



**Condition & Valuation Marine Survey Report of**

**1988 Kha Shing Overseas 40**



CONDUCTED BY

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PREPARED FOR



## Table of Contents

SECTION 1: REPORT PARTICULARS .....	4
1.1 Report Details .....	4
1.2 Dates & Conditions of Inspection.....	4
SECTION 2: REPORT SCOPE & TERMINOLOGY .....	4
2.1 Purpose of Survey .....	4
2.2 Scope of Survey .....	4
2.3 Limitation of Liability .....	5
2.4 Glossary of Terms .....	5
2.5 Standards for the Marine Industry.....	6
SECTION 3: VESSEL IDENTIFICATION & DIMENSIONS.....	7
3.1 Vessel Information.....	7
3.2 Dimensions & Capacities.....	7
SECTION 4: VESSEL HISTORY, LAYOUT & CONSTRUCTION .....	8
4.1 Vessel History .....	8
4.3 Vessel Construction.....	10
5.1 Primary Propulsion Machinery & Specifications.....	11
5.2 Primary Propulsion Systems .....	12
5.2.1 ENGINES .....	12
5.2.2 OIL ANALYSIS .....	12
5.2.3 CONTROLS/GAUGES.....	12
SECTION 6: HULL PIPING, PUMPS & TANKAGE .....	13
6.1 Propulsion Fuel System.....	13
6.2 LPG (Propane)/CNG (Compressed Natural Gas) Systems.....	14
6.3 Potable Water System .....	14
6.4 Sanitation System.....	15
6.5 Pumps & Dewatering Systems .....	16
6.5.1 WASHDOWN.....	16
6.5.2 AIR CONDITIONING PUMPS.....	16
6.5.3 BILGE PUMPS .....	16
6.7 Seacocks, Through-hulls & Drainage.....	16
SECTION 7: ELECTRICAL SYSTEMS.....	16
7.1 Ignition Protection.....	16
7.2 Direct Current Systems (less than 50V) .....	17
7.3 Alternating Current Systems (over 50V).....	17
7.3.1 GENERATORS.....	18
7.4 Appliances & Galley Equipment .....	19
7.4.1 REFRIGERATION .....	19
7.4.2 OVENS/COOKTOPS .....	19
7.5 Heating, Ventilation & Air Conditioning Systems.....	20
7.6 Corrosion Protection Systems.....	20

SECTION 8: ELECTRONICS & NAVIGATION SYSTEMS .....	20
8.1 Navigation & Communications Electronics.....	20
SECTION 9: SAFETY SYSTEMS & EQUIPMENT.....	21
9.1 Exterior Lighting.....	21
9.2 Safety Equipment .....	21
9.3 Ground Tackle.....	22
9.4 Detection, Alarm & Fire Suppression Systems .....	22
SECTION 10: ADDITIONAL EQUIPMENT .....	22
10.1 Davits .....	22
10.2 Tender.....	22
10.5 Non-Fixed Furnishings.....	23
SECTION 11: SUMMARY .....	24
SECTION 12: SURVEYOR'S CERTIFICATION .....	24
APPENDIX A: SUMMARY OF FINDINGS & RECOMMENDATIONS .....	25
A.1 Summary of Findings & Recommendations .....	25
Category A: Findings Recommended for Immediate Attention .....	25
Category B: Findings Related to Regulatory Compliance.....	28
Category C: Findings Related to Removable Safety Gear .....	29
Category D: Findings Related to Voluntary Standards Compliance .....	29
Category E: Non-Urgent Findings Related to Vessel Structure.....	30
Category F: Maintenance & Cosmetic Findings.....	32
APPENDIX B: VALUATION DETAIL.....	34

### **Disclosure Statement**

The principal attending surveyor is of the belief, in consideration of full disclosure, that neither the surveyors nor Lewis Martin & Associates Ltd. (Marine Surveys Canada) have surveyed the subject vessel, nor been contracted to provide consulting services in relation to this vessel for a period of three years prior to the date of the inspection described in this report. Should it be discovered that this statement is inaccurate at any time following publication of this report, including any follow-up correspondence or compliance inspections undertaken, the attending surveyors will issue a disclosure statement outlining the details of any such work.

## SECTION 1: REPORT PARTICULARS

### 1.1 Report Details

Marine Surveys Canada File No.	██████████
Reason for Survey Request	Condition & Valuation for purchase interest
Declared Intended Use of the Vessel	Canadian inland, protected waterways, Great Lakes and near coastal waters. Recreational.
Name of the Vessel's Current Owner(s)	██████████ per Certificate of Registry
Insurer	██████████
Insurance Broker	██████████
Listing Yacht Broker/Salesperson	██
Purchaser's Broker/Representative	██████████

### 1.2 Dates & Conditions of Inspection

The vessel was surveyed afloat and hauled/keel blocked at ██████████ on September 26, 2024. A sea trial was conducted from ██████████ on the same day. Conditions at sea trial were 21C with clear skies, stiff breeze and light chop. The attending surveyor was onsite from 9:15am to 4:45pm. The prospective purchaser and the listing broker were both present for the majority of the survey inspection and for the sea trial (broker acted as captain for the sea trial). Battery power and shore power were available and both AC & DC electrical components were tested and found to be operational, unless stated otherwise in this report. Certain components could not be tested as some onboard systems were not recommissioned on the day of survey.

**For the purposes of reporting, the vessel's structure and equipment installations shall be taken as intact, compliant and serviceable unless otherwise stated in Appendix A: Findings and Recommendations section of this report.**

## SECTION 2: REPORT SCOPE & TERMINOLOGY

### 2.1 Purpose of Survey

This condition & valuation marine survey was commissioned solely for the purpose of determining condition and value of the subject vessel, for the sole use of the person(s) for whom this report was prepared (the client), or (as designated at the discretion of the client) an insurer or prospective insurer, or a financial institution. Using this report for any other purpose may result in incomplete information and a risk exists that this report may be taken out of context.

### 2.2 Scope of Survey

This survey is an objective report on the condition and/or value of a particular vessel paying close attention to structural, safety, and appearance issues. This report is unbiased and subject to the condition and accessibility of the vessel at the time of the survey. Test methods used are of a non-destructive nature and vessel disassembly is not within the scope of this survey. A complete report of the vessel would require complete disassembly and will not be undertaken in the formulation of this report.

The hull and hull framing, decks, superstructure, cockpit sole, platforms, and other structures are evaluated using visual inspection for cracks, damage or other deterioration. Random percussive sounding tests have been conducted using a phenolic hammer. Relative moisture measurements, where applicable to the structure (areas constructed of fiberglass or wood), have been conducted.

Rigging and spars, where applicable, are inspected from the deck only. Keel bolts, chain plates, shrouds and stays (where fitted) have been visually inspected, where accessible for inspection. Keel bolt torque has not been verified. Sails and canvas will be inspected if accessible at the time of the survey, but are typically not unfolded if bagged due to normal constraints of space in a boat yard.

Deck and interior hardware such as cleats, handholds, hatches, doors and windows are inspected visually. Latches, locks, supports and hinges are tested for proper function where accessible. Interior joinery is inspected visually for appearance and structural integrity. Electronic moisture detection methods may be used on interior cabinetry and headliners, particularly in areas common for water ingress such as around portlights and hatches.

Propulsion and generator engines, running gear and steering systems are evaluated using visual inspection of accessible castings, mounts, fasteners, hoses, gaskets, pumps, belts, machinery guards, flame arrestors, and the presence of any visible fuel, oil, cooling or exhaust leaks. **A full mechanical inspection is not undertaken as a part of this survey.** In cases where a sea trial has been commissioned and completed, engines are observed for starting characteristics, idle quality, power delivery, wide open throttle performance and synchronization (multiple engines only, where conditions permit), backdown test for assessment of engine mounts, and in some cases thermal imaging to detect overheat conditions while underway. Exhaust component castings are observed not to exceed a temperature of 93C (200F) for inboard engine installations. Outdrive

bellows, hoses and related fitting (where applicable) are visually inspected where accessible. Components of transom assemblies/transom shield kits with limited or no access for inspection are presumed to be intact and serviceable but are not warranted to be so. Thrusters are evaluated using visual inspection of accessible motors, mounts, fasteners, electrical or hydraulic connections, machinery guards, and the presence of any visible leaks. In cases where the vessel has been surveyed afloat or a sea trial has been commissioned and completed, thrusters are observed for proper operation in both directions.

Onboard electrical systems and electrical output of generators are evaluated using onboard volt- and ammeters, along with a DVOM, as well as visual inspection of accessible wiring, components and fixtures, proper grounding, polarity, ground fault protection and overcurrent protection. Electrical and electronics systems are powered up only where power is available, and where safe and practical to do so. Critical safety systems are powered up where power is available. If power is not available, visual inspections only are performed. Corrosion protection systems have been evaluated using visual inspection of accessible sacrificial anodes, bonding wiring, components and fixtures, and proper grounding. Impressed current systems and galvanic isolators are not tested for proper operation as a part of this survey.

Hydraulic, mechanical and plumbing systems are inspected visually for leaks and defects. Wear evaluations are based on visual inspections and, where available, reported life of the components. Fuel systems have been evaluated using visual inspection of accessible tanks, fittings, hoses/piping, vents, proper grounding, filtration, pumps, valves, and the presence of any visible leaks. LPG/CNG fuel systems have been evaluated using visual inspection of accessible tanks, fittings, hoses/piping, vents, regulators/valves, dedicated lockers, emergency shut-off systems, and the presence of any leaks. A leak down test is performed where possible. The sanitation system has been evaluated using visual inspection of accessible tanks, fittings, hoses/piping, vents, pumps, filtration, toilets, overboard discharge, and the presence of any leaks. Dewatering systems have been evaluated using visual inspection of accessible pumps, fittings, hoses/piping, filtration, operation of bilge pumps & float switches (where accessible and where power available), and the presence of any leaks.

Seacocks, through-hulls and drainage systems have been evaluated using visual inspection of accessible tanks, fittings, seacocks/valves, hoses/piping, vents, pumps, scuppers, overboard drains, and the presence of any leaks.

Any and all equipment inaccessible at the time of the survey will be assumed to be in acceptable condition for its age. Any and all equipment required on the vessel by law and found to be deficient or absent at the time of the survey shall be duly noted in the recommendations of this report. **For the purposes of reporting, the vessel's structure and equipment installations shall be taken as intact, compliant and serviceable unless otherwise stated in Appendix A: Findings and Recommendations section of this report.**

**This survey is an opinion of the surveyor on the condition of the vessel as presented and within the parameters outlined above. The recommendations made are based on the surveyor's knowledge and experience. This report is in no way a guarantee of the vessel's condition or performance, either now or in the future.**

### 2.3 Limitation of Liability

Acceptance and use of this report by the client acknowledges the client's understanding that the report has been composed of information that is believed to be true after reasonable investigation and inquiry but is not warranted to be so. The information was obtained without drilling, diving, ultrasonics, cleaning or opening up to expose parts or conditions ordinarily concealed. There were no tests for tightness or soundness conducted other than the conditions noted visually. Acceptance and use of this report acknowledges the client's understanding that no determination of stability or structural strength has been made and no opinion is expressed. Acceptance and use of this report acknowledges the client's understanding that Lewis Martin & Associates Ltd. (Marine Surveys Canada) does not accept any responsibility for damage or deterioration not found or discovered during the course of survey, nor for consequential damage, deterioration or loss due to any error or omission. The Client hereby undertakes to keep the Surveyors/Consultants and its employees, agents and subcontractors indemnified and to hold them harmless against all actions, proceedings, claims, demands or liabilities whatsoever or howsoever arising which may be brought against them or incurred or suffered by them, and against and in respect of all costs, loss, damages and expenses (including legal costs and expenses on a full indemnity basis) which the Surveyor/Consultant may suffer or incur (either directly or indirectly) in the course of the services under these Conditions. Notwithstanding the above clause, in the event that the Client proves that the loss, damage, delay or expense was caused by the negligence, gross negligence or wilful default of the Surveyors/Consultants aforesaid, then, save where loss, damage, delay or expense has resulted from the Surveyors'/Consultants' personal act or omission committed with the intent to cause same or recklessly and with knowledge that such loss, damage, delay or expense would probably result, the Surveyors'/Consultants' liability for each incident or series of incidents giving rise to a claim or claims shall never exceed a sum equal to the Surveyors'/Consultants' charges.

### 2.4 Glossary of Terms

An explanation of the terminology and wording in this survey:

*Appeared:* An opinion based on visual inspection and other non-invasive test methods, as outlined in the Scope of Survey above.

*Compliant:* Complies with applicable vessel construction standards or applicable legislation.

*Findings:* Deficiencies observed by the surveyor during inspection. Findings with associated recommendations are listed in

Appendix 'A' (Summary of Findings and Recommendations).

*Fit for intended use:* Use intended by the designer/manufacturer of the vessel.

*Inoperable:* Was powered up or tested but did not work as designed or did not appear to work as intended.

*Operational:* Working properly at the time of inspection.

*Powered up:* Power was applied only (this does not indicate that the system or component was tested and observed running).

*Recommendations:* Recommended actions for the vessel owner to correct deficiencies identified in this report, as listed in the descriptions within the body of this report, and in Appendix 'A' (Summary of Findings and Recommendations).

*Relative moisture readings:* Classified as slight, moderate, or significant (for cored and non-cored fibreglass reinforced plastic laminates, numbers referenced in this report are relative to known dry readings using a Flir MR160 moisture meter in non-invasive mode where 0-20 are considered very dry to dry, 21-35 are considered slightly elevated, 36-50 are considered moderately elevated, and numbers exceeding 50 are considered to be significantly elevated when using non-destructive testing on fibreglass reinforced plastics). Relative moisture readings alone do not necessarily indicate a structural issue, though they may have a high cost of repair. Elevated relative moisture readings are commonly found on fibreglass vessels upwards of 5 to 10 years old.

*Serviceable:* Sufficient for a specific requirement.

*Soundings:* Sounds created during percussive sounding tests, and typically referred to as 'good' (referring to bright, solid sounds), 'dull' (or dullness), and 'hollow'. Dull soundings are often accompanied by elevated moisture readings and may be an early sign of structural issues in cored areas of fiberglass hulls, decks and below deck structural areas. Hollow soundings may be indicative of fiberglass delamination (separation of layers of fiberglass or core materials) or voids below gelcoat or paint finishes.

*Tested:* Component was operated or inspected for proper operation or specification.

*Ready access:* Access for inspection without the use of tools that would require time beyond the scope of this survey.

## 2.5 Standards for the Marine Industry

This is a brief outline of the organizations responsible for creation and maintenance of standards and regulations used in evaluating the soundness of this vessel. Some of the standards are recommendations, while many have been adopted into Canadian and United States law. More information pertaining to regulations, the Canada Shipping Act and related standards can be obtained by contacting Transport Canada directly. A list of construction standards for pleasure craft is also available from American Boat & Yacht Council. The ABYC standards have been adopted and endorsed by North American pleasure craft manufacturers and insurers, and Transport Canada as of October 31<sup>st</sup> 2019, and are considered best practice. The following is a list of organizations, regulations and standards considered in the formulation of this report:

Canada Shipping Act

United States Code of Federal Regulations (CFR)

National Fire Protection Association

American Boat & Yacht Council

International Standards Organization (ISO)

## SECTION 3: VESSEL IDENTIFICATION & DIMENSIONS

### 3.1 Vessel Information

Name of Vessel	[REDACTED]
Manufacturer	Kha Shing Lumber Company Ltd., Taiwan
Model	Overseas 40
Type	Bridge Cruiser/Trawler
Year of Manufacture	1988
Model Year	1988
Hull Identification Number (HIN)	[REDACTED]
Ship Registry Official Number	[REDACTED]
Port of Registry	[REDACTED]
Maximum Speed	25 mph estimated
Cruising Speed	13 mph approx.
Hull Material	Fibreglass reinforced plastic (FRP)
Deck Material	Fibreglass reinforced plastic (FRP)
Vessel Documents	The following documents were presented to the attending surveyor: <ul style="list-style-type: none"> <li>• [REDACTED]</li> </ul>
Placard & Labels	All required safety placards and warning labels were observed affixed to the vessel based on date of manufacture. No Canadian Compliance Label sighted.

### 3.2 Dimensions & Capacities

Length Overall (excluding non-integral platforms)	12.04m (39',6") (reported BUC)
Load Waterline Length	Not measured
Beam	4.29m (14',1") (reported BUC)
Draft	1.24m (4',1") approx. (reported BUC)
Displacement	10,455kg (23,000 lbs.) approx. (reported BUC)
Registered Tonnage	29.29 GT / 27.17 NT, per vessel registry documents
Ballast	None fitted
Fuel Capacity	Unavailable (no tank labels sighted)
Water Capacity	Unavailable (no tank labels sighted)
Holding Capacity (black water)	Unavailable (no tank labels sighted)
Passenger Capacity	No capacity label sighted



FIGURE 1 - HULL IDENTIFICATION NUMBER (HIN)

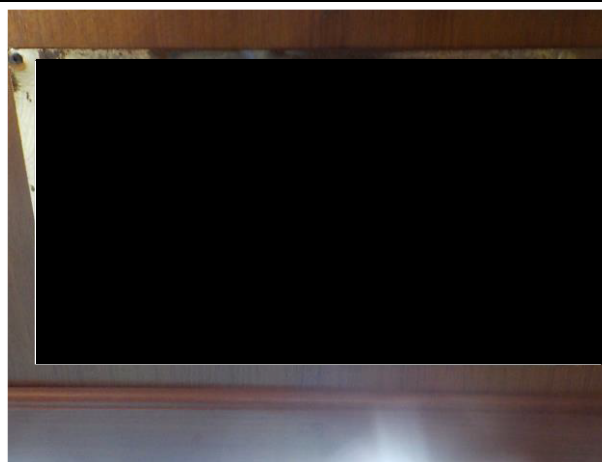


FIGURE 2 - OFFICIAL NUMBER PLAQUE IN FORWARD BERTH

## SECTION 4: VESSEL HISTORY, LAYOUT & CONSTRUCTION

### 4.1 Vessel History

The listing broker reported that the current owner acquired the vessel in 2010, though a sale listing was found for the subject vessel from 2019 (see the valuation section of this report for details). No information was provided as to prior ownership history or liens. No history of claims or damage reported to the attending surveyor. The listing broker reported the current owner has traveled the Great Loop once with this vessel, and that the current owner has fitted the vessel with lower pitch propellers to achieve desired cruising performance. Spare propellers stowed below the dinette bench seats are reported to be the originally specified propeller pitch. Some existing/known issues were reported by the current owner, according to the listing broker, as follows:

- Problems with reliability of wind speed/direction instrumentation
- Problems with reliability of the Navman depth/speed display at the lower helm station
- Problems with reliability of the ice maker at the aft deck
- Problems with effectiveness of the externally mounted stern thruster and, more recently the stern thruster failed to operate and has been professionally diagnosed as having a seized motor



FIGURE 3 - PORT STERN VIEW



FIGURE 4 - STARBOARD STERN VIEW



FIGURE 5 - PORT BOW VIEW



FIGURE 6 - DECK VIEW

## 4.2 Vessel Layout

is a modified V-hull bridge cruiser with twin shaft drive diesel propulsion. Vessel is fitted with a large foredeck atop the forward cabin and forward of the bridge, accessed via side decks port and starboard. The bridge is fitted atop the main cabin and accessed via steps fitted to the aft face of the cabin trunk in the aft deck area. A hardtop extends over the aft deck. A radar arch is fitted atop the bridge. An aft deck area is fitted at the stern, atop the aft cabin, with side doors in the aft deck enclosure providing access to the side decks and a transom gate in the aft rail with ladder access to the aft swim platform. Companionways are fitted at the entrance to the main cabin from the aft deck, and between the salon and the forward and aft cabins. The perimeter of the decks is fitted with stainless railings with intermediate lifelines and a wooden cap rail. Stainless grab rails are fitted to the underside of the aft deck hardtop, along with sides of the bridge apron, and at the forward coaming on the bridge. Wooden grab rails are fitted to the interior cabin staircases. Stainless mooring cleats are fitted along the port and starboard side decks, and at the forward weather deck near the windlass. Engines are fitted amidships with access to the engine space via removable hatch panels in the main salon sole.

The subject vessel is fitted with a helm station on the bridge and a lower helm station in the cabin. A wet-bar cabinet, sink and compact ice maker are fitted at the aft deck. The bridge and aft deck areas are fitted with full canvas enclosures. A mesh type windshield cover is fitted to the lower windshield. The lower windshield is constructed of three tempered glass sections, with wiper motors fitted to the centre and starboard sections. An upper stub windshield with acrylic lens is fitted to the bridge coaming. Vinyl bench seating is fitted to port & starboard (and aft) on the bridge deck, with under seat storage. The aft deck is fitted with a carpet sole covering and unsecured rattan furniture.

