

REPORT ON MACHINERY.

Hull Rpt No. 29960

No. 9697

Received at London Office

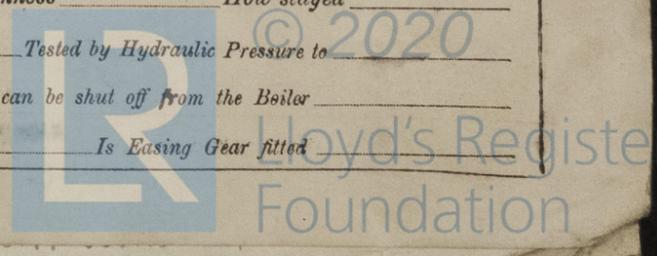
WEL 11 APR 1917

Date of writing Report 23-5-17 When handed in at Local Office 10/4/17 Port of Middlesbrough
 No. in Survey held at Middlesbrough Date, First Survey 10th Jan 17 Last Survey 28th March 1917
 Reg. Book. on the Steel screw steamer "William Westborough" (Number of Visits 5 (23-5-1917 File)
 Master SSN:687 Tons 1917
 Built at Selby By whom built Cochrane & Sons Ltd
 Engines made at Middlesbrough By whom made Richardson, Wrotgarth & Co. (L: H 237) when made 1917-5
 Boilers made at Hull By whom made C. D. Holmes & Co. Ltd when made 1917-5
 Registered Horse Power _____ Owners British Admiralty Port belonging to _____
 Nom. Horse Power as per Section 28 87 Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 13", 23", 37" Length of Stroke 26" Revs. per minute 114 Dia. of Screw shaft as per rule 7.88" Material of Steel
 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 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 Length of stern bush 3'-0"
 Dia. of Tunnel shaft as per rule 7.04" Dia. of Crank shaft journals as per rule 7.39" Dia. of Crank pin 7 1/2" Size of Crank web 14 3/8 x 4 7/8" Dia. of thrust shaft under collars 7 1/2" Dia. of screw 9-7 1/2" Pitch of Screw 11'-0" No. of Blades 4 State whether moveable No Total surface 33 sq ft
 No. of Feed pumps 1 Diameter of ditto 2 5/8" Stroke 14 3/4" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 1 Diameter of ditto 2 5/8" Stroke 14 3/4" Can one be overhauled while the other is at work yes
 No. of Donkey Engines one 4 3/4" cylinder Sizes of Pumps 6", 4 1/4" x 6" duplex No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room two 2" dia In Holds, &c. one 2" in each compartment
All suction also connected to 3" yacht
 No. of Bilge Injections one size 3 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size 3" yacht
 Are all the bilge suction pipes fitted with roses yes 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 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 Toward suction How are they protected strong casing
 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 yes

BOILERS, &c.—(Letter for record S) Manufacturers of Steel _____
 Total Heating Surface of Boilers 1440 sq ft Forced Draft fitted no No. and Description of Boilers one single ended
 Working Pressure _____ Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____
 Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of Safety Valves to each boiler _____
 Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted with easing gear _____
 Smallest distance between boilers or uptakes and bunkers or woodwork _____ 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 _____
 Percentages of strength of longitudinal joint _____ Working pressure of shell by rules _____ Size of manhole in shell _____
 Size of compensating ring _____ No. and Description of Furnaces in each boiler _____ Material _____ Outside diameter _____
 Length of plain part _____ Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
 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 nuts or 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 _____



2110-581800-EE1800

IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— *Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set of air feed & bilge pump valves, one main & one donkey check valve, two valves for donkey pumps, six pump ring studs & nuts, 3 condenser tubes, one safety valve spring, one set of fire bars & a quantity of bolts & nuts & iron of various sizes*

The foregoing is a correct description,
of and on behalf of
RICHARDSONS, WESTGARTH & Co., Ltd

M. Jackson Manufacturer.

Dates of Survey while building
During progress of work in shops --
During erection on board vessel ---
Total No. of visits

1917. Jan 10. 13. 24. Feb 6. 10. 13. 15. 19. 23. 27. March 3. 8. 14. 20. 28.

15

Is the approved plan of main boiler forwarded herewith

Is the approved plan of donkey boiler forwarded herewith

Dates of Examination of principal parts—Cylinders *19. 2. 17* Slides *27. 2. 17* Covers *27. 2. 17* Pistons *23. 2. 17* Rods *23. 2. 17*
Connecting rods *23. 2. 17* Crank shaft *20. 1. 17* Thrust shaft *7. 2. 17* Tunnel shafts *None* Screw shaft *12. 1. 17* Propeller *12. 1. 17*
Stern tube *12. 1. 17* Steam pipes tested *10-5-17* Engine and boiler seatings *20-1-17* Engines holding down bolts *4-5-17*
Completion of pumping arrangements *17-5-17* Boilers fixed *10-5-17* Engines tried under steam *17-5-17*
Completion of fitting sea connections *20-1-17* Stern tube *20-1-17* Screw shaft and propeller *23-1-17*
Main boiler safety valves adjusted *15-5-17* Thickness of adjusting washers *7/16 & 5/16*

Material of Crank shaft *Steel* Identification Mark on Do. *5863A B* Material of Thrust shaft *Steel* Identification Mark on Do. *5667M A B*

Material of Tunnel shafts *None* Identification Marks on Do. Material of Screw shafts *Steel* Identification Marks on Do. *620 R F M*

Material of Steam Pipes *Solid drawn copper* Test pressure *400 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.)

These Engines have been constructed under Special Survey and in accordance with the Rules and Specifications. The material and workmanship are good. The Engines have now been sent to Selby where they are to be fitted on board the vessel.

The machinery of this vessel has been properly fitted & secured on board the vessel, the steam pipe tested as above & on completion the machinery was tested under full power for two hours as required by the Admiralty & found satisfactory, the safety valves have been adjusted under steam & tested for accumulation which did not exceed 210 lbs.

In my opinion the vessel is eligible for the record + L.A.C. 5-17.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 5. 17.

M. Frank A. Stinger
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ...	£ 1 : - : -	When applied for,
Special	£ 8 : 14 : -	<i>10/14/1917</i>
Donkey Boiler Fee ...	£ 8 : 14 : -	
Travelling Expenses (if any) £	:	When received,
		<i>26.4.1917</i>

Committee's Minute
Assigned *+ L.M.C. 5.17*

MACHINERY CERTIFICATE WRITTEN



Rpt. 5a.
Date of writing
No. in Series
Reg. Book.
Master
Engines made
Boiler made
Registered Ho
MULTITU
(Letter for rec
Boilers on
No. of Certific
safety valves t
Are they fitted
Smallest distan
Material of sh
Descrip. of riv
Lap of plates
rules 201
boiler Three
Description of U
plates: Materi
Top 11 "x F" I
smallest part 2
Pitch of stays 4
Area supported
Lower back plai
Pitch of tubes
water spaces
girder at centre
Working pressur
separately
holes Pite
stiffened with r
Working pressur
Dates of Survey while building
During work on board
GENERAL
under spe
of this
by hydr
issued o
Survey Fee
Travelling Ex
Committee's
Assigned

Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute