Condition & Valuation Marine Survey Report of

[redacted]

1987 Carver 32 Montego

CONDUCTED BY

Timothy J. S. Martin
SAMS Accredited Marine Surveyor® #1360
Transport Canada Appointed Tonnage Measurer <24m

PREPARED FOR

[redacted]

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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.	[redacted]
Reason for Survey Request	Condition & Valuation for insurance underwriting
Declared Intended Use of the Vessel	Canadian inland, protected waterways and Great Lakes. Recreational.
Name of the Vessel's Current Owner(s)	[redacted]
Insurer	[redacted]
Insurance Broker	[redacted]
Policy No.	[redacted]
Details of Coverage	[redacted]
Listing Yacht Broker/Salesperson	[redacted]
Purchaser's Broker/Representative	[redacted]

1.2 Dates & Conditions of Inspection

The vessel was surveyed suspended above her slip at [redacted], on October 30, 2024. No sea trial was undertaken as part of this survey and the vessel was not surveyed afloat. The attending surveyor was onsite from 9:45 am to 1:30 pm. Ambient temperature on arrival was 17C, overcast. Temperatures of hull, transom and below deck structural components were observed between 13C and 16C, as measured using infrared thermography. No other parties present for the out-of-water inspection. Onboard systems were not recommissioned and were, therefore, not tested at the time of the out-of-water inspection.

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.

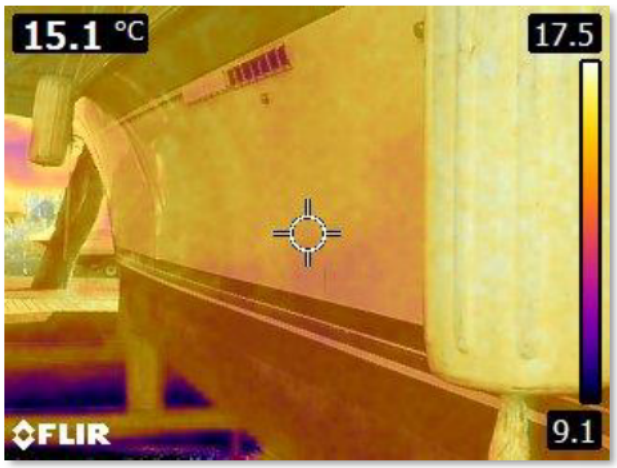

FIGURE 1 – THERMAL IMAGE OF TOPSIDES

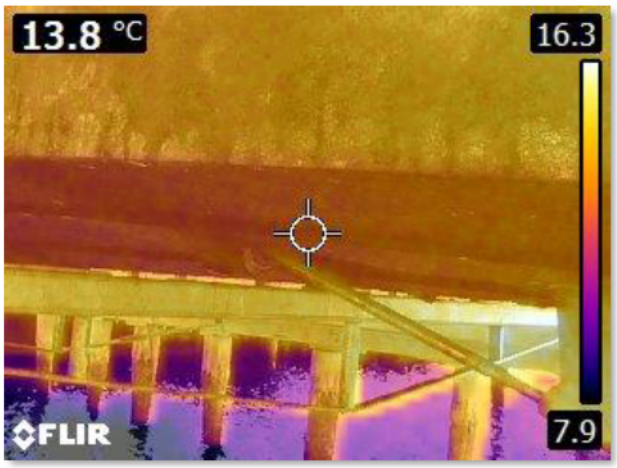

FIGURE 2 – THERMAL IMAGE OF TRANSOM

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 fibreglass 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 31st 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	Carver Boat Corporation, Hopkins, MN
Model	32 Montego
Type	Express Cruiser
Year of Manufacture	1987
Model Year	1987
Hull Identification Number (HIN)	[redacted]
Vessel License Number	[redacted]
Maximum Speed	35 mph
Cruising Speed	25mph
Hull Material	Fibreglass reinforced plastic (FRP)
Deck Material	Fibreglass reinforced plastic (FRP)
Vessel Documents	The following documents were presented to the attending surveyor: • [redacted] [redacted]
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)	9.83m (32',3") (reported BUC)
Load Waterline Length	Not measured
Beam	3.76m (12',4") (reported BUC)
Draft	0.84m (2',9") approx. (reported BUC)
Displacement	5896kg (13,000 lbs.) approx. (reported BUC)
Fuel Capacity	643L (170gal. US) per tank label(s)
Water Capacity	Unavailable
Holding Capacity (black water)	Unavailable
Passenger Capacity	No capacity label sighted


[redacted]

FIGURE 3 - HULL IDENTIFICATION NUMBER (HIN)


[redacted]

FIGURE 4 - VESSEL LICENSE NUMBER

SECTION 4: VESSEL HISTORY, LAYOUT & CONSTRUCTION

4.1 Vessel History

No information was provided as to prior ownership history or liens. No history of claims or damage reported to the attending surveyor. Generator has not been used for 9 years. Standing water in engine space was reported to the attending surveyor by the marina staff, the vessel is scheduled for extraction/clean-up this fall.

