



BMSUK (Oxon) Limited
Marine Surveyors & Consultants

Traditional Stern Narrowboat 57 ft
"Libran Legacy"



BMS Marine Survey

Pre Purchase Survey Of the Vessel [:Vessel Name:]

"Libran Legacy"

Traditional Stern Narrowboat 57 ft

CONDUCTED BY

MJ Wiater AMYDSA MIIMS

BMSUK (OXON) LIMITED

PREPARED FOR

C. Smith

2nd December 2020

2 INTRODUCTION

PURPOSE & SCOPE

The attending Surveyor attended aboard the 2004 Burton Narrow Boats Traditional Stern Narrowboat "Libran Legacy", at the request of C. Smith, beginning 2nd December 2020. The Survey was requested to determine the physical condition of the vessel. No reference or information should be construed to indicate evaluation of the internal condition of engines, transmissions, drives or generators, nor the propulsion system's or the auxiliary power system's operating capacities. Electrical and electronic equipment was powered up and some electrical equipment may have been tested for basic and/or limited function only. The wiring was inspected where accessible and was found to be in generally serviceable condition, unless otherwise noted. A significant amount of wiring could not be observed due to the wiring looms and conduits that transit areas which would require dismantling and removals for their inspection. If a detailed report as to the condition and capacities of the wiring and electrical components is desired, it is recommended that a qualified and Certified Marine Electrical Engineer be engaged. Vessel tankage was visually inspected where accessible. No obvious leakage was observed, unless otherwise noted; however, the tanks were not confirmed to be full at the time of inspection. If a more thorough assessment is desired, the tanks should be filled and checked under full tank status or pressure tested to attest to their condition.

The vessel was Surveyed without the removal of any parts, including fixed partitions, fastened panels, fittings, headliners & wall-liners, heavy furniture, tacked carpeting or other fixed flooring material, appliances, electrical equipment or electronics, instruments, anchors line & chain, spare parts, personal gear, clothing, miscellaneous items in the bilges, cabinets, lockers or other storage spaces, or other fixed or semi-fixed items.

Only installed items were inspected, including but not limited to enclosures, covers and tops. Locked compartments or otherwise inaccessible areas would also preclude inspection. The client is advised to open up all such areas for further inspection. A visual inspection was conducted only on accessible structures and no destructive testing was performed. Naval architecture and engineering analysis were not a part of this Survey.

Furthermore, no determination of stability characteristics or inherent structural integrity has been made, and no opinion is expressed with respect thereto. Complete compliance with, identification of, and reporting on all standards, codes and regulations is not guaranteed. This signed report represents the findings of the Survey and supersedes any and all conversations, statements and representations, whether verbal or in writing. This Survey Report represents the condition of the vessel on the above date or dates and is the unbiased opinion of the undersigned, but it is not to be considered an inventory, warranty or guarantee, either specified or implied.

The Survey Report is for the exclusive use of the client and those lenders and underwriters that will finance and insure the vessel for this client only, and is not assignable to any other parties for any purpose.

Completed by Mark Wiater on behalf of BMSUK (Oxon) Ltd. No unusual limitations affected the survey apart from those mentioned in the text. The vessel was found in a covered dry dock which partially restricted access to the vessel.

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CONDUCT OF SURVEY

This survey was carried out under BMSUK (Oxon) Limited standard terms of business (TOB) 2020.

The survey was commissioned by the above for the purpose of establishing the condition of the vessel for purchase purposes on the date of survey. Unless otherwise stated, the vessel was not surveyed for compliance with any build standards or operational codes of practice or local licenses. The vessel has also not been surveyed for suitability for any particular purpose or location. This survey report is a factual statement of the surveyor's examination as carried out and his opinion given in good faith as to the relevance of disclosed facts and defects so far as seen. It implies no guarantee against faulty design or latent defects.

LIMITATIONS

Areas inspected were limited to openings and access available during normal operations and maintenance of the vessel. No fastenings or skin fittings were pulled, or joinery and head linings removed. Materials used in the construction were tested as far as was possible by industry standard Non-Destructive Test (NDT) equipment as stated within report.

The vessel was initially examined afloat and then ashore at Lea valley Marina. The narrow boat was supported at ground level on wooden supports making any inspection of the base (bottom) plate impossible.

No opinion could be made or responsibility undertaken for condition or defect of those aspects of the vessel not accessible or evident due to the above limitations.

Methods

Visual examination and hammer sounding are utilised for initial inspection and to determine the construction of the vessel and the vulnerable areas which require more detailed and dense sampling. The thickness of the steel is measured with a Tritex 5600 multigauge 2.25 MHz, 13 mm 10mm twin crystal probe. Pit depth is measured with a digital depth gauge. All instruments are zeroed prior to taking readings.

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DEFINITION OF TERMS

The terms and words used in this report have the following meanings as used in this Report of Survey:

APPEARED:

Indicates that a very close inspection of the related item was not possible due to constraints imposed upon the Surveyor (e.g. no power available, inability to remove panels or requirements not to conduct destructive testing, etc.).

SERVICEABLE:

Fulfilling its function adequately (usable at the time of Survey).

READILY ACCESSIBLE

Means capable of being reached for operation, inspection or maintenance without removal of any vessel structure or use of any tools or removal of any item of portable equipment stowed in places intended for storage such as lockers, drawers or shelving. {Source: ISO 10088 E}.

ACCESSIBLE

Means capable of being reached for operation, inspection or maintenance without removal of any vessel structure (Note hatches-are not regarded as permanent vessel structures in this sense even if tools such as wrenches or screwdrivers are needed to open them. Hatches for inspection or maintenance of fuel tanks may be covered by uncut carpet , provided that all tank fittings can be inspected and maintained via other openings. {Source: ISO 10088 E}.

POWERED UP:

Power was applied only. This does not refer to the operation of any system or component, unless specifically indicated.

USE OF "A", "B" or "C":

Use of the letters "A", "B" or "C" in the body of this report will indicate that a finding will be listed in the "Findings and Recommendations" Section pertaining to the lettered item. PLEASE BE ADVISED THAT SOME DEFICIENCIES, OBSERVATIONS AND SUGGESTIONS MAY ALSO BE CONTAINED IN THE BODY OF THE REPORT.

