

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 20.4.23 19 When handed in at Local Office 9 JUN 1943 19 Port of HULL
No. in Survey held at HULL Date, First Survey 3.11.42 Last Survey 5.6.1943
Reg. Book on the STEAM TUG ALLEGIANCE (Number of Visits 55)
Built at SELBY By whom built Cochran & Co. Ltd. Yard No. 1263 Tons Gross 597 Net Nil
Engines made at HULL By whom made Chas. D. Holmes & Co. Engine No. 1642 When built 1943
Boilers made at West Hartlepool By whom made Central Marine Eng. Works Boiler No. R359 When made
Registered Horse Power Owners Admiralty Port belonging to
Nom. Horse Power as per Rule 222 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which vessel is intended Government Rescue Tug.

ENGINES, &c.—Description of Engines TRIPLE EXPANSION. Contract Revs. per minute 122.
Dia. of Cylinders 17"-28"-46". Length of Stroke 33". No. of Cylinders 3. No. of Cranks 3.
Crank shaft, dia. of journals as per Rule 9.46. Crank pin dia. 9 5/8". Mid. length breadth — Thickness parallel to axis 6 1/8".
as fitted 9 5/8". Crank webs Mid. length thickness — Thickness around eye-hole 4 5/16".
Intermediate Shafts, diameter as per Rule 9.01. Thrust shaft, diameter at collars as per Rule 9.46.
as fitted 9 1/4". as fitted 9 5/8".
Tube Shafts, diameter as per Rule None Screw Shaft, diameter as per Rule 10". Is the {tube} shaft fitted with a continuous liner {Yes.
as fitted None as fitted 10 1/2". {screw}
Bronze Liners, thickness in way of bushes as per Rule .601". as per Rule .45".
as fitted 2 1/32". Thickness between bushes as fitted 1 7/32". Is the after end of the liner made watertight in the
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 One length.
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
Propeller, dia. 11'-9". Pitch 12'-0". No. of Blades 4. Material C.I. Length of Bearing in Stern Bush next to and supporting propeller 4 1/2".
Feed Pumps worked from the Main Engines, No. 2. Diameter 3". Stroke 18". Can one be overhauled while the other is at work Yes.
Bilge Pumps worked from the Main Engines, No. 2. Diameter 3". Stroke 18". Can one be overhauled while the other is at work Yes.
Feed Pumps {No. and size One 7" x 5" x 6" Duplex Pumps connected to the {No. and size Two @ 3" x 18" One 7" x 7" x 8" 3" Steam Hand pump
How driven Independent Suction Main Bilge Line How driven Main Eng. Ind. Press. Suction to Cofferdam
Ballast Pumps, No. and size One 7" x 7" x 8". Lubricating Oil Pumps, including Spare Pump, No. and size None
Are two independent means arranged for circulating water through the Oil Cooler None Suctions, connected to both Main Bilge Pumps and Auxiliary
Bilge Pumps:—In Engine and Boiler Room 2 @ 2 1/2" Steam Suction & 4 @ 1 1/2" Suctions in gutterway.
In Pump Room Cofferdam One @ 2". In Holds, &c. One in each of the following @ 2" Dia. Fore Peak
Water ballast port & star. After peak
Main Water Circulating Pump Direct Bilge Suctions, No. and size 6". Independent Power Pump Direct Suctions to the Engine Room Bilges,
No. and size 3" Steam Suction. Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes.
Are 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.
Are all Sea Connections fitted direct on the skin of the ship Yes. Are they fitted with Valves or Cocks Yes.
Are 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
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.
What Pipes pass through the bunkers None How are they protected —
What pipes pass through the deep tanks None Have they been tested as per Rule —
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes.
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 None Is it fitted with a watertight door — worked from —

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 3550 ft.
Which Boilers are fitted with Forced Draft All Which Boilers are fitted with Superheaters None
No. and Description of Boilers One S.B. Working Pressure 210 lb 10".
IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes.
IS A DONKEY BOILER FITTED? None If so, is a report now forwarded? —
Can the donkey boiler be used for domestic purposes only —
PLANS. Are approved plans forwarded herewith for Shafting 10-1-40. Main Boilers 20-10-39. Auxiliary Boilers None Donkey Boilers None.
(If not state date of approval)
Superheaters None General Pumping Arrangements 13-4-40. Oil fuel Burning Piping Arrangements 26-4-40.
SPARE GEAR.

