

Rpt. 9A

REPORT OF MACHINERY SURVEYS AND REPAIRS
(ENGINES AND AUXILIARIES)

2 JUL 1963
Received London

part or complete. Special Surveys those items which are not applicable
to a ship are to be cancelled; this need not be done when the machinery is
continuous survey basis. When any part has been subjected to pressure
this should be stated. Engine parts when referred to by numbers should
be counted from forward.

described fully under "objects and repairs".
Where repairs have been effected or it is

Ship's Name ~~SS/MS~~ "MOBIL RADIANT" Gross tons 17598
 Is there a rpt. 8? No Port DURBAN Rpt. No. 10346
 No. of visits 5 First date 22-6-63 Last date 24-6-63
 Interim Cert. issued & copy herewith? Yes Damage rpt. issued & copy herewith? No Last rpt. (H.Q. only) PIR. 10212
 Date of completing rpt. 26-6-63 Surveyed at, if different from Port above -
 Is a rpt. 9B attached? No MN 2750 Nature of survey Dam. Rprs.
 Survey fees R40 - 00 Damage fee Expenses R 7 - 45
 S.A. fee R12 - 00

14 JUL 1963

MAIN ENGINES, RECIPI., STEAM OR I.C. (State Port—P or Starboard—S)

- 1 Cycls., covers, pistons & rods
- 2 Valves & gears
- 3 Con. rods, top ends & guides centre Side
- 4 Crankpins & bearings centre Side
- 5 Journals & bearings

MAIN ENGINE DRIVEN AIR COMPRESSORS (State Port—P or Starboard—S)

- 6 Cycls., covers, pistons & rods 7 Con. rods & top ends
- 8 Crankpins & bearings 9 Journals & bearings
- 10 Coolers & safety devices

MAIN ENGINE DRIVEN SCAVENGE PUMPS (State Port—P or Starboard—S)

- 11 Cycls., covers, pistons & rods 12 Con. rods & top ends
- 13 Crankpins & bearings 14 Journals & bearings

MAIN TURBINES (State Port—P or Starboard—S)

- 15 Casings, rotors, blading, bearings U thrusts
- 16 Reduction gearing
- 17 Scavenge blowers
- 18 Superchargers

I recommend that the machinery of this ship remain as classed ~~with~~ without fresh record of survey, subject to the outboard auxiliary turbine being specially examined and dealt with as necessary at next drydocking and in any case before the end of June, 1964; also subject to any other conditions which may be attached to the ship's class being dealt with as previously recommended.

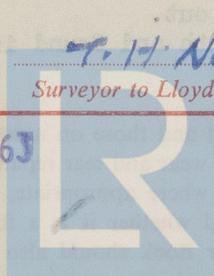
(Where conditions of class are recommended to be retained, imposed, amended or deleted, particulars must be stated above and on the interim certificate.)

Date of Committee MONDAY 15 JUL 1963

Minute As now subject

Write Over

Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation

010274-010281-0089 1/2

ALSO FOR

SPL FOR

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HEADER

CERT

20	Exhaust steam turbines (with recip. eng.)	21	Thrust blocks shafts & bearings
22	Steam compressors	23	Intermediate shafts & bearings
24	Clutches & hydraulic couplings	25	Condensers (main & aux.)
26	Steam re-heaters	27	Air ejectors (main & aux.)
28	De-superheaters	29	Forced &/or induced draught fans
30	Stop & manoeuvring valves	31	Holding down bolts & chocks
33	Main engine driven pumps	32	Detuner or vibration damper
34	Crankcase doors & explosion relief devices	35	Have main engines been tested working & manoeuvring? (To be done on completion of ES or CS cycle)
36	Essential independent pumps		
37	Bilge, ballast & oil fuel suction lines, fittings & controls	38	Have the remaining piping arrangements & fittings in the machinery space been examined as considered necessary?
39	Fresh water coolers	40	Lub. oil coolers
41	Heaters (state service)	42	Feed water filters
43	Auxiliary air receivers & safety devices	44	Starting air pipes
45	Main air receivers & safety devices		
46	Independent air compressors coolers & safety devices		
47	Oil fuel tanks (not forming part of the hull structure)		
48	Have all evaporators safety valves been tested under steam?	49	Evaporators HP & LP
51	Fire extinguishing arrangements	50	Distillers
		52	Steering machinery
		53	Windlass

AUXILIARY ENGINES

PARTICULARS OF DEFECTS, REPAIRS, ALTERATIONS, ETC.

It was reported that whilst the outboard electrical generator was under load the turbine driving the generator suddenly developed slight vibration and a split pin in the fulcrum pin, for the governor control to steam valve lever, worked out and as a result the fulcrum pin became dislodged and the governor steam valve was allowed to open fully the turbine overspeeded and developed serious vibration.

On examination of the turbine rotor blading it was found that the leading row of the 3rd expansion, i.e. 5th row from HP end, was seriously damaged. about 1/3 being broken the remaining blades slack. It was also found that the carbon glands had seized on rotor shaft, this it was stated caused the initial vibration.

THE FOLLOWING NOW DONE.

Defective row of blades cut out.
Rotor tried in lathe for truth and found in order.
Rotor balanced dynamically.

The reason for repairs must be stated and those on account of damage, the alleged cause of which must be given should be detailed separately from wear and tear repairs. State what action has been taken regarding items which are subjects of class. State also where appropriate, for the information of the Technical Records Dept., the material of the defective item and whether it is a forging, casting or welded fabrication. Any alterations to existing particulars in the Register Book should also be reported above.

DA (cont.)

Ship's Name SS/~~MS~~

"MOBIL RADIANT"

Port DURBAN

Rpt. No. 10346

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All other rotor blading examined, hammer tested and found in order.
All gearing examined and found in order.
All stationary blading, nozzles and casing examined and found on order.
Governor gear overhauled and good fitting pins and split pins fitted in governor actuating gear.
Generator armature and windings checked for damage, mechanical and electrical found in order.
Carbon glands renewed and adjusted.

On completion of repairs generator tried under loaded conditions and turbine and generator found in order.

Governor and overspeed trip checked and found in order.

It is recommended that this turbine be specially examined at next drydocking but in any case before the end of June, 1964. (12 months limit).

T. H. Noel



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