

Emergency Fleet Corporation No. 930

REC'D NEW YORK NOV 20 1920

Hull 9

Rpt. 4.

REPORT ON MACHINERY.

No. 72.

TUE DEC. 7 1920

Date of writing Report 21st June 19 When handed in at Local Office 26th June 19 Port of Hamilton Ohio
No. in Survey held at Hamilton Ohio Date, First Survey 2nd June Last Survey 16th June 1919
Reg. Book. 78048 on the ENG N^o 4551
Master Laurent Built at Alexandria Va By whom built Virginia S. B. Co. When built 1920
Engines made at Hamilton Ohio By whom made Hoover Arms & Rentschler Co. when made 1919
Boilers made at Chesler Pa. By whom made Sun Shipbuilding Company when made 1920
Registered Horse Power _____ Owners Emergency Fleet Corporation Port belonging to Alexandria Va.
Nom. Horse Power as per Section 28 510. 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 24 1/2 - 41 1/2 - 72" Length of Stroke 48" Revs. per minute 88 Dia. of Screw shaft 14 1/2" Material of Steel
Is the screw shaft fitted with a continuous liner the whole length of the stern tube no (2 liners) 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 blacked 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 ✓ If two liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 5' 2 1/2"
Dia. of Tunnel shaft 13 1/8" Dia. of Crank shaft journals 13 7/8" Dia. of Crank pin 14 3/8" Size of Crank webs 29 1/2 x 27" Dia. of thrust shaft under collars 14" Dia. of screw 16-9" Pitch of Screw 16-9" No. of Blades 4 State whether moveable no Total surface 79.06 sq ft
No. of Feed pumps 2 Diameter of ditto 12x8 Stroke 24 Can one be overhauled while the other is at work yes
No. of Bilge pumps 2 Diameter of ditto 5" Stroke 21" Can one be overhauled while the other is at work yes
No. of Donkey Engines 4 Sizes of Pumps 1 1/2 x 8 1/2 x 12 10 x 7 x 10 7 1/2 x 5 x 10 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room Two 3 1/2" Tunnel One 3 1/2" Thrust Room 3 1/2" In Holds, &c. No 1 Two 3 1/2 No Two 3 1/2 No 3 Two 3 1/2 No 4 Two 3 1/2
No. of Bilge Injections 1 sizes 10" Connected to condenser, or to circulating pump Ca Pump Is a separate Donkey Suction fitted in Engine room & size yes 3 1/2
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 ✓
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 below
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 yes Is it fitted with a watertight door yes worked from Engine room top platform

BOILERS, &c.—(Letter for record _____) Manufacturers of Steel _____
Total Heating Surface of Boilers _____ Is Forced Draft fitted _____ No. and Description of Boilers _____
Working Pressure 200# 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 _____
Per centages of strength of longitudinal joint _____ rivets _____ 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 _____ crown _____ bottom _____ 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 _____

© 2020 Lloyd's Register Foundation W 389-0188

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

Two top & bottom end bolts & nuts. Two main bearing bolts & nuts. Set of Coupling bolts & nuts. Pair of top end brasses. One Crank pin bearing. H.P. Valve spindle. Two H.P. 2 I.P. & One L.P. piston rings. Two H.P. piston valve rings. Set of Valves, guards & studs for Air & Bilge pump.

The foregoing is a correct description,

for engine only
THE HOOVEN, OWENS, RENTSCHLER CO.

59 Rule Asst Chief Eng Manufacturer.
23/6/19

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

June 2nd 9th 16th 1919.

Is the approved plan of main boiler forwarded herewith No.

Dates of Examination of principal parts—Cylinders 2/6/19 Slides 16/6/19 Covers 16/6/19 Pistons 9/6/19 Rods 9/6/19

Connecting rods 16/6/19 Crank shaft 2/6/19 Thrust shaft 16/6/19 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

Completion of fitting sea connections Stern tube Screw shaft and propeller

Main boiler safety valves adjusted Thickness of adjusting washers

Material of Crank shaft Steel Identification Mark on Do. See list attached Material of Thrust shaft Steel Identification Mark on Do. See list attached

Material of Tunnel shafts Steel Identification Marks on Do. Material of Screw shafts Steel 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 duplicate of a previous case No 4516 If so, state name of vessel

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

The above Engines have been constructed under Special Survey, also under the supervision of the American Bureau Surveyor.

The materials & workmanship employed in their manufacture so far as can be seen are sound & efficient.

When the Engines have been satisfactorily installed in vessel & proved satisfactory under working conditions & spare gear being supplied as required by the rules, the vessel in which they are fitted will in my opinion be eligible for record of F.I.M.C. (with date)

The amount of Entry Fee ... \$: : When applied for,
Special ... \$: : 19.
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) \$ 14.35 : : 19.
25.75

Committee's Minute New York

NOV 23 1920

Assigned

See Ballo Rpt. No. 3050

J. Robinson &

Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register Foundation