

FMB0959 – Tug



General

Built: 1959 by
Builder: T. Mitchison of Gateshead
Construction: Steel
Classification: New MCA Loadline Certificate
Bollard Pull: 22 T

Dimensions

LOA: 32.60m	GT
BRD: 8.51m	NT:
DFT: 3.53m	DWT:

Power

Main Engine: British Polar Diesel Engine Type- M46M 1364BHP at 320 rpm.
Original Auxiliaries: Lister x 2* JP4 46BHP at 1200 rpm, Harbour Set Lister (reduced to 1500 rpm) ST2 14.6BHP at 1800 rpm, Fi-Fi Set Detroit Diesel x 2 6-71LA24M. Alternator (65kva) Perkins 6354, Alternator (27kva) Ford 2712E, Alternator (40kva) Perkins LD50317. Engines marked * have water cooled exhausts. The original auxiliaries are no longer used to supply electrical power - they are used to power a GS pump and three compressors, which do not require their rated power.

Electrics: 440v.

Other information

7 Tons Fresh Water. This can be increased by using ballast tanks
50 Tons Fuel plus fuel transfer capabilities

Summary of Works carried out:

MAIN DECK LEVEL

Damaged bow section renewed incorporating a push fender, strengthened bit and fair-lead, with access platform.

The fore peak tank vent and fill pipes and tank top studs were also renewed.

The old anchor windlass was replaced and re-sited with new spurlin pipes and chain locker access hatch.

Obsolete Fi-Fi lines were also removed being corroded.

Deck vents and fill pipes have been replaced as required and new gauzes, plug chains self closing balls and caps supplied.

The bottom of the housing by way of the entrance doors to aft stores and engine room were renewed.

Water-tight doors were installed to replace the recessed wooden ones originally there.

Wooden doors to the outer stores and toilet were removed and replaced with steel ones (single latch twin hinges with foam rubber seals).

Engine room access door from main deck moved to entrance and changed to water tight door. The porch area was sealed off on the starboard side and opened up on the aft providing a sheltered storage and access.

The towing hook was removed and a winch installed on its platform.

The rope store access hatch has been removed and replaced with a bolt on flush deck top sealed with a rubber gasket.

Damaged steelwork on the starboard quarter renewed and old solid rubber fendering removed all round. New stern fendering installed on the stern and aircraft tyre fenders along the sides.

Pitted steel on top of steering flat renewed.

New flush access hatch to steering flat.

Bulwark drain flaps removed and grids or bars replacing them.

Bolt holes and such-like in casing plugged as they are found.

Bulwark stanchions some renewed and some repaired.

Cracked port light glasses renewed and new seals on port lights.

BRIDGE DECK LEVEL

Galley sky-light removed and plated over.

Hand rails renewed.

Hand operated davits replaced with two hydraulic cranes, each of which can be powered from either the engine room or the engine driven pump.

Self contained engine driven hydraulic power pack installed.

Wasted vents removed or renewed with fire flaps as required.

LSA mounts replaced or refurbished as required.

New deck flood lighting installed.

Wasted deck edging renewed.
Engine room sky light glasses removed and replaced with steel plate.
Engine room sky light refurbished and new gaskets installed.
Windows installed port and starboard side of bridge, where old nav light boxes were.
Old nav light boxes refurbished where corroded.
Bridge flooring lifted and wiring/plumbing and steel work checked and made good.
Side lights moved to bridge top.
New battery box and batteries installed.

BRIDGE TOP AND MAST

Nav lights refurbished or renewed as needed, including wiring, plugs and sockets.
New side mast installed for red/white/red lights.
Hand rails refurbished or renewed.
New beds for life rafts fitted with extended frame to clear side of tug.
New access ladder with platforms fitted from bridge deck to near top of mast.
New flood lighting installed.
New radar scanner platforms made.
New bracketing for navigation equipment as required.

BRIDGE

Two radars installed.
DCS VHF installed.
GPS unit installed
Chart plotter installed.
GPS compass installed.
Fwd looking echo sounder installed.
Nav light board checked and repaired as required.
New lighting including emergency installed.
New seating , steering platform , consol , chart table , look-outs seats and desk.
New loud hailer system installed.
New 220/24 Volt distribution board installed.

ACCOMMODATION and GALLEY

New lighting, TV sockets, power points installed all cabins and messes.
Galley fully re-furbished.
Decks part concreted to compensate for large camber and thresholds.
Two modern electrical distribution boards installed.

ENGINE ROOM

220 Volt DC system removed including obsolete wiring and switch-board. New or replacement motors as needed.
Central heating/hot water burner and circ pump replaced with AC units.
Port starting air compressor over-hauled.
Harbour set engine renewed.
All sea suction and over board valves stripped and refurbished as required.
All pipe work inspected and renewed where necessary.

Fuel and Day tanks cleaned (by contractor). Fore peak, No 1, Cofferdam fwd, No 5 P&S and Aft peak tanks checked.

Deck plating and support renewed where necessary.

Original rope store converted to 415 Volt generator room with access to engine room through a water tight door. This room has independent ventilation and fuel shut off from outside it.

Starboard engine driven GS pump replaced by slightly larger electrically driven one.

Starboard DC generator removed and an extra starting air compressor put in its place.

New stator to emergency oil pump.

Various minor repairs to equipment.

New electrical distribution system with 95% approx modern cabling (marine grade).

Bilges cleaned as possible by ship's crew (ongoing).

New lighting systems installed in addition to original.

Emergency three hour lighting installed through-out the vessel.

Cover plate made to fit main engine silencer where old lagging was missing. Rock wool used as replacement insulation.

New deck plating in entirety in generator room.

Replacement hydraulic pump and required pipe work for windlass and cranes installed.

Obsolete equipment and pipe work removed.

Main engine test run, sump tank entablature and bed plate cleaned.

HULL

Cleaned and pressure washed 2006. Plating renewed where required.

Stern seal checked-no leakage after two to three months.

Barrier coat and anti-fouling applied.

New anodes to hull and sea suction.

All sea chests and gratings cleaned with new anodes installed.

New transducer installed for echo sounder/sonar.

Though this looks like an exhaustive list it has been done from memory and does not cover all the work done to the vessel. A boilermaker, platter, electrician and engineer marine along with a permanent seaman have been working on her for most of the time.

Vessel has recently been docked, with new MCA Loadline and Bow Thruster.