The number of asterisks in this General Information section refers to the source of related information as follows:

- * Owners/Bookers Information.
- ** Per Manufacturer's Documentation
- *** Per Registration Documentation
- **** Information found onboard

Unless specifically noted otherwise, there were no measurements or calculations performed during the Survey. The specifications listed within the report are believed to be correct; however, accuracy is not guaranteed. Recommend obtaining accurate measurements and performing calculations as desired, or verifying all vessel specifications and capacities with the vessel's builder.

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SURVEYOR NOTES

TRIAL RUN COMMENTS

A trial run was not performed during the Survey inspection.

OUT OF WATER SURVEY

The underwater hull was pressure cleaned prior to inspection so my conclusions are based on the evidence presented by selected and random sample areas scraped clean for inspection and measurement.

ELECTRICAL SURVEY

AC and DC power was used to power up the electrical systems specified in this report only, unless otherwise noted.

HIN

The vessel's HIN (Hull Identification Number) was not verified during the Survey inspection (see HIN Compliance).

ENGINE SURVEY

The engine was inspected visually only. It is highly recommended and understood that all propulsion & auxiliary power systems (engines, transmissions, gears, drives, generators) be inspected by their respective Manufacturer's Certified Technician to determine their condition.

ULTRASONIC TESTING

An Ultrasonic Metal Thickness Audio Gauging was performed on the vessel's hull bottom below the waterline, decks, cabin and keel, using a Tramex 560 Ultrasonic Thickness Meter. All readings obtained, verified the steel plating thicknesses to be of their original milled thickness in the areas measured. No recommendations have been made to perform any service to the vessel's steel structures.

GENERAL RECOMMENDATIONS

It is highly recommended that the buyer spend an adequate amount of time aboard with the vessel's owner or captain, in order to learn important details specific to the vessel, and also be educated about any unconventional or complicated system installations or complex electronics/electrical configurations & operations. Special consideration should be given to details regarding periodic maintenance schedules, basic & complex systems operation, vessel maneuverability and any safety concerns.

3 GENERAL VESSEL INFORMATION

TYPE OF SURVEY REQUESTED

Pre-Purchase for Buyer

DATE AND TIME OF SURVEY

2 nd December 2020

VESSEL TYPE

Traditional Stern style narrow boat.

VESSEL BUILDER

Burton Narrow Boats

MODEL YEAR

2004

CRT NUMBER

512523

RCD PLATE DETAILS

Cat,:D

YEAR BUILT

2004

VESSEL MATERIAL

Steel

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LENGTH OVERALL (LOA)

Measured approximately 57 ft.

BEAM

6' 10"

DRAFT

Measured approximately 2'8

LOCATION OF SURVEY INSPECTION

Aylesbury Canal Society. Circus Field Basin, HP20 1AP

LOCATION OF BOTTOM INSPECTION

Ashore in covered shed.

PERSONS IN ATTENDANCE DURING SURVEY

MJ Wiater, client and vessels representative.

WEATHER CONDITIONS PRESENT

Dry in covered shed.

GLOSSARY

DEFINITION OF TERMS

Accessible Capable of being reached for operation, inspection or maintenance without removal of permanent boat structure.

Anti-cavitation plate A plate fitted flush or almost flush to the counter plate to cover the weedhatch aperture.

At Risk An installation which, if operated, may lead to a situation which could create a risk to life or property.

Average plate thickness The calculated steel plate thickness as a mean of a number of readings.

Chine The joint between the hull side and hull bottom. There may be several chines, depending upon the hull design.

Cratch board A vertical frame, normally triangular, fitted to the fore deck to provide support for covers.

Counter The stern section of a vessel, where the underwater section reduces in beam to allow water to flow to the propeller or rudder

Counter plate Flat plates, extending outboard of the swim. Also known as uexter plates

Dolly A round bollard used for mooring.

Extending heel An extension to the bottom below the propeller to support the rudder. Often known as a skeg.

Galvanic corrosion. Pitting caused by stray electric currents.

Gunwale The top edge to the hull top side.

Knee Internal support framing for the hull side, generally vertical. In some craft it may extend to also support the bottom plate.

Nominal The basic manufactured dimension. Due to manufacturing techniques, the actual dimension may be larger or smaller, within appropriate tolerances.

Overplate Plating fitted on top of the hull plate.

Readily accessible Capable of being reached for operation, inspection or maintenance without the use of tools.

Residual plate thickness The calculated steel plate thickness, after considering the deepest pit measured and the average plate thickness.

Rudder Post A steel bar connecting the rudder blade to the tiller.

Rudder post tube A tube fitted between the counter plate and deck for the rudder post to pass through

Sacrificial strip An extension of the bottom plate to provide protection and a wear edge for the bottom weld.

Scantling The size and location of structural members and plating.

Swim The section of the hull side to the stern of a narrow boat that reduces in beam to allow water to flow to the propeller.

Skin tank A steel tank fitted to the internal hull, with at least one face being the hull plating. The tank contents are cooled by the external water via the hull plating.

Stringer Internal support framing for the hull side or bottom, generally running fore & aft.

Tiller A steel bar used for steering.

Taff rail A safety rail round the back of the steering deck.

Topsides The upper section of the hull side.

Turn of the swim The position on the hull where the side plating starts to bend towards to centre of the craft to form the swim.

Turn of the bow The position on the hull where the side plating turns in to the bow.

Transom. Flat plate extending across the back of the boat.

Ultrasonic meter A hand-held electronic device with a small probe that indicates material thickness by recording the speed of sound through the material.

Weedhatch An aperture directly above a propeller, enabling removal of debris from the propeller.

4 HULL INSPECTION & UNDERWATER EQUIPMENT

HULL COATINGS

The hull has been previously coated with a coal tar or bitumen coating. The hull was to be reblacked prior to launch.

ANODES

The vessel featured 2 pairs of cast magnesium sacrificial anodes fitted to the hull side shell by way of welded straps which hammer tested serviceable. Both set of anodes were estimated as new.

Note: Cast magnesium sacrificial anodes on steel narrowboats in fresh water help to protect only a limited area around each anode with little or no benefit to the majority of the underwater hull.

FINDING B-1

WEED BOX

The weedhatch extended through the counter plate above the propeller. The weed hatch top was barely an acceptable height above the waterline. (150mm above the counter plates.) The weedhatch top and mechanism

were visually acceptable with a substantial rubber gasket and a well maintained clamping system. Note the weed hatch top and gasket are keeping the vessel afloat so should be removed at least once a year to keep the mechanism serviceable and inspect the gasket.

