

Rpt. 4d.

# REPORT ON ELECTRIC PROPELLING MACHINERY.

No. 103740

Date of writing Report 6<sup>th</sup> MAY 1946 When handed in at Local Office 18/5/46 Received at London Office 7 JUN 1946

No. in Survey held at Heaton Date, First Survey 12.5.44 Last Survey 3<sup>rd</sup> MAY 1946  
Reg. Book. Port of NEWCASTLE - ON - TYNE

Single on Twin Screw vessel "BEAVERLAKE" Number of Visits 55  
Triple  
Quadruple

Built at Port Glasgow By whom built Lithgows, Ltd. Yard No. 1008 When built 1946

Electrical Machines made at Heaton By whom made G. A. Parsons & Co. Ltd. Contract No. 720 Generator No. 2630 Motor No. 2622 When made 1946

Shaft Horse Power at Full Power 9000 Total capacity of Generators \_\_\_\_\_ kilowatts

Nom. Horse Power as per Rule 1500 Owners Canadian Pacific Railway Co. Port belonging to London

Trade for which Vessel is intended London - Montreal freight

**STEAM ENGINES.**—Type of Engine high pressure steam turbine No. of Engines One Revs. per minute 3450

Is a Governor fitted yes Is the speed variation as per Rule when load is thrown off \_\_\_\_\_

Is an emergency Governor fitted yes Is it arranged for hand tripping yes

Does it trip the throttle valve as per Rule yes If exhaust steam is admitted, is an automatic shut-off fitted \_\_\_\_\_

Is provision made for bleeding steam yes and \_\_\_\_\_

is a non-return or positive shut-off valve fitted to be provided by Builders

**Torque Limiting.**—If generator capacity exceeds motor rating, state means provided for limiting torque input to screw shaft When operating on half motor travel of governor valve limited by interlocked stop on control console.

**Lubricating Oil.**—State what means are provided for emergency supply Gravity tank

Is the emergency reserve sufficient to maintain lubrication as per Rule \_\_\_\_\_

**Mechanical Balance.**—Are the Engines and Generators balanced so as not to cause appreciable vibration yes

**Report.**—Has a separate report Rpt. 4a for the Engines been issued yes

**OIL ENGINES.**—Type of Engines \_\_\_\_\_ Revs. per minute \_\_\_\_\_

Is a Governor fitted \_\_\_\_\_ Is the speed variation as per Rule when load is thrown off \_\_\_\_\_

Is an Emergency Governor fitted \_\_\_\_\_ Does it operate as per Rule \_\_\_\_\_

**Rating.**—Has each Engine been tested and found to be capable of developing 10 per cent. overload for one hour as per Rule \_\_\_\_\_

**Report.**—Has a separate report Rpt. 4b for the Engines been issued \_\_\_\_\_

**GENERATORS.**—Direct or Alternating Current Alternating current

If alternating current state number of phases Three No. of Generators 1 - main 1 - Auxiliary

Kilowatts per Generator main - 7000 Auxiliary - 400 Voltage per Generator main - 3000 Auxiliary - 1150 frequency main - 57.6 Auxiliary - 22 Amperes per Generator main - 1347 Auxy - 261

Do they comply with the requirements regarding insulation materials yes

terminals yes, coolers yes, thermometers yes (on bearings only)

lubrication yes, position in ship \_\_\_\_\_, temperature rise yes

embedded temperature detectors yes shaft currents yes

**Ventilation.**—State how this is arranged (open or closed system) main - closed system; Auxiliary - open system

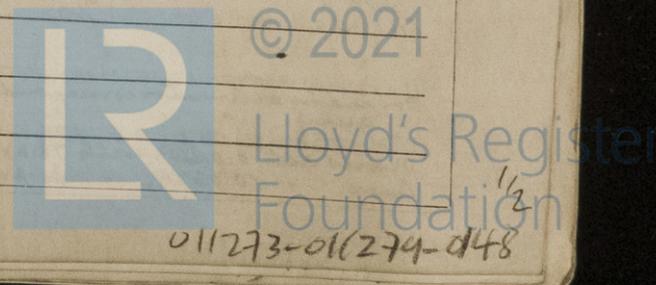
If open system are ventilating arrangements satisfactory yes

**Heating when Idle.**—State what provision is made for main alternator only: - two 1/2 kw. electric heaters each end in winding compartment

**Facilities for Inspection and Repair.**—Are these as per Rule yes

Are wear-down gauges supplied yes

**Bilges.**—Are the arrangements to prevent accumulation of bilge-water under the machines satisfactory \_\_\_\_\_





All Conductors are of annealed copper, conforming to International Electrotechnical Commission Publication No. 28.

The Insulated Conductors have withstood the dielectric tests specified in the Rules.

The foregoing is a correct description,

*L. B. Horsley*  
*for C. A. Parsons & Co Ltd*

Electrical Engineers.

Date *17<sup>th</sup> May 1946.*

COMPASSES.—Are Single-Conductor circuits carrying continuous current arranged with lead and return conductors fitted as close to one another as possible

Have tests been made during adjustment of the Compasses to determine the effect of switching the main circuits on and off

The maximum deviation due to electric currents was found to be \_\_\_\_\_ degrees on \_\_\_\_\_

Standard Compass and \_\_\_\_\_ degrees on \_\_\_\_\_ course in the case of the Steering Compass.

Builders' Signature.

Date \_\_\_\_\_

Dates of Survey while building	During progress of work in shops	(1944) May 12, June 21, Aug 10, Sept. 8, 12, Oct. 6, 18, 19, Nov. 1, 17, 22 Dec. 5 (1945) Jan 3, 9, 17 Feb. 8
		18, Feb. 5, 10, Nov. 3, Dec. 13, 14, 15, 17, 19, (1946) Jan 3, Feb. 20, Mar. 20, Apr. 8, 9, 10, 19, May 3
	During erection on board vessel - -	
	Total No. of visits	<i>55</i>

Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *S.S. "BEAVERDELL"*

General Remarks (State quality of workmanship, opinions as to class, &c. *THE MAIN AND AUXILIARY ALTERNATORS, THE PROPULSION MOTOR, THE CONTROL GEAR AND THE NEGATIVE BOOSTER SETS HAVE BEEN BUILT UNDER SPECIAL SURVEY IN ACCORDANCE WITH THE APPROVED PLANS AND WITH THE SECRETARY'S LETTERS. THE MATERIALS USED ARE OF GOOD QUALITY AND THE WORKMANSHIP IS GOOD. THE MACHINES AND CONTROL GEAR HAVE BEEN TESTED AT THE MAKERS' WORKS AS FAR AS PRACTICABLE AND THE TEST RESULTS INDICATE THAT THE REQUIREMENTS RELATING TO TEMPERATURE RISE AND OPERATING CHARACTERISTICS WILL BE MET UNDER WORKING CONDITIONS. HIGH VOLTAGE (DIELECTRIC) AND INSULATION RESISTANCE TESTS HAVE BEEN APPLIED AND FOUND SATISFACTORY.*

*GREENOCK*  
THE MACHINERY HAS BEEN DESPATCHED TO GLASGOW FOR INSTALLATION IN THE SHIP AND ON THE COMPLETION THEREOF AND AFTER SATISFACTORY SHIP TRIALS, WILL, IN OUR OPINION, BE ELIGIBLE FOR THE NOTATION *L.M.C.* (WITH DATE.)

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

The amount of Entry Fee	{ <i>Sum</i> £ 110 : 0 : 0	When applied for, <i>5 JUN 1946</i>
Travelling Expenses (if any)	{ <i>G.M.</i> £ 27 : 10 : 0	When received, _____

*Saninson & R.P. Stone*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute *GLASGOW 12 NOV 1946*

Assigned

SEE ACCOMPANYING MACHINERY REPORT



© 2021

Lloyd's Register Foundation

D  
R  
B  
E  
B  
N  
W  
D  
of  
No.  
Is f  
No.  
each  
are  
the  
Wid  
Thick  
or fl  
for C  
Diam  
long.  
Percen  
Thick  
in, eac  
welded  
for Cla  
Diamet  
Percen  
Percen  
Thickne  
Header  
Tubes:  
joint to  
strength  
firm  
Pitch of  
Crown  
SUPER  
Plan  
Thickness  
or flanged  
for Class  
Diameter  
long, join  
drum shell  
Radius or  
Tested by  
can be shu  
of valves  
Spare Ge  
Hea  
Dates  
of Survey  
while  
building  
Is this boiler  
GENERA  
spec  
the  
5-lip  
Survey  
Travel