

For LMC etc. - Salt water cooling pump (aux.)
 Fresh water cooling pump (aux.)
 Both L.O. pumps
 O.F. transfer pump
 Feed water pump and injector
 Both L.O. coolers
 1 main and 1 aux. fresh water cooler
 All (4) air receivers and mountings. All steam pipes (tested). Cascade tank.
 Valves, cocks, pipes and strainers of pumping arrangement
 Electrical installation
 Windlass, steering gear and capstan
 Both O.F. daily service tanks.

For DBS Donkey boiler examined internally and externally, together with its mountings, manhole doors and their fastenings. Safety valves adjusted under steam to the above stated pressure. O.F. burning appliances examined under working conditions and found good. Fire extinguishing arrangement verified. Control rods checked.

Machinery Repairs (Owners' Account)

P&S main engines and auxiliary machinery completely dismantled and re-assembled.
 3 cylinder covers renewed, all other covers dressed and hydraulically tested.
 All fuel injection valves renewed, all other valves dressed.
 P. main engine No. 8 cylinder jacket, one crack metalocked. (tested)
 P&S ME - all pistons dressed, all piston rings and all gudgeon pins and bushes renewed
 All connecting rod palms and all top surface of crank pin bearings machined flat.
 4 crank pin bearings re-metalled. All other bearings dressed and adjusted.
 P&S crank- thrust- and intermediate and screw shafts examined in lathe, for truth.
 All coupling flanges and both thrust shaft collars machined flat.
 All thrust and intermediate shaft journals machined true, all thrust and intermediate shaft bearings re-metalled. All coupling bolts renewed.
 All moving parts and P&S crank and straight shafting re-aligned.
 P&S main engine bed plate chocks and holding down bolts renewed.
 P&S main engine driven scavenge pumps thoroughly overhauled, 500 scavenge valves renewed
 P&S stern tubes re-bored for alignment, P&S stern bushes (forward and aft) renewed.
 Aft oil gland rings renewed, forward rings dressed.
 P&S screw shafts renewed (Forging Rpt. attached). Existing starboard screw shaft machined true and placed on board as spare.
 P&S attached L.O. pumps, gear wheel shafts and bushes renewed.

Auxiliary Machinery

P. forward and aft auxiliary engines: All cylinder covers, valves, liners and pistons dressed, all piston rings renewed, all camshaft bearings re-metalled, all crankshaft main and bottom end bearings adjusted.

S. forward auxiliary engine, all cylinder covers, valves, liners and pistons dressed all piston rings renewed, all camshaft bearings and all crankshaft main and bottom end bearings re-metalled, crankshaft pins and journals ground.

S. aft emergency auxiliary engine and generator (10 KW) renewed by one 2 cyls. 4 S.O. Deutz engine, No. 1377751-52, Type F2M 417, HP. 24, N = 1000 and one 16 KW DC generator Makers: Hans Still, Hamburg, No. 515693, Type GA 230 GK/42, 230 V, 69.5 A, n = 1000

Note: Owing to difficulty in getting a Lloyd's Register tested oil engine from stock, the Owners have decided to take the above mentioned oil engine, which has been tested by G.L. The engine has been opened out and examined, the cylinders and covers hydraulically tested to 10 ATM and the crankshaft brinell tested and all found in good order.

Both starting air compressors, all piston rings renewed, all crosshead pins and bearings renewed, both crankshafts machined, crank shaft bearings re-metalled, 2 complete suction valves and all valve springs renewed.

All air coolers tested, gear wheels and shafts of attached salt water cooling pumps and salt water cooling pump (main) impeller shaft, sealing rings and bushes renewed.

Fresh water cooling pump (main) impeller and shaft machined, sealing rings, bushes and ball bearing renewed.

Salt water pump (aux.)
Fresh water pump (aux.)) impellers, impeller shafts, sealing rings, bushes and ball bearings renewed.

Bilge and ballast pump and general service pump impellers and shafts machined, sealing rings and bushes renewed, impellers of self priming parts renewed, housings machined

Both L.O. stand-by pumps, gear wheel shafts renewed, neck bushes and glands re-bushed

O.F. transfer pump spindles and bushes dressed.

Sanitary pump impeller shaft, sealing rings and bushes renewed.

Feed water pump piston and bucket rods machined, neck bushes and glands re-bushed, piston and bucket rings renewed, valve chest dressed.

Main and auxiliary fresh water coolers tested.

Both L.O. coolers tested

All O.F. and L.O. filters tested, 2 L.O. filter casings renewed.

All (4) starting air receivers, a number of leaky rivets and seams caulked, all receivers hydraulically tested on completion.

P&S daily service tanks have been renewed in accordance with approved plans Nos. SKR and MR 3422, dated 3.9.53.

A number of bilge and ballast lines renewed, all pipes and valve chests of pumping arrangement overhauled and hydraulically tested on completion of repairs.

Windlass and steering gear thoroughly overhauled. Telemotor with steering wheel on bridge and telemotor lines to steering engine entirely renewed and tested.

Sundry minor repairs effected.

Main and auxiliary machinery including pumping arrangement, windlass and steering gear examined under working conditions on completion of repairs and left in good order.

Electrical Installation - All motors and dynamos have been re-wound and tested in accordance with Rules requirements with satisfactory results. The switchboard, all control gears, cables and fittings throughout the vessel have been renewed in accordance with approved plans No. MKE 815 and 817, dated 10.8.53 and MKE 821 dated 28.8.53, which are attached, together with the new Rpt. 13, No. 913, which cancels the existing Rpt. 13, No. 72960.

Boiler Repairs A number of smoke tubes expanded. Circumferential seam (top) and a number of rivets caulked. Donkey boiler hydraulically tested on completion and left in good order.