The cabin is configured with forward and aft staterooms with attached heads, salon/dinette/galley amidships. The forward and aft cabins are both fitted with double berths. The forward head is fitted to the port side of the forward stateroom, with an electric flush toilet and a shower tap set fitted in a fibreglass liner. An external sink and vanity are fitted to the starboard side of the forward stateroom. The aft head is fitted to the port side of the aft cabin and is configured with a manual pump-flush toilet, a sink and vanity with cabinet, and a shower enclosure with a small bathtub. The aft head is fitted with a full fibreglass liner. The main cabin is fitted amidships and configured with a salon with settee and entertainment centre, along with the lower helm station to the starboard side and a sliding door access to the starboard side deck. The forward companionway provides steps down from the salon to the lower portion of the main cabin forward, with a dinette fitted to port and the galley to starboard. The dinette is fitted with vinyl bench seat cushions with under seat storage, and a pedestal table. The galley is configured with U-shaped cabinetry, propane range top and oven, a microwave oven, a fridge/freezer and a stainless double sink with tap set. Sole coverings in the cabin are of teak and holly wood finish. Headliners in the cabin are of wood and vinyl. Joinery is finished wood and appeared intact and securely fastened to the vessel. Two hatches are fitted of sufficient size to offer a secondary means of cabin egress in emergency, one at the foredeck atop the forward stateroom and on at the transom for the aft cabin. Sliding glass side windows are fitted to the main cabin trunk port & starboard. Opening portlights with plastic flanges are fitted to the hull topsides port & starboard, below the rub rail.



FIGURE 7 – UPPER HELM ON BRIDGE



FIGURE 8 – AFT DECK WITH RATTAN FURNITURE



FIGURE 9 – AFT CABIN



FIGURE 10 - GALLEY

### 4.3 Vessel Construction

The hull is constructed of moulded FRP. Accessible spans of the hull laminate below decks appeared to be solid laminate without cored areas. Ablative bottom paint appeared in serviceable condition. Bottom appeared intact. No cracks observed. The subject vessel is fitted with a drift keel constructed of fibreglass. The keel appeared intact.

The topsides are constructed of fibreglass reinforced plastic. Topsides appeared intact, no cracks observed. No osmosis was observed. A full transom is laminated into the hull at the stern. The transom appeared intact. No cracks observed. No osmosis observed. Very limited access for inspection of structural components below forward and aft cabin soles due to vessel design. Two pairs of longitudinally-oriented FRP stringers are laminated to the hull and transom, and appear to run most of the length of the vessel. Cross frames are laminated between the stringers at intervals. Core material of the hull framing is not known to the attending surveyor. The framing appeared to be of a glass-over-dimensional type. Accessible spans of hull framing appeared intact. Filleting at framing appeared intact, where accessible for inspection. No cracks or visible delamination observed at framing. Primary bulkheads were observed below decks at the forepeak, forward stateroom, engine space and aft cabin. All bulkheads appeared intact.

The deck is constructed of moulded FRP. The presence and type of core material is not known to the attending surveyor at the time of publication. Decks are finished with what appears to be original gelcoat. Exposed weather decks and the foredeck were found to be fitted with a non-slip gelcoat finish. Deck and cockpit sole appeared intact. Cabin trunk appeared largely intact.

Limited access to the hull/deck joint due to vessel design. Access available only in the forepeak rode locker. The hull/deck joint appears to be of a shoebox type, with the deck flange sitting outboard of the hull flange, mechanically fastened and bonded. An external plastic rub rail is fitted, with a stainless insert, around the perimeter of the hull/deck joint. The hull/deck joint appeared intact and without visible signs of water seepage where accessible for inspection. The rub rail appeared to be intact and securely fastened.

The subject vessel is fitted with a bolt-on aft swim platform constructed of a plastic decking material and supported with aluminum brackets affixed to the transom. A FRP bow pulpit is through-bolted to the forward weather deck. Platform(s) appeared intact. No cracks observed at the aft platform. Platform supports appeared intact and securely fastened. Mounting fasteners and related hardware appear to be intact and securely fastened.

Bright sounds were audible in most accessible areas of structural laminate during random percussive sounding tests. The hull laminate and decks presented as mostly dry during non-destructive electronic moisture testing.

**For the purposes of reporting, the vessel's structure and equipment installations shall be taken as intact, compliant and serviceable unless otherwise stated in Appendix A: Findings and Recommendations section of this report.**



FIGURE 11 – HULL FRAMING BELOW AFT CABIN SOLE



FIGURE 12 – HULL/DECK JOINT AND BULKHEAD IN FOREPEAK

## SECTION 5: PROPULSION SYSTEMS

### 5.1 Primary Propulsion Machinery & Specifications

COMPONENT	DESCRIPTION
No. of Engines	Two (2)
Type	6-cylinder diesel inboard shaft.
Manufacturer	Cummins
Model	6BT5.9M
Engine Serial No.	[REDACTED]
Model Year	1987
EPA Label	None fitted
Displacement (each engine)	5.9L (359 CID)
Rated Power (each engine)	157kW (210 HP)
Engine Hours	3154 port, 4417 starboard, according to hour meters in tachometers at lower helm
Compartment Ventilation	2x 12VDC electric blowers Plastic/FRP vents fitted port & starboard topsides
Reduction Gear Model/Type	Twin Disc model MG502-1 transmissions
Reduction Gear Serial Nos.	[REDACTED]
Gear Ratio	2.00:1
Shaft(s)	1-3/4" stainless
Shaft Seal Type	Traditional stuffing box(es) with packing.
Struts/Bearings	Single post bronze struts forward, V-struts aft Cutlass bearings fitted to all 4 struts
Propeller(s)	Twin Hung Shen 24x21 3-blade bronze with weed cutters
Steering Gear	Dual station hydraulic, dual spade stainless rudders with tie bar fitted at steering gear below aft berth
Trim Tabs	Bennett hydraulic
Bow Thruster	None fitted.
Stern Thruster	12VDC Sideshift externally mounted with twin propellers

## 5.2 Primary Propulsion Systems

### 5.2.1 ENGINES

COMPONENT	DESCRIPTION
Engine block(s) and cylinder head(s)	Cast iron
Engine beds/mounts	Cast iron/aluminum with rubber bushings
Cooling system	Closed, freshwater cooling system with raw water cooled heat exchanger.
Exhaust system	Wet-type exhaust with overboard discharge via fibreglas muffler(s).
Automatic oil changer	U-Lube 12VDC unit in engine space



FIGURE 13 – PORT MAIN ENGINE



FIGURE 14 – STARBOARD MAIN ENGINE

Engine(s) appeared serviceable during the survey inspection. Nonetheless, a full mechanical inspection was not undertaken as a part of this survey. Engine(s) appeared securely installed to engine beds amidships. Machinery guards were observed to be in place as required. There were no oil or exhaust leaks found where components were accessible for inspection.

The engine(s) ran well during sea trial. Engine(s) started easily and without notable smoke during cold start-up. Idle speed appeared normal, vessel came up to cruising speed quickly under full power. Engine(s) performed well at wide open throttle and reached acceptable rpm during the sea trial. Engine synchronization was found to be audibly correct and confirmed with gauges while underway. No movement was observed at the engine mounts during a backdown test at sea trial. Thermal imaging showed no unusual high temperatures in the engine and exhaust system castings during sea trial.

### 5.2.2 OIL ANALYSIS

Oil analysis was not requested as a part of this survey.

### 5.2.3 CONTROLS/GAUGES

COMPONENT	MAKE/MODEL	SERIAL NO.	TYPE	LOCATION
Shift/throttle control	Morse	-	Binnacle mount	Both helm stations
Engine gauges	VDO	-	Engine speed (tachometers), coolant temperature, oil pressure, volts Fuel flow gauges	Both helm stations  Lower helm only
Stop switch/tether	None sighted	-	-	-



FIGURE 15 - THERMAL IMAGE OF PORT MAIN ENGINE

FIGURE 16 - THERMAL IMAGE OF STARBOARD MAIN ENGINE

Shift/throttle controls presented with smooth operation throughout operating range. Shift/throttle controls and engine gauges were found to be operational while underway during sea trial. Gauges were not tested for accuracy as part of this survey, but appeared to be reasonably accurate during observations at sea trial.



FIGURE 17 - STRUT, PROPELLER AND WEED CUTTER

FIGURE 18 - STARBOARD RUDDER

The steering gear appeared intact and serviceable, with no visible leaks from hydraulic components and no significant water entry at the rudder posts while underway during sea trial. Linkages appeared intact. Helm operation was found to be smooth from lock to lock during dockside testing of both helm stations. The Sideshift stern thruster was found to be inoperable and was therefore not tested.

## SECTION 6: HULL PIPING, PUMPS & TANKAGE

### 6.1 Propulsion Fuel System

COMPONENT	DESCRIPTION
Fuel type	Diesel
No. of tanks	Two (2)
Tank material	Painted steel
Tank locations	Engine space, outboard of main engines
Deck fill locations, type	Port & starboard side decks, stainless
Fuel valves	Supply lines at tanks, distribution manifold in engine space
Filtration	Water separating with sight bowls
Pumps	Mechanical, no fuel transfer pump sighted
Tank monitors	Electric sending units at tanks, gauges at both helms



FIGURE 19 – FUEL FILTER IN ENGINE SPACE



FIGURE 20 – TANK ENCLOSURE WITH BALL VALVE

Tank(s) appeared to be intact and securely fastened to the vessel. Tank label(s) not sighted. No leaks were sighted at the tank(s) or tank fittings. Deck fill fitting(s) appeared to be intact, securely fastened and serviceable. Venting appeared intact where accessible for inspection. Deck fill grounding not sighted due to limited access. Fuel tank grounding appeared compliant where accessible for inspection. Fuel valves appeared serviceable and without leaks or weeping at valve bodies or fittings. Fuel valves were cycled and confirmed operational. Fuel filter(s) secured to the vessel and appeared serviceable. No leaks sighted at fuel filter(s) or related fittings. Diesel in the sight bowls appeared clean and free from excessive debris. Fuel hose markings not accessible for inspection on some of the fuel hoses. Some of the fuel hoses observed onboard appeared to be compliant and correctly marked. Fuel hoses appeared intact where accessible for inspection. Double hose clamps of sufficient size are installed on accessible fuel fill hose fittings. No leaks sighted from fuel hoses or related fittings while underway during sea trial. No fuel transfer pump sighted onboard. Fuel pump(s) appeared to be original equipment and serviceable. No active leaks sighted from fuel pump on engines while underway during sea trial. Fuel level gauge(s) appeared serviceable but were not tested for accuracy as part of this survey. Floscan fuel flow metering system fitted alongside both main engines in the engine space. System appeared serviceable and accurate during sea trial.

## 6.2 LPG (Propane)/CNG (Compressed Natural Gas) Systems

COMPONENT	DESCRIPTION
Fuel type	LPG (propane)
No. of tanks	2
Tank material	Steel (painted)
Tank locations	1 secured below bridge helm, 1 unsecured at starboard side deck
Regulators	Single stage with electric solenoid valve below bridge apron
Lockers	Storage locker below bridge apron

Tank below bridge helm appeared to be securely fitted to the vessel. Tank fittings appeared intact and serviceable. Remote shut-off valve and sensor assembly in galley appeared serviceable.

