

# REPORT ON MACHINERY

No. 4603

7 APR. 1921

Received at London Office

Date of writing Report 6 April 1921 When handed in at Local Office 19 Port of Harve  
 No. in Survey held at Caen Date, First Survey 14 October Last Survey 2 April 1921  
 Reg. Book. on the SS Député René Reulle Sault (Number of Visits 2) Tons Gross  
 Master Built at Caen By whom built Ch. Naval Français When built 1920  
 Engines made at Harve By whom made Ch. Schneider when made 1920  
 Boilers made at Greenock By whom made Kincaid & Co. Stamped 1444 when made 1920  
 Registered Horse Power Owners Transports Maritimes M<sup>re</sup> Marchande Port belonging to Harve  
French Government  
 Nom. Horse Power as per Section 28 190 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 18 1/8", 29 1/2", 49 3/16" Length of Stroke 37 1/2" Revs. per minute 85 Dia. of Screw shaft as per rule 292.2 Material of screw shaft Steel  
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube no 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 X 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 X If two  
 liners are fitted, is the shaft lapped or protected between the liners paint Length of stern bush 37.233  
 Dia. of Tunnel shaft as per rule 239 Dia. of Crank shaft journals as per rule 253 Dia. of Crank pin 256 Size of Crank webs 400 Dia. of thrust shaft under  
 collars 256 Dia. of screw 4.360 Pitch of Screw 4" No. of Blades 4 State whether moveable no Total surface 5.53  
 No. of Feed pumps 2 Diameter of ditto 65 Stroke 480 Can one be overhauled while the other is at work yes  
 No. of Bilge pumps 2 Diameter of ditto 65 Stroke 480 Can one be overhauled while the other is at work yes  
 No. of Donkey Engines 1 feed barrel Sizes of Pumps 152-114 No. and size of Suctions connected to both Bilge and Donkey pumps  
1 Water Ballast 254-254  
1 service 254-254  
1 of 85" 140-127  
12.7 stroke  
 In Holds, &c. 1 each 70" and 1 of 150" tunnel

No. of Bilge Injections 1 sizes 160" Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes 180"  
 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 yes  
 Are all connections with the sea direct on the skin of the ship Access fitted Are they Valves or Cocks yes  
 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 yes  
 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  
 How are they protected X  
 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  
 Dates of examination of completion of fitting of Sea Connections 24 Nov. of Stern Tube X Screw shaft and Propeller X  
 Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from the deck

MILLERS, &c.—(Letter for record S) Manufacturers of Steel Kincaid & Co Greenock No. 1444 - 1445  
 Total Heating Surface of Boilers 2220 Is Forced Draft fitted no No. and Description of Boilers Two single ended  
 Working Pressure 185 Tested by hydraulic pressure to 234 on board Date of test 4 December 20 No. of Certificate 1444 - 1445  
 Can each boiler be worked separately yes Area of fire grate in each boiler 4.31 X No. and Description of Safety Valves to  
 each boiler 2 Spring Area of each valve 78.6 cm<sup>2</sup> Pressure to which they are adjusted 190 Are they fitted with easing gear yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork 0.25" 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 \_\_\_\_\_  
 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 \_\_\_\_\_  
 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 \_\_\_\_\_  
 Thickness of stays to ditto: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ If stays are fitted with nuts or riveted heads \_\_\_\_\_ Working pressure by rules \_\_\_\_\_  
 Material of stays \_\_\_\_\_ Diameter 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 \_\_\_\_\_  
 Diameter 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 \_\_\_\_\_  
 Thickness 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 \_\_\_\_\_ Superheater or Steam chest; how connected to boiler \_\_\_\_\_ Can the superheater be shut off and the boiler worked \_\_\_\_\_  
 Material of rivets \_\_\_\_\_ Diameter \_\_\_\_\_ Length \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet \_\_\_\_\_  
 Pitch of rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Diameter of flue \_\_\_\_\_ Material of flue plates \_\_\_\_\_ Thickness \_\_\_\_\_  
 If stiffened with rings \_\_\_\_\_ Distance between rings \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ End plates: Thickness \_\_\_\_\_ How stayed \_\_\_\_\_  
 Working pressure of end plates: \_\_\_\_\_ Area of safety valves to superheater \_\_\_\_\_ Are they fitted with easing gear \_\_\_\_\_

9th April 1921  
 attached to  
 Député Gaston Duménil

006332-006342-0044

IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied :- One half (1/2) crank pins bottom brasses, one and half (1 1/2) crank pins top brasses - Two (2) crosshead bottom brasses, two and half (2 1/2) crosshead top brasses - Two (2) bolts of head and two (2) bolts of bottom connecting rods - Two (2) bolts for main bearing - Six (6) bolts coupling - 4 valves bilge pump - 4 seat valve of bilge pump - 4 valves feed pump, 4 seat valves feed pump - 2 piston rings HP - 2 MP and - 2 LP - 39 condenser tubes - 1 propeller

The foregoing is a correct description,

SEAFARERS NAVALS FRANÇAIS

L. J. DISCOEUR

*L. J. Discoeur*

Manufacturer.

Dates of Survey while building { During progress of work in shops - - - }  
{ During erection on board vessel - - - }  
Total No. of visits 8  
14 Oct 20 - 24 Nov - 5 January 21 - 31 January - 18 February - 20 March, Capul - Capul  
Is the approved plan of main boiler forwarded herewith yes.

Dates of Examination of principal parts - Cylinders 14 Oct Slides 14 Oct Covers 14 Oct Pistons 14 Oct Rods 14 Oct

Connecting rods 14 Oct Crank shaft 24 Nov Thrust shaft 24 Nov Tunnel shafts 24 Nov Screw shaft  Propeller

Stern tube  Steam pipes tested 10 Nov Engine and boiler seatings  Engines holding down bolts

Completion of pumping arrangements 5 January Boilers fixed 24 Nov Engines tried under steam 2 April

Main boiler safety valves adjusted 5 January Thickness of adjusting washers Port Boiler { Core 7 mm } Starboard Boiler { Core 6.7 }

Material of Crank shaft Steel Identification Mark on Do.  Material of Thrust shaft steel Identification Mark on Do.

Material of Tunnel shafts Steel Identification Marks on Do.  Material of Screw shafts steel Identification Marks on Do.

Material of Steam Pipes Steel Test pressure 40 kg

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 *Cape Marie-Louise*

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

The machinery of this vessel has been examined during erection on board but not during the works on shops, excepting the screw shaft, thrust shaft, intermediate shaft, which have been made by S<sup>rs</sup> des Moteurs Bhalassiere and surveyed by Marseille office and also the boilers which have been made by John G Kincaid and Marked N<sup>o</sup> 1444 and 1445 the casing valves, slide valves, their rods and double bar link eccentrics steam cylinders, pistons and packing rings, connecting rods and brasses, crank shaft, tunnel shaft, screw shaft and brasses condenser, air circulating and feed pumps bilge pumps bed plate were found working in good condition. The material used which is in Siemens Martin steel has been tested to our satisfaction.

The engine has been tried under steam and found satisfactory. This machinery being in accordance with the approved plans is in my opinion eligible to be classed with the notation I.M.C. and  NB recorded in the Register Book.

Table with 4 columns: Description, Amount, Currency, and Date/Status. Includes Entry Fee (£112), Special (£893), Donkey Boiler Fee (£), and Travelling Expenses (£283).

*J. Hamel*  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute TUE. APR. 19 1921  
Assigned *L. M. H. 21*

CERTIFICATE WRITTEN



certificate (if required) to be sent to *yes* - *Chief office*