FINDING B-2

SHAFT BEARINGS

The water lubricated cutless bearings showed no signs of significant wear.

UNDERWATER SURFACES

The bottom plate had not been painted which is standard industry practice which in my opinion is due to economic and access factors more than practical consideration. Rust 'pustules' present would attest that the bottom plate is not regularly scoured by contact with the bottom and consideration to painting the bottom plate could be considered for the future.

THROUGH HULL FITTINGS

Welded spigots and yellow metal through hull fittings.

HULL FITTINGS

Topside hull fittings were found to be well attached.

PROPELLER PROTECTION

Provided partially by the skeg.

5 VESSEL CONSTRUCTION

HULL ARRANGEMENT

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VESSEL DESCRIPTION

'Noahs Ark' is a traditional commercial butty narrowboat, which has been converted into a steel bottomed pleasure cruiser and motorised. The hull has been constructed in riveted iron with a steel lower strake and base plate. The original Bantock boats were built to a unique design, of composite construction and having a wooden lower strake of oak and an elm bottom bottom and lower sides. Flat bottom with a slight rise at the bow from the fwd. quarters. The steel accommodation has slab sides with slight tumblehome from the side deck.

Built from the welding of mild steel plate to a riveted iron hull. Steel decks and superstructure. In its parallel middle section, the hull bottom is constructed by butt welding flat bottom plates. On both sides of the flat base vertical side plates are fillet welded to the base plate thus forming a narrow sacrificial chine (Wear plate). Above the steel plating the iron side plating has been welded to the steel superstructure forming a tumblehome sheer strake and narrow side decks. For impact and rubbing protection 'whisker' rubbing strakes protects the bow, formed by attaching a D-section bar to the side plating.

The bow is a classic narrow boat style with a substantial stem post. The elliptical type stern is in traditional butty style. A steel splash plate welded to the stern supports the lower rudder cup bearing.

The accommodation from fwd.:

Foredeck cants and hatch. Well deck. Door with step and substantial cill to open plan saloon and walk through galley, bathroom and one double berth cabin. Steps over engine to short aft deck.

SURVEY DETAILS

HULL

Hull construction is of welded steel and riveted iron Sample thickness measurements taken from locations where corrosion is unlikely to be present, indicated an original nominal build plate thickness as:

Roof: 4mm Superstructure: 5mm Topsides: 6 mm Lower topside plating: 6 mm Counter plate: 10mm
Bottom (Base) Plate: 10mm

HULL DESIGN TYPE

Traditional Steel Narrowboat

HULL MATERIAL

Hull construction is of welded and folded steel. Sample thickness ultrasound measurements taken from locations where corrosion is unlikely to be present, indicated an original nominal build plate thickness as noted previously.

TOPSIDES

The side plates above the water line were clean and fair. The paintwork above the waterline was in fair condition. Heavy corrosion along the waterline especially on the Stbd. side. Pitting to 3 mm.

There was rust corrosion along the waterline. Waterline corrosion was considered serious at this time and should be cleaned off and re painted.

There was no visible evidence of significant impact damage or indentation.

The side plates were covered in a very thick layer of bitumen blacking which hindered inspection. In places this thick blacking chipped off under aggressive hammer testing. One section midships to starboard was cleared of all blacking to inspect the steel below with active widespread heavy electrolytic pitting to 3mm.

The welding to the hull was a little uneven but believed to be serviceable. Welded butt joints were externally inspected, were tidy and unobtrusive and hammer tested serviceable. Waterline pitting was widespread. Aggressive hammer testing below the waterline produced no evidence of weakness in the steelwork. Sample hammer testing carried out around welds gave no indication of weakness.

The rubbing strakes were welded top and bottom, which was considered good practice.

FINDING A-1

RUBBING STRAKES

D-Section steel section rubbing strakes protected the stem and stern. The strakes were attached to the hull plating with continuous seam welds top and stitch welded bottom. Attention to 'forcing' blacking into the lower margins is strongly recommended to prevent corrosion forming behind the strakes.

HULL BELOW WATERLINE

Underwater plating which had been pressure washed prior to blacking, was inspected visually, by general hammer sounding and by ultrasonic thickness measurements taken at selected and random points. Ultrasonic thickness measurements are taken 'over planes' and therefore represent the maximum thickness of the plating at that point only, with a deduction to be allowed in respect of the depth of any pitting present. In evaluating the overall condition of the plating the pitting depth found is taken into account but as thickness measurements are recorded over planes with a deduction to be allowed in respect to estimated pitting depth. These thickness recordings are strictly point thickness and there is no warranty that adjoining areas of plating share the same thickness reading. Plate thickness measurements varied between 6 mm and 5.7mm.

Hull Thickness Measurement:

A Tritex multi echo ultrasonic thickness meter was used to measure sample plate thickness. Being multi echo the meter discounts the paint thickness. The meter was calibrated before use. Thickness testing is of a sample nature targeting suspect locations around the hull. Over 100 readings were achieved which showed an acceptable consistency. Enough sample readings were achieved to confirm the plating remained in good condition, which was

backed up by aggressive sample hammer testing with a 16lb ball peen hammer. To complete a comprehensive thickness test it would be necessary to blast the hull clean first and complete many more readings, which would not be practical, or considered necessary at this time.

Thickness readings:

Side plate original nominal thickness 6mm. Range of readings 5.2mm to 5.8mm Pitting < 0.5mm where seen.

Base plate original nominal thickness 12mm. Range of readings 9.7mm to 11.7mm Pitting <0.5 mm

The readings taken were consistent and show little diminution. The virtual lack of pitting confirmed that the vessel had been originally built out of a high quality steel. There was little evidence of serious corrosion

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internally in the few areas where the base plate could be accessed, namely the engine bay and the small inspection hatch aft in the cabin.

We were led to believe there had been some rusty areas internally but this always looks worse than it is. The owner has cleaned off the rust and painted these areas and there was no evidence of any fault on this survey. The hull was therefore believed to be in good condition at the present time so long as further corrosion is minimised. There was no evidence of any paint on the base plate externally.

Base Plate

The 10mm base plate was found fairly clean and was visually fair with no evidence of serious indentation or damage.

The base plate was cleaned off in sample areas around the outer edges and on the centreline. In the cleaned off areas the underlying plate was found in good condition with only minimal pitting found. The base plate was not coated in canal crud as normally seen so inspection was reasonably easy.

There was no evidence of any protective paint coating, which is disappointingly usually the case with narrowboats. Paint coating is the only way to prevent electrolytic pitting.

A 10mm sacrificial strip where the chine extends outside the side shell of the vessel to minimise wear to the weld was found in serviceable condition.

Welding joining the swim plate to the counter plate, side plate to bottom plate and weedhatch assembly were also externally inspected, sample hammer tested and found continuous and fair.

The counter plates were of 10mmmm plating and in good condition on both sides.

EXTERIOR FINISH

Painted superstructure and upper topsides.

EXTERIOR CONDITION

The exterior of the vessel appeared to be generally well kept.

TRANSOM

Steel counter stern over elliptical swim plates.

BULKHEADS

Only the aft face of the engine space bulkhead was accessible.

STEM

Raked stem with substantial stem post. Bow plates without any defomation.

BALLAST

Believed to be loose concrete paving slabs but could not be accessed.

STRUCTURAL FRAMES

Not accessible for inspection.

BILGES

Fitted carpet prevented inspection of the main cabin bilge space.

GENERAL BILGE CONDITION

Some of the bilge spaces required general cleaning/detailing.

COMMENTS

Suggest: The use of two-part epoxy paint protection for side shells and base plates is becoming more common on narrowboats for long-term protection. This is the best defence against future corrosion. This is more important if shore power and a 230v battery charger are to be used regularly. The heavy electrolytic pitting is caused by ground leaks and stray current. The vessel should be measured at the earliest opportunity for ground leakage.

In discussions with the Insured we mentioned Hot Zinc spraying at Debdale in Leicester . Alternatively the use of epoxy primer under epoxy blacking will protect the hull. In both cases the hull needs to be grit blasted clean prior to painting. It would be advisable to complete a quality paint coating in the next two or three years and as with all paint coatings the quality of the coating depends on the quality of the preparation and the conditions in which the paint is applied.

FINDING A-2

DECK ARRANGEMENT

DECK MATERIAL

Welded steel plating.

DECKING OVERLAY

The narrow side decks were coated with a non-slip material.

RUB-RAILS

Continuous upper rubbing strake. Whisker style rubbing strakes protected the bow. Waterline rubbing strake at stern.

SUPERSTRUCTURE ARRANGEMENT

MATERIAL

5 mm welded steel superstructure and cambered 4 mm coachroof. Integral hand rails.

6 STERN GEAR

PROPELLERS

Propeller: 700mm three bladed right hand phosphor bronze propeller. Tips serviceable with only minor impact damage. Propeller secured with drilled nut and pin on shaft with Woodruff keyway.

PROPELLER SHAFTS

38mm magnetic shaft. stainless steel shaft. Visually serviceable and believed straight. Turned easily by hand.

HULL SKEGS

Steel U-section bar skeg with cup bearing welded to bottom plate.

RUDDER MATERIAL

Steel flat blade rudder mounted on rudder stock.

THROUGH HULLS

There were no underwater skin fittings which is considered good practice. Most overboard drains were above the Canal Boat Association recommendation of a minimum 250mm freeboard. The kitchen sink discharge was in good condition and was seen to have a smaller discharge set in to the normal 2" discharge and secured with silicone. This is not safe practice and the discharge should be replaced by one that fits the hull securely. Unsafe.

FINDING B-3

7 EXTERIOR EQUIPMENT

CABIN VENTILATION

Screw down mushroom vents. Louvered vents in bow and stern doors which must be kept clear.

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DECK HATCHES

Steel hinged gas locker hatch. Hatch on aft deck to access weedhatch and stern gland greaser.

EXTERIOR DOORS

The aft entrance door was by way of twin steel doors and a steel sliding hatch, solidly constructed. Forward doors were twin timber lined steel doors.

WINDOWS

Hopper style alloy glazed windows in accommodation sides. Locking device. No visible internal leakage.

FINDING C-1

HAND RAILS/GRAB RAILS

Steel integral hand rails run along the coach roof sides.

MOORING ARRANGEMENT

T-stud mooring point on bow. Centre line attachment point on coach roof midships. Two mooring posts on stern.

MOORING LINES

NOTE: General wear & tear was observed on some of the lines.

FENDERS

Tubular tube type rubber fenders attached to side deck mounting points. Rope stem and stern fenders in serviceable condition.

8 CABIN ARRANGEMENT

INTERIOR

MAIN CABIN ARRANGEMENT

Open plan saloon with galley and companioway with door to bathroom. Aft cabin.

GALLEY ARRANGEMENT

The Galley was located port forward amidships in the main cabin.

HEAD ARRANGEMENT

12 volt DC macerating type toilet with fresh water flushing.

SHOWER ARRANGEMENT

Full size shower cubicle.

INTERIOR CABINETRY & TRIM

No significant wear & tear was observed on the interior cabinetry and trim.

INTERIOR DOORS

Recommend confirming that the door lock's key is onboard and that the lock mechanism is operational.

WALL-LINERS

Cabin is lined in white water resistant plasterboard.

FLOORING

Laid plastic wood flooring. carpet in saloon and aft cabin. Lino in bathroom.

CABIN SOLE FOUNDATION

Plywood cabin sole foundation. Felt firm underfoot. Not accessible.

INTERIOR MIRRORS

No significant de-silvering was observed on the interior mirror's reflective coatings.

GENERAL INTERIOR & SOFTGOODS CONDITION

The general maintenance of the interior soft-goods appeared serviceable.

GENERAL INTERIOR FURNISHINGS & SOFT-GOODS CONDITION

The general maintenance of the interior soft-goods appeared serviceable.

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INTERIOR JOINER WORK COMMENTS

The interior joiner work appeared serviceable.

INTERIOR BULKHEADS

The interior bulkheads appeared serviceable, where sighted.

INTERIOR SYSTEMS & EQUIPMENT

LIGHTING

12 Volt DC lighting fixtures. Some LED fittings. All lights illuminated.

CABIN HEATING SYSTEM

Morco LPG combi-boiler located aft. Supplying domestic hot water and to radiators. Not operated. Nb. Owner reported that the two 13 kg LPG bottles last approximately two weeks.

AUDIO/VISUAL EQUIPMENT

TELEVISION SYSTEM

Samsung 32" smart TV. Active aerial mounted on alloy pole fwd. which can be lowered. DAB radio with Blue Tooth adaptor. Not operated.

GALLEY EQUIPMENT

REFRIGERATION

Indisit AC powered domestic refrigerator. Switch tested.