## 6.3 Potable Water System

COMPONENT	DESCRIPTION
Pressure pumps	Jabsco Par Max 2.9 12VDC electric 50 psi demand type Installed in engine space
Filtration	Watts dual canister particulate filters installed in engine space
No. of tanks	Two (2)
Tank material	Stainless
Tank locations	Below aft berth
Deck fill locations, type	Port & starboard side decks, stainless
Shore water fittings	Starboard side of the cabin trunk
Transom shower	Not sighted
Water heater type/capacity	Seaward S-1100 120VAC electric 42L (11 gal. US) Installed in engine space
Water heater engine coolant loop	None sighted
Pressure relief	150 psi
Tank monitors	Series multi-tank monitor system display in galley



FIGURE 21 – DUAL TANKS FITTED BELOW AFT BERTH



FIGURE 22 – HOT WATER TANK IN ENGINE SPACE

Potable water tank(s), lines and fittings appeared securely installed to the vessel, serviceable and without visible leaks, where accessible for inspection. Water system pressure pump powered up briefly but not tested with water system decommissioned. The water heater appeared intact and undamaged, with no visible leaks from fittings and no standing water around the base of the tank. The water heater was not powered up or tested with the water system decommissioned. Water filtration system(s) were not tested as a part of this survey.

#### 6.4 Sanitation System

COMPONENT	DESCRIPTION
Pumps	Jabsco 12VDC self-priming macerator Installed below galley sole
Vent filtration	Yes, engine space
No. of holding tanks	One (1)
Holding tank material	Stainless
Holding tank locations	Engine space
Deck pump out fitting locations, type	Starboard side deck, stainless
Holding tank monitors	Series multi-tank monitor system display in galley
No. of grey water tanks	None sighted
No. of shower sumps	Two (2)
Location of shower sumps	Below galley sole, in engine space



FIGURE 23 – HOLDING TANK IN ENGINE SPACE



FIGURE 24 – HOLDING TANK VENT FILTER

Holding tank, pumps, lines, fittings and fixtures appeared intact, securely fastened and without visible leaks, where accessible for inspection. Sanitation hoses and fittings appeared serviceable where accessible for inspection. System found to be decommissioned for off-season storage and was therefore not tested.

## 6.5 Pumps & Dewatering Systems

### 6.5.1 WASHDOWN

COMPONENT	DESCRIPTION
Pumps	Flojet model 4325-143 12VDC 40 psi demand type Installed in engine space
Filtration	Inline plastic particulate filter near pump
Source/through-hull locations	Raw seawater through-hull fitting with seacock in engine space
Spigot locations	Bow

Pump(s), fittings, hoses and related components appeared serviceable. Sea strainer and fittings to through-hull appeared intact, securely fastened and serviceable. Washdown system was not recommissioned and therefore not tested as a part of this survey.

### 6.5.2 AIR CONDITIONING PUMPS

COMPONENT	DESCRIPTION
No. of pumps	One (1)
Pump type	Non-self-priming 120VAC below aft cabin sole
Filtration	Sea strainer
Source/through-hull locations	Raw seawater through-hull fitting with seacock below aft cabin sole

The pump(s), hoses and related fittings appeared intact, securely fastened and serviceable. Not powered up with system decommissioned.

### 6.5.3 BILGE PUMPS

COMPONENT	DESCRIPTION
No. of pumps sighted	Three (3)
Pump type	Cartridge type 12VDC non-self-priming, specs not legible
Pump locations	Below forward cabin sole, engine space and below aft berth
Float switches	Yes (all three pumps)

Accessible bilge pumps, float switches, hoses and connections appeared intact, securely fastened and serviceable. Bilge pump(s) powered up and sounded operational, though the after most two pumps were not tested with dynamic load due to the absence of sufficient bilge water on the day of survey.

## 6.7 Seacocks, Through-hulls & Drainage

COMPONENT	DESCRIPTION
Topsides through-hull fittings	Bronze
Through-hulls below the waterline	Plastic and bronze
Seacocks type	Ball valves
Hull drain fittings	Bronze hull drain at base of transom.
Lifting/trailer eyes	None fitted.
Scuppers	None sighted, self-bailing decks

Topsides through-hull fittings appeared intact and securely fastened to the vessel. Through-hull fittings below the waterline appeared intact and securely fastened to the vessel. Seacocks are fitted on through-hull fittings below the waterline, where accessible for inspection. Seacocks cycled and some found to be serviceable at time of inspection. Hose clamps appeared securely installed where accessible for inspection. Hull drain plug(s) and related hardware appeared intact, securely fastened and serviceable, where accessible for inspection. No leaks were sighted from accessible through-hull fittings while underway during sea trial.

## SECTION 7: ELECTRICAL SYSTEMS

### 7.1 Ignition Protection

At least one electrical component installed in LPG tank space below the bridge apron was not clearly labeled as compliant with ignition protection requirements, as required by small vessel regulations, regardless of date of manufacture of the vessel. This is an important safety requirement intended to prevent ignition of fumes that could cause fire or explosion onboard the vessel. Recommendations around the propane system and ignition protection are identified in the Findings & Recommendations section of this report.

## 7.2 Direct Current Systems (less than 50V)

COMPONENT	DESCRIPTION
Voltages	12-volt, negative ground
Main disconnects	Multiple battery main switch installed to salon DC panel Additional master battery switch below lower helm
Panel boards/overcurrent protection	Main DC panel board in salon, breakers Sub-panels located at lower helm, breakers
Batteries – no., type, locations	1 x 24-series 12-volt flooded lead-acid genset starting 2 x 8D 12-volt sealed AGM inverter/house All batteries installed in engine space
Alternators	2 x engine mounted 12-volt alternators, output specification labels not sighted
Battery isolators	None sighted.
Automatic charging relays	None sighted.
Solar charging system	Multiple large solar panels installed to hardtop (specification labels not accessible for inspection) Victron Energy Solar Charge controller installed in step beside the lower helm
Parallel solenoid	Not sighted
12-volt outlet locations	Both helm stations

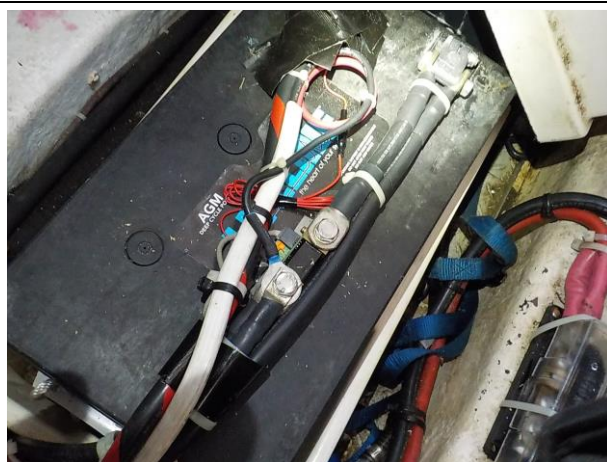


FIGURE 25 – MAIN BATTERY DISCONNECT IN SALON DC PANEL BOARD      FIGURE 26 – 8D BATTERY IN ENGINE SPACE

No ready access to back of panel for inspection (disassembly of cabinetry required to access, which is beyond the scope of this survey). Battery master disconnect switch(es) and DC panel boards appeared to be intact and compliant, where accessible for inspection. Battery connections appeared clean and secure. Proper electrolyte containment observed. Positive (+) terminal(s) appeared properly insulated. Very limited access to large spans of DC wiring harnesses installed to cable races throughout the vessel. Wiring insulation, connections and related fixtures appeared mostly compliant and in serviceable condition where accessible for inspection. DC power appeared consistent on relevant tested circuits while underway during sea trial. Choose a building block. Alternator(s) not thoroughly tested for output as a part of this survey, however, increased voltage was observed with engine(s) running during sea trial. Solar panel(s), controller and connections appeared securely installed and mostly compliant, where accessed for inspection.

## 7.3 Alternating Current Systems (over 50V)

COMPONENT	DESCRIPTION
Voltages	120VAC
Shore power inlet receptacles/locations	Single 120VAC 30A Installed to the starboard side of the cabin trunk
Main disconnects	Non-ELCI breakers in AC panel board within 3m (10') of the shore power inlet receptacle
Panel boards/overcurrent protection	Main AC panel board in salon, breakers
120-volt GFCI receptacle locations	Galley, both heads
120-volt non-GFCI receptacle locations	Salon, berths, engine space

Battery charger/inverter	Victron Energy Multi-Plus 12-volt 120-amp battery charger with 120VAC 3000-watt DC-to-AC inverter Installed in engine space
Isolation Transformers	None sighted



FIGURE 27 – MAIN AC PANEL BOARD IN SALON



FIGURE 28 – CHARGER/INVERTER IN ENGINE SPACE

No ready access to back of panel for inspection (disassembly of cabinetry required to access, which is beyond the scope of this survey). Panel board installation appeared compliant and serviceable, where accessible for inspection. Receptacles appeared securely installed in approved junction boxes and serviceable. GFCI receptacles tested and found to be operational. Very limited access to large spans of AC wiring harnesses installed to cable races throughout the vessel. AC wiring insulation, connections and fixtures appeared mostly compliant and in serviceable condition where accessible for inspection. Battery charger/inverter appeared securely installed and serviceable. Unit appeared to be mostly correctly installed, with secure connections and sufficient, suitable overcurrent protection. Powered up and appeared operational.

### 7.3.1 GENERATORS

COMPONENT	DESCRIPTION
Fuel type	Diesel
Manufacturer/model	Onan
Serial no.	Label not sighted
Location of installation	Engine space
Output Specifications	Label not sighted
Engine hours	2466, according to hour meter at generator enclosure



FIGURE 29 - GENERATOR INSTALLATION IN ENGINE SPACE



FIGURE 30 – SHORE POWER MAIN INLET RECEPTACLE

No access to generator manufacturer label due to location of installation. Generator appeared serviceable. Installation appeared to be secure and compliant. No oil, coolant, fuel, or exhaust leaks were sighted on visual inspection of the generator and related components. Generator not started, as the current owner had already winterized the unit ready for off-season storage.

## 7.4 Appliances & Galley Equipment

### 7.4.1 REFRIGERATION

MAKE	MODEL	TYPE	LOCATION
Nova Kool	RFU8000	Full-size 2-way AC/DC electric fridge	Galley
U-Line	ULN-WH95TP-03	115VAC electric ice maker	Aft deck wet bar



FIGURE 31 – GALLEY FRIDGE



FIGURE 32 – AFT DECK ICE MAKER

Refrigeration appliances appear to be intact and serviceable. Refrigeration units appear to be properly secured to the vessel structure. Galley fridge powered up and confirmed operational on all applicable power sources. Ice maker at aft deck was not tested.

### 7.4.2 OVENS/COOKTOPS

MAKE	MODEL	TYPE	LOCATION
Mediterranean	LPG (propane)	Range top and oven	Galley
RCA	-	Microwave oven	Galley



FIGURE 33 – PROPANE OVEN IN GALLEY



FIGURE 34 – MICROWAVE OVEN

Cooking appliances sighted onboard appeared serviceable. Cooking appliances stowed/secured as required for crew safety while underway. Microwave powered up and confirmed operational during dockside testing. Propane range not fired/tested as a part of this survey.