FIGURE 5 - PORT STERN VIEW

FIGURE 6 - STARBOARD STERN VIEW

FIGURE 7 - PORT BOW VIEW

FIGURE 8 – DECK VIEW

4.2 Vessel Layout

[redacted] is a modified V-hull express cruiser with twin gasoline inboard V-drive propulsion. Vessel is fitted with a large foredeck atop the forward cabin and forward of the cockpit, accessed via side decks. An open midships cockpit is fitted, with open aft deck area. A radar arch is fitted atop the cockpit. Engines are fitted astern with access to the engine space via hatch in the aft deck.

The hull appears to be finished with original gelcoat. Bottom paint applied below the waterline. Decks appear to be finished with original gelcoat. The cabin is accessed from the cockpit, via non-slip steps and via two (2) companionway doors hinged with a sliding top. Three (3) hatches are fitted to the vessel, with one (1) of sufficient size for use as an alternate means of egress in emergency. Opening and fixed glass side windows are fitted to the cabin trunk sides of the main cabin. Stainless railings are fitted at bow and side decks. Stainless mooring cleats are fitted along both the port & starboard side decks. The radar arch is of FRP with a gelcoat finish.

The subject vessel is fitted with a single helm station aft of the windshield. A wet-bar cabinet, and sink are fitted at the aft deck area. The cockpit is fitted with a canvas bimini top and mooring cover. The cockpit seating is of vinyl with benches fitted aft and to the port side. A helm bench is fitted abaft the windshield. Storage is fitted below the bench at the helm in the cockpit. A

full windshield is fitted to the cockpit, with centre walk-through section side located, vents are fitted port and starboard. The cockpit sole is finished with a non-slip gelcoat finish.

The cabin is configured with a double V-berth forward, dinette/settee/head/galley mid-cabin, and aft berth fitted below cockpit sole. U-shaped dinette is fitted in the cabin, converts to a double side berth. A settee is fitted in the salon. Mattresses are of cloth, seat cushions in the cabin are of cloth. Vinyl headliners are fitted throughout the cabin. The cabin sole is finished with carpet. Joinery is of wood with a plastic finish. The galley is fitted to the port side of the main cabin. The galley is fitted with a range top, sink with tap set, microwave oven, fridge/freezer and a toaster. The head is situated to the forward starboard portion of the cabin, is attached to the stateroom, and is fitted with an electric toilet, sink with tap set, and a combination shower enclosure with a drain scupper in the sole.

FIGURE 9 – AFT DECK

FIGURE 10 - FOREDECK

FIGURE 11 - CABIN

FIGURE 12 – DINETTE IN CABIN

4.3 Vessel Construction

Limited access to some areas of the hull bottom with vessel suspended in her slip. The hull is constructed of moulded FRP. It is not known to the attending surveyor if the hull is cored, as a lay-up schedule was not available at the time of publication of this report. Hull Framing is configured with longitudinals (stringers) with cross frames at intervals, constructed of FRP with glass over dimensional type framing cored with unknown material. Primary bulkheads are constructed of wood and FRP and fitted at forepeak, forward state room, main cabin and the engine space. The topsides are constructed of fibreglass reinforced plastic. A full transom is laminated into the hull at the stern. Decks are constructed of FRP. Deck framing not seen due to configuration of vessel interior. The cabin trunk is constructed of FRP. The cockpit sole is constructed of FRP. The cabin sole is constructed of FRP. 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, mechanically fastened and bonded. A rub rail is fitted to the perimeter of the hull/deck joint, constructed of plastic and fitted with a stainless steel insert. A bolt-on aft platform is fitted astern, and constructed of FRP with a non-slip finish. A bow pulpit is fitted at the bow, bolted to the deck, and constructed of FRP with a non-slip finish.

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 13 – HULL BOTTOM

FIGURE 14 – HULL LAMINATE AT BOW

4.5 Structural Inspection Comments

4.5.1 VESSEL STRUCTURE

The hull, hull framing, bulkheads, decks, superstructure, platforms and finishes all presented as intact and mostly dry. Mostly bright sounds were audible during random percussive sounding tests with a phenolic hammer in most areas of the vessel structure. The hull/deck joint appeared intact and without visible signs of water seepage, where accessible for inspection. The rub rail appeared intact and securely fastened.

4.5.3 DECK HARDWARE

Railings, stanchions and related hardware appeared intact and securely fastened to the vessel. Hatches, portlights, windows, doors, companionways were found to be intact and properly secure to the vessel. The arch appeared intact, securely fastened at the mounts. The arch presented as mostly dry with bright soundings.

4.5.4 COCKPIT

Canvas, lazarettes/storage, wet bar cabinetry, and windshield(s) presented as intact and secure. Windshield wiper(s) appeared intact and securely fastened, Wiper(s) not powered up. Windshield vent(s) appeared intact and secure, appeared serviceable. Seating appeared largely intact and securely fastened.

4.5.5 CABIN

Cabin joinery appeared intact and securely fastened, with mostly serviceable hinges and latches. Cabin interior doors were fond to be intact. Cabin sole coverings, soft furnishings and headliners appeared intact, clean and serviceable.

SECTION 5: PROPULSION SYSTEMS

5.1 Primary Propulsion Machinery & Specifications

COMPONENT	DESCRIPTION
No. of Engines	Two (2)
Type	8-cylinder gasoline inboard V-drive.
Manufacturer	Crusader
Model	350
Engine Serial Nos.	[redacted]
Model Year	1987 estimated
EPA Label	No
Displacement (each engine)	7.4L (454 CID)
Rated Power (each engine)	260kW (350 HP)
Engine Hours	751 hours, meter at helm, single meter for 2 engines
Compartment Ventilation	2 x 12 VDC electric blowers Vents fitted port & starboard topsides astern
Reduction Gear Model/Type	Borg Warner Velvet Drive (V-Drive)
Reduction Gear Serial Nos.	[redacted]

Gear Ratio	2.0:1
Shaft(s)	Stainless shafts
Shaft Seal Type	Traditional stuffing box(es) with packing.
Struts/Bearings	Single, straight/ cutlass bearings in struts- not accessible with vessel suspended above slip
Propeller(s)	2 x bronze, 3 blade propellers, visual inspection only Propeller specification not sighted
Steering Gear	Single station, cable, tie bar fitted astern. Dual bronze spade rudders.
Trim Tabs	Benett hydraulic
Bow Thruster	None fitted.
Stern Thruster	None fitted.

5.2 Primary Propulsion Systems

5.2.1 ENGINES

COMPONENT	DESCRIPTION
Engine block(s) and cylinder head(s)	Cast iron
Engine beds/mounts	Steel & Aluminum
Cooling system	Open, seawater cooling system.
Exhaust system	Wet-type exhaust with overboard discharge via fibreglas muffler(s).
Automatic oil changer	None fitted.

FIGURE 15 – MAIN ENGINES BELOW AFT DECK

FIGURE 16 – SHAFTS, PROPELLERS AND RUDDERS

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 astern. Drive belts appeared to be intact, serviceable and properly tensioned. Flame arrestor(s) fitted as required. There were no fuel, oil, cooling or exhaust leaks found where components were accessible for inspection.

5.2.2 OIL ANALYSIS

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

5.2.3 CONTROLS/GAUGES

COMPONENT	MAKE/MODEL	TYPE	LOCATION
Shift/throttle control	Morse	Binnacle	Helm
Engine gauges	Teleflex	Analogue gauges for engine speed (tachometer), oil pressure, battery voltage and coolant temp.	Helm
Stop switch/tether	None fitted	-	-

FIGURE 17 – CONTROLS AT HELM

FIGURE 18 – ENGINE GAUGES AT HELM

Shift/throttle controls presented with smooth operation throughout operating range. Gauges were not tested for accuracy as part of this survey,

SECTION 6: HULL PIPING, PUMPS & TANKAGE

6.1 Propulsion Fuel System

COMPONENT	DESCRIPTION
Fuel type	Gasoline
No. of tanks	Two (2)
Tank material	Aluminum
Tank locations	Engine space
Deck fill locations, type	Two (2) stainless steel fitted to the transom port and starboard
Fuel valves	None sighted
Filtration	Particulate
Pumps (Fuel Supply/Fuel Transfer)	Mechanical/No transfer pump fitted
Tank monitors	Gauges fitted helm Electric sending units

Very limited access to deck fills(s) due to configuration of installation(s). Tank(s) appeared to be intact and securely fastened to the vessel. Tank label(s) observed and appeared to be compliant. 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. Fuel tank grounding appeared compliant where accessible for inspection. Fuel filter(s) secured to the engine(s) and appeared serviceable. No leaks sighted at fuel filter(s) or related fittings. Fuel hose markings not accessible for inspection. Some of the fuel hoses observed onboard appeared to be compliant and correctly marked. Double hose clamps of sufficient size are installed on accessible fuel fill hose fittings. Fuel pump(s) appeared to be original equipment and serviceable. Fuel level gauge(s) appeared serviceable but were not tested for accuracy as part of this survey.

6.3 Potable Water System

COMPONENT	DESCRIPTION
Pressure pumps	Jabsco 12VDC 40psi on-demand pump installed below aft berth
Filtration	None sighted
No. of tanks	One (1)
Tank material	Plastic
Tank locations	Below aft berth
Deck fill locations, type	One (1) stainless steel port side deck
Shore water fittings	None sighted
Transom shower	None sighted
Water heater type/capacity	Brand label not accessible, 120VAC installed in engine space
Water heater engine coolant loop	None sighted

Pressure relief	75psi
Tank monitors	None sighted

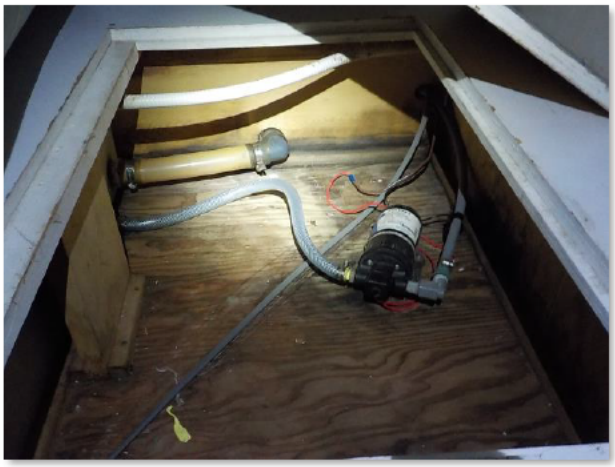

FIGURE 19 - WATER TANK AND PUMP BELOW AFT BERTH

FIGURE 20 - WATER SYSTEM PUMP

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 was not powered up. System found to be partially disassembled/decommissioned for off-season storage/service. The water heater appeared intact and undamaged, with no visible leaks from fittings and no standing water around the base of the tank.

6.4 Sanitation System

COMPONENT	DESCRIPTION
Pumps	None sighted
Vent filtration	None sighted
No. of holding tanks	One (1)
Holding tank material	Plastic
Holding tank locations	Below cabin sole
Deck pump out fitting locations, type	One (1) Stainless steel, forward weather deck
Holding tank monitors	None sighted
No. of shower sumps	One (1)
Location of shower sumps	Below cabin sole forward

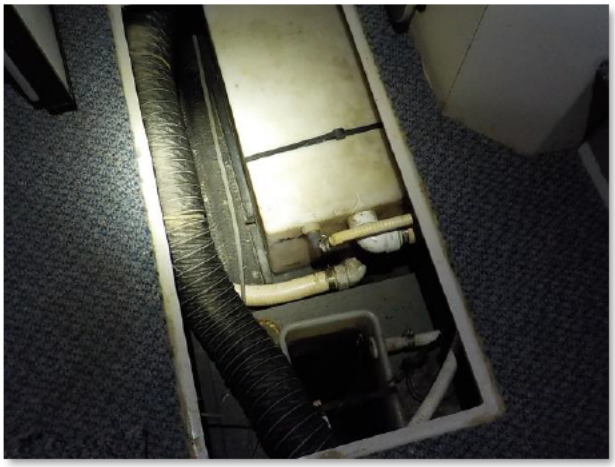

FIGURE 21 – HOLDING TANK BELOW CABIN SOLE

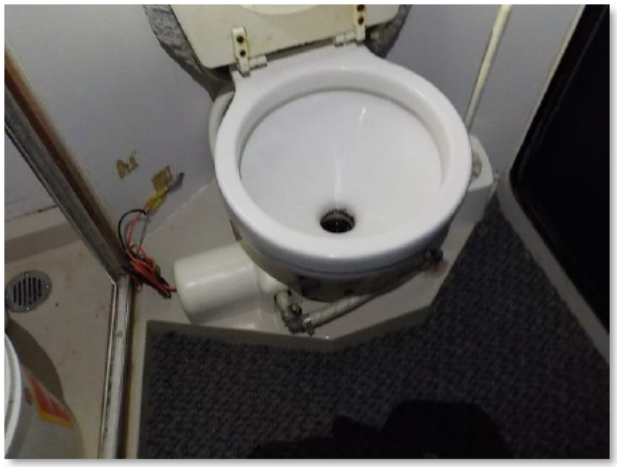

FIGURE 22 – ELECTRIC FLUSH TOILET

Holding tank, 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. Not powered up. Overboard discharge appeared compliant with U.S./Canadian regulations.

6.5 Pumps & Dewatering Systems

6.5.2 AIR CONDITIONING PUMPS

COMPONENT	DESCRIPTION
No. of pumps	One (1)
Pump type	Marine Air 120VAC fitted in engine space
Filtration	None sighted
Source/through-hull locations	Seawater, through-hull fitted in engine space

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

6.5.3 BILGE PUMPS

COMPONENT	DESCRIPTION
No. of pumps sighted	Three (3)
Pump type	12VDC 1500GPH
Pump locations	Engine space, below cabin sole forward, and below aft berth
Float switches	Yes

Limited access to some of the bilge pumps presumed to be fitted, specifically in the engine space. Accessible bilge pumps, float switches, hoses and connections appeared intact, securely fastened and serviceable. Bilge pump(s) not tested as a part of this survey, as no ship's power was available.

6.7 Seacocks, Through-hulls & Drainage

COMPONENT	DESCRIPTION
Topsides through-hull fittings	Plastic and bronze
Through-hulls below the waterline	Bronze
Seacocks type	Ball valves
Hull drain fittings	Bronze hull drain at hull bottom
Lifting/trailering eyes	None fitted.
Scuppers	Plastic scupper drains fitted to cockpit and hatch openings

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 found to be serviceable at time of inspection. Hose clamps appeared securely installed where accessible for inspection. Drain plug not seen at the time of the survey inspection.

SECTION 7: ELECTRICAL SYSTEMS

7.1 Ignition Protection

At least one electrical component installed in gasoline engine/fuel tank space 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. Components that the surveyor could not confirm as ignition protected 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	One (1) battery master switch installed in aft deck locker in the cockpit.
Panel boards/overcurrent protection	Main DC panel board fitted in the Salon, breakers
Batteries – no., type, locations	2 x 31-series 12-volt flooded lead-acid fitted in the engine space
Alternators	2 x 12VDC engine mounted, specifications not sighted
Battery isolators	None sighted.
Automatic charging relays	None sighted.
12-volt outlet locations	One (1) at helm

FIGURE 23 – BATTERY MASTER SWITCH IN AFT DECK LOCKER

FIGURE 24 – BATTERIES FITTED IN ENGINE SPACE

Battery master disconnect switch(es) and DC panel boards appeared to be intact and compliant, where accessible for inspection. Overcurrent protection appeared to be of sufficient type and capacity for the application. Batteries appeared intact and securely installed in approved trays/boxes. 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. Alternator(s) appeared securely mounted and serviceable.

7.3 Alternating Current Systems (over 50V)

COMPONENT	DESCRIPTION
Voltages	120VAC
Shore power inlet receptacles/locations	Single 120VAC 30A at starboard transom
Main disconnects	None sighted
Panel boards/overcurrent protection	Main panel board installed in Salon
120-volt GFCI receptacle locations	None sighted
120-volt non-GFCI receptacle locations	Galley, head, berths, aft deck
Battery charger	Newmar 12 volt in engine space– specifications not sighted due to worn label
Inverter	None sighted
Isolation Transformers	None sighted

FIGURE 25 – SHORE POWER INLET RECEPTICALE AT TRANSOM

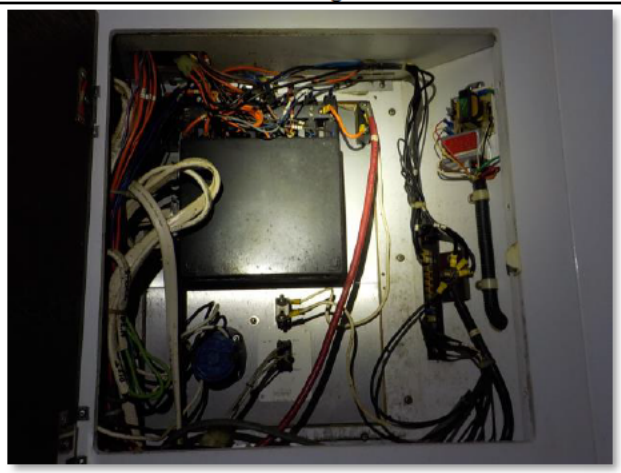

FIGURE 26 – BACK OF MAIN AC PANEL BOARD IN SALON

Panel board installation appeared mostly compliant and serviceable, where accessible for inspection. A reverse polarity indicator is fitted to the panel board, and the panel board was found to be correctly labeled. Receptacles appeared securely installed in approved junction boxes and serviceable. Very limited access to large spans of AC wiring harnesses installed to cable races throughout the vessel. AC wiring insulation, connections and related fixtures appeared compliant and in serviceable condition, where accessible for inspection. Battery charger(s) appeared securely installed and serviceable. Not powered up.

7.3.1 GENERATORS

COMPONENT	DESCRIPTION
Fuel type	Gasoline
Manufacturer/model	Onan Ensign 6500
Serial no.	No access to label
Location of installation	Engine space
Output Specifications	120VAC/60Hz/6.5kW
Engine hours	167, according to meter at generator enclosure

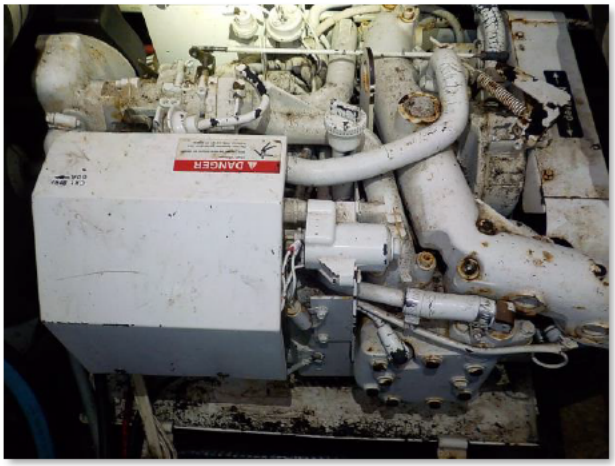

FIGURE 27 - GENERATOR

FIGURE 28 – HOUR METER FOR GENERATOR

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 with vessel out of the water.

7.4 Appliances & Galley Equipment

7.4.1 REFRIGERATION

MAKE	MODEL	TYPE	LOCATION
Norcold	DE400C	Compact two-way 12V/120V electric fridge/freezer	Galley

Refrigeration appliances appear to be intact and serviceable. Refrigeration units appear to be properly secured to the vessel structure.

7.4.2 OVENS/COOKTOPS

MAKE	MODEL	TYPE	LOCATION
Princess	2-burner	Range top. Electric, liquid fuel	Galley
Gold Star	-	Microwave oven	Galley

FIGURE 29 – RANGE FITTED IN GALLEY

FIGURE 30 – MICROWAVE FITTED IN GALLEY

Cooking appliances sighted onboard appeared serviceable.

7.4.3 OTHER APPLIANCES

MAKE	MODEL	TYPE	LOCATION
West Bend	-	Toaster	Salon

Appliances appeared to be serviceable.

7.5 Heating, Ventilation & Air Conditioning Systems

COMPONENT	DESCRIPTION
No. of air conditioners/air handlers	Air conditioner not sighted – controller fitted in salon
Locations and capacities of air unit installations	-
System voltages	-
Chiller system	-

7.6 Corrosion Protection Systems

COMPONENT	DESCRIPTION
Locations of sacrificial anode installations	None sighted.
Impressed-current corrosion protection	None sighted.
Galvanic isolation	None sighted.

Some metallic 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	None sighted,	-
GPS/plotters	None sighted.	-
Depth/speed temperature	Transom mounted depth transducer Through-hull depth transducer	Exterior mount transom Hull bottom
Autopilot	None sighted.	-
Rudder indicator	None sighted.	-
Radar	None sighted.	-
Wind speed/direction	None fitted.	-
Radios/loud hailers	No VHF radio sighted.	-
Automatic Identification System (AIS)	None sighted.	-
Intercom/phone system	None sighted.	-
Video	None sighted.	-
TV/monitors	None sighted.	-
Audio	Clarion M235 stereo deck Speakers	Salon Throughout cockpit and cabin

Most navigation equipment has been removed, presumably for off-season storage. Audio equipment appeared serviceable and securely fastened. Cable connections appeared to be correctly installed, serviceable and well supported. Not powered up.

SECTION 9: SAFETY SYSTEMS & EQUIPMENT

9.1 Exterior Lighting

COMPONENT	DESCRIPTION	LOCATION
Navigation Lights	Bi-colour (red/green) Anchor light	Side decks Arch
Emergency Lighting	None sighted	-
Docking Lights	None sighted.	-
Spotlight/Searchlight	12VDC spotlight Remote	Arch Helm
Courtesy Lights	12VDC incandescent	Throughout cockpit
Deck Lights	None fitted.	-
Spreader Lights	None fitted.	-
Underwater Lights	None fitted.	-

Exterior lighting appeared mostly serviceable and securely fastened to the vessel. Lenses appeared to be intact where able to be sighted from deck level only. Not powered up.

9.2 Safety Equipment

COMPONENT	DESCRIPTION	LOCATION
Signal Horn/Bell/Whistle	12VDC electric Manual sound signal	Deck Stowed in cockpit
Radar reflector	None sighted.	-
Emergency Escape Breathing Device	None sighted.	-
Automated External Defibrillator	None sighted.	-
MOB recovery	Buoyant heaving line	Cockpit
EPIRB/Lights	None sighted.	-
Boat Hooks	2 x plastic with aluminum pole	Cockpit
Paddles	1 x plastic & aluminum	Cockpit
Bailer	None sighted.	-
Re-boarding ladders/gangways	Hinged stainless steel	Aft pulpit
Liferafts	None present for inspection.	-
First aid kits	Two (2)	Head cabinetry
Visual distress signals	1 x waterproof flashlight	Cockpit
Personal flotation devices	Several adult PFDs of various types	Cockpit and cabin
Emergency hatches	One (1)	Foredeck

9.3 Ground Tackle

COMPONENT	DESCRIPTION	LOCATION
Fenders & mooring lines	Plastic fenders, nylon lines	Port & starboard topsides and side decks
Anchors/rode	Folding aluminum plow anchor Chain 5/16" rope 5/8"	Bow Forepeak locker
Windlass	Benson A-35 12VDC Electric Remote	Bow Helm

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.

9.4 Detection, Alarm & Fire Suppression Systems

COMPONENT	DESCRIPTION	LOCATION
Detectors	Gas fume detector.	Helm
Alarms	Engine warning system	Helm
Fixed fire extinguishing & fire ports	None sighted	-
Portable fire extinguishers	General 3A:10BC s/n 052608C Garrison 1A:10BC s/n G-10585422, 2000 Garrison 2A:10BC s/n 31386, 1999	V-berth Companionway steps in salon Cockpit
Fire buckets & axes	None sighted	-
Self-contained breathing apparatus	None sighted	-

FIGURE 31 – ANCHOR AND WINDLASS

FIGURE 32 – ROPE IN FOREPEAK LOCKER

Some of the portable fire extinguishers were found to be mounted, all gauges show fully charged.

SECTION 11: SUMMARY

Overall, the subject vessel presented as clean but in need of generational maintenance. 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: November 7, 2024

This report has been prepared for the attending surveyor(s) by Carla Manina, Technical Writer.

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.

CODE	DESCRIPTION
F602	***Finding*** Multiple 1lb. propane cylinders were found stowed in the cabin in the V-berth.
R602	***Recommendation*** Relocate 1lb. LPG (propane) cylinders to a location on the boat exterior, protected from the weather or mechanical damage, and where escaping vapours can only flow overboard, to comply with Sections 604 and 721 of the Small Vessel Regulations, and Section 30.5 of ABYC Standard A-30.
F702	***Finding*** The microwave located on the counter of the galley, and the toaster in the salon, were found to be not secured to the vessel or stowed safely.
R702	***Recommendation*** Secure component(s) properly or stow securely, to comply with Section 728(1) of the Small Vessel Regulations, Section 8.3 of TP1332E Construction Standards for Small Vessels (2004 & 2010), Section 10.7 of ABYC Standard E-10 and Section 11.15 of ABYC Standard E-11.

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.*

CODE	DESCRIPTION
F701	***Finding*** The hot water tank, bilge pump, alternators and battery charger in the engine space were found to be not clearly marked as ignition protected, either due to a worn or inaccessible label on the components.
R701	***Recommendation*** Component(s) 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 gasoline engine space/fuel tank compartment. It is recognized by the surveyor the component(s) identified above may be an original installation and may be compliant with the ignition protection requirements of the Small Vessel

	Regulations. The responsibility lies with the vessel owner to ensure this is the case. This may require contacting the component manufacturer.
F880	***Finding*** No compass or VHF present for inspection.
R880	***Recommendation*** Install compass and VHF to comply with Small Vessel Regulations.
F921	***Finding*** Broken anchor light navigation light fixture(s) observed on the arch.
R921	***Recommendation*** Replace affected fixture(s) and test for proper operation, to comply 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).*

Category C: Findings Related to Removable Safety Gear

CODE	DESCRIPTION
F912	***Finding*** Some required safety equipment was not sighted onboard, specifically radar reflectors.
R912	***Recommendation*** An inventory of required safety gear is recommended prior to next voyage. Missing or out-of-date removable safety gear should be replaced or updated to ensure compliance with the Small Vessel Regulations.
F910	***Finding*** Expired flares were observed onboard the vessel in the cabin.
R910	***Recommendation*** 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.

CODE	DESCRIPTION
F624A	***Finding*** Fuel cap not tethered to deck fill fitting at both fuel deck fill fittings.
R624A	***Recommendation*** Repair tether or replace deck fill fitting with a model fitted with a tether, to comply with ABYC Standard H-24.
F707	***Finding*** Non-approved connectors, specifically wire nuts, were found at wiring VHF connections in the cockpit.
R707	***Recommendation*** 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.

F708	***Finding*** Non-approved wire, specifically wire type rated @ 60C (should be rated at 105C for use in an engine space), was observed at battery cables in the engine space.
R708	***Recommendation*** Replace non-approved wire with approved, stranded marine wire of sufficient gauge, in order 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.
F709	***Finding*** Insufficient or absent overcurrent protection was observed; there were no main breakers sighted within 10' of shore inlet.
R709	***Recommendation*** Install proper circuit protection to the affected component(s) in order to comply with Section 728(1) of the Small Vessel Regulations, Section 8.9 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and Section 11.10 of ABYC Standard E-11.
F716	***Finding*** No ground fault protection was observed at the shore power mains or main panel board.
R716	***Recommendation*** 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.
F718	***Finding*** Non-GFCI receptacle(s) observed in the galley, head and aft deck, areas that may be subject to water spray.
R718	***Recommendation*** Retrofit affected receptacles with GFCI receptacles, 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, and Section 11.13 of ABYC Standard E-11.
F719	***Finding*** The AC panel board was found to be shared with the DC panel board with switch connections exposed in the head cabinet, without a barrier or separation requiring use of tools to access.
R719	***Recommendation*** AC panel should be properly segregated 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.
F720	***Finding*** Unsupported wire was observed at the entrance to the junction box at the generator enclosure in the engine space.
R720	***Recommendation*** Wiring should be supported (clamped) at entrance to electrical/junction box, in order to reduce strain on connections and 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 11.14 of ABYC Standard E-11.
F721	***Finding*** No grounding conductor sighted at the metallic casing of the battery charger in the engine space.
R721	***Recommendation*** Install proper 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.
F725	***Finding*** Some through-hull fitting(s) located in the engine space were found to be without a grounding (bonding) conductor attached.
R725	***Recommendation*** Consider properly connecting a grounding wire to the affected metallic through-hull fitting(s) in accordance with recommendations in ABYC Standards E-2, E-11 and Section 27.6 of ABYC Standard H-27. Grounding wire should be of a size at least #8AWG (#6AWG minimum if the wire is also used a part of a lightning protection system – see ABYC Technical Report TE-4).

F904	***Finding*** The portable fire extinguisher(s) in the cockpit found not secured to the vessel.
R904	***Recommendation*** 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.
F914	***Finding*** No carbon monoxide detectors sighted onboard.
R914	***Recommendation*** Install carbon monoxide detectors in accommodation spaces, in accordance with ABYC Standard A-24.
F915	***Finding*** No smoke detectors sighted onboard.
R915