Rpt. 4.

No. 5125

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office – 5 MAR 1942

Date of writing Report 7-2-42 10 When handed in at Local Office 10 Port of HULL

No. in Reg. Book. Survey held at Hull, Date, First Survey 19.8.41 Last Survey 23.2.1942 (Number of Visits 50)

on the H.M.T. DUNCTON Tons Gross 511 Net ~~467~~ 160

Built at BEVERLEY. By whom built Cook Welton & Gemmell Ld Yard No. 684. When built 1942-2.

Engines made at HULL By whom made Chas. D. Holmes. Engine No. 1600. When made 1942-2.

Boilers made at W. Hartlepool By whom made Central Marine Eng Works. Boiler No. R346 When made 1942-2

Registered Horse Power Owners The Cedarvally. Port belonging to

Nom. Horse Power as per Rule 156. Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes.

Trade for which Vessel is intended

ENGINES, &c.—Description of Engines Triple Expansion

Dia. of Cylinders 15", 25", 42". Length of Stroke 27" No. of Cylinders 3. Revs. per minute 120

No. of Cranks 3.

Crank shaft, dia. of journals as per Rule 8.36 as fitted 8½" Crank pin dia. 8½" Crank webs Mid. length breadth – Mid. length thickness – shrunk Thickness parallel to axis 5½" Thickness around eye-hole 3 13/16".

Intermediate Shafts, diameter as per Rule 7.9" as fitted 8⅛"

Thrust shaft, diameter at collars as per Rule 8.3. as fitted 8½"

Tube Shafts, diameter as per Rule – as fitted None **Screw Shaft,** diameter as per Rule 8.8. as fitted 9" Is the ~~tube~~ screw shaft fitted with a continuous liner Yes.

Bronze Liners, thickness in way of bushes as per Rule .56 as fitted 5/8" Thickness between bushes as per Rule .42. as fitted 5/8" 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 shaft No If so, state type – Length of Bearing in **Stern Bush** next to and supporting propeller 42½".

Propeller, dia. 10'9". Pitch 11'-7½" No. of Blades 4 Material C.I. whether Moveable Solid Total Developed Surface 43. sq. feet

Feed Pumps worked from the **Main Engines,** No. One Diameter 3" Stroke 16" Can one be overhauled while the other is at work Yes

Bilge Pumps worked from the **Main Engines,** No. One Diameter 3" Stroke 16" Can one be overhauled while the other is at work Yes.

Feed Pumps No. and size One 6"×8½"×13". How driven Independent Steam.

Pumps connected to the Main Bilge Line No. and size 1@3"×16" One 7"×5"×6" One 3" Ejector. How driven Main Eng Independent Stm

Ballast Pumps, No. and size One 7"×5"×6" Duplex (Included above).

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@2½ & 3" Steam Ejector.

In Pump Room In Holds, &c. 2"D. in each:- Fore Hold, D.C. Stores, Spirit Rm. Magazine.

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 5". **Independent Power Pump Direct Suctions** to the Engine Room Bilges, No. and size One 3" Stm Ejector. Included above. 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 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 brass covering plate Yes.

What Pipes pass through the bunkers Forward Suctions. How are they protected Wood Casing.

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 2358 ☐'.

Is Forced Draft fitted Yes. No. and Description of Boilers One S.B. Working Pressure 220 lbs/□".

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes.

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

Is the donkey boiler intended to be used for domestic purposes only –

PLANS. Are approved plans forwarded herewith for Shafting 26-3-41 Main Boilers 30-1-41. Auxiliary Boilers None Donkey Boilers None (If not state date of approval)

Superheaters NONE. General Pumping Arrangements 15-4-41. Oil fuel Burning Piping Arrangements –

SPARE GEAR.

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

State the principal additional spare gear supplied In accordance with Admiralty Specification. List attached.

The foregoing is a correct description.

FOR CHARLES D. HOLMES & CO., LTD.

W. R. Evans

Manufacturer.

DUNCTON

Dates of Survey while building

During progress of work in shops — 1941. Aug. 19. 22. 27. Sep. 5. 12. Oct. 10. 27. Nov. 10. 14. 21. 22. 24. 26. 28. Dec. 1. 3. 5. 12. 19. 22. 29. — 1942. Jan. 1. 2. 3. 5. 6. 8. 10. 12.

During erection on board vessel — 13. 15. 16. 19. 20. 21. 23. 28. 29. 31. Feb. 2. 3. 4. 6. 10. 11. 13. 14. 21. 22. 23

Total No. of visits 50

Dates of Examination of principal parts—Cylinders 24/11/41. 26/11/41. 28/11/41. Slides 1/12/41. Covers 24/11/41. 26/11/41. 28/11/41.

Pistons 14/11/41. 12/12/41. 19/12/41. Piston Rods 14/11/41. Connecting rods 12/12/41.

Crank shaft 22/11/41 Thrust shaft 27/10/41. Intermediate shafts 10/11/41.

Tube shaft NONE. Screw shaft 12.12.41 Propeller 12/12/41.

Stern tube 23/8/41. Engine and boiler seatings 23. 8. 41. Engines holding down bolts 1-1-42.

Completion of fitting sea connections 23-8-41.

Completion of pumping arrangements 29-1-42 Boilers fixed 1-1-42. Engines tried under steam 11.2.42.

Main boiler safety valves adjusted 29-1-42. Thickness of adjusting washers P 13/32. S. 7/16"

Crank shaft material M.S. Coupling. 5961 Journal. 5964 AEG 21-8-41. Identification Mark Pins. 6374 AEG 4-11-41. Thrust shaft material M.S. Identification Mark 5962 AEG. 21/8/41.

Intermediate shafts, material M.S. Identification Marks 5965 AEG 21-8-41. Tube shaft, material NONE. Identification Mark

Screw shaft, material M.S. Identification Mark 5935 AEG 15.8.41 Steam Pipes, material Steel Test pressure 600 lbs/in² Date of Test 22-7-41.

Is an installation fitted for burning oil fuel No. Is the flash point of the oil to be used over 150°F. ✓

Have the requirements of the Rules for the use of oil as fuel been complied with ✓

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ✓ 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 H.M.T. BIRDLIP. Hull No. 5[illegible]2.

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

The Machinery of this Vessel has been fitted on board under Special Survey in accordance with the Admiralty requirements & approved plans & the Society's Rules.

The workmanship & materials are good & when tried under Steam it was found Satisfactory in every respect

It is eligible, in our opinion, to have the records of ✠ L.M.C 2.42. C.L. & the notation of T. 3 Cy 15", 25", 42" — 27" 156 NHP. 270 lbs. 1.SB. 3 Cf. G.S. 63, H.S. 2358. F.P.

Certificate to be sent to

The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee ...	£ : :	When applied for,	
Special	£ 7/8 / 15 : 0 / 14 :	13 FEB 1942	
~~Donkey Boiler Fee~~ Less Boiler fee. ...	£ 62- : 6 :	When received,	
Travelling Expenses (if any)	£ : :	..... 19.....	

Engineer Surveyor to Lloyd's Register of Shipping.

TUE 10 MAR 1942

Committee's Minute + Lmc. 2.42 FD, CL.

Assigned