OVEN

Indisit domestic free standing oven and grill. Not operated. Converted to LPG operation.

9 PROPULSION & MACHINERY SPACE

PROPULSION SYSTEM

ENGINE MODEL

Beta Marine 38 B

ENGINE HORSEPOWER

37.5 BHP @3000 RPM

NUMBER OF CYLINDERS

Four inline.

STARTER VOLTAGE

12 Volt.

ENGINE HOURS

2042

ENGINE SERIAL NUMBERS

354235 K 13358

ENGINE DISPLAYS

Simplw BETA panel with key ignition, RPM and audible and visual alarms. Alarms not tested.

ENGINE EXHAUST SYSTEM

Lagged dry exhaust with silencer.

ENGINE COOLING SYSTEM TYPE

Keel cooled via skin tank located on interior swim plating.

ENGINE DRIVE BELTS

Serpentine belt condition appeared serviceable.

THROTTLE & SHIFT CONTROLS

Morse mechanical lever/cable type.

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ENGINE BED MOTOR MOUNTS

Flexible mounts bolted directly to steel engine bearers. Visually inspected only.

ENGINE BED SUMPS

Integrated drip sump under the engine formed by the bearers.

MAIN ENGINE OIL LEVEL

Normal level was observed on the engine sump dipstick.

MAIN ENGINE COOLANT LEVEL

Visible with anti freeze.

COMMENTS

The engine model is based on a Kubota engine.

TRIAL RUN INFORMATION

ENGINE SPACE COMBUSTION AIR VOLUME

The engine appeared to have adequate air flow.

MACHINERY & BILGE SPACE EQUIPMENT

HOSES

Appeared serviceable, where sighted. Monitor frequently for dry cracking, degradation, damage or chafing.

HOSE CLAMPS

Always recommend installing corrosion resistant marine grade stainless steel T-bolt type hose clamps and/or solid banded (non-open slotted) hose clamps where appropriate.

TOOL BOX

No tools or spares observed onboard.

COMMENTS

NO engine spares observed onboard.

FINDING B-4

TRANSMISSIONS / GEARS / DRIVES

DRIVE SYSTEM TYPE

Direct Drive.

TRANSMISSIONS/GEARS

PRM 120 Marine reduction gear bolted directly to the engine.

PROPELLER SHAFT COUPLERS

SD type flexible coupling.

PROPELLER SHAFT PACKING GLANDS

Flange & bolt stuffing box type packing glands. Monitor frequently.

10 FUEL SYSTEMS

FUEL SYSTEM TYPE

Diesel.

FUEL TANK MATERIAL

Steel, built in fuel tank, aft under the deck.. Copper pipe supply with isolation taps. All visually serviceable subject to cleaning. The cleanliness of the fuel in the tank could not be confirmed and dirty fuel is a common cause of engine failure.

NUMBER OF FUEL TANKS

One (1).

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FUEL TANKAGE CAPACITY

Recommend verifying the fuel tankage capacity.

FUEL LEVEL MONITORING

Recommend verifying the usable fuel capacity. This can easily be achieved with a simple dip stick.

FUEL TANKAGE SECURING

Integral to structure mounted on top of the counterplate at the aft end of the engine space.

FUEL FILL LOCATION

On aft deck cant with overboard drain.

FUEL FILL MARKING

The fuel fill fittings were correctly marked.

FUEL TANK VENTILATION

Fuel air vent with gauze flame arrestor on transom.

FUEL LINES/HOSES

Copper fuel lines, with ISO flexible hose to engine connections.

FUEL SHUT-OFF VALVES

Ball valves at the fuel tank.

MAIN ENGINE PRIMARY FUEL FILTERS

'WASP' Primary filter/water separator.

MAIN ENGINE SECONDARY FUEL FILTERS

Engine mounted Secondary Fuel Filter.

FUEL FILTER CONDITION

Unknown, due to enclosed filter design type. Monitor/service often.

COMMENTS

There was no service information sighted onboard. I would strongly recommend servicing the engine and replacing all filters. Keeping the fuel tank topped up reduces condensation and water build up in fuel tank.

11 ELECTRICAL SYSTEMS

DC ELECTRICAL SYSTEMS

DC SYSTEMS VOLTAGE

12 Volt systems.

BATTERIES

12V DC System. Five 110ah low maintenance leisure batteries age unknown. One lead acid engine starting battery. Batteries found in acceptable battery trays and strapped down. The terminals were not covered but their location does not pose a risk of accidental shorting.

Battery voltages were at a serviceable level. nb. AC powered battery charger was switched on during survey.

Battery charging from alternators and a combi 230 volt battery charger and 3kw inverter.

BATTERY CHARGERS

From combination Inverter/charger and from Solar panel.

ENGINE ALTERNATORS

Twin 12 volt / 70 amp, engine mounted and belt driven. Independent charging to both banks.

DC ELECTRICAL/WIRING COMMENTS

Appeared to be well supported and secured, where sighted. Always recommend installing chafe gear at all key friction points where wires/cables and hoses transit the vessel against sharp edges. Also recommend waterproofing all wiring connections that may be exposed to moisture.

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COMMENTS

The vessel is primarily powered by 230 volt AC power (Heating and refrigeration). The insulation with interchangeable sockets does facilitate the purchase of a small portable generator. Strongly recommended. Additional solar should also be considered.

AC ELECTRICAL SYSTEMS

AC SHORE POWER SYSTEM VOLTAGE

230 Volts AC @ 50Hz.

AC SHORE POWER INLETS

Single external 13 amp shore power socket.

AC SHORE POWER CORDS

No shore cable observed.

FINDING B-5

MAIN AC SHORE POWER BREAKERS

Consumer unit with RCD installed.

FINDING B-6

GALVANIC ISOLATION

Highly recommended if not installed.

AC ELECTRICAL POWER OUTLETS

UK type 230 volt AC switched sockets. Sample sockets tested with polarity checker. Powered by inverter/shore line.

12 GENERATORS/AUXILIARY POWER

GENERATORS

GENERATOR MODEL

There was a small Yanmar Cereda 2.8kw generator installed in the engine bay with a separate exhaust and fuel feed. All visually serviceable but not tested.

GENERATOR FUEL TYPE

Diesel.

GENERATOR KILOWATT RATING

2.5

STARTER VOLTAGE

12 Volt.

13 WATER SYSTEMS

FRESHWATER SYSTEM

WATER TANKAGE MATERIAL

Stainless Steel.

