

YACHT REPORT ON BOILERS.

No. ¹⁸⁰⁹⁴ 14039

Form 5a.

Received at London Office 26 JUL 1930

Date of writing Report 25.7 1930 When handed in at Local Office 25.7 1930 Port of Southampton
 Date, First Survey 7.10.29 Last Survey 2.5 1930
 Survey held at Cowes (Number of Visits 11) Gross Tons _____ Net Tons _____
 Name of vessel 65 on the t.s. yacht "XARIFA"
 Built at Cowes By whom built Franklin White & Co Ltd Ward No. 1686 When built 1930
 Engines made at Cowes By whom made do Engine No. do When made 1930
 Boilers made at Cowes By whom made do Boiler No. do When made 1930
 Owners Franklin Singer Esq Port belonging to New York

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel W. Beardmore & Co. Ltd. (Letter for Record _____)
 Total Heating Surface of Boilers 2297 Is forced draught fitted yes Coal or Oil fired O.F.
 No. and Description of Boilers one S.E. Return tube cylindrical Working Pressure 180 lb/sq in
 Tested by hydraulic pressure to 320 Date of test 21.3.30 No. of Certificate 397 Can each boiler be worked separately ✓
 Area of Firegrate in each Boiler _____ No. and Description of safety valves to each boiler one Double Spring Imp. High Lift Type
 Area of each set of valves per boiler { per Rule 50% of 17.12" as fitted 9.8182" Pressure to which they are adjusted 180 lb/sq in Are they fitted with easing gear yes
 In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no
 Smallest distance between boilers or uptakes and bunkers or woodwork 11" Is oil fuel carried in the double bottom under boilers no
 Smallest distance between shell of boiler and tank top plating _____ Is the bottom of the boiler insulated no
 Largest internal dia. of boilers 14'-6" Length 10'-6" Shell plates: Material Steel Tensile strength 28/32
 Thickness 1 7/32" Are the shell plates welded or flanged no Description of riveting: circ. seams { end D.R.L. inter. _____
 Long. seams T.R.D.B. Diameter of rivet holes in { circ. seams 1 5/16" Pitch of rivets { 3.745" long. seams 1 1/4" 8.89"
 Percentage of strength of circ. end seams { plate 65 rivets _____ Percentage of strength of circ. intermediate seam { plate _____ rivets ✓
 Percentage of strength of longitudinal joint { plate 85.9 rivets _____ Working pressure of shell by Rules appd.
 Thickness of butt straps { outer 1 5/16" inner 1 1/16" No. and Description of Furnaces in each Boiler 3 Moulin Corrugated
 Material Steel Tensile strength 26/30 Smallest outside diameter 3'-6 1/4"
 Length of plain part { top _____ bottom ✓ Thickness of plates { crown 3 17/32" Description of longitudinal joint weld
 Dimensions of stiffening rings on furnace or c.c. bottom _____ Working pressure of furnace by Rules _____
 End plates in steam space: Material Steel Tensile strength 26/30 Thickness 1 7/32" Pitch of stays 1'-8" x 1'-9 1/2"
 How are stays secured Double nuts & double washers Working pressure by Rules appd.
 Tube plates: Material { front Steel back Steel Tensile strength { 26/30 Thickness { 1 5/16" 3/4"
 Mean pitch of stay tubes in nests 9.6875" Pitch across wide water spaces 13 1/2" Working pressure { front appd. back _____
 Girders to combustion chamber tops: Material Steel Tensile strength 28/32 Depth and thickness of girder _____
 at centre 10 1/4" x 15" Length as per Rule 2'-8.34" Distance apart 10 3/4" No. and pitch of stays _____
 in each 2 x 9/8" Working pressure by Rules appd. Combustion chamber plates: Material Steel
 Tensile strength 26/30 Thickness: Sides 21/32" Back 21/32" Top 23/32" Bottom 21/32"
 Pitch of stays to ditto: Sides 9/8" x 8 1/2" Back 9 1/8" x 8 3/8" Top 9/8" x 10 3/4" Are stays fitted with nuts or riveted over nuts fitted
 Working pressure by Rules appd. Front plate at bottom: Material Steel Tensile strength 26/30
 Thickness 1 5/16" Lower back plate: Material Steel Tensile strength 26/30 Thickness 3/4"
 Pitch of stays at wide water space 13 1/4" x 8 3/8" Are stays fitted with nuts or riveted over nuts fitted
 Working Pressure appd. Main stays: Material Steel Tensile strength 28/32
 Diameter { At body of stay, _____ or _____ No. of threads per inch 6 Area supported by each stay 430 sq in
 Working pressure by Rules appd. Screw stays: Material Steel Tensile strength 26/30
 Diameter { At turned off part, _____ or _____ No. of threads per inch 9 Area supported by each stay _____

Working pressure by Rules *appd.* Are the stays drilled at the outer ends *no* Margin stays: Diameter { At turned off part, or Over threads *1 3/4"*

No. of threads per inch *9* Area supported by each stay *8 3/8" x 11 3/32"* Working pressure by Rules *appd.*

Tubes: Material *S.D. Steel* External diameter { Plain *2 3/4"* Stay *2 3/4"* Thickness { *9.456* *3/8"* *1 3/32"* No. of threads per inch *9*

Pitch of tubes *3 7/8" x 3 7/8"* Working pressure by Rules *appd.* Manhole compensation: Size of opening *1 5/8"*

shell plate *1 7/4" x 2 1/4"* Section of compensating ring *8 7/8" x 1 1/4"* No. of rivets and diameter of rivet holes *36* *1 5/8"*

Outer row rivet pitch at ends *9"* Depth of flange if manhole flanged *3 5/8"* Steam Dome: Material *none*

Tensile strength Thickness of shell Description of longitudinal joint

Diameter of rivet holes Pitch of rivets Percentage of strength of joint { Plate Rivets

Internal diameter Working pressure by Rules Thickness of crown No. and diameter of stays Inner radius of crown Working pressure by Rules

How connected to shell Size of doubling plate under dome Diameter of rivet holes and of rivets in outer row in dome connection to shell

Type of Superheater *none* Manufacturers of { Tubes Steel castings

Number of elements Material of tubes Internal diameter and thickness of tubes

Material of headers Tensile strength Thickness Can the superheater be shut off the boiler be worked separately Is a safety valve fitted to every part of the superheater which can be shut off from the boiler

Area of each safety valve Are the safety valves fitted with easing gear Working pressure as Rules Pressure to which the safety valves are adjusted Hydraulic test pressure tubes, castings and after assembly in place Are drain cocks or valves fitted to free the superheater from water where necessary

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with

The foregoing is a correct description,
 For J. Samuel White & Company Ltd.,
 Managing Director.

Dates of Survey { During progress of work in shops - *7/10/29, 23/10/29, 8/11/29, 19/11/29, 11/12/29* Are the approved plans of boiler and superheater forwarded herewith *yes* (If not state date of approval.)
 while building { During erection on board vessel - *9/1/30, 13/2/30, 20/2/30, 4/3/30, 21/3/30* Total No. of visits *11*

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

This boiler was constructed in accordance with the approved plans and the requirements of the Rules, tested and found satisfactory. The workmanship & materials are good.

Survey Fee £ : : } When applied for, 192
 Travelling Expenses (if any) £ ✓ : : } When received, 192

H. R. Samuel

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FR 1 AUG 1930

Assigned *See F.E. Rpt.*