## 7.5 Heating, Ventilation & Air Conditioning Systems

COMPONENT	DESCRIPTION
No. of air conditioners/air handlers	One (1)
Locations and capacities of air unit installations	Aft berth hanging locker
System voltages	120VAC
Chiller system	Specification not sighted

No access to air conditioner installed in the aft berth hanging locker due to disassembly of cabinetry required beyond the scope of this survey. Not powered up with system decommissioned.

## 7.6 Corrosion Protection Systems

COMPONENT	DESCRIPTION
Locations of sacrificial anode installations	Transom (plate anodes), trim tabs and propeller shafts
Through-hull bonding	Yes
Impressed-current corrosion protection	None sighted.
Galvanic isolation	None sighted.

Anodes appeared to be securely installed with most in serviceable condition. Through-hulls below the waterline appeared to be bonded where accessible for inspection.

## SECTION 8: ELECTRONICS & NAVIGATION SYSTEMS

### 8.1 Navigation & Communications Electronics

COMPONENT	DESCRIPTION	LOCATION
Magnetic compass	Ritchie	Both helm stations
GPS/plotters	Garmin touch screen MFD	Upper helm only
Depth/speed temperature	Furuno displays Navman display Depth and paddlewheel speed transducers	Both helm stations Lower helm only Hull bottom
Autopilot	Raymarine ST70 display Newer Raymarine display Hydraulic pump and rudder indicator Electronic fluxgate compass	Lower helm Upper helm Below aft berth Dinette cabinetry
Radar	Furuno analogue display Closed dome scanner	Lower helm Radar arch
Wind speed/direction	Furuno displays	Both helm stations
Radios/loud hailers	Standard Horizon Intrepid VHF Icom IC-M424G VHF	Salon Stowed in aft cabin
Automatic Identification System (AIS)	AIS capable VHF fitted, no transceiver sighted.	-
Intercom/phone system	Airphone handsets	Both helm stations
Computers	None sighted.	-
Ethernet	None sighted.	-
NMEA networks	NMEA2000 network backbone	Below lower helm
Security systems	None sighted,	-
Video	None sighted.	-
TV/monitors	Samsung flat screen TV	Salon
Audio	Fusion multi-media stereo Speakers	Salon Throughout cabin and at aft deck



FIGURE 35 – RADAR DISPLAY AT LOWER HELM



FIGURE 36 – NEWER GARMIN PLOTTER AT UPPER HELM

Navigation equipment powered up and confirmed mostly operational during sea trial. Helm display(s) appeared properly installed and serviceable. Cables and connections appeared intact. TV appeared securely fastened and serviceable. Powered up briefly and appeared operational. Audio equipment appeared serviceable and securely fastened. Cable connections appeared to be correctly installed, serviceable and well supported. Powered up briefly and appeared operational.

## SECTION 9: SAFETY SYSTEMS & EQUIPMENT

### 9.1 Exterior Lighting

COMPONENT	DESCRIPTION	LOCATION
Navigation Lights	Bi-colour (red/green) lights Stern light Anchor light	Bridge apron, port & starboard Transom Radar arch
Docking Lights	None sighted.	-
Spotlight/Searchlight	12VDC portable spotlight	Stowed below bridge apron
Deck Lights	12VDC LED	Fitted below bridge apron to illuminate foredeck
Underwater Lights	None fitted.	=

Exterior lighting appeared serviceable and securely fastened to the vessel. Lenses appeared to be intact where able to be sighted from deck level only. Powered up and confirmed operational.

### 9.2 Safety Equipment

COMPONENT	DESCRIPTION	LOCATION
Signal Horn/Bell/Whistle	Ship's bell Air horn Manual Sound Signal	Cabin Starboard side of bridge apron Stowed below bridge apron
Radar reflector	None sighted.	-
MOB recovery	None sighted.	-
EPIRB/Lights	None sighted.	-
Boat Hooks	1 x plastic with aluminum pole	At bridge apron
Paddles	None sighted	-
Bailer	None sighted.	-
Re-boarding ladders/gangways	Telescoping stainless steel	Aft platform
Liferafts	None present for inspection.	-
First aid kits	None sighted.	-
Visual distress signals	No current flares present for inspection	-
Personal flotation devices	None sighted.	-
Emergency hatches	Two (2)	Foredeck atop the forward cabin Aft berth

### 9.3 Ground Tackle

COMPONENT	DESCRIPTION	LOCATION
Fenders & mooring lines	Plastic fenders, nylon lines	Along starboard side of vessel and stowed in various locations onboard
Anchors/rode	Steel plow anchor (spec not sighted) 3/8" G4 steel chain with 5/8" rope Secondary folding aluminum anchor with rope	Bow roller Forepeak locker Stowed at ladder on aft swim platform
Windlass	Quick 12VDC electric vertical model FRS60 Remote controls Plug for corded remote	Forward weather deck Both helm stations Forward weather deck

Fenders and mooring lines appeared serviceable. Anchor appeared serviceable. Chain/rode observed in forepeak rode locker, appeared sufficient for vessel and serviceable, but anchor chain/rode was not let out for detailed inspection due to the constraints of the location of inspection. The windlass appeared serviceable, with tidy wiring in the rode locker. Powered up and confirmed operational.

### 9.4 Detection, Alarm & Fire Suppression Systems

COMPONENT	DESCRIPTION	LOCATION
Detectors	LPG/CNG detector	Galley cabinetry
Alarms	Engine warning system	Both helm stations
Fixed fire extinguishing & fire ports	None sighted	-
Portable fire extinguishers	Flag 3A:40BC, s/n 134302C Buckeye 1A:10BC, s/n VR-791315 First Alert 3A:40BC, s/n DR22756893 Buckeye 1A:10BC, s/n VR-791310	Below bridge apron Salon at companionway Salon at starboard side entrance Forward stateroom
Fire buckets & axes	None sighted	-



FIGURE 37 – WINDLASS IN FOREPEAK LOCKER



FIGURE 38 – ANCHOR CHAIN IN FOREPEAK LOCKER

Engine warning system alarm confirmed operational with 'key on' power supplied. Individual alarms for low oil pressure, overheat and other connected sensors were not specifically tested as a part of this survey. Portable fire extinguishers mounted, gauges show fully charged.

## SECTION 10: ADDITIONAL EQUIPMENT

### 10.1 Davits

Nautley Dinghy Ramp system with two cradles securely fastened to the trailing edge of the aft platform, appeared serviceable.

### 10.2 Tender

The tender present on the day of survey was not requested to be included in the valuation.

### 10.5 Non-Fixed Furnishings

The following non-fixed furnishings were observed onboard and have been included in this report for valuation purposes only:

- Couch in main salon
- Rattan loveseat, chairs, ottoman and coffee table on aft deck



FIGURE 39 – LOVESEAT AFT DECK



FIGURE 40 – ARMCHAIR AND OTTOMAN

## SECTION 11: SUMMARY

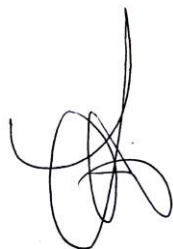
Overall, the subject vessel presented as clean and well maintained, but showing signs of age and in need of some generational maintenance. The subject vessel presented as structurally sound, where accessed for inspection and within the scope of this report. The vessel performed well during sea trial. This vessel was found by the surveyor to be in satisfactory condition for its intended use, providing deficiencies listed as Category A: Findings Recommended for Immediate Attention in Appendix A: Summary of Findings & Recommendation are properly addressed. A compliance inspection should be considered at the conclusion of repairs, to verify repairs are compliant with applicable legislation, construction standards, and best practices.

## SECTION 12: 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 that favours the cause of the client, the amount of the value estimate, the attainment of a stipulate 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 should be considered as an entire document. No single section is intended to be used, except as part of the whole. This report and its contents are submitted without prejudice and for the benefit of whom it may concern. This report does not constitute a warranty, either expressed or implied, nor does it warrant the future condition of the vessel. It is a statement of the condition of the vessel at the time of the survey only. Marine Surveys Canada assumes no responsibility or liability for any action taken by the owner or insurer as a result of this report.

Signed:




**Name of Surveyor: Timothy J. S. Martin**

**Surveyor Certification: SAMS Accredited Marine Surveyor® #1360  
Transport Canada Appointed Tonnage Measurer <24m**

**Date of Report: October 1, 2024**

**Lewis Martin & Associates Ltd.**

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## APPENDIX A: SUMMARY OF FINDINGS & RECOMMENDATIONS

This section is only one part of the survey report. If received on its own, this section should not be mistaken as this vessel's full survey report.

### A.1 Summary of Findings & Recommendations

#### Findings & Recommendations

Findings & recommendations in this document have been organized into the following six categories. Definitions of the categories are provided below:

#### Category A: Findings Recommended for Immediate Attention

*These deficiencies are highest priority and should be addressed before the vessel is next underway, and in some cases, prior to launching the vessel. Some of these items may represent an endangerment to personnel or property and may be enforceable where applicable legislation applies. Some findings may also be listed in this category to express urgency of repair, particularly in cases where failure to address the deficiency may result in unexpected damage to (or premature deterioration of) the vessel that is likely to incur significant cost or inconvenience.*

1. A significant amount of flexing and distortion was observed in the aft swim platform where the dinghy davit mounts are fitted along the trailing edge, which may be indicative that the plastic aft platform decking material is not sufficiently robust to handle the weight of the tender. The aft swim platform has distorted to such an extent that the structural integrity of the platform is considered by the attending surveyor to be unsafe to use to support the weight of a tender. Immediate further investigation and modification to improve the weight-bearing capacity of the aft swim platform is recommended prior to use of the davit system to support the weight of a tender. In addition, the nylon inserts of the nylock nuts do not appear to be engaged with the threads of the bolts for the aft platform supports on the transom, a condition which could result in loosening of the nuts. Immediate further investigation recommended. Longer bolts may be required.
2. The horn was found to be inoperable. The air horn compressor audibly powered up but no sounds emanated from the horn during the survey inspection. Repair/replace horn or, to comply with Section 207 of the Small Vessel Regulations.