NUMBER OF FRESHWATER TANKS

One (1).

WATER TANKAGE CAPACITY

Reported at 350 ltrs. Recommend verifying the water tankage capacity. A tank gauge was showing intermittent levels.

WATER TANKAGE SECURING

Inspection of the water tank was severely reticited by its location and insulation.

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WATER TANKAGE LOCATION

Below the well deck fwd.

WATER FILL LOCATION

On the fwd. well deck.

WATER FILL MARKING

Properly marked for water.

FRESHWATER PUMPS

12 volt Dc demand type with integral pressure switch. Demonstrated.

FRESHWATER FILTRATION

None seen. Installing an active charcoal filter can improve the taste of the tank water,

FRESHWATER PIPING

Mixture of white plastic PEX type (Cross-linked Polyethylene) speed fit fittings and pipe, colour coded , copper tubing and flexible hoses.

WATER LEVEL MONITORING

Recommend verifying the water tankage level gauge's accuracy.

HOT WATER SYSTEM

WATER HEATER

Combi Boiler.

WATER HEATER CAPACITY

On demand on constant setting,

BLACKWATER SYSTEM

BLACKWATER TANKAGE

Vetus olyethylene blackwater (sewage) holding tank located below aft berth mounted in custom Stainless steel tray,

BLACKWATER TANKAGE VENTILATION

Active odour filter fitted inline. Located below aft berth,

BLACKWATER SYSTEM DISCHARGE

Side deck pumpout fitting. Inline discharge pump with hose.

COMMENTS

Well thought out system with the option of pumping out the tank at sanitation stations.

GREYWATER SYSTEM

GREYWATER DISCHARGE

Shower sump discharged directly overboard by an electric 12 volt DC pump located . Switched from shower.

14 STEERING SYSTEMS

STEERING SYSTEM TYPE

Direct tillers steering at the stern counter.

RUDDER SKEG

Solid steel skeg welded to base plate.

UPPER BEARING

Sleeved upper rudder shaft bearing mounted on deck.

LOWER RUDDER BEARING

Cup bearing welded to skeg.

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RUDDER STOCKS

Steel solid tube stock. Not observed where it passed through the diesel tank in the rudder stock tube.

RUDDER

Solid steel plate rudder.

15.1 GROUND TACKLE

ANCHORS

No anchor was observed onboard. Ground tackle is important safety equipment. Properly sized, rigged, stowed and ready for use. Rig properly sized anchor, as necessary. nb. EA mandatory requirement.

COMMENTS

For river use a suitably sized anchor, 5 kg and length of chain, min 10m of 8mm and 20m nylon rode is recommended. This is mandatory on most river Authorities including the Thames. The bow fitting should be suitably mounted and sized to accommodate the anchor rode and

16.1 ELECTRONICS & NAVIGATION EQUIPMENT

TUNNEL LIGHT

Tunnel light switch from helm. Operational.

FINDING C-2

HORN

12 volt DC electric horn fitted at bow. Working.

17 AUXILIARY GAS SYSTEMS

GAS TYPE

LPG (Liquified Petroleum Gas/Propane).

GAS TANKAGE LOCATION

Foredeck integral steel gas locker with external overboard drains.

GAS LOCKER VENT

Appeared adequate (keep drainage hole clear).

GAS SHUT-OFFS

At the tank. Individual device isolation valves.

GAS TANKAGE MOUNTING

Three 13 kg bottles. Two with auto-switching valve for combi boiler. One for cooker operation.

GAS LINES & FITTINGS

Seamless copper pipe, with flexible hose at the tank connection.

GAS REGULATOR

A Gas Regulator was installed inline by the bottles.

LPG GAS FUME DETECTORS

No gas detector observed.

FINDING B-7

19.1 VESSEL DOCUMENTATION

HIN (HULL IDENTIFICATION NUMBER) COMPLIANCE (33 CFR 181): No RCD documentation or vessel marking observed,

18 SAFETY EQUIPMENT

SAFETY EQUIPMENT

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WEARABLE PERSONAL FLOATATION DEVICES

None conveyed with the vessel.

LIFEBOUYS

One life bouy mounted on roof.

FIRE EXTINGUISHERS

Three dry powder %A 34B C extinguishers correctly mounted adjacent to escape exits. No certification/servis documentation observed.

MOUNTED IN GALLEY

An approved fire blanket was mounted in the galley.

AUXILIARY SAFETY EQUIPMENT

CARBON MONOXIDE DETECTORS

None sighted. Highly recommend installing Carbon Monoxide Detectors inside all of the accommodation spaces.

SMOKE DETECTORS

None sighted. Install Smoke Detectors inside the accommodation spaces.

FINDING B-8

BILGE PUMPING SYSTEMS

ELECTRIC BILGE PUMPING SYSTEMS

A small submersible bilge pump was observed in the aft engine bilge. Switch below DC electric panel. It operating.

19 SUMMARY

VESSEL CONDITION

This vessel has been in the ownership of the insured for 11 years. Little of the history of the vessel was known.

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SUMMARY

The corrosion along the waterline must be repaired. The electrolytic pitting below the waterline must be checked against the vessels possible ground leakage as a matter of urgency.

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SURVEYOR'S CERTIFICATION

I certify that, to the best of my knowledge and belief:

The statements of fact contained in this report are true and correct.

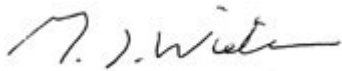
The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions and conclusions.

I have no present or prospective interest in the vessel that is the subject of this report and I have no personal interest or bias with respect to the parties involved.

My compensation is not contingent upon the reporting of a predetermined value or direction in value or direction in value that favours the cause of the client, the amount of the value estimate, the attainment of a stipulated result or the occurrence of a subsequent event.

I have made a personal inspection of the vessel that is the subject of this report.

This report is submitted without prejudice and for the benefit of whom it may concern.



Mark J. Wiater AMYDSA MIIMS

Principal Surveyor

2nd December 2020

BOAT OWNERS TIPS

TIPS

Boat Ownership Advice:

After taking ownership of your new vessel there will be some maintenance and safety issues that should be addressed immediately.

The following checklist should help you to undertake these improvements and comply with current legislation. It is the responsibility of the skipper to ensure the vessel is of suitable dimensions for intended cruising grounds.

When you first get your boat.

Pick a good weather weekend and remove all of the soft furnishings.

