

17 JUN 1960

Rpt. 9

Date of writing report 4/6-60
Survey held at Rubbestadneset.

Received London
No. of visits 4

Port Bergen
First date 4/4/60
Last date 3/5-60
No. 4728.

REPORT OF PERIODICAL SURVEYS & REPAIRS OF MACHINERY

No. in R.B. 23908 Name M.V. "NORSTRAUM"
Gross tons 191 Date of build 1892
Owners Eilif H. Slotvik, Partrederi Managers -
Port of Registry Brønnøysund.
Engines made 1943 By Wichmann Motorfabrikk A/L, Type Oil eng. 4 cyl. 2 S.C.S.A.
Refitted 1960. No. of Main Engines 1 No. of Screws 1
Records of Survey & Special Notations as per Register Book

No. of Main Boilers - W.P. -
No. of Aux./Donkey Boilers - W.P. -
Surveyed Afloat or in Dry Dock Both
Nature of Survey Fitting of reconditioned
Was Damage Report issued? - Int. Cert.? Yes.
Last Report (For Head Office only)

Hull	Machinery
B.S.	MBS
North Sea & European	ES 9/56
Coasting Service	MBS 9/58
SS 9/56 (Dr)	OG 8/58 N.
DS 7/59	

The condition of any of the following items is to be described as "good" only when the part has been examined, found or placed in good condition, and is considered to be acceptable until the due date of the next Periodical Examination. Where it is considered that re-examination or repairs should be effected before the due date of the next Periodical Examination a distinguishing mark thus † should be inserted against the item and the circumstances and action recommended described fully under "defects and repairs". At part or complete Special Surveys those items which are not applicable to the ship should be cancelled with a black line; this need not be done when the machinery is on a continuous survey basis. When any part has been subjected to pressure test this should be stated. Engine parts when referred to by numbers should be counted from forward.

Now.
Has a Survey also been held on Ship?
If so, is the Report sent now, or when will it be sent?

DOCKING Propellers good. Wear Down of Stern Bushes 0,8 mm Oil Glands good. Sea Connections -
Fastenings good. Has Screwshaft Tubeshaft been drawn? Yes Date of Examination 8/4/60 Has Shaft been changed? Yes.
Has Shaft now fitted been previously used? NO. Has Shaft now examined/fitted a continuous liner? no. Approved oil gland? Yes.

MAIN ENGINES (Recip. Steam or I.C.) PORT STARBOARD
1 Cyls., Covers, Pistons & Rods good.
2 Valves & Gears good.
3 Connecting Rods, Top Ends & CHUCKS good.
4 Crankpins & Bearings good.
5 Journals & Bearings good.

MAIN ENGINE DRIVEN AIR COMPRESSORS
6 Cyls., Covers, Pistons & Rods ✓
7 Connecting Rods & Top Ends ✓
8 Crankpins & Bearings ✓
9 Journals & Bearings ✓
10 Coolers & Safety Devices ✓

MAIN ENGINE DRIVEN SCAVENGE PUMPS
11 Cyls., Covers, Pistons & Rods ✓
12 Connecting Rods & Top Ends ✓
13 Crankpins & Bearings ✓
14 Journals & Bearings ✓
15 Levers ✓

SCAVENGE BLOWERS
16 ✓
17 SUPERCHARGERS ✓

MAIN TURBINES
18 Casings, Rotors, Blading, Bearings & Thrusts ✓

19 ~~STEAM TURBINES (WITH RECIP. ENGINES)~~
20 ~~STEAM COMPRESSORS~~
21 CLUTCHES & HYDRAULIC COUPLINGS good.
22 ~~REDUCTION GEARING~~
23 THRUST BLOCKS, SHAFTS & BEARINGS good.
24 INTERMEDIATE SHAFTS & BEARINGS -
25 HOLDING DOWN BOLTS & CHOCKS good.
26 ~~CONDENSERS (MAIN & AUX)~~
27 ~~STEAM REHEATERS~~
28 ~~OR SUPERHEATERS~~
29 STOP & MANOEUVRING VALVES good.
30 MAIN ENGINE DRIVEN PUMPS good. (Salt water cooling pumps)
31 CRANKCASE DOORS & EXPLOSION RELIEF DEVICES good. Have Main Engines been tested working and manoeuvring? Yes.

OPINION OF MACHINERY AND RECOMMENDATIONS
The machinery of this ship so far as now seen is in good condition, and eligible in our opinion to remain as classed with record of ES with date when the survey has been completed, and TS (OG) 4/60 New, and notation Engine made 1943 fitted 5/60.

Date of Committee TUESDAY 23 AUG 1960
Decision TSN 4,60
NE made 43 fitted 5,60.

