7 1/2" driven by STEAM ENG.
 Auxiliary Air Compressors, No. No. of stages diameters stroke driven by.
 Is provision made for first charging the air receivers. COMPRESSORS NOTED ABOVE.
 Charging Air Pumps, No. UNDER PISTON SUPERCHARGE diameter stroke driven by.
 Auxiliary Engines crank shafts, diameter as per Rule. No. 6 (50 H.P. K.W. 10. 120 K.W.) Position ENG. ROOM FOR LAUNCH PLATFORM.
 Are the auxiliary engines been constructed under special survey YES. Is a report sent herewith YES.

19.12.51

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AIR RECEIVERS:—Have they been made under survey... YES State No. of report or certificate. X378 + X318

Is each receiver, which can be isolated, fitted with a safety valve as per Rule... YES
Can the internal surfaces of the receivers be examined and cleaned... YES Is a drain fitted at the lowest part of each receiver... YES

Injection Air Receivers, No. 2 Cubic capacity of each... Internal diameter... thickness...
Seamless, welded or riveted longitudinal joint... Material... Range of tensile strength... Working pressure...
Starting Air Receivers, No. 2 Total cubic capacity 800 cu.ft (each) Internal diameter RIVETTED 70/8" thickness RIVETTED 1 1/16" Working pressure...
Seamless, welded or riveted longitudinal joint... Material STEEL Range of tensile strength 28/32 Working pressure...
IS A DONKEY BOILER FITTED YES (6) If so, is a report now forwarded... YES

IS THE DONKEY BOILER INTENDED TO BE USED FOR DOMESTIC PURPOSES ONLY... NO (STEAM AUXILIARIES)

PLANS. Are approved plans forwarded herewith for shafting... YES Receivers... YES Separate fuel tanks... YES
Donkey boilers... YES General pumping arrangements... YES Pumping arrangements in machinery space... YES
Oil fuel burning arrangements... YES

Have Torsional Vibration characteristics been approved... YES Date of approval SEC⁴ LETTER 30.6.49

SPARE GEAR. Has the spare gear required by the Rules been supplied... YES

State the principal additional spare gear supplied...
PORT TAILSHAFT: 5 4694. STAR TAILSHAFT: 5 4908
"R.O.B" 13 2.50. "R.O.B" 14 3.50.

The foregoing is a correct description, Shed P. 11/49 Manufacturer.

Dates of Survey while building... During progress of work in shops... During erection on board vessel... Total No. of visits...
1948 1949
Dec 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
May 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Sept 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Oct 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Nov 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Dec 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Jan 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Feb 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Mar 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Apr 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
May 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Jun 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Jul 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Aug 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Sep 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
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Dec 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Dates of examination of principal parts—Cylinders... Covers... Pistons... Rods... Connecting rods...
Crank shaft... Flywheel shaft... Thrust shaft... Intermediate shafts... Tube shaft...
Screw shaft... Propeller... Stern tube... Engine seatings... Engine holding down bolts...

Completion of fitting sea connections... Completion of pumping arrangements... Engines tried under working conditions...
Crank shaft, material... Identification mark... Flywheel shaft, material... Identification mark...
Thrust shaft, material... Identification mark... Intermediate shafts, material... Identification marks...
Tube shaft, material... Identification mark... Screw shaft, material... Identification mark...

Identification marks on air receivers... RIVETTED: - No 355 "J.M.A" 21.6.46. RETEST "R.O.B" 7.3.50.
WELDED: - No 474 "R.O.B" 10.3.50.

Welded receivers, state Makers' Name... HARLAND & WOLFF LTD
Is the flash point of the oil to be used over 150°F... YES

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with... YES
Description of fire extinguishing apparatus fitted... STEAM SMOTHERING - CO2 PORTABLE EXTINGUISHERS (ERY BR)

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo... TANKER 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... No If so, state name of vessel... ✓

General Remarks (State quality of workmanship, opinions as to class, &c) This machinery has been constructed and installed under Special Survey in accordance with Rules, approved plans and Secretary's Letter. The materials used are good and the workmanship satisfactory.

The machinery was examined under full working conditions with satisfactory results.

The machinery of this vessel is eligible in our opinion to be classed in the Register Book with the record of - L.M.C 10/51. P.S.T.S.C.L. 6.D.B.200 lbs/p

A PR BOILERS 70 lbs/p.

The amount of Entry Fee... Special... Donkey Boiler Fee... Travelling Expenses (if any) £...
F.E. MACH 377. 0.
F.E. AUX ENG 155. 0.
MAIN AIR REA 16. 0.
H.S.W. BOILERS 8. 0.
AUX AIR REA 8. 0.
FACTORY EQUIP 55. 0.

When applied for... 27. 11. 1951
When received... 19

Committee's Minute... FRI. 21 DEC 1951

Assigned... + L.M.C 10,51 Oil Eng
C.L. 62B 200lb 4 Pr. Boilers 70lb.

Engineer Surveyor to Lloyd's Register of Shipping... A. J. Smith

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