Open all cupboards and lift floor panels. Understand where all the pipe runs and electrical runs are installed.

Understanding where everything is and how systems work, makes repairs a lot easier.

Once you have purchased your boat you are largely on your own and completing basic repairs and servicing yourself will save you a lot of money.

Learn to steer your vessel by practicing manoeuvring in tight spaces. Learn how the wind effects your vessel.

For inland users River Canal Rescue offer a comprehensive breakdown and recovery service.

Security: Change the locks on all exterior entrances and hatches to improve security. Check that all windows and doors are secure: Improve window hardware as necessary. Security rods can be added to windows, hatches and

BMS Marine Survey

doors. Consideration could also be given to an alarm system.

Mooring: Boats can be left for long periods in exposed and sometimes undesirable locations. Vandalism, arson and theft are all problems to be considered. Be aware that water levels can change and the effect of this must be considered.

Fire Safety: Create a plan of action in case of fire in your boat. Check fire extinguishers are fully charged and in the correct place on a monthly basis. Smoke detectors should be installed in each room. Carbon Monoxide and gas detectors should be fitted in suitable locations. In case of fire get everyone off, and well away from the boat as soon as possible.

Suggest: Install all necessary alarms and test on a monthly basis: Inspect fire extinguishers monthly.

Narrowboat Corrosion: To minimise steel corrosion it is now widely agreed that the use of epoxy primers and epoxy blacking is the best protective method under the waterline. Older boats can only be painted properly after they have been grit blasted clean. This is now becoming normal practice for quality boat builders. Epoxy fillers can be used on existing corrosion and pitting. Plug welding is also acceptable for pitting. It is important that pits are cleaned out well prior to filling or welding and are painted over afterwards.

Ventilate your boat well: The importance of continuous ventilation can not be stressed too highly to avoid condensation and to keep the internal plating as dry as possible. It is also vital for the prevention of Carbon Monoxide poisoning. The use of several floor ventilation hatches will help to ventilate under a wooden floor. **Suggest:** Remove floor inspection hatches and open access cupboards when the boat is not in use to improve ventilation to the hull and reduce the risk of damage to the sub floor from damp.

Bilge Pumping Arrangements: There is no requirement for bilge pumping on recreational vessels. They are however the last line of defence against sinking.

Automatic 12v bilge pumps rely on a continuous power supply and should not be switched off when the vessel is left unattended. They also rely on cleanliness. One bilge pump is never enough. A back up, manual, high capacity bilge pump that can be operated by a passer by may save the vessel. Test all bilge pumps prior to leaving the vessel.

Winterise your engine and water systems:

Engines should be winterised to the engine manual, and drain all water systems before leaving the boat for the winter.

Check your boat at least once a month.

Docking: It is advisable to dock your vessel every 12 months on a lift and hold basis to inspect the underbody and the stern gear. Use this opportunity to pressure wash the vessel to aid inspection.

Safety Equipment:

It is important that safety equipment is relevant to the cruising area envisaged. Safety Equipment must be kept in good condition and serviced according to manufacturers instructions. Each crew member should wear a life jacket at all times when on the water.

Marine Coastguard Agency coding:

Only applicable if the vessel is to be used for commercial work.

V.A.T. Status and proof of ownership:

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The original purchase invoice confirms that V.A.T. has been paid so long as the vessel is properly identified. This invoice should be kept in the owners manual. This is only important if the vessel is to be taken abroad. If you do not have proof of V.A.T payment and take your vessel abroad you may be charged V.A.T again.

Boat Safety Scheme:

A Boat Safety Scheme Certificate should be provided with the vessel rather like a car M.o.T.

Please be aware that the existence of a Boat Safety Scheme certificate does not imply that the craft is safe. It only indicates that, on the day of the inspection, the craft has met the requirements for licensing with the Navigational Authority, concerned with minimising the risk of fire and pollution and its effect on other vessels. Boat Safety Certificates have little value in a Pre Purchase Situation. BSS inspections are required every 4 years.

Suggest: Inland waterways boat owners are advised to download a full copy of the Boat Safety Scheme guide from www.boatsafetyscheme.com and keep it on the vessel for reference. Alterations and improvements should be made to manufacturers instructions and the BSS.

Small Ships Register:

Some vessels are registered with the Marine Coastguard Agency on the Small Ships Register for proof of ownership and finance reasons. We can help with this registration if required.

Canal and River Trust Registration:

Inland vessels should be registered with the Canal and River Trust. The license should be displayed on the vessel. A Canal and River Trust Number should be correctly displayed on both sides of the vessel for identification. Registration with the Canal and River Trust will require updating with a change of ownership. A combined CRT and EA 'Gold' licence is available for use on rivers and canals.

Recreational Craft Directive:

If the vessel was built after July 1998 the requirements of the Recreational Craft Directive apply. The vessel should have an acceptable builders plate with CE mark.

An owners manual should be available which included a Certificate of Conformity for the vessel. A Hull Identification Number should be correctly marked on the starboard side of the transom. It is generally accepted that the requirements of the Recreational Craft Directive have little effect once the vessel is over 5 years old. Suggest: An owners manual should be kept up to date and all paperwork for the vessel added to it. This is particularly important for receipts

Findings & Recommendations

The Findings & Recommendations section is only one section of the "Libran Legacy" Survey Report. If received on its own, this section should not be mistaken as this vessel's full Survey Report.

Deficiencies noted under "FIRST PRIORITY/SAFETY AND COMPLIANCE FINDINGS" should be addressed before the vessel is next underway. These findings could represent an endangerment to personnel and/or the vessel's safe operating condition. Findings may also be in violation of UK Licensing Authority Regulations, RYA/MCA Voluntary Safety Standards & Recommended Practices or Codes & Standards.

Deficiencies noted under "SECONDARY PRIORITY/FINDINGS REQUIRING TIMELY ATTENTION" should be corrected in the near future, so as to maintain and adhere to certain codes, regulations, standards or recommended practices (and safety in some cases) and to help the vessel to retain its value.

Deficiencies noted under "SURVEYOR'S GENERAL FINDINGS AND OBSERVATIONS" are lower priority or cosmetic findings, which should be addressed in keeping with good marine maintenance practices and in some cases as a desired upgrade.

