

REPORT ON MACHINERY.

No. 15153

REC'D NEW YORK June 18-1918

Received at London Office MON 20 JUNE 1918

of writing Report 10 When handed in at Local Office 10 Port of NEW YORK N.Y.
 in Survey held at Schenectady N.Y. Date, First Survey _____ Last Survey _____ 19
 on the S/S "Federal" (Number of Visits _____)

Master A. N. Pratt Built at Keany N.J. By whom built Federal Shipbuilding Co. Tons { Gross _____ Net _____
 Engines made at Schenectady N.Y. By whom made General Electric Co. When built 1918-11.
 Moulders made at Keany N.J. By whom made Federal Shipbuilding Co. when made 1918-11.
 Registered Horse Power _____ Owners _____
 Net Horse Power at Full Power 2500 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

PROPPELLER ENGINES, &c.—Description of Engines GEARED TURBINE (TURBINE 13430. GEAR 2997) No. of Turbines ONE
 Diameter of Rotor Shaft Journals, H.P. 8" L.P. Y Diameter of Pinion Shaft 7"
 Diameter of Journals H.S. PINION 4" Distance between Centres of Bearings H.S. PINION 25" Diameter of Pitch Circle H.S. PINION 7.833"
 Diameter of Wheel Shaft 14" Distance between Centres of Bearings L.S. PINION 52" Diameter of Pitch Circle of Wheel 2.5 PINION 10.75"
 Diameter of Face 14.35" Diameter of Thrust Shaft under Collars _____ Diameter of Tunnel Shaft _____
 Screw Shafts _____ Diameter of same _____ Diameter of Propeller _____ Pitch of Propeller _____
 Blades _____ State whether Moveable _____ Total Surface _____ Diameter of Rotor Drum, H.P. _____ L.P. _____ Astern _____
 Revs. per Minute at Full Power, Turbine 3374.5 Propeller 90

PARTICULARS OF BLADING.

EXPANSION	ACTIVE H.P. PITCH			L.P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
10-10	75-125	2'-11 1/2"	2				8125-1.5	3'-3"	2
8-18	625	3'-9"	1				3375	3'-3"	1
10-	125	2'-10 1/2"	1						
	25	4'-0"	1						
	6	4'-2"	1						

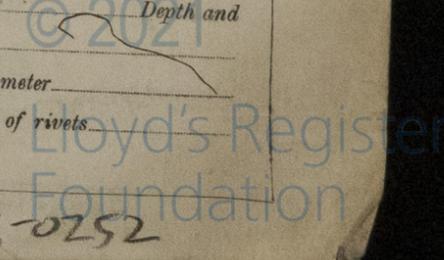
Size of Feed pumps _____
 Size of Bilge pumps _____
 Size of Bilge suction in Engine Room _____

In Holds, &c.
 Bilge Injections _____ sizes _____ Connected to condenser, or to circulating pump _____ Is a separate Donkey Suction fitted in Engine Room & size _____
 Are the bilge suction pipes fitted with roses _____ Are the roses in Engine room always accessible _____
 Connections with the sea direct on the skin of the ship _____ Are they Valves or Cocks _____
 Fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the Discharge Pipes above or below the deep water line _____
 Each fitted with a Discharge Valve always accessible on the plating of the vessel _____ Are the Blow Off Cocks fitted with a spigot and brass covering plate _____
 How are they protected _____
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times _____
 Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges _____
 Bilge Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

Boilers, &c. (Letter for record _____) Manufacturers of Steel _____
 Heating Surface of Boilers _____ Is Forced Draft fitted _____ No. and Description of Boilers _____
 Pressure _____ Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____
 Boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of Safety Valves to _____
 Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted with easing gear _____
 Distance between boilers or uptakes and bunkers or woodwork _____ Mean dia. of boilers _____ Length _____ Material of shell plates _____
 Range of tensile strength _____ Are the shell plates welded or flanged _____ Descrip. of riveting: cir. seams _____
 Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____
 Strength of strength of longitudinal joint _____ Working pressure of shell by rules _____ Size of manhole in shell _____

Compensating ring _____ No. and Description of Furnaces in each Boiler _____ Material _____ Outside diameter _____
 Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
 Pressure of furnace by the rules _____ Combustion chamber plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____
 Stays to ditto: Sides _____ Back _____ Top _____ If stays are fitted with nuts or riveted heads _____ Working pressure by rules _____
 Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ End plates in steam space _____
 Thickness _____ Pitch of stays _____ How are stays secured _____ Working pressure by rules _____ Material of stays _____
 Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____
 Material of Lower back plate _____ Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____
 Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____
 Working pressures by rules _____ Girders to Chamber tops: Material _____ Depth and _____
 Length as per rule _____ Distance apart _____ Number and pitch of stays in each _____
 Steam dome: description of joint to shell _____ % of strength of joint _____ Diameter _____
 Material _____ Description of longitudinal joint _____ Diameter of rivet holes _____ Pitch of rivets _____
 Crown plates: Thickness _____ How stayed _____

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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 _____

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

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,
General Electric Co. Manufacturer.
per J.A. Borg.

Dates of Survey while building
 During progress of work in shops -- *1918. APRIL 17. MAY 15. 17. 21. 22. 23. 24. 28. 29. JUNE 3.*
 During erection on board vessel ---
 Total No. of visits _____ Is the approved plan of main boiler forwarded herewith _____
 " " " donkey " " " _____

Dates of Examination of principal parts—Casings _____ Rotors _____ Blading _____ Gearing _____
 Rotor shaft _____ Thrust shaft _____ Tunnel shafts _____ Screw shaft _____ Propeller _____
 Stern tube _____ Steam pipes tested _____ Engine and boiler seatings _____ Engines holding down bolts _____
 Completion of pumping arrangements _____ Boilers fixed _____ Engines tried under steam _____
 Main boiler safety valves adjusted _____ Thickness of adjusting washers _____
 Material and tensile strength of Rotor shaft *STEEL 80,000 LBS. LT. MINIMUM.* Identification Mark on Do. *T.G.D.*
 Material and tensile strength of Pinion shaft *" 100,000 LBS. "* " Identification Mark on Do. *T.G.D.*
 Material of Wheel shaft *STEEL.* Identification Mark on Do. *T.G.D.* Material of Thrust shaft _____ Identification Mark on Do. _____
 Material of Tunnel shafts _____ Identification Marks on Do. _____ Material of Screw shafts _____ Identification Marks on Do. _____
 Material of Steam Pipes _____ Test pressure _____
 Is an installation fitted for burning oil fuel _____ 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 a duplicate of a previous case _____ 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 in accordance with the approved plans. The materials and workmanship are sound and good. The engines to be forwarded to New York N.Y. to be fitted on board.*

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

The amount of Entry Fee ... £	<i>3 machy</i>	When applied for,	19
Special ... £	<i>see</i>	When received,	19
Donkey Boiler Fee ... £	<i>see</i>		
Travelling Expenses (if any) £	<i>see</i>		

T.G. Dodd.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *New York DEC 10 1918*
 Assigned *See NY Rpt 15854*

