

REPORT ON OIL ENGINE MACHINERY.

No. 56513.

12 MAY 1950

Received at London Office

Date of writing Report 19 _____ When handed in at Local Office 8 MAY 1950 Port of HULL

No. in Survey held at Hessle Date, First Survey 29. 4. 49 Last Survey 9. 3. 1950
 Reg. Book. _____ Number of Visits 16

35267 on the Single Screw vessel S.Sc. Motor Trawler "BONNYBRIDGE". Tons {Gross 289
 {Net 98

Built at Hessle By whom built Henry Scarr, Ltd. Yard No. S.629 When built 1950

Engines made at Hazelgrove, Stockport By whom made Mirrlees, Bickerton & Day, Ltd. Engine No. 33401 When made 1949

PROBABLY Donkey Boilers made at Johannesburg By whom made Boag & Co., Ltd. Boiler No. - When made -

Brake Horse Power 630 (567 cont. rating). Owners Great Western Fishing Co., Ltd. Port belonging to Fleetwood

Nom. Horse Power as per Rule 178 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended Trawler

OIL ENGINES, &c.—Type of Engines Airless injection heavy oil 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders _____ Diameter of cylinders _____ Length of stroke _____ No. of cylinders _____ No. of cranks _____

Mean Indicated Pressure _____

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge _____ Is there a bearing between each crank _____

Revolutions per minute _____ Flywheel dia. _____ Weight _____ Means of ignition _____ Kind of fuel used _____

Crank Shaft, { Solid forged as per Rule _____ Crank pin dia. _____ Crank Webs Mid. length breadth _____ Thickness parallel to axis _____
 { Semi built dia. of journals as fitted _____ Mid. length thickness _____ shrunk Thickness around eyehole _____
 { All built _____

Flywheel Shaft, diameter as per Rule _____ Intermediate Shafts, diameter as per Rule approx. 7 7/8" Thrust Shaft, diameter at collars as per Rule _____
 as fitted _____ as fitted _____

Tube Shaft, diameter as per Rule _____ Screw Shaft, diameter as per Rule approx. 9 1/2" TOC Is the Index shaft fitted with a continuous liner { No
 as fitted _____ as fitted _____

Bronze Liners, thickness in way of bushes as per Rule _____ Thickness between bushes as per Rule _____ Is the after end of the liner made watertight in the propeller boss _____
 as fitted _____ as fitted _____

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner _____

If 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 _____

If two liners are fitted, is the shaft lapped or protected between the liners _____ Is an approved Oil Gland or other appliance fitted at the after end of the tube _____

shaft Yes If so, state type Newark No. 3 Length of Bearing in Stern Bush next to and supporting propeller 3' 2"

Propeller, dia. 8' 0" Pitch _____ No. of blades 4 Material C.I. whether Moveable solid Total Developed Surface _____ sq. feet

Method of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication forced

Thickness of cylinder liners _____ Are the cylinders fitted with safety valves _____ Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine funnel exhaust

Cooling Water Pumps, No. 1 S.W. 1 F.W. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. 1 Diameter 4 3/4" Stroke 5 1/2" Can one be overhauled while the other is at work _____

Pumps connected to the Main Bilge Line { No. and Size 1-4 3/4" x 5 1/2" G.S. 50 tons/hr.
 { How driven M.E. Port forward aux. engine.

Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements _____

Ballast Pumps, No. and size G.S. only Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2-3"x3 1/2". 880 galls/hr.

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces 2-2", also 1-2 1/2" to M.E. only In Pump Room _____

In Holds, &c. 1-2" to for'd store., 1-2" to fishroom, 1-2" to slushwell.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-2 1/2" from G.S. pump. 4 @ 2 1/2" M.E. bilge pump

Are all the Bilge Suction pipes in Holds and ~~and~~ fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces Yes

led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

Are all Sea Connections fitted direct on the skin of the ship Yes, or to welded boxes. Are they fitted with Valves or Cocks Yes

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 above

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 single cock

What pipes pass through the bunkers _____ How are they protected _____

What pipes pass through the deep tanks _____ Have they been tested as per Rule Yes

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times _____

Is the 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 _____ Is it fitted with a watertight door _____ worked from _____

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork _____

Main Air Compressors, No. 1 No. of stages 2 Diameters 5" & 2 5/8" Stroke 5" Driven by M.E.

Auxiliary Air Compressors, No. 1 No. of stages _____ Diameters _____ Stroke _____ Driven by port aft aux. engine.

Small Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____

What provision is made for first Charging the Air Receivers aux. engine can be started by hand.