Deficiencies will be listed under the appropriate heading:

- A. FIRST PRIORITY/SAFETY AND COMPLIANCE FINDINGS
- B. SECOND PRIORITY/FINDINGS REQUIRING TIMELY ATTENTION
- C. SURVEYOR'S GENERAL FINDINGS AND OBSERVATIONS

A: URGENT RECCOMENDATION

TOPSIDES

The side plates above the water line were clean and fair. The paintwork above the waterline was in fair condition. Heavy corrosion along the waterline especially on the Stbd. side. Pitting to 3 mm.

There was rust corrosion along the waterline. Waterline corrosion was considered serious at this time and should be cleaned off and re painted.

There was no visible evidence of significant impact damage or indentation.

The side plates were covered in a very thick layer of bitumen blacking which hindered inspection. In places this thick blacking chipped off under aggressive hammer testing. One section midships to starboard was cleared of all blacking to inspect the steel below with active widespread heavy electrolytic pitting to 3mm.

The welding to the hull was a little uneven but believed to be serviceable. Welded butt joints were externally inspected, were tidy and unobtrusive and hammer tested serviceable. Waterline pitting was widespread. Aggressive hammer testing below the waterline produced no evidence of weakness in the steelwork. Sample hammer testing carried out around welds gave no indication of weakness.

The rubbing strakes were welded top and bottom, which was considered good practice.

FINDING A-1

Corrosion along the waterline with pitting to 3mm.

RECOMMENDATION

Grind back to bare metal. Fill pits with epoxy filler and repaint and black at the earliest opportunity.

Findings & Recommendations

COMMENTS

Suggest: The use of two-part epoxy paint protection for side shells and base plates is becoming more common on narrowboats for long-term protection. This is the best defence against future corrosion. This is more important if shore power and a 230v battery charger are to be used regularly. The heavy electrolytic pitting is caused by ground leaks and stray current. The vessel should be measured at the earliest opportunity for ground leakage.

In discussions with the Insured we mentioned Hot Zinc spraying at Debdale in Leicester . Alternatively the use of epoxy primer under epoxy blacking will protect the hull. In both cases the hull needs to be grit blasted clean prior to painting. It would be advisable to complete a quality paint coating in the next two or three years and as with all paint coatings the quality of the coating depends on the quality of the preparation and the conditions in which the paint is applied.

FINDING A-2

Electrolytic Pitting.

RECOMMENDATION

Test vessel with a silver nitrate reference anode to check for any ground leakage from the vessels electrical circuits. It is possible however that the ground leak is from another vessel in the marina or shore power. A galvanic isolator must be fitted as soon as possible to prevent further damage.

B: RECOMMENDATION

ANODES

The vessel featured 2 pairs of cast magnesium sacrificial anodes fitted to the hull side shell by way of welded straps which hammer tested serviceable. Both sets of anodes were estimated as new.

Note: Cast magnesium sacrificial anodes on steel narrowboats in fresh water help to protect only a limited area around each anode with little or no benefit to the majority of the underwater hull.

FINDING B-1

Heavy hull pitting.

RECOMMENDATION

A second pair of 2,5 kg low profile anodes should be fitted midships. Another two could be fitted and both sets should be attached at equal distances on the hull sides.

WEED BOX

The weedhatch extended through the counter plate above the propeller. The weed hatch top was barely an acceptable height above the waterline. (150mm above the counter plates.) The weedhatch top and mechanism

were visually acceptable with a substantial rubber gasket and a well maintained clamping system. Note the weed hatch top and gasket are keeping the vessel afloat so should be removed at least once a year to keep the mechanism serviceable and inspect the gasket.

FINDING B-2

Weedbox surfaces.

RECOMMENDATION

The interior of the weedbox should be blacked with the rest of the hull. This important area is often forgotten.

Findings & Recommendations

THROUGH HULLS

There were no underwater skin fittings which is considered good practice. Most overboard drains were above the Canal Boat Association recommendation of a minimum 250mm freeboard. The kitchen sink discharge was in good condition and was seen to have a smaller discharge set in to the normal 2" discharge and secured with silicone. This is not safe practice and the discharge should be replaced by one that fits the hull securely. Unsafe.

FINDING B-3

Unsafe sink overboard discharge.

RECOMMENDATION

Recommend: Replace the sink drain overboard discharge skin fitting. Any discharge pipes connected to skin fittings, below the industry standard 250mm above the laden waterline should be securely clipped at both ends and loop up to deck level where possible. All hull fittings should be secure and sealed. All open holes in the side shell should be welded up securely in case the vessel tips on the bank or in floods. Any redundant discharges should be welded up permanently.

COMMENTS

NO engine spares observed onboard.

FINDING B-4

Engine Spares.

RECOMMENDATION

I would strongly recommend that a set of spares including but not limited to belts, filters, impellor, oil and anti freeze be kept onboard.

AC SHORE POWER CORDS

No shore cable observed.

FINDING B-5

Shore power cable.

RECOMMENDATION

Shore cables with an inline galvanic isolator are available.

MAIN AC SHORE POWER BREAKERS

Consumer unit with RCD installed.

FINDING B-6

Consumer unit with RCD.

RECOMMENDATION

Check monthly for safe operation.

Findings & Recommendations

LPG GAS FUME DETECTORS

No gas detector observed.

FINDING B-7

No gas alarm.

RECOMMENDATION

A LPG alarm and a bubble detector should be installed to warn of LPG leakage,. LPG is heavier than air and will sink and accumulate in the bilges.

SMOKE DETECTORS

None sighted. Install Smoke Detectors inside the accommodation spaces.

FINDING B-8

Smoke Detectors were not observed onboard the vessel.

RECOMMENDATION

Install and test regularly.

C: SURVEYOR'S SUGGESTION & OBSERVATIONS

WINDOWS

Hopper style alloy glazed windows in accommodation sides. Locking device. No visible internal leakage.

FINDING C-1

Window drains.

RECOMMENDATION

It is important to clean out window drip channels and drains on a regular basis to prevent moisture ingress on to the internal timber. Stop all window leaks.

TUNNEL LIGHT

Tunnel light switch from helm. Operational.

FINDING C-2

navigation Lights

RECOMMENDATION

If navigation after dark is attempted then suitable navigation lights must be fitted,

HIN (HULL IDENTIFICATION NUMBER) COMPLIANCE (33 CFR 181)

No RCD documentation or vessel marking observed,

FINDING C-3

Since 1998 all UK vessels have been obliged to conform with the EU Recreational Craft Directive rules.

RECOMMENDATION

Ask owner for verification of compliance.