

Machinery of the M/TANKER "TIBIA"

Cont.

The new dynamo is secured by an automatic circuit breaker adjusted thus: Direct trip 300 A - Timerelease 450 A in 10 sec.

After fitting the new set has tried under working condition with satisfactory results.

The following auxiliaries as listed below have been opened out, examined and found or brought in good condition:

General service pump - (Duplex) - Stand by lubr. oil pump (Duplex) Fuel oil transfer pump (Duplex) - Both fuel burning pump (Duplex) - Auxiliary Boiler feed pump (Duplex) and Steam driven generating set

F.O. Daily service tanks examined and found in good condition Evaporator casing and heating coils examined and found in good condition. Heating coils tested with satisfactory results

Both F.O. heaters examined and found in good condition. The heating coils have been tested with satisfactory results

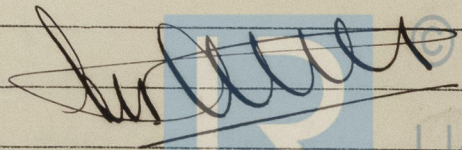
Upper main starting air receiver examined internally and externally and found with mountings in good condition

NOTE: The auxiliary starting air receiver has been removed. Starting air for the new installed motor generating set is taken from the main starting air system.

Electric equipment examined i.e. generators, motors, main switchboard, sub boards, fuse panels, cables, switchgear, fittings and other appliances and found or brought in efficient condition. Minor repairs were carried out. The electric installation has been megger tested and tried under normal load with satisfactory results.

Both donkey boilers examined internally and externally and found in good condition. Safety valves and mountings opened out, examined and found or made in order. Donkey boilers afterwards tried under steam and found with the F.O. burning and in a good working order. The safety valves have been adjusted. Steam pipes examined and tested with satisfactory results.

On completion of the conversion and survey the main engine has been tried on H.V.F. for several hours under full load and found working satisfactorily.



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No. 9 cylinder liner, extension piece and cylinder cover renewed

Attached main engine T.C.W. and surcharge pumps opened out examined and found in good condition.

MAIN ENGINE CONVERSION FROM DIESEL OIL TO HIGH VISCOSITY FUEL (H.V.F.)

Arrangements have been made for running the main engine on H.V.F. The fuel valves have been fitted with "Wilson and Kyle" atomisers, this being the only alteration in organic respect to the engine.

The fuel to be used is supposed to have a viscosity of 1500° Redwood at 100°F. while the temperature at the fuel valve needles is to be kept at 180°F.

A plan of the fuel oil heating and purifying arrangement is forwarded herewith for guidance.

For this arrangement are newly fitted:

- 1/ A purifier and a clarifier both of the "DELAVAL" type with transfer pumps attached.
- 2/ 2 F.O. heaters "Gurney Bros Everclean" type (being former marked Ployet Test 450 lbs. M.S. 2297/2298 16-5-52)
- 3/ A F.O. suction filter and a "Autoclean" Duplex filter
- 4/ A heating system for M.E. fuel valves (for manoeuvring only) consisting of a hot well (the water being heated by steam injection) and a hot fresh water circulating pump (electric driven "Mona" type). At sea when running full speed the system is out of action, the fuel valves being cooled as usual from the general cooling line.
- 5/ Steam heating coils (50% $\frac{1}{2}$ in) are fitted in forward F.O. Deptanks (Panel 3) and in the F.O. crossbunkers (Panel 3) Same tested after fitting with satisfactory results.

The H.V.F. settling tanks have their existing heating coils. In addition a F.O. drain tank and a sludge tank have been fitted.

NOTE: It will be observed from the plan that the Main Engines can be changed over on Diesel oil instantaneously.

FITTING A NEW 40 K.W. MOTOR GENERATOR SET

The existing 20 KW motor generator has been removed and replaced by a new one, consisting of:

A Ruston and Hornsby engine Type 6 V.P.H.Z. No 332043

A "Campbell" and "Islerwood" generator rated 40 KW. cont. comp. wound No 47729.

A copy certificate of the set has been requested and will be forwarded when received.

The generator being connected to the existing panel of the switchboard with:

Main cables 4 x 1 x 150 mm^2 (Steel wire braided lead cable)

Shunt cables 2 x 6 mm^2

The dynamo (The new one and the existing steam dynamo) are not arranged to run parallel, a change over switch being fitted.

Please see continuation sheet.