FIGURE 41 – DISTORTION OF AFT PLATFORM

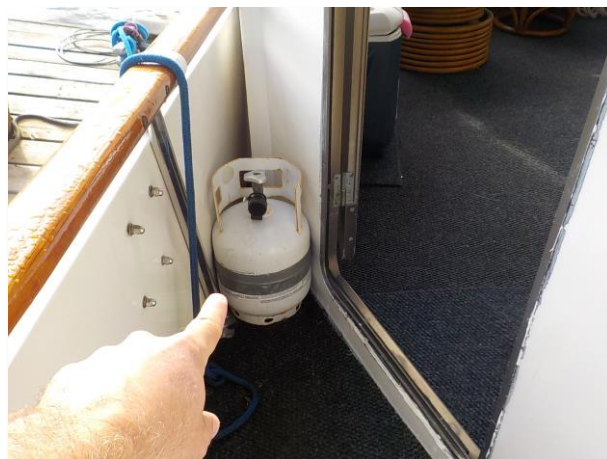


FIGURE 42 – UNSECURED LPG CYLINDER

3. An unsecured 10lb. steel LPG (propane) cylinder was observed stowed at the starboard side deck access door. Remove LPG cylinder from unsecured storage, to comply with Sections 604 & 721 of the Small Vessel Regulations, Section 1.7.6 of ABYC Standard A-1.
4. Fuel hoses found onboard the vessel appeared to be original, many were found to be dated 1987 and well past the 10-year life expectancy according to EPA guidelines. Promptly replace fuel fill, vent and supply hoses due to age and increased likelihood of permeation. Fuel hose should be selected to comply with Sections 605, 724(1) and 727(1) of the Small Vessel Regulations, Section 7 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and ABYC Standards H-24/H-33 (as applicable).
5. The vessel is fitted with her original propane system, fitted in the storage area below the bridge apron (below the bridge helm). The propane system is fitted with only a single stage regulator and some of the components appear to

be original (and some not accessible for inspection). In addition, using the under bridge apron storage as a propane locker is not suitable, as the locker is full of other gear, has insufficient venting and contains a large number of electrical components that are not ignition protected. In the opinion of the attending surveyor, the propane system should be completely removed from the vessel. Alternatively, the propane system could be update and relocated or the locker modified to meet applicable standards for safety. At a minimum, the system should be inspected by qualified technician, in order to ensure safe operation and compliance with Sections 604 & 721 of the Small Vessel Regulations and ABYC Standard A-1. The system should not be used until repairs have been satisfactorily completed. In addition, any electrical components in the propane locker should be confirmed as compliant with ignition protection requirements in Sections 608 & 731 of the Small Vessel Regulations, Section 8.4 of TP1332E Construction Standards for Small Vessels and Section 11.5 of ABYC E-11 (or equivalent SAE J1171, UL1500, C1500, ISO 8846 or ISO 8-8846 ignition protection standards), or replaced with a model that is Ignition Protected, or relocated outside of the propane storage compartment.



FIGURE 43 – SINGLE STAGE REGULATOR IN UNSUITABLE PROPANE LOCKER



FIGURE 44 – IMPROPER FUEL HOSE CONNECTION AT PORT MAIN ENGINE

6. Unsecured portable gasoline containers found stowed below the bridge apron and at the aft deck (with the outboard motor for the dinghy) should be secured in a suitable space on the vessel exterior that does not contain non-ignition-protected electrical components, or removed from the vessel entirely, to comply with Section 605 of the Small Vessel Regulations.
7. The flexible fuel hose between the hard copper fuel piping and the port main engine was found to be connected without a proper fitting (the hose was fitted over the unfinished end of the copper pipe and a hose clamp was found to be in place to secure it). A repair should be undertaken promptly to prevent potential fuel leaks and to comply with Section 33.6.2 of ABYC Standard H-33. The fitting at the starboard engine was not sighted and should also be verified.
8. No seacock fitted at the through-hull fitting below the galley sole (appears to be for the holding tank overboard discharge. Install proper seacoaks on through-hulls, in compliance with Section 602 of the Small Vessel Regulations, Section 3.3.1 of TP1332E Construction Standards for Small Vessels, and Section 27.5 of ABYC Standard H-27. In addition, the seacock should be locked out in the closed position and tagged, to prevent accidental or intentional discharge of holding tank contents and to comply with Canadian and United States regulations for inland and near shore waterways.
9. No DC overcurrent protection was sighted for the solar charging system. The presence of suitable overcurrent protection should be confirmed prior to next use of the solar charging system, to comply with Part 7 of the Small Vessel Regulations, Section 8 of TP1322E Construction Standards for Small Vessels (2004 & 2010), and ABYC Standards A-31 and E-11. As the solar charging system appears to be a newer installation (not original to the vessel), the installation should comply with current regulations and construction standards.
10. Unprotected wiring connections were observed sitting in the bilges, and may be subject to submersion in bilge water, which could result in short circuits or give rise to stray current corrosion:
  - A main DC battery cable in the centre bilge of the engine space, to starboard of the battery installation.
  - An AC extension cord in the centre bilge of the engine space, aft of the batteries.
  - An AC extension cord with the air conditioning raw water pump cord plugged into it in the starboard bilge below the aft cabin sole.

Wiring connections should be made above the level of bilge water accumulation, and secured in junction boxes. Replace non-approved electrical connector type with approved connector(s), to comply with Section 728(1) of the Small Vessel Regulations, Section 8.7 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and Section 11.14 of ABYC Standard E-11. As these wiring connections have clearly been installed to the vessel after the date of manufacture (not original to the vessel), they should comply with current regulations and construction standards.



FIGURE 45 - NO SEACOCK ON SANITATION SYSTEM OVERBOARD DISCHARGE      FIGURE 46 - EXTENSION CORD LAYING IN BILGE

11. The side shift stern thruster was reported by the listing broker to be inoperable, with a “seized motor”. The control box was found sitting unsecured and with unprotected DC terminals atop the water tanks in the aft berth. A risk of short circuit exists. It is recommended that the stern thruster and related components be removed from the vessel. If the stern thruster is to be repaired, the control box below the aft berth should be properly secured to the vessel with the battery positive terminals protected with insulating boots, in compliance with TP1332E Construction Standards for Small Vessels and ABYC Standard E-11. Repair of the stern thruster may incur significant cost.
12. The outboard motor stowed on the aft deck (for the tender) was found to be unsecured. The outboard motor should be properly secured to the vessel prior to next voyage, in the interest of crew safety while underway.
13. A film of fuel was observed around the fittings of the mechanical fuel pump fitted to the port side of the starboard main engine block. Prompt further investigation recommended to determine and correct the cause, to prevent contamination of bilge water.

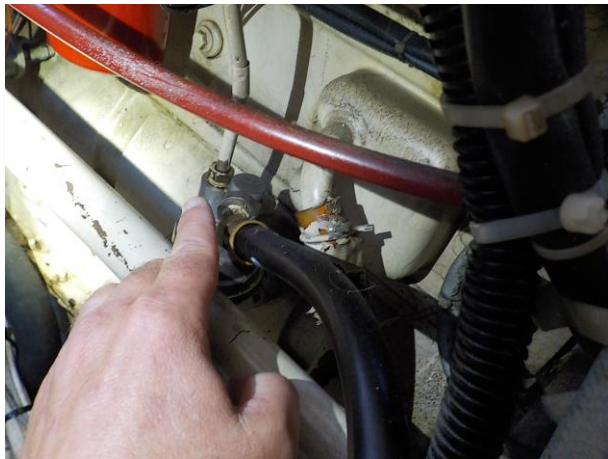


FIGURE 47 - WEEPING FUEL PUMP FITTING AT STARBOARD MAIN ENGINE      FIGURE 48 - UNJACKETED TURBOCHARGERS IN ENGINE SPACE

14. Both main engine turbochargers were found to be without insulating jackets. Exhaust temperatures at the turbochargers (dry exhaust) are significantly higher than the allowable 93C (200F) in the engine space during normal operation of the vessel. It is recommended that the turbochargers and related castings on the dry side of the exhaust be jacketed at both main engines prior to next voyage.

15. Significant corrosion staining was observed at the lifeline fittings at the bow rail, suggestive of some crevice corrosion with potential for deterioration of hardware. Recommend prompt further inspection of lifelines, fittings and swages, to prevent unexpected failure.
16. Damage was observed at the port side deck wooden cap rail, and the cap rail has been temporarily repaired using flat bar and screws. This configuration is unlikely to last long and should not be considered a permanent repair. Railings are required to withstand a force of 400lbs. in any direction. Recommend prompt repair/replacement of the damaged wooden cap rail.



FIGURE 49 – LIFELINE CORROSION AT THE BOW RAIL

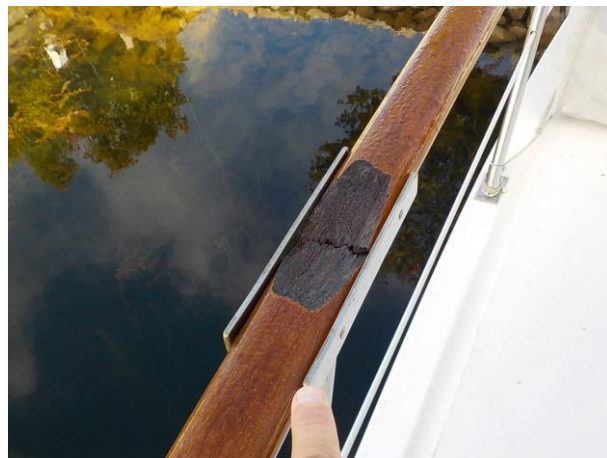


FIGURE 50 – WOODEN CAP RAIL DAMAGE

17. Vinyl windows in the aft face of the bridge canvas enclosure were found to be weathered and occluding line of sight aft from the bridge helm. Line of sight aft from the lower helm is also occluded due to vessel design. Recommend replacement of weathered vinyl windows prior to next voyage, in the interest of crew safety and in compliance with ABYC Standard H-1 related to field of vision from the helm.

\*Note: The listing broker affected a repair of a leaking port side main engine raw water pump and opened a partially closed starboard main engine raw water seacock prior to proceeding to sea trial on the day of survey, presumably with the permission of the vessel's current owner. The repair appeared to be satisfactory and the sea trial proceeded without event.

### Category B: Findings Related to Regulatory Compliance

*Deficiencies in this category are regulatory in nature, but not necessarily of immediate concern with respect to the safe operation of the vessel. Regulations are cited to assist in finding specific details of how to comply. In many cases, the deficiencies listed in this category may be related to equipment fitted at the time the vessel was manufactured and may have been in service for several years as installed. Recommendations in this category may be dependent on intended use of the vessel that cannot be anticipated by the attending surveyor (for example, smaller vessels do not require navigation lights or a compass if certain conditions are met under the regulations). Such items may be listed here because they are regulatory in nature, although the vessel may never be used in a situation requiring compliance under the regulations. Some recommendations in this category that are dependent on how, when, and where the vessel is operated are considered **dependent recommendations**. Responsibility ultimately rests with the vessel owner to comply when required to do so.*

18. The navigation light lenses all appeared weathered, which may reduce visibility when powered up. Recommend replacement of lenses, to ensure compliance with Small Vessel & Collision Regulations (*This is a dependent recommendation that is only required if the vessel is operated after sunset, before sunrise, or in periods of restricted visibility*).
19. No case grounding wire sighted at the metallic casing of the inverter/charge installed to the forward bulkhead in the engine space. Install proper inverter/charger case ground connection, in order to comply with Section 728 of the Small Vessel Regulations, Sections 8.2 and 8.12 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and Section 11.15 of ABYC Standard E-11. The inverter/charger appears to be a newer installation (not original to the vessel) and is therefore considered under current construction standards and related regulations.