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

State the principal additional spare gear supplied.

2 Top end bolts & nuts.
2 Bottom " "
2 Main bearing " "
One set of coupling bolts.
2 Safety Valve Springs.
25 Condenser nuts.
50 " Ferrules.
One set feed & bilge pump valves.
One set Air pump valves.

One set of valves & glands for Pishon & piston valves.
12 Boiler nuts. Plain
4 do Stay.
One Piston Rod
One Valve Rod
One Main Check Valve
One Donkey Check Valve

OIL FUEL SPARE GEAR.
2 Thermometers.
6 Burner Bodies
6 " Caps.
36 " Nipples
36 " Diaphragms
6 Fire Brick lapped
12 Gauge glasses.

The foregoing is a correct description.

FOR CHARLES D. HOLMES & CO., LTD.

W. R. Evans

Manufacturer.

ALLEGANCE

During progress of work in shops - - { 1942. Nov. 3. Dec. 7. 14. 18. 23. 28. 31. 1942. Jan. 1. 4. 15. 20. 22. 24. 29. Feb. 3. 5. 12. 19. 26. Mar. 5. 10. 25. 26. Apr. 3. 6. 29.

Dates of Survey while building { 1943 JAN 23. FEB 14. MAR 10, 25. APR 11, 15, 23, 28. MAY 4, 5, 6, 7, 12, 14, 18, 19, 20, 22. 23, 25, 26, 27, 28, 30 June 4. 5.

Total No. of visits 85.

Dates of Examination of principal parts - Cylinders 20/1/43. 31/1/43. 23/1/43. 26/3/43. Slides 26/3/43. Covers 20/1/43. 31/1/43. 29/1/43.

Pistons 26/2/43. 19/2/43. Piston Rods 5/3/43. Connecting rods 19/2/43.

Crank shaft 19-2-43. Thrust shaft 27-1-43. Intermediate shafts 2-2-43.

Tube shaft None. Screw shaft 7. 12-43. Propeller 14. 2. 43.

Stern tube 23. 1. 43. Engine and boiler seatings 23-4-43. Engines holding down bolts 23-4-43.

Completion of fitting sea connections 14. 2. 43.

Completion of pumping arrangements 14. 5-43. Boilers fixed 23-4-43. Engines tried under steam 14-5-43.

Main boiler safety valves adjusted 14-5-43. Thickness of adjusting washers P. 1 1/32 105. 15/32.

Crank shaft material F. 1. Steel Identification Mark CP 19. 8. 42. Thrust shaft material F. 1. Steel Identification Mark 8920 CP. 10/10.

Intermediate shafts, material F. 1. Steel Identification Marks 8919 CP. 14/10/2. Tube shaft, material None. Identification Mark -

Screw shaft, material F. 1. Steel Identification Mark 8918 CP. 24/10/2. Steam Pipes, material Steel. Test pressure 630 B. 11. Date of Test 29-4-43.

Is an installation fitted for burning oil fuel Yes. 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.

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 Yes. If so, state name of vessel FRISKY. Hull Rpt. 51413.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery of the Vessel has been constructed in accordance with the approved plan, the Rule, and the Specification, of Rated material made by firms accredited by the Society.

The Workmanship and Materials are good.

The Machinery and Auxiliaries have been fitted in a good and, when tried under steam at or near full power as practicable in the basin were found satisfactory in every respect.

Eligible, in our opinion, to have record of * LMC 5. 43. CL. and the notation of T. 3 Cy. 17", 28", 46" - 33". 222 NHP. 15 B 210 lb 3 CF

H S 3550. F. D.

Fitted for oil fuel 5. 43 FP above 150°F

The amount of Entry Fee ... £ : : When applied for, JUN 1943

Special ... £ 96 : 6 : : When received, 19

Donkey Boiler Fee ... £ : : : 19

Travelling Expenses (if any) £ : : : 19

Committee's Minute

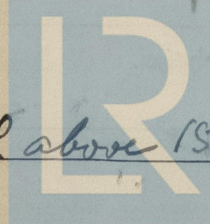
Assigned

FRI. 18 JUN 1943

+ LMC 6. 43

2800 for oil fuel 6. 43 FP above 150°F

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation