

Rpt. 9.

REPORT OF SURVEY FOR REPAIRS, &c., OF ENGINES AND BOILERS

No. 128193

Date of writing Report 30. 11. 1953

(Received at London Office)

4 DEC 1953

2 DEC 1953

No in

Reg. Book. Survey held at Shoreham

When handed in at Local Office

Port of London

Date First Survey AND

Last Survey 24-11-1953

(No. of Visits 1)

354085 on the Machinery of the Wood, Iron or Steel

M.V. "Liobeth M"

Tonnage { Gross 939
Net 457

Vessel built at Newden

By whom De Chan & Cerebman

Year. Month.

MN As Per Rule

Engines made at John Deutz

By whom Lockner & Humboldt

When

No. of Main Boilers

Boilers, when made (Main)

(Donkey)

When

HS " " "

Owners Metcalf Motor Boats Ltd

Owners' Address

No. of Donkey Boilers

Managers

(if not already recorded in Appendix to Register Book.)

Steam Pressure—

If Surveyed Afloat or in Dry Dock

Port London

Voyage

in Main Boilers

(State name of Dock.)

in Donkey Boilers

Afloat
Shoreham Harbour

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

HULL

MACHINERY

100A1
(Bassent & Co.)

Last Report No.

Port

Particulars of Examination and Repairs (if any)

DAMAGE.

Periodical Surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides initials of any letters respecting this case.

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined.

Was a damage report made by anyone else? If so, by whom?

Offered & declined
Charge made Surveyor

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time?

Donkey

not, state for what reasons

What parts of the Boilers could not be thus thoroughly examined?

That special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of these parts of each Boiler?

State latest date of internal examination of each boiler

Did the Surveyor examine the Safety Valves of the Main Boilers?

Present condition of funnel(s)

Did the Surveyor examine the Safety Valves of the Donkey Boilers?

To what pressure were they afterwards adjusted under steam?

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers?

To what pressure were they afterwards adjusted under steam?

Did the Surveyor examine the drain plugs of the Main Boilers?

and of the Donkey Boilers?

Did the Surveyor examine all the mountings of the Main Boilers?

and of the Donkey Boilers?

Has the screw shaft now been drawn and examined?

Has it a continuous liner?

Is an approved oil retaining appliance fitted at the after end?

Has the shaft now been changed? If so, state reasons

Has the shaft now fitted been previously used?

Has it a continuous liner?

Is an approved oil retaining appliance fitted at the after end?

State date of examination of Screw Shaft

Is electric light and/or power fitted?

If so, did the Surveyor examine the generators, motors, switchgear cables and fuses?

the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms?

The parts, when referred to by numbers, should be counted from forward. Auxiliary machinery should be referred to by position in Machinery Space.

Survey is not complete, state what arrangements have been made for its completion and what remains to be done.

DAMAGE stated to have occurred due to an explosion in the compartment causing the auxiliary lighting accumulators, on the boat deck at the aft end of the O.R. bin & light casing.

The compartment is of 3/16" steel w.t. construction approx. 5'-0" high x 7'-4" long (athwartship) x 2'-6" deep, the back plate being the aft plate of the O.R. casing, and there is an upper & lower section. The steel dividing plate forming the floor of the upper section is drilled with numerous 3/4" holes, hence both sections are common. At the port side near the top of the upper section there is a 4" dia. vent pipe with a goose neck and gauge wire mesh at its terminal end about 9'-0" high from the boat deck, and at the starboard side of the lower compartment there is a 4" dia. vent pipe commencing 2" above the boat deck level with goose neck & gauge wire at the terminal end 2'-0"

General Observations, Opinion, and Recommendation:—

(State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, etc.)

The machinery of this vessel as now seen is eligible in my opinion to remain as classed without fresh record.

Fee (per Section 23)

£

Damage or Repair Fee (if any)

£

(per Section 23.)

ing expenses (if chargeable)

£

Fees applied for,

19

Received by me,

19

Committee's Minute

TUESDAY 19 JAN 1954

ned

See Rot. Rpt. 4 p. 37/58

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation

002165-002173-0091 1/3

Insert Character of Ship and Machinery precisely as in the Register Book

In a certificate required? If so, to be sent to

M.V. "Lisbeth M"

High from boat deck level. Most of the gauge wire mesh was missing.

The compartment has two steel top doors (3'2" L x 3'0" wide x 3/16" thk.) & two steel lower doors, of same dimensions for access to the upper & lower rows of batteries respectively. The doors are steel hinged & made watertight by a hemp packing joint fitted in a channel & each door is secured by 5 steel survival clamps.

The nickel iron accumulators made by D.E.A.G. (Deutsche-Edison-Akkumulatoren Co. Hagen) are arranged in series giving 110 volts & 142 amp/hour & are fitted in wooden cases (5 accumulators per case) each accumulator is marked "D.E.A.C. TYPE T.N.E." The installation was fitted by A. De Hoop, N.V. Rotterdam. A fuse box is provided near the accumulator compartment - on the inside & at the top of the C.R. casing.

The wooden cases are constructed with solid bottoms & a top & bottom wood strip at sides and inset in the lower wood strip at each side is a composition washer which locates with a small circular nipple on the end of each accumulator and apart from the terminal connecting strip this is the only means of keeping the individual accumulators apart in the wood case. A number of accumulators were found displaced in their wood cases. It was also found that a number of the accumulators were bulged outward towards the top and some accumulators were in contact & that the light metal vent valves were blown from several.

Each accumulator was painted black externally. It was found possible to create a spark with a screw driver connected across two adjacent accumulator casings.

It was stated that the explosion took place at 1.20 p.m. on 23/11/1953 whilst the vessel was tied up at Tarmac wharf, Shoreham, and that the accumulators had then been charging for 4 1/2 hours. The charging is via a centre zero ammeter (charge & discharge) controlled by a hand operated switch on the main switchboard. It was also stated that the vessel had been in service only 5 weeks & that the batteries were last topped up with 9 pints of distilled water on 14/11/53.

Mr. Metcalf (owner) stated that a previous explosion occurred at Rotterdam prior to the vessel's trials, when all the accumulators were removed & examined by the electrical contractors (A. De Hoop). One cell only was renewed at that time.

M.V. "Liebeth M"

The auxiliary lighting installation was fitted by the Owners primarily for use at night & during week ends in port and in addition also provides power for the two small fan motors in connection with the oil fired galley and cabin heating stove respectively.

The following damage was caused by the explosion:-

Both top access doors to the compartment were severed from their hinges, the securing clamps distorted and the doors blown on to the wharf alongside the vessel.

Both lower doors were severed as above and blown along the deck. The accumulator compartment fractured in places at the welding and the fore end of the compartment (B.E. casing) distorted and deck below the compartment set down slightly & a fuse box cover broken. The port lifeboat found with five strakes damaged; keel & sternpost fractured.

It is suggested that the means of separating the accumulators in the wood cases is not sufficiently robust. The vent pipes as fitted are not considered large enough to provide effective ventilation of the compartment and larger hooded air pipes of oval or rectangular section might be fitted at each side of the upper & lower sections.

The installation is now out of use, the fuses having been removed and the Owners intend to communicate with Messrs A. De Hoop regarding the mishap.

J. W. Roberts.