

REPORT ON MACHINERY.

No. 45332

Received at London Office 27 JAN 1926

Date of writing Report Jan 23rd 1926 When handed in at Local Office Jan 26th 1926 Port of GLASGOW.

No. in Survey held at Yroon Date, First Survey 25. 9. 25 Last Survey Jan 20th 1926. (Number of Visits 21.)

Reg. Book. on the S.S. SCILLONIAN. Tons } Gross 429 Net 179

Master Built at Yroon By whom built Ailsa S.B. Co Ltd N°396 When built 1926

Engines made at Yroon By whom made Ailsa S.B. Co Ltd N°131 when made 1926

Boilers made at Glasgow By whom made Barclay Curle & Co Ltd AILSA 4 when made 1926

Registered Horse Power Owners Isles of Scilly Steamship Co Ltd Port belonging to Scilly

Nom. Horse Power as per Section 28 106. 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 13 1/2" 21" & 35" Length of Stroke 26" Revs. per minute 133 Dia. of Screw shaft as per rule 4.48" Material of screw shaft S

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes 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 No space

If two liners are fitted, is the shaft lapped or protected between the liners — Length of stern bush 2'-6" Dia. of Tunnel shaft as per rule 6.43" as fitted 6 3/4" Dia. of Crank shaft journals as per rule 4.06" as fitted 4 1/8" Dia. of Crank pin 4 1/8" Size of Crank webs 13 3/4" x 4 9/16" Dia. of thrust shaft under collars 4 1/8" Dia. of screw 9ft Pitch of Screw 10'-3" No. of Blades 4 State whether moceable No Total surface 29.2 sq ft

No. of Feed pumps 2 Diameter of ditto 2 1/2" Stroke 13" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 2 1/2" Stroke 13" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Sizes of Pumps Ballast 5" x 5" x 6" Sen Ser. 5" x 3 1/2" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 1 @ 2" Engine Room 2 @ 2" in Stokehold In Holds, &c. 2 @ 2" in wings & 1 @ 2 1/4" at centre of aft end of Cargo Hold 1 @ 2" in shaft recess 1 @ 2 1/4" aft.

No. of Bilge Injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size Yes 2 1/4" Are all the bilge suction pipes fitted with roses No Are the roses in Engine room always accessible — Are the sluices on Engine room bulkheads always accessible —

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 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 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 No tunnel Is it fitted with a watertight door — worked from —

BOILERS, &c.—(Letter for record S) Manufacturers of Steel The Steel Coy of Scotland Ltd.

Total Heating Surface of Boilers 2141 sq ft Is Forced Draft fitted No No. and Description of Boilers One S.E. Marine 15B. Working Pressure 180 lbs Tested by hydraulic pressure to 320 lbs Date of test 3-11-25 No. of Certificate 16969.

Can each boiler be worked separately — Area of fire grate in each boiler 64 sq ft No. and Description of Safety Valves to each boiler Two Spring loaded Area of each valve 4.06 sq in Pressure to which they are adjusted 180 lbs Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 1' 6" Mean dia. of boilers Length Material of shell plates Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell plate

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings bottom

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom Pitch of stays to ditto: Sides Back Top If stays are fitted with riveted heads Working pressure by rules

Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space: Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Area at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

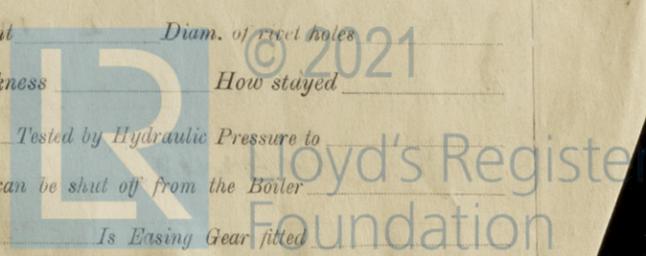
Working pressure by rules Steam dome: description of joint to shell % of strength of joint Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded? *-*

SPARE GEAR. State the articles supplied:— *Two connecting rod top end bolts and nuts*
Two bottom end bolts and nuts *Two main bearing bolts* *One set of*
coupling bolts *One set of feed and bilge pump valves* *A quantity of*
assorted bolts and nuts *Iron of various sizes*

The foregoing is a correct description,
FOR AILSA SHIPBUILDING CO., LIMITED.

J. McLaughlin
ENGINEER MANAGER

Manufacturer.

Dates of Survey while building { During progress of work in shops -- *1925. Sept. 25. 30 Oct 6. 9. 13. 20. 29. Nov 2. 6. 12. 17. 23. Dec 1. 4. 10. 17. 22. 23. 24.*
During erection on board vessel --- *1926. Jan 12. 20.*
Total No. of visits *21*

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders *13-10-25* Slides *9-10-25* Covers *30-9-25* Pistons *9-10-25* Rods *12-11-25*
Connecting rods *12-11-25* Crank shaft *29-10-25* Thrust shaft *13-10-25* Tunnel shafts *13-10-25* Screw shaft *29-10-25* Propeller *2-11-25*
Stern tube *29-10-25* Steam pipes tested *4-12-25* Engine and boiler seatings *12-11-25* Engines holding down bolts *23-11-25*
Completion of pumping arrangements *14-12-25* Boilers fixed *1-12-25* Engines tried under steam *20-1-26*
Completion of fitting sea connections *12-11-25* Stern tube *2-11-25* Screw shaft and propeller *6-11-25*
Main boiler safety valves adjusted *14-12-25* Thickness of adjusting washers SV $\frac{7}{16}$ " PV $\frac{13}{32}$ "
Material of Crank shaft *S* Identification Mark on Do. *LLOYDS No 1176 DCB 29-10-25* Material of Thrust shaft *S* Identification Mark on Do. *LLOYDS No 1176 DCB 13-10-25*
Material of Tunnel shafts *S* Identification Marks on Do. *LLOYDS No 1176 DCB 13-10-25* Material of Screw shafts *S* Identification Marks on Do. *LLOYDS No 1176 DCB 29-10-25*
Material of Steam Pipes *S D Copper* Test pressure *360 lbs*
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 *No* If so, state name of vessel *-*

General Remarks (State quality of workmanship, opinions as to class, &c. *The engines have been constructed under special survey in accordance with the Rules of the Society. The workmanship and materials are of good quality. The engines and boiler have been securely fitted on board and tried under steam with satisfactory results.*

When vessel was in an advanced stage of completion a ^{transverse} bulkhead was fitted in Forward cargo hold dividing the compartment into two. Owing to the presence of cargo in N°2 hold it was found impossible to fit the extra bilge suction necessitated by the alteration and the owners stated that this would be done when the cargo had been discharged.

The surveyors at Falmouth have been notified.

It is submitted that this vessel will be eligible for a record of *LMC 1-26* when the survey is completed as above.

Survey completed, see Fal. Str. 4. 2. 26.

It is submitted that this vessel is eligible for THE RECORD. + LMC 1-26.C.L.

The amount of Entry Fee ... £ 3 : 0 :
3/5 Special ... £ 15 : 18 : *26/1/26*
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ 2 : 12 : 6 *28-1-26*

David C Barr
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *GLASGOW 26 JAN 1926*

Assigned *Deferred*

FRI. 5 FEB 1926 © 2021
Lloyd's Register Foundation
CERTIFICATE WRITTEN

26/1/26
Certificate (if required) to be sent to Glasgow.