

REPORT ON BOILERS.

TUE 9-SEP 1919

No. 15745

Received at London Office

Date of writing Report 191 When handed in at Local Office 191 Port of New York and Philadelphia 3375

No. in Survey held at Bayonne N.J. Date, First Survey Last Survey Oct 30 1918

Reg. Book. on the STEEL SCREW STEAMER "LIBERTY GLO" (Number of Visits) Tons { Gross 5753 Net 3562

Master J. Stoussland Built at Philadelphia By whom built American International Corp When built 1919

Engines made at Schenectady N.Y. By whom made General Electric Co. When made 1919

Boilers made at Bayonne N.J. By whom made Babcock & Wilcox Co MB 600 When made 1918

Registered Horse Power 600 Owners United States Shipping Board Emergency Fleet Corporation Port belonging to Philadelphia 600

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Lukin's Steel Co

Letter for record S Total Heating Surface of Boilers 8706 sq ft Is forced draft fitted yes No. and Description of Boilers Three Water Tube Working Pressure 200 lb Tested by hydraulic pressure to 400 lb Date of test 13/5/19

No. of Certificate 331 Can each boiler be worked separately. yes Area of fire grate in each boiler ✓ No. and Description of safety valves to each boiler Two direct spring Area of each valve 7.06 sq in Pressure to which they are adjusted 200 lb Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

Smallest distance between boilers or uptakes and bunkers or woodwork ✓ Mean dia. of boilers 42 in Length 14' 7 3/8 in

Material of shell plates Steel Thickness 1/2 in Range of tensile strength 60,000 Are the shell plates welded or flanged no

Description of riveting: cir. seams SR Lap long. seams D.R.D.B.S. Diameter of rivet holes in long. seams 29/32 Pitch of rivets 2 9/16 in

Width of plates or width of butt straps 9 3/4 x 15 in Per centages of strength of longitudinal joint 108 Working pressure of shell by rules 80.1

Weight of boiler 243 lbs Size of manhole in shell 15" x 11" Size of compensating ring 2 1/8 in

No. and Description of Furnaces in each boiler

Description of longitudinal joint	Material	Thickness: Sides	Back	Top	Bottom	Pitch of stays to ditto: Sides	Back
<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>

If stays are fitted with nuts or riveted heads ✓ Working pressure by rules ✓ Material of stays ✓ Diameter at smallest part 19 in

Area supported by each stay ✓ Working pressure by rules ✓ End plates in steam space: Material Steel Thickness 32

How are stays secured Dished ends 42 in Working pressure by rules 200 lb Material of stays ✓ Diameter at smallest part ✓

Working pressure by rules ✓ Material of Front plates at bottom ✓ Thickness ✓ Material of back plate ✓ Thickness ✓ Greatest pitch of stays ✓ Working pressure of plate by rules ✓ Diameter of tubes ✓

Material of tube plates ✓ Thickness: Front ✓ Back ✓ Mean pitch of stays ✓ Pitch across wide spaces ✓ Working pressures by rules ✓ Girders to Chamber tops: Material ✓ Depth and thickness of 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 Yes 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 ✓

End plates: Thickness ✓ How stayed ✓ Working pressure of end plates ✓ Area of safety valves to superheater 1 in Are they fitted with easing gear yes

VERTICAL DONKEY BOILER—

No.	Description	Manufacturers of steel

By whom made ✓ When made ✓ Where fixed ✓ Working pressure ✓

Tested by hydraulic pressure to ✓ Date of test ✓ No. of Certificate ✓ Fire grate area ✓ Description of safety valves ✓

Area of each ✓ Pressure to which they are adjusted ✓ If fitted with easing gear ✓ If steam from main boilers can enter the donkey boiler ✓

Dia. of donkey boiler ✓ Length ✓ Material of shell plates ✓ Thickness ✓ Range of tensile strength ✓

Description of riveting long. seams ✓ Dia. of rivet holes ✓ Whether punched or drilled ✓ Pitch of rivets ✓

Per centage of strength of joint ✓ Rivets ✓ Working pressure of shell by rules ✓ Thickness of shell crown plates ✓

No. of Stays to do. ✓ Dia. of stays ✓ Diameter of furnace Top ✓ Bottom ✓ Length of furnace ✓

Description of joint ✓ Working pressure of furnace by rules ✓ Thickness of furnace crown ✓

Radius of do. ✓ Stayed by ✓ Diameter of uptake ✓ Thickness of uptake plates ✓

Material of water tubes ✓

The foregoing is a correct description,
 per J. Stoussland Manufacturer.

During progress of work in shops - - - 1918: Mar. 6, 14, 15, 18, 19, 21, 22, 25, 27, 28, 29, 30, Apr. 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, May 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Jun 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Jul 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Aug 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Sep 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Oct 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Nov 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Dec 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1919: Jan. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Feb. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Mar. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Apr. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, May 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Jun 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Jul 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Aug 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Sep 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Oct 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Nov 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Dec 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1920: Jan. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Feb. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Mar. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Apr. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, May 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Jun 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Jul 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Aug 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Sep 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Oct 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Nov 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, Dec 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30

See Report 4a

Is the approved plan of main boiler forwarded herewith ✓

" " " donkey " " ✓

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

These boilers have been constructed under Special Survey and in accordance with plans approved July 18-1917. The workmanship and material are both of good quality. The steam-drums and sections have been tested by hydraulic pressure to 400 lbs per sq. inch, and found tight and sound. They have now been despatched for fitting aboard. To complete the survey the boilers to be re-created on board, and tested by hydraulic pressure. All mountings to be examined and fitted. Safety-valves to be adjusted under steam.

Philadelphia:-

Boilers erected on board, mountings examined and fitted, hydraulic test of 400 lbs applied and safety valves adjusted under steam to 200 lbs. ✓

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 .. £	:	:	When applied for,
Special <i>S.P.D.</i> .. £	:	:19.....
Donkey Boiler Fee £	:	:	When received,
Travelling Expenses (if any) £	:	:13.....

Committee's Minute

New York AUG 19 1919

Assigned

See Phil Rpt 3375

Alexander MacArthur
 Engineer Surveyor to Lloyd's Register of Shipping.
Bluelock
 Lloyd's Register
 Foundation