

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 19 25.9.36 Port of Glasgow 30 SEP 1936

No. in Survey held at Glasgow Date, First Survey 7.10.29 Last Survey 22-9-1936  
Req. Book on the new steel S/S "COULBEG". (Number of Visits 113)

Built at Irvine By whom built Ayrshire Dockyard Co Yard No. 518 Tons Gross 3670 Net 2254  
When built 1936

Engines made at Glasgow By whom made David Rowan & Co Ltd Engine No. 924 When made 1936

Boilers made at Glasgow By whom made David Rowan & Co Ltd Boiler No. 924 When made 1936

Registered Horse Power Owners Donoch Shipping Co Ltd Port belonging to Glasgow

Nom. Horse Power as per Rule 346 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 Revs. per minute 77

Dia. of Cylinders 22"-38"-63" Length of Stroke 42" No. of Cylinders 3 No. of Cranks 3

Crank shaft, d.a. of journals as per Rule 12.06" Crank pin dia. 12 3/8" Crank webs Mid. length breadth 18 1/4" Thickness parallel to axis 7 3/4"  
as fitted 12 1/4" Crank pin dia. 12 3/8" Mid. length thickness 7 3/4" Thickness around eye-hole 5 5/8"

Intermediate Shafts, diameter as per Rule 11.49 Thrust shaft, diameter at collars as per Rule 12.06"  
as fitted 11 1/2" as fitted 12 1/4" Mitchell

Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 12.93"  
as fitted Is the tube screw shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule .694" Thickness between bushes as per Rule .52"  
as fitted 3/4" as fitted 1/16" 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 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 - Is an approved Oil Gland or other appliance fitted at the after end of the tube

shaf. no If so, state type Length of Bearing in Stern Bush next to and supporting propeller 4'5"

Propeller, dia. 17'3" Pitch 17'3" No. of Blades 4 Material bad iron whether Movable no Total Developed Surface 95.6 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/4" Stroke 21" Can one be overhauled while the other is at work yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 3/4" Stroke 21" Can one be overhauled while the other is at work yes

Feed Pumps No. and size 1 @ 8" x 5" x 8" Pumps connected to the Main Bilge Line No. and size Ballast pump  
How driven steam How driven steam

Ballast Pumps, No. and size 1 @ 9" x 12" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size -

Are two independent means arranged for circulating water through the Oil Cooler - Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room 3 @ 2 1/2" In Holds, &c. No 1 hold - 2 @ 2 1/4", No 2 hold - 2 @ 3/4", No 3 hold - 2 @ 2 3/4"

In Pump Room No 4 hold - 2 @ 2 1/2", Tunnel well - 1 @ 2 1/4"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 6" Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 1 @ 4 1/4" 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 stowhold 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 hold suction How are they protected under liner boards

What pipes pass through the deep tanks no deep tanks 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 yes Is it fitted with a watertight door yes worked from upper deck

## MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 4802 sq ft Working Pressure 200 LBS

Is Forced Draft fitted yes No. and Description of Boilers 2 SB

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes

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 -

PLANS. Are approved plans forwarded herewith for Shafting no Main Boilers yes Auxiliary Boilers - Donkey Boilers yes  
(If not state date of approval)

Superheaters no General Pumping Arrangements no Oil fuel Burning Piping Arrangements -

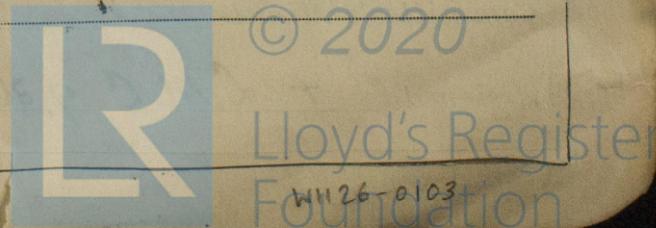
### SPARE GEAR.

