

Rpt. 4.

# REPORT ON MACHINERY.

No. 45940

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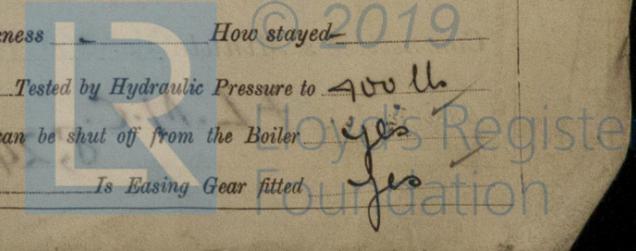
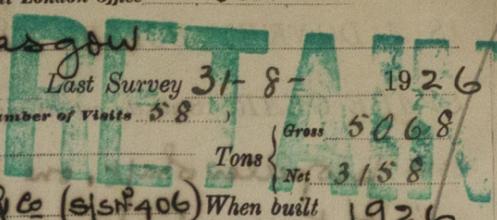
Date of writing Report 10 When handed in at Local Office 4-9-26 Port of Glasgow  
 No. in Survey held at Glasgow Date, First Survey 29th Jan Last Survey 31-8-1926  
 Reg. Book. on the new steel S/S "COUNSELLOR" (Number of Visits 58) Tons { Gross 5068 / Net 3158 }  
 Master Built at Glasgow By whom built J. Hasbomell & Co (S/SN 406) When built 1926  
 Engines made at Glasgow By whom made D. Rowan & Co Ltd (N° 836) when made 1926  
 Boilers made at Glasgow By whom made D. Rowan & Co Ltd (N° 836) when made 1926  
 Registered Horse Power Owners T & G. Harrison Ltd Port belonging to Liverpool  
 Nom. Horse Power as per Section 28 464 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

**ENGINES, &c.**—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3  
 Dia. of Cylinders 26"-43"-73" Length of Stroke 48" Revs. per minute 77 Dia. of Screw shaft 14.85" Material of screw shaft 1. Steel  
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes No O.G. Is the after end of the liner made water tight in the propeller boss yes If the liner is in more than one length are the joints burned 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 Length of stern bush 5'-10"  
 Dia. of Tunnel shaft 13.5" Dia. of Crank shaft journals 4.206" Dia. of Crank pin 14.5" Size of Crank webs 9" x 22.5" Dia. of thrust shaft under collars 14.5" Dia. of screw 17.6" Pitch of Screw 16.6" No. of Blades 4 State whether moveable yes Total surface 940 sq ft  
 No. of Feed pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work yes  
 also 2 Wens do 4" Stroke 24" Can one be overhauled while the other is at work yes  
 No. of Bilge pumps 2 Diameter of ditto 4.5" Stroke 24" Can one be overhauled while the other is at work yes  
 No. of Donkey Engines 3 Sizes of Pumps 10" x 9" x 12" 9" x 6" x 12" No. and size of Suctions connected to both Bilge and Donkey pumps  
 In Engine Room 4 @ 3.5" In Holds, &c. N° 1 hold - 2 @ 3.5" N° 2 hold - 2 @ 3.5"  
 N° 3 hold - 2 @ 3.5" Deep tank - 2 @ 3.5" N° 5 hold - 2 @ 3.5" N° 6 hold - 1 @ 3.5" Tunnel well - 1 @ 3"  
 No. of Bilge Injections 1 sizes 8" Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size yes 4.5"  
 Are all the bilge suction pipes fitted with must boxes with straight tailpipes (Bilge injection) Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible none  
 Are all connections with the sea direct on the skin of the ship yes Are they 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 Discharge Pipes above or below the deep water line both  
 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 are carried through the bunkers none How are they protected  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes  
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes  
 Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from Upper deck (Bars)