Knut Olsen. L.O. Nordaas.
Engineer Surveyor to Lloyd's Register of Shipping

Knut Olsen. L.O. Nordaas.
Lloyd's Register Foundation

If certificate is required state where to be sent

27 Essential Independent Pumps (Identify by position).....
 33 Bilge, Ballast & Oil Fuel Suction Lines, Fittings & Controls Exd. in connection fitted new main engine - good.
 34 Have the remaining Piping Arrangements & Fittings in the machinery space been examined as considered necessary? for the new main engine - good.
 35 Fresh Water Coolers..... none..... 36 Lub. Oil Coolers..... none..... 37 Heaters (state service)..... none.....
 38 Independent Air Compressors, Coolers & Safety Devices.....
 39 Air Receivers & Safety devices—Main..... Both tested - good..... 40 Auxiliary.....
 41 Oil Fuel Tanks (Not forming part of hull structure).....
 42 Evaporators..... 43 Have Evaporator Safety Valves been tested under steam?.....
 44 Steering Machinery..... 45 Windlass..... 46 Fire Extinguishing Arrangements..... good.

AUXILIARY ENGINES (Identify by position).....

PROPULSION	ELECTRICAL EQUIPMENT		AUXILIARY EQUIPMENT
	PORT	STARBOARD	
a Generators			l Generators & Governors.....
b Exciters			m Motors.....
c Air Coolers			n Switchboards & Fittings.....
d Motors			o Circuit Breakers.....
e Air Coolers			p Cables.....
f Control Gear, Cables, etc.			q Insulation Resistance.....
g Insulation Resistance			r Steering Gear Generators and Motors.....
h Insulating Oil Test			s Navigation Light Indicators.....
i Overspeed Governors			
j Magnetic Couplings			
k Air Gap			

BOILERS OPENED UP & EXAMINED (Identify by position and state latest date of internal examination of each boiler)

MAIN	AUXILIARY, DONKEY or PRESS
Superheaters	
Safety Valves	
Mountings, Doors & Fastenings	
Safety Valves Adjusted to } Sat.	
} Spt.	
Boiler Securing Arrangements	
Main Economisers	Exhaust Gas Heated Economisers
Steam Heated Steam Generators	Steam Generator Safety Valves Adjusted to
Were Oil Burning System & Remote Controls examined working in accordance with Rules?	Forced Circulating Pumps
Have Saturated Steam Pipes in cylindrical boiler smoke boxes been examined as required by Rules?	Funnel

EXAMINATION & TESTING OF STEAM PIPES (State material)

Main	Auxiliary (over 3 in. bore)
Were Copper Pipes annealed?	Have Saturated Pipes in cylindrical boiler smoke boxes been tested?

PARTICULARS OF DEFECTS & REPAIRS, ETC. (Damage repairs should be detailed separate from wear and tear repairs; state what action has been taken regarding items which are subjects of class)

It is alleged this ship sustained damage to the main engine, crankshaft, due to the propeller touched some underwater object. The crankshaft found broken in way of crankweb no.3. The existing main engine has been removed and a reconditioned oil engine of type 2 SC. SA, 4 cylinder, semidiesel engine, supplied and now fitted by the builder, Wichmann Motorfabrikk A/L, Rubbestadneset. The previously used parts of the engine have been constructed to the requirement of Det Norske Veritas.

The now fitted reconditioned main engine has been completed opened up, overhauled as necessary, examined and found satisfactory.

Particulars of the engine are as stated in the London letter of 3rd May 1960 and in accordance with the approved plans.

Following renewals and repairs carried out to the above engine:

All cylinders, covers, pistons with top ends, and crankshaft, and parts of the thrust, have now been renewed.

All cylinders, covers and both silencers have been tested by hydraulic pressure and found sound and tight.

The crankshaft has been examined in finished condition and found

LEAVE THIS SPACE BLANK

Survey fees ... Kr. 700,-
 Damage fee
 Expenses... .. " 200,-
 Date when A/c rendered... 4/6/60.



17 JUN 1960

Rpt. Contⁿ. Sheet
 Port of Bergen. Continuation of Mch. Report No. 4728. dated 4/6-60.

on the S.S./M.S. "NORSTRAUM".

good. The shaft has been manufactured by A/S Fredriksstad Mek. Verksted, Fredriksstad and found marked: N.V. 8260. l.l. 27/8-58.

All main- and bottom end shell bearings have now been renewed.

Thrust shaft with SKF thrust and the other parts have been examined and found good.

The thrust shaft found marked: N.V. 152. 12.12.1940. and S-K 25.9.1946.

All 4 connecting rods of cast steel, which have previously been used, now examined and found good. Found marked: N.V. 202,211,212 and 662.

Both silencers previously used, now tested by hydraulic pressure and found sound and tight.

Both existing starting air receivers have been examined and tested, and found good.

The Screwshaft has been renewed of L.R. tested material: Found marked: L.R. 851 2/3-54 and now marked: L.R. Bgn. 20.4.1960 L.O.N. Copy of certificate attached.

Sternbush liner renewed of cast iron - good.

New Cederwall sternbush gland fitted, examined and found good.

Flange coupling forend of tailshaft made of cast steel, examined and found good.

A previously used 3 bladed cast steel propeller has now been bored out and fitted.

The propeller has been hammer tested and found good and free from defects, and found marked: S-K 5.9.1952.

The existing main engine seating has been altered in accordance with approved plan, examined and found satisfactory.

The reconditioned main engine was subsequently tested in accordance with the Rule requirements and found satisfactory.

A notice board fitted barring speed above 350 RPM and engine governor set to 355 RPM.

Wittelsen