Has the spare gear required by the Rules been supplied yes

State the principal additional spare gear supplied one cast iron propeller and one screw shaft

The foregoing is a correct description,  
For David Rowan & Co. Ltd  
Arch. W. Frierson

Manufacturer.



Is a Report also sent on the Hull of the Ship? If not, state whether, and when, one was sent.

Dates of Survey while building  
 During progress of work in shops -- 1929 Oct: 7 Nov: 5, 11, 14, 27 Dec: 4, 11, 12, 17, 18, 19, 27 (1930) Jan: 9, 23, 27, 28 Feb: 3, 4, 5, 11, 17  
 and  
 During erection on board vessel --- 1930 July: 2, 4, 11 Aug: 5, 7, 8, 21, 26, 27 Sep: 2, 4, 19, 22 (1931) Jan: 20 (1935) Aug: 21 Dec: 13, 16, 18, 20  
 1936 Jan: 7, 13, 28 Mar: 4, 9 Apr: 3, 27, 30 May: 7, 12, 13, 14, 19, 21, 22, 25, 27, 28 June: 1, 2, 3, 8, 11, 12, 15, 17, 22  
 Total No. of visits - 113 - 15, 16, 17, 19, 22, 23, 24 July: 13, 15, 27 Aug: 4, 18, 19, 20, 21, 22, 24, 26, 27 Sep: 1, 2, 7, 9, 15, 17, 22

Dates of Examination of principal parts—Cylinders 27-3-30 Slides 2-9-30 Covers 16-4-30  
 Pistons 27-8-30 Piston Rods 3-4-36 Connecting rods 21-8-30  
 Crank shaft 28-4-30 Thrust shaft 24-6-36 Intermediate shafts 8-8-30  
 Tube shaft - Screw shaft 27-5-36(w) 13-7-36(s) Propellers 28-5-36(w) 18-8-36(s)  
 Stern tube 25-5-36 Engine and boiler seatings 18-8-36 Engines holding down bolts 9-9-36  
 Completion of fitting sea connections 4-8-36  
 Completion of pumping arrangements 15-9-36 Boilers fixed 1-9-36 Engines tried under steam 22-9-36  
 Main boiler safety valves adjusted 15-9-36 Thickness of adjusting washers P with P<sub>2</sub> 5/16" S with P<sub>2</sub> 5/16" DB 9/32" A 5/16"  
 Crank shaft material 2 steel Identification Mark \* LLOYDS N° 329 28-4-30 Thrust shaft material 1 steel Identification Mark \* LLOYDS N° 2686 J.N.B. 24-6-36  
 Intermediate shafts, material 9 steel Identification Marks \* LLOYDS N° 2054 etc L.C.D. 8-8-30 Tube shaft, material - Identification Mark \* LLOYDS N° 2757 27-5-36  
 Screw shafts, material steel Identification Mark \* LLOYDS N° 6226 GA 13-7-36 Steam Pipes, material steel Test pressure 600 Date of Test 20-6-36  
 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 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 "Loughmore" G.R. N° 57200

**General Remarks** (State quality of workmanship, opinions as to class, &c.)  
 \* In addition to these marks the original page numbers are stamped on each shaft as per forging reports hereunder.  
 Andrew and Cameron's cam operated steam and exhaust valves fitted to HP cylinder only.  
 The workmanship and materials are good.  
 The machinery has been constated under special survey, satisfactorily fitted in the vessel tried under steam and found good.  
 It is eligible in my opinion for Classification and the Record + LMC 9, 36.

25/9/36

S. Davis  
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5 : :  
 Special ... £ 76 : 18 : :  
 Donkey Boiler Fee ... £ : : :  
 Travelling Expenses (if any) £ : : :  
 When applied for, 25.9.1936  
 When received, 2.10.1936

Committee's Minute GLASGOW 29 SEP 1936

Assigned + LMC 9, 36



GLASGOW

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

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