

Rpt. 4.

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 1/7/1947 When handed in at Local Office 1/7/1947 Port of Aberdeen

No. in Survey held at Aberdeen Date, First Survey 4.3.46 Last Survey 24.6.1947 (Number of Visits 60)

Reg. Book on the trawler "Egill Raudi" Built at Aberdeen By whom built A. Hall & Co. Ltd. Yard No. 716 When built 1947

Engines made at " By whom made " Engine No. 427 When made 1947

Boilers made at Dumbarton By whom made W. Denny Bros. Boiler No. 5402/1 When made 1946

Registered Horse Power Owners Icelandic Government Port belonging to Reykjavik

Nom. Horse Power as per Rule 248 249 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended Fishing

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 115

Dia. of Cylinders 16 1/2", 28 1/2", 47" Length of Stroke 30" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule as app. Crank pin dia. 9 1/2" Crank webs Mid. length breadth ✓ Thickness parallel to axis 5 7/8" as fitted 9 1/2" Crank webs shrunk Mid. length thickness ✓ Thickness around eye-hole 4 1/16"

Intermediate Shafts, diameter as per Rule as app. Thrust shaft, diameter at collars as per Rule as app. as fitted 9"

Tube Shafts, diameter as per Rule as app. Screw Shaft, diameter as per Rule as app. Is the shaft fitted with a continuous liner Yes as fitted 10"

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

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 at ✓

Propeller, dia. 11'-3" Pitch 11'-0" No. of Blades 4 Material Bronze whether Moveable No Total Developed Surface 44 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/2" Stroke 10" Can one be overhauled while the other is at work Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 1/2" Stroke 10" Can one be overhauled while the other is at work Yes

Feed Pumps No. and size one aux. 3000 Gall/hr Pumps connected to the Main Bilge Line No. and size two General Service 50 ltr for each (4 Main Engine Pumps) How driven Electric Motor

Ballast Pumps, No. and size ✓ Lubricating Oil Pumps, including Spare Pump, No. and size ✓ Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected both to Main Bilge Pumps and Auxiliary Bilge Pumps:—In Engine and Boiler Room 3-3"

In Pump Room In Holds, &c. 1-2" for Store, 1-3" for Fat Room, 1-3" for Fat Room.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-5" Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges, No. and size 1-3"

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 on fabricated reservoirs Are they fitted with Valves or Cocks both

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 cover plate Yes

What Pipes pass through the bunkers. How are they protected Bilge & Tank Pipes through duct Have they been tested as per Rule (Rust) Yes

What pipes pass through the deep tanks. 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 ✓ Is it fitted with a watertight door ✓ worked from ✓

MAIN BOILERS, &c.—(Letter for record \$) Total Heating Surface of Boilers 2800 sq ft (Superheaters 1235 sq ft)

Which Boilers are fitted with Forced Draft Main Which Boilers are fitted with Superheaters main

No. and Description of Boilers one S.E. Return Tube Working Pressure 225 LB/SQ"

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? ✓

Can the donkey boiler be used for other than domestic purposes ✓

PLANS. Are approved plans forwarded herewith for Shafting 27/11/45 Main Boilers ✓ Auxiliary Boilers ✓ Donkey Boilers ✓ (If not state date of approval) 14/2/46

Superheaters ✓ General Pumping Arrangements 10/7/46 Oil fuel Burning Piping Arrangements 26/9/46

### 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. For ALEXANDER HALL W. Y. Smith Managing Director

Manufacturer.

1946. Apr 4. Apr 12. May 20. June 14. July 8. 22. Aug. 26. Sep 3. 10. 24. Oct 8. 18. 28. 31.  
 During progress of work in shops - - -  
 1947. Jan 24. 29. Feb. 4. 6. 24. Mar. 3. 5. 11. 13. 18. 28. Apr. 1. 3. 15. 24. May 1. 2. 8. 12. 20.  
 During erection on board vessel - - -  
 21. 22. 26. June 2. 3. 9. 11. 12. 16. 24  
 Total No. of visits. 60

Dates of Examination of principal parts—Cylinders 2. 11. 46 Slides 27. 11. 46 Covers 2. 11. 46  
 Pistons 9. 1. 47 Piston Rods 27. 11. 46 Connecting rods 3. 9. 46  
 Crank shaft 22. 5. 46 Thrust shaft 26. 12. 46 Intermediate shafts 26. 12. 46  
 Tube shaft ✓ Screw shaft 26. 12. 46 Propeller 16. 1. 47  
 Stern tube 16. 1. 47 Engine and boiler seatings 31. 10. 46 Engines holding down bolts 18. 3. 47  
 Completion of fitting sea connections 16. 1. 47  
 Completion of pumping arrangements 16. 6. 47 Boilers fixed 26. 5. 47 Engines tried under steam 16. 6. 47  
 Main boiler safety valves adjusted 12/6/47 Thickness of adjusting washers Part 1 Star  $\frac{3}{8}$ " Super  $\frac{5}{16}$ "  
 Crank shaft material steel LLOYDS Identification Mark 288 WAL Thrust shaft material steel LLOYDS Identification Mark 744 WAL  
 Intermediate shafts, material steel LLOYDS Identification Marks 745 WAL CB Tube shaft, material ✓ Identification Mark ✓  
 Screw shaft, material steel LLOYDS Identification Mark 746 WAL Steam Pipes, material S.D. steel Test pressure 675 LB. Date of Test 2. 6. 47  
 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 No If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.)  
 The machinery of this vessel has been constructed under Special Survey in accordance with the Rules & approved plans.  
 The materials & workmanship are good.  
 The engine & boiler have been securely fitted on board the vessel, tried under power & found satisfactory & is eligible, in my opinion, to be classed with record of survey + L.M.C. 6.47 & the notation of C.L.  
 Fitted for oil fuel 6.47, F.P. above 150°F.

The amount of Entry Fee	... £	✓	✓	When applied for,
Special	... $\frac{3}{5}$	44	12	19
Donkey Boiler Fee	... £	✓	✓	When received,
Travelling Expenses (if any)	£	✓	✓	19

Clive Bell & P.H. Edward.  
 Engineer Surveyor to Lloyd's Register of Shipping.

Date. FRI. 1 AUG 1947

Committee's Minute + LMC 6.47  
 FITTED FOR OIL FUEL 6.47 FLASH POINT ABOVE 150°F. F.D. C.L. Spt.