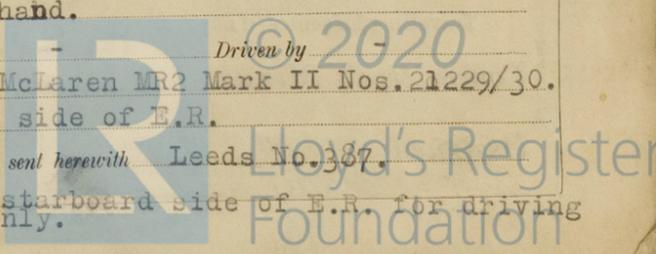
Scavenging Air Pumps, No. _____ Diameter _____ Stroke _____ Driven by 2-McLaren MR2 Mark II Nos. 21229/30.

Auxiliary Engines crank shafts, diameter as per Rule approx. Position port side of E.R.

Have the Auxiliary Engines been constructed under special survey Yes Is a report sent herewith Leeds No. 387.

Also 1-Mirrlees Type TLA5 Eng. No. 33402 fitted on starboard side of E.R. for driving winch only.

See 23/5/50



062471-062476-0111

AIR RECEIVERS:—Have they been made under survey Yes ✓ Are reports or certificates now forwarded _____

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. - Cubic capacity of each - Internal diameter - thickness -

Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules - Actual -

Starting Air Receivers, No. 2 ✓ Total cubic capacity See Manchester Report No. 13751 Internal diameter - thickness -

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules - Actual 300lb.

IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Yes

Is the donkey boiler intended to be used for domestic purposes only Yes To be forwarded with report on Yard No. S.630

PLANS. Are approved plans forwarded herewith for Shafting _____ Receivers gen. approval Separate Fuel Tanks 15.7.49

(If not, state date of approval)

Donkey Boilers 4.5.49 General Pumping Arrangements 21.2.49 Pumping Arrangements in Machinery Space 21.2.49

Oil Fuel Burning Arrangements 15.7.49 12.4.49

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes ✓

State the principal additional spare gear supplied _____

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } _____

{ During erection on board vessel - - } 1949. Apr. 29; May 12, 20; June 21; July 4; Aug 4, 17; Sept 1, 10; Oct 12, 13, 18; ¹⁹⁵⁰ Feb. 1; Mar. 4, 8.

Total No. of visits 16.

SEE MANCHESTER REPORT NO. 13751.

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 21.6.49 Stern tube 21.6.49 Engine seatings 21.6.49 Engines holding down bolts 10.9.49

Completion of fitting sea connections 21.6.49 Completion of pumping arrangements 18.10.49 Engines tried under working conditions 8.3.50

Crank shaft, Material _____ Identification Mark _____ Flywheel shaft, Material _____ Identification Mark _____

Thrust shaft, Material _____ Identification Mark 3230 W.J.I. 8.6.49 Intermediate shafts, Material _____ Identification Marks 4779 G.P.S. 28.6.49

Tube shaft, Material _____ Identification Mark _____ Screw shaft, Material _____ Identification Mark 4776 T.D.S. 21.6.49

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 ✓

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 _____

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with _____

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 installed under Special Survey in accordance with the Rules, approved plans and the Secretary's letters.

On completion the main and auxiliary machinery was tried under working conditions during a river trial with satisfactory results.

The machinery is eligible in my opinion to have the Notation +L.M.C. 3,50

O.E. 4 S.C.S.A. 7 cyls. 13 3/4", 21". 178 M.N.

Note:- The trawl winch has not yet been fitted to this vessel due to delay in delivery. The vessel is at present time fishing.

1/3 of 53:8:0d.

The amount of Entry Fee .. £ 17 : 16 : When applied for, _____

Special £ : : 8 MAY 1950

Donkey Boiler Fee £ 6 : - : When received, _____

Travelling Expenses (if any) £ FRI. 2 JUN 1950

M. Chambers,
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned + LMC 3.50 Oil Eng.
NOB made about 1945, fitted 1950
OG. DB 80lb.



Certificate (if required) to be sent to _____
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

FIVED
 UG 1949
 No. in
 Reg. Book.
 Built at
 Engines m
 Donkey Boi
 Brake Hors
 M.N. Power
 Trade for w
 IL ENG.
 Maximum p
 Mean Indic
 from inner
 Flywheel d
 Crank Sha
 Shaft, A
 Flywheel S
 Tube Shaft
 Bronze Lin
 propeller b
 If the line
 corrosive...
 end of tube
 Propeller,
 Moment
 Method of
 lubrication
 or lagged
 back to the
 Bilge Pum
 Pumps cor
 Is the cool
 arrangeme
 Ballast Pu
 Are two in
 bilge pum
 In holds,
 Independ
 Are all th
 accessible
 Are all Se
 sufficientl
 Are they
 What pig
 What pig
 Are all p
 Is the ar
 spaces, o
 If a wood
 Main Ai
 Auxiliari
 Small A
 What pr
 Scaveng
 Auxiliari
 Have th