**BOILERS, &c.**—(Letter for record (1)) Manufacturers of Steel David White & Sons Ltd. Lamarkshire Steel Co. Ltd.  
 Total Heating Surface of Boilers 7406 sq ft Is Forced Draft fitted no No. and Description of Boilers Two double ended  
 Working Pressure 200 Tested by hydraulic pressure to 350 Date of test 14-4-26 No. of Certificate 14098  
 Can each boiler be worked separately yes Area of fire grate in each boiler 1050 sq ft No. and Description of Safety Valves to each boiler 2 direct spring Area of each valve 12.560" Pressure to which they are adjusted 205 Are they fitted with easing gear yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork 1'-6" Mean dia. of boilers 15'-2.33" Length 16'-6" Material of shell plates steel  
 Thickness 1.25" Range of tensile strength 28-32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams mid T.R. long. seams DBS. TR Diameter of rivet holes in long. seams 1.16" Pitch of rivets 9.15" & 9.35" Lap of plates or width of butt straps 2.14"  
 Per centages of strength of longitudinal joint rivets 92.6 plate 85.3 Working pressure of shell by rules 200 Size of manhole in shell 19.5" x 15.5"  
 Size of compensating ring 36.5" x 32.5" x 1.78" No. and Description of Furnaces in each boiler 6 Morrison Material steel Outside diameter 3'-7.25"  
 Length of plain part top 1.19" bottom 1.32" Thickness of plates crown 1.19" Description of longitudinal joint welded No. of strengthening rings  
 Working pressure of furnace by the rules 200 Combustion chamber plates: Material steel Thickness: Sides 3.32" Back — Top 3.32" Bottom 3.32"  
 Pitch of stays to ditto: Sides 10.8" x 8.75" Back — Top 10.8" x 8.75" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 200  
 Material of stays Iron Area at smallest part 2.030" Area supported by each stay 89.80" Working pressure by rules 202 End plates in steam space: Material steel Thickness 1.38" Pitch of stays 22" x 20" How are stays secured B.N. Working pressure by rules 200 Material of stays steel  
 Area at smallest part 9.6758" Area supported by each stay 460.0" Working pressure by rules 201 Material of Front plates at bottom steel  
 Thickness 1" Material of Lower back plate — Thickness — Greatest pitch of stays — Working pressure of plate by rules —  
 Diameter of tubes 3.5" Pitch of tubes 4.13" x 4.58" Material of tube plates steel Thickness: Front 1" Back 7/8" Mean pitch of stays 11.34"  
 Pitch across wide water spaces 14.98" Working pressures by rules F200. B200 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 20" x 10.34" x 7/8" Length as per rule 3'-6.14" Distance apart 8.75" Number and pitch of stays in each 3 @ 10.8"  
 Working pressure by rules 200 Steam dome: description of joint to shell none % of strength of joint —  
 Diameter — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet holes —  
 Pitch of rivets — Working pressure of shell by rules — Crown plates — Thickness — How stayed —

**SUPERHEATER.** Type Smoke tube Date of Approval of Plan See Mech Rpt. Tested by Hydraulic Pressure to 400 lb  
 Date of Test 27-4-26 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes  
 Diameter of Safety Valve 1.5" Pressure to which each is adjusted 207 Is Easing Gear fitted yes

W433-0105



IS A DONKEY BOILER FITTED? yes If so, is a report now forwarded? yes

SPARE GEAR. State the articles supplied: - In accordance with the Rules, and in addition: -  
one propeller shaft, one propeller boss, 2 propeller blades, one Thompson coupling two  
pairs of top end bushes, one pair of bottom end bushes, one air pump rod, one circulating  
pump impeller and shaft, one set of air pump valves, one air pump head valve seating  
one eccentric sheave and strap, one valve spindle.

The foregoing is a correct description,  
for David Rowan & Co. Ltd }  
Archd. N. Grierson, } Manufacturer.

Dates of Survey while building { During progress of work in shops -- } 1926 Jan 29 Feb 2-4-9-10-22-23-24-25 Mar 4-8-11-15-16-25-29 Apr 4-8-14-12-9-19-16-21-26-29-28  
{ During erection on board vessel --- } 30 May 3-4-5-6-7-10-14-18-19-20-21-24-25-26-28-31 June 4-7-8-10-11-15-16-17-21-23-25 July 1 Aug 27-31  
Total No. of visits 58 Is the approved plan of main boiler forwarded herewith yes  
" " " donkey " " " yes

Dates of Examination of principal parts - Cylinders 25-3-26 Slides 21-5-26 Covers 19-5-26 Pistons 26-5-26 Rods 19-5-26  
Connecting rods 11-3-26 Crank shaft 19-4-26 Thrust shaft 17-5-26 Tunnel shafts 21-4-26 Screw shaft 21-4-26 Propeller 8-4-26  
Stern tube 19-4-26 Steam pipes tested 14-4-26 17-6-26 Engine and boiler seatings 26-5-26 Engines holding down bolts 23-6-26  
Completion of pumping arrangements 1-7-26 Boilers fixed 21-6-26 Engines tried under steam 31-8-26  
Completion of fitting sea connections 18-5-26 Stern tube 18-5-26 Screw shaft and propeller 18-5-26  
Main boiler safety valves adjusted 25-6-26 Thickness of adjusting washers all 3/8"  
Material of Crank shaft J. Steel Identification Mark on Do. LLOYD'S NO 7381 19-4-26 Material of Thrust shaft J. Steel Identification Mark on Do. LLOYD'S NO 7381 17-5-26  
Material of Tunnel shafts J. Steel Identification Marks on Do. LLOYD'S NO 7381 21-4-26 Material of Screw shafts J. Steel Identification Marks on Do. LLOYD'S NO 7381 21-4-26  
Material of Steam Pipes Lapwelded wrought iron Test pressure 600 lbs per sq. in.

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 Section 49 of the Rules been complied with ✓  
Is this machinery duplicate of a previous case yes If so, state name of vessel "Wayfarer".

General Remarks (State quality of workmanship, opinions as to class, &c.)  
The workmanship and materials are good  
The machinery has been constructed 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 8, 26

It is submitted that this vessel is eligible for THE RECORD. +LMC 8. 26. CL.

*[Signature]*  
8/9/26.  
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5 : :  
Special ... £ 94:12 : :  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : :  
When applied for, 3/9/26.  
When received, 7.9.26.

Committee's Minute GLASGOW 7-SEP 1926

Assigned +L.M.C. 8, 26.

CERTIFICATE WRITTEN

Glasgow

Certificate (if required) to be sent to  
2/9/26