### Category C: Findings Related to Removable Safety Gear

20. Some required safety equipment was not sighted onboard, specifically current flares, PFDs, MOB recovery devices and a radar reflector. An inventory of required safety gear is recommended prior to next voyage.
21. Expired flares were observed onboard the vessel with various dates of manufacture. Expired flares should be removed from the vessel prior to launch. Contact your local marina office for assistance with proper disposal.

*Periodic inventory of required safety gear is recommended, in order to ensure compliance with the Small Vessel Regulations. A list of required safety equipment for a vessel of this size can be obtained from the Transport Canada, on the Office of Boating Safety website at <https://www.tc.gc.ca/eng/marinesafety/debs-obs-menu-1362.htm>. (This is a dependent recommendation, as some safety equipment requirements are dependent on when, where and how the vessel is used. Responsibility rests with the vessel owner/operator to ensure required safety gear is present and serviceable for each voyage).*

### Category D: Findings Related to Voluntary Standards Compliance

*These items should be strongly considered for upgrade, in keeping with current standards and best practices, but are not enforceable, either due to the vessel's date of manufacture or because no legislation exists. Voluntary standards are cited to assist in finding specific details of how to comply.*

22. Batteries installed in the engine space were found to be unsecured in their boxes. Batteries should be properly secured with positive terminals properly covered, and with a suitable means of containing spilled electrolyte, to comply with the requirements of Part 7 of the Small Vessel Regulations, Section 8.6 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and Section 10.7 of ABYC Standard E-10.
23. A wire nut and several Scotch-Lok type (insulation piercing) connectors were observed in the wiring below the lower helm station. Replace non-approved electrical connector type with approved connector(s), to comply with Section 728(1) of the Small Vessel Regulations, Section 8.7 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and Section 11.14 of ABYC Standard E-11.
24. No ground fault protection sighted at the AC shore power mains or panel board. Install Equipment Leakage Circuit Interrupter (ELCI) breaker or Type A residual current device (RCD) with or in addition to the main shore power circuit breaker(s), in order to comply with Section 728 of the Small Vessel Regulations, Sections 8.2 and 8.12 of TP1332E Construction Standards for Small Vessels (2010 only), and Section 11.11 of ABYC Standard E-11.
25. The AC and DC panel boards below the lower helm station in the salon were found to be non-segregated. AC panel should be properly separated from the DC panel, in order to comply with Section 728 of the Small Vessel Regulations, Sections 8.2, 8.10 and 8.12 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and Section 11.9 of ABYC Standard E-11.
26. Two non-GFCI 120VAC receptacles were found installed in the engine space. Receptacles installed in the engine space should be replaced with GFCI receptacles, in accordance with ABYC Standard E-11.
27. The portable fire extinguisher stowed below the bridge apron at the upper helm station was not mounted. Fire extinguishers should be mounted securely in a visible and readily accessible location, ideally situated in accordance with Table 2 of ABYC Standard A-4.
28. No carbon monoxide detectors sighted onboard. Install carbon monoxide detectors in accommodation spaces, in accordance with ABYC Standard A-24.
29. No smoke detectors sighted onboard. NFPA Standard 302 recommends installation of single station smoke alarms in enclosed accommodation spaces.
30. No inverter warning label sighted. Install label at the shore power panel in the salon, warning of the presence of a DC to AC inverter installed on the vessel, to comply with Section 31.8 of ABYC Standard A-31.
31. The control panel for the inverter was not installed at the shore power panel board. Relocate inverter control panel beside shore power panel in salon, in order to comply with Section 31.6 of ABYC Standard A-31.
32. The 150 psi hot water heater pressure relief valve is not compliant with ABYC Standard H-23, Section 23.7.2. The water system pressure is 50 psi (50 psi x 175% = 87.5 psi). The existing valve should be replaced with a valve rated at 75 psi, the closest commercially available valve rating for the application.

## Category E: Non-Urgent Findings Related to Vessel Structure

Deficiencies in this category are related to findings around structural components of the vessel but are not considered as immediate structural concerns. These findings represent areas of deterioration that may lead to more serious structural concerns in the future, but are not currently considered by the attending surveyor(s) to be of concern with respect to the structural integrity of the vessel, for any of the following reasons:

- a) The structure of the vessel is not compromised, nor likely to be compromised in the foreseeable future
- b) The affected area is relatively small or isolated and well-supported by surrounding structures
- c) The affected area is not a critical structural component of the vessel (for example, hatches or coamings)

33. Significantly elevated relative moisture readings were obtained in the following areas:

- In the cabin trunk of the aft deck enclosure, immediately surrounding both side doors (access to the port & starboard side decks), with dull sounds audible during percussive soundings of the affected areas and some slightly displaced cracks in the laminate surrounding the side doors. This presentation is suggestive of progressed deterioration of core materials in the laminate. The affected areas are not considered by the attending surveyor to be in critical structural areas.
- Bow pulpit, with dull sounds and visible, displaced cracks in the pulpit laminate, again suggestive of progressed deterioration of core material.
- In the hardtop laminate to starboard of the bridge companionway. Dull sounds were audible in the aft faces of the cabin trunk at the after portion of the bridge/forward end of the aft deck, and some visible deterioration (dry rot) of the exposed core plywood material was observed at the starboard side of the bridge companionway opening. Dark coloured stains were also visible in the aft face of the cabin trunk, port side of the bridge, suggestive of wet core material. Dull sounds were present in much of the aft face of the cabin trunk above bridge deck level (but without corresponding elevated moisture readings), suggestive of some delamination in this area. Again, the affected areas described here are considered by the attending surveyor to be relatively isolated.

Moisture in the cabin trunk and bow pulpit should be further investigated as necessary to help determine urgency and best course of action for repair. Indications of core deterioration are present and invasive testing, such as core sampling, is recommended. While in the opinion of the surveyor complete structural failure is unlikely in the affected area(s), repairs will be required soon, likely at significant cost.



FIGURE 51 – DETERIORATED AREA AROUND SIDE DECK ACCESS DOORS

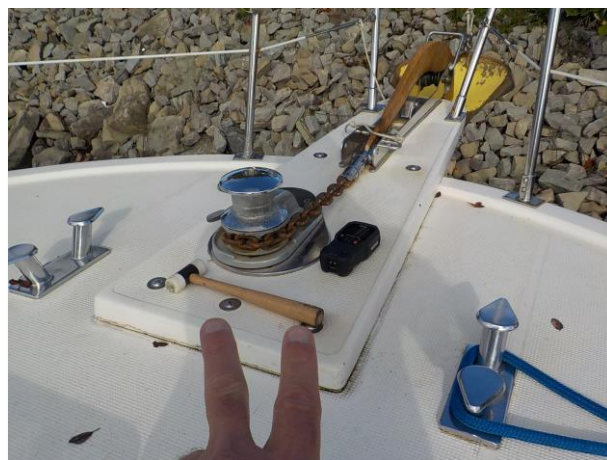


FIGURE 52 – DETERIORATED BOW PULPIT

34. Moderately to significantly elevated relative moisture readings were obtained in the following areas:

- In the full beam of the angled portion of the foredeck immediately below the windshield. Bright sounds were audible during percussive sounding tests of the affected area. Some hollow sounds were audible in several random area of the foredeck, forward of the windshield and aft of the foredeck hatch, suggestive of a series of voids or some delamination in this isolated area of the foredeck. Staining/water damage was observed on the interior wood finishes directly below the windshield in the cabin, also suggestive of water seepage around the windshield.

- In much of the carpeted portion of the aft deck atop the aft cabin. Bright sounds audible in this area and no significant flexing of the laminate observed.
- Cross frame immediately aft of the water tanks installation, accessed below the aft berth. Laminate and wood appeared intact with bright sounds during percussive sounding tests.
- The forward end of the starboard side deck (in line with the leading edge of the windshield) and in the forward weather deck to starboard of the bow pulpit and foredeck hatch. Bright sounds here also.
- The lower portions of the FRP hardtop supports at the aft deck. Bright sounds here and the laminate appeared intact.

Moisture in the foredeck, forward weather deck, and in the aft deck atop the aft cabin, should be monitored and further investigated as necessary. Consideration could be given to invasive testing, such as core samples, to determine condition of core and fibreglass substrate. The surveyor has no immediate structural concerns in the affected area(s) of this vessel; however, it should be noted that repairs will very likely be necessary in the future. Exact timing of the necessity of any future repairs is not possible within the scope of non-invasive testing undertaken as a part of this survey.



FIGURE 53 – ELEVATED MOISTURE IN FOREDECK



FIGURE 54 – NON-STRUCTURAL BLISTERS ON KEEL

35. A combination of slightly dull and hollow sounds were obtained in the following areas:

- Starboard side of the bridge apron above the starboard side deck.
- Several small areas of the underside of the hardtop above the aft deck (no safe access for the surveyor to climb atop the hardtop for inspection, so only the underside has been fully inspected).
- Most of the underside of the radar arch.
- Wood interior liner immediately surrounding the hatch in the aft berth, along with water stains in the finish of the affected area, suggestive of water leaking from the aft berth hatch.

Suspect soundings in the bridge apron, hardtop and radar arch should be further investigated when practicable (likely after fall haul out) to determine the urgency and best course of action for repair. No corresponding elevated relative moisture readings were obtained in the affected areas. The presentation is suggestive of isolated areas of delamination with perhaps some core deterioration in some of the areas. The surveyor has no immediate structural concerns in the affected areas of this vessel.

36. Small, non-structural blisters were observed across much of the hull bottom and drift keel after haul out for bottom inspection. The blisters measured no more than 2.5cm (1") diameter and disappeared quickly as the surface of the hull dried out following a bottom wash. These blisters can be very expensive to repair. Recommend monitoring for progression over time. No reliable elevated relative moisture readings were obtained in the affected areas.

\*\*\*Note: an abundance of non-essential gear/equipment was found to be packed into many of the storage compartments throughout the vessel, and the vessel was therefore not well prepared for survey. Very limited access was afforded to a number of areas of the vessel structure below decks.

## Category F: Maintenance & Cosmetic Findings

Deficiencies in this category do not represent an immediate safety concern. Items in this category should be **considered** for repair, in the interest of maintaining the safe operating condition and appearance of the vessel. In some cases, the surveyor may make suggestions as to a suitable timeline for repair (for example, before or after the vessel is hauled for the season), to assist the vessel owner in service planning and budgeting.

