

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

Received at London Office

Date of writing Report July 17<sup>th</sup> 1934 When handed in at Local Office 28 JULY 1934 Port of LIVERPOOL  
 No. in Survey held at Birkenhead Date, First Survey 24<sup>th</sup> Jan'y 1934 Last Survey 12<sup>th</sup> July 1934  
 Reg. Book.. 65305 on the S. S. 'Royal Daffodil II' (Number of Vials 82) Gross 588 Tons Net 216  
 Built at Birkenhead By whom built Cammell Laird & Co. Ltd Yard No. 999 When built 1934  
 Engines made at Birkenhead By whom made Cammell Laird & Co. Ltd Engine No. 999 When made 1934  
 Boilers made at Birkenhead By whom made Cammell Laird & Co. Ltd Boiler No. 999 When made 1934  
 Indicated Horse Power 1075 Owners The Messrs. Alderman, Burgess & Bonney Port belonging to Liverpool  
 Registered Horse Power 184 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes  
 Trade for which Vessel is intended Ferry purposes

ENGINES, &c.—Description of Engines Twin screw - vertical reciprocating Revs. per minute 145  
 Dia. of Cylinders 14" 23 1/2" 38" Length of Stroke 24" No. of Cylinders 3 each engine No. of Cranks 3 each engine  
 Crank shaft, dia. of journals as per Rule 7 1/2" Crank pin dia. 7 3/4" Crank webs Mid. length breadth 14 1/4" Thickness parallel to axis 5"  
 as fitted 7 3/8" Mid. length thickness 5 1/2" Thickness around eye-hole 3 1/4"  
 Intermediate Shafts, diameter as per Rule 6 9/16" Thrust shaft, diameter at collars as per Rule 7 1/2"  
 as fitted 7 1/4"  
 Tube Shafts, diameter as per Rule 7 1/2" Screw Shaft, diameter as per Rule 7 8/16" Is the screw shaft fitted with a continuous liner no lines  
 as fitted 7 1/2"  
 Bronze Liners, thickness in way of bushes as per Rule 3/16" Thickness between bushes as per Rule 3/16" Is the after end of the liner made watertight in the  
 as fitted 3/16" 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 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 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 the tube  
 shaft yes If so, state type U.S. patent gland Length of Bearing in Stern Bush next to and supporting propeller 4' 0" each propeller  
 Propeller, dia. 7' 9" Pitch 11' 3" No. of Blades four Material Managan. Bronze whether Moveable no Total Developed Surface 19.4 sq. feet  
 Feed Pumps worked from the Main Engines, No. none Diameter yes Stroke yes Can one be overhauled while the other is at work yes  
 Bilge Pumps worked from the Main Engines, No. 4 Diameter yes Stroke yes Can one be overhauled while the other is at work yes  
 Feed Pumps { No. and size Two - 8" x 6" x 15" Pumps connected to the { No. and size One 8" x 6" x 15" One 5 1/2" x 4 1/2" x 12"  
 How driven steam Main Bilge Line { How driven steam  
 Ballast Pumps, No. and size One - 8" x 6" x 15" Lubricating Oil Pumps, including Spare Pump, No. and size none  
 Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Bilge Pumps;—In Engine and Boiler Room In Engine Room - one 2 1/2" In boiler room 3 or 2 1/2" 2 or 2"  
 In Pump Room 1 In Holds, &c. fore peak one 2", for stores 2 or 2", aft peak 1 or 2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size one 6" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 No. and size one 2 1/2" 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 main pump discharge overboard How are they protected steel plate  
 What pipes pass through the deep tanks for aft peak bilge suction 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 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 no tunnel Is it fitted with a watertight door yes worked from yes

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 3123 sq. ft.  
 Is Forced Draft fitted no No. and Description of Boilers 3 multitub. cylindrical Working Pressure 200 lb. sq. in.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes  
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? yes  
 Is the donkey boiler intended to be used for domestic purposes only yes

PLANS. Are approved plans forwarded herewith for Shafting yes Main Boilers yes Auxiliary Boilers yes Donkey Boilers yes  
 (If not state date of approval)  
 Superheaters yes General Pumping Arrangements yes Oil fuel Burning Piping Arrangements yes

## SPARE GEAR.

Has the spare gear required by the Rules been supplied yes

State the principal additional spare gear supplied one stern tube brush, one rec sheave & strap complete, 12 brasses  
 tubes & 100 ferrules, one air pump bucket, a number of boiler tubes, & other items  
 in accordance with list attached herewith.

The foregoing is a correct description.

FOR AND ON BEHALF OF  
CAMMELL LAIRD & Co. LIMITED.

Manufacturer.

SECRETARY.

006809-006818-0217

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Lloyd's Register  
Foundation



Jan 24, Feb 1, 5, 8, 9, 13, 15, 17, 19, 21, 23, 27, 28, Mar 1, 2, 5, 7, 9, 13, 14, 15, 16, 19, 20, 21, 22, 23, 24, 26, 27, 28, Apr 3, 5, 6, 9, 10, 11, 12, 13, 16, 18, 19, 20, 23, 25, 27, 30,  
During progress of work in shops - - -  
May 1, 2, 3, 7, 9, 10, 15, 24, 25, 28, 29, 30, 31, June 4, 6, 7, 8, 11, 13, 14, 15, 18, 21, 22, 23, 28, 29, 30, July 2, 3, 4, 6, 10, 11, 12,  
During erection on board vessel - - -  
Total No. of visits 82

Dates of Examination of principal parts—Cylinders 19/3/34 21/4/34 28/4/34 9/3/34 28/3/34 Slides 28/3/34 23/4/34 Covers 13/4/34 25/4/34  
Pistons 23/4/34 24/3/34 28/3/34 10/4/34 Piston Rods 20/3/34 23/4/34 Connecting rods 9/4/34 27/3/34 24/3/34  
Crank shaft 27/3/34 13/4/34 11/4/34 Thrust shaft 16/3/34 23/4/34 Intermediate shafts 11/2/34 23/4/34 24/5/34  
Tube shaft Screw shaft 24/1/34 10/3/34 28/3/34 24/5/34 Propeller 15/6/34  
Stern tube 24/5/34 25/4/34 Engine and boiler seatings 22/5/34 Engines holding down bolts 4/7/34  
Completion of fitting sea connections 29/5/34 Boilers fixed 3/7/34 Engines tried under steam 12/7/34  
Completion of pumping arrangements 6/7/34 Thickness of adjusting washers P. 29/64 S. 3/8 C. 11/32 S. 25/64 S. 3/8  
Main boiler safety valves adjusted 6/7/34 Crank shaft material *slab* Identification Mark 2035 Thrust shaft material *slab* Identification Mark 108, 1075  
Intermediate shafts, material *slab* Identification Marks 1075, 1081 Tube shaft, material ✓ Identification Mark ✓  
Screw shaft, material *slab* Identification Mark 1075 Steam Pipes, material *slab* Test pressure 600lb Date of Test 24/6/34 3/7/34  
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 *no* If so, state name of vessel ✓

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

This Machinery has been constructed under Special Survey, & is in accordance with the approved plans and the Rules. The workmanship is good throughout. Upon completion it was examined under full working conditions during official trials and found satisfactory, and is now eligible in my opinion for Classification in Register book with record of time 7-34.

The amount of Entry Fee ... £ 3 : 0 : 0  
Special ... £ 46 : 0 : 0  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : :  
When applied for, 31 JULY 1934  
When received, 17-8-34

J. J. Mutton  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

+ L.M.C. 7:34.  
Elec. Light.  
I.S. O.B.

CERTIFICATE WRITTEN



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