37. Scuffs and scratches were observed along both port & starboard topsides between the rub rail and the waterline, consistent with the age of the vessel. An isolated area of damaged gelcoat was observed along the starboard topsides above the waterline, with some areas of exposed fibreglass mat. Gelcoat should be repaired when practicable, to prevent water ingress to the underlying laminate and to improve appearance.
38. Some of the cabinet door latches in the cabin were found to be broken/ineffective. Cabinet doors around the cabin that could not be secured closed should be repaired in the interest of crew safety while underway.
39. Non-displaced, non-structural stress cracks in and around the cockpit and deck areas could be repaired in order to improve appearance and prevent moisture ingress to the underlying fibreglass mat.
40. No recertification tags/blank tags sighted affixed to the portable fire extinguishers found onboard the vessel. Fire extinguishers should be recertified and tagged or replaced, in the interest of maintaining the extinguishers in serviceable condition.
41. Flexible hoses were found to be fitted over unfinished copper piping below the aft head sink, a configuration that may give rise to a leak from the potable water system. Recommend use of suitable water system hoses and fittings, where joined to copper piping. In addition, tape was observed wrapped around one of the water line fittings at the after end of the water tanks installed below the aft berth.
42. The float switch appeared inoperable for the forward shower sump below the galley sole. Further investigation recommended to determine and correct the cause.
43. The exhaust hose between the generator and muffler in the engine space was found to be weathered. Recommend replacement of the hose with a suitable USCG approved wet exhaust hose as part of generational maintenance.
44. Transom mounted plate anodes were observed to be partially wasted and should be replaced at next haul out.
45. Several of the stainless vent fittings were found to be loose where installed to the port and starboard topsides below the rub rail. Securely re-bed the vent fittings when practicable.
46. A stainless through-hull fitting along the starboard topsides amidships above the waterline (possibly the original generator exhaust discharge fitting) was found to have the hose disconnected inside the engine space and the exterior opening filled in with silicone sealant. While the silicone appears intact, the fitting is relatively close to the waterline. It is recommended that this fitting be properly capped or removed (and the fibreglass repaired) to prevent water ingress to the engine space in the event of failure of the silicone plug.



FIGURE 55 – SILICONE FILLED THROUGH-HULL STARBOARD TOPSIDES

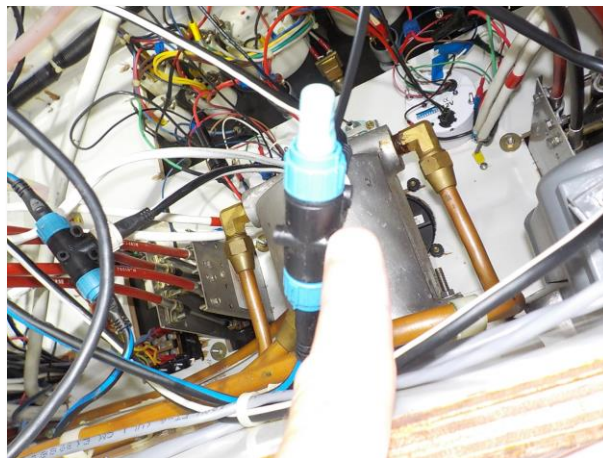


FIGURE 56 – UNSECURED NMEA NETWORK CONNECTIONS BELOW LOWER HELM

47. Corrosion was observed at the pin terminals for the windlass remote plug installed to the forward weather deck, which may affect proper operation of the remote. The remote was also not sighted onboard the vessel. In addition, the windlass did not operate from the upper helm station on the bridge. Further investigation recommended when practicable, to determine and correct the cause.

48. Gear oil was observed in a plastic pail below the outboard motor stowed on the aft deck, suggestive of a leak or spill. Further investigation recommended to determine and correct the cause.
49. One of the characters appeared unreadable in the Navman LCD display at the lower helm station. Consider replacement of the component. The display is not a current model.
50. Two NMEA backbone assemblies were observed unsecured below the lower helm station. These connections are very fragile due to small wiring and are susceptible to damage from vibration if not properly secured. This in turn may affect reliability of the navigation instrumentation. Recommend securing the NMEA network backbones to the vessel.
51. Peeling bedding material was observed at the strut mounting locations on the hull bottom. Recommend secure re-bedding of the struts (and any other affected fittings on the hull bottom) at next haul out, as part of generational maintenance.
52. A crack was observed in the foredeck hatch lens, and the hatch may no longer weathertight. Monitor and consider replacement of hatch lens as necessary.
53. The starboard windshield wiper was found to be torn and likely ineffective. In addition, the centre wiper arm was found to be missing from the wiper motor fitting. Recommend installing a new wiper arm for the centre windshield section and fitting the wipers with new blades.
54. The aft deck transom gate cap rail hinge was found to be very loose. Monitor and repair as necessary to maintain the integrity of the railing.
55. The following items are considered to be cosmetic in nature and can be repaired/updated as part of generational maintenance:
  - Carpet lifting at both side decks near the side door access to the aft deck area.
  - Shrunken/weathered rubber seals in the surrounding frames of the windshield sections and some of the side window frames.
  - Lifting wood trim below the port side of the forward portion of the bridge apron (above the windshield).
  - Weathered/threadbare mesh lower windshield cover.
  - Chipped gelcoat finish on the fibreglass bench seat bottoms on the bridge.
  - Water saturated bridge bench seat cushions (also suggestive of leaking canvas).
  - Roughly applied sealant in the upper corners of the shower enclosures of both heads (suggestive of cracks developing in the fibreglass liners).
  - A sticky lock mechanism was observed at the forward head access door latch.
  - Worn vinyl at the dinette bench seat cushions.
  - Cracked acrylic stub windshield lens at the perimeter of the bridge coaming (taped up with clear packing tape).
  - No shower hose observed at the shower tap set in the forward head.
  - Base for the Airphone intercom handset slightly loose where mounted on the bridge.
  - Mild surface corrosion on the mounts of the main propulsion engines, with minimal material loss.

## APPENDIX B: VALUATION DETAIL

The Comparable Vessel Calculation is the most probable price in terms of money which a vessel should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title under conditions whereby:

- a) Buyer and seller are typically motivated;
- b) Both parties are well informed or well advised, and each is acting in what they consider to be their own best interest;
- c) A reasonable time is allowed for exposure in the open market;
- d) Payment is made in terms of cash in Canadian or U.S. dollars, or in terms of financial arrangements compatible thereto; and
- e) The price represents a normal consideration for the vessel sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

The scope of the market or markets considered in the compilation of data is dependent to some extent on the sample size available and the impact of markets in other regions on local values. Generally speaking, a larger sample size provides more accurate data. Variances in the North American market are typically considered, so long as they do not significantly impact average values when compared with vessels found in the local market. In cases where limited comparables exist in local and North American markets, the scope of the research will be broadened and comparables sought in areas outside North America, to help establish a fair and accurate value. The importance of including neighbouring markets cannot be understated, as vessels are commonly relocated from freshwater to saltwater and vice versa throughout North America, therefore the high and low value ranges published in this valuation should reflect the range of vessels that can be found in the local market. Vessels listed for sale, or shown as sold, in USD have been converted to CAD based on the exchange rate of 1.35 as provided by Morningstar (Google) for the date of inspection.

Current Listings. Comparable vessels of the same or similar model and model year (not including the subject vessel) were found on brokerage websites; YachtWorld.com, Boats.com, BoatTrader.com and BoatDealers.ca, as well as various FSBO sites.

No. of comparable vessels (sample size):	5
Average asking price (CAD):	\$ 108,216.00
Adjusted avg. price (CAD):	\$ 94,718.29
Adjusted high average (CAD):	\$ 108,649.53
Adjusted low average (CAD):	\$ 80,940.65

SoldBoats.com listed comparable vessels of the same or similar model and model year sold within the date range listed below.

No. of comparable vessels (sample size):	6
Date range of sample:	2022 - 2024
Average asking price (CAD):	\$97,304.00
Average reported sold price (CAD):	\$85,167.33
Pct. of ask price (how 'adjusted price' was calculated for current listings above):	88%

The highest actual sales of vessels of the same or similar model and model year were:

(CAD)	\$108,755.00	Vallejo, CA, USA
(CAD)	\$95,000.00	Iroquois, ON, Canada
High average of sold boats reported (CAD):	\$101,877.50	

The lowest actual sales of vessels of the same or similar model and model year were:

(CAD)	\$64,848.00	El Jobean, FL, USA
(CAD)	\$71,500.00	Port Coquitlam, BC, Canada
Low average of sold boats reported (CAD):	\$68,174.00	

The subject vessel was located in the SoldBoat.com data as being listed at [REDACTED] and sold for [REDACTED] in [REDACTED] by [REDACTED].

BUCValuPro.com places a current fair market value range on a Great Lakes vessel as follows:

BUC Fair Market Value range (CAD), adjusted for location:	\$108,108.00	to	\$118,692.00
BUC Fair Market Value midrange average (CAD):	\$113,400.00		
BUC Fair Market Value high average (CAD):	\$130,410.00		
BUC Fair Market Value low average (CAD):	\$73,710.00		
BUC published replacement value (CAD):	\$1,235,250.00		

The range of market values is represented in the valuation summary below as the range between the lowest average and the highest average of the data listed above. The presenting condition of the vessel at the time of inspection, with any equipment present, is considered against this range of market values.

The findings & recommendations made in this report impact the valuation only to the extent of the vessel's overall condition in relation to the market value ranges listed. The owner (insured, buyer or seller) of the vessel will bear any reconditioning costs that may be required in order to render the vessel suitable for intended use.

#### Valuation Summary

Compared to many of the vessel's sister ships, the vessel fares well when it comes to hull structure and onboard equipment but has more limited appeal with some developing moisture issues in structural areas and a need for some generational maintenance. The actual sales data for freshwater boats enjoys a slightly higher average retail value than saltwater vessels. Considering the overall condition and weighing the actual sales data and current listings data, the valuation of the subject vessel is placed at the lower midrange of market values.

#### Comparable Approach Average:

Adjusted Values Low		Adjusted Values Midrange		Adjusted Values High	
Current Adj Listings	\$80,941	Current Adj Listings	\$94,718	Current Adj Listings	\$108,650
Sold Boats Data	\$68,174	Sold Boats Data	\$85,167	Sold Boats Data	\$101,878
BUC ValuPro	\$73,710	BUC ValuPro	\$113,400	BUC ValuPro	\$130,410
<b>LOW AVG VALUE</b>	\$74,275	<b>MIDRANGE AVG VALUE</b>	\$97,762	<b>HIGH AVG VALUE</b>	\$113,646

Therefore, after consideration of the reliability of the data, the extent of the necessary adjustments and the "as is, where is" condition of the vessel, its equipment as surveyed, it is the opinion of the surveyor that the Fair Market Value range of the subject vessel & included equipment (excluding taxes) is: CAD\$80,000.00-\$90,000.00

#### Value Breakdown as follows:

Vessel only	CAD\$78,500.00-\$88,200.00
Non-fixed Furnishings	CAD\$ 1,500.00-\$ 1,800.00

\*Note: the dinghy and outboard motor were not requested by the client to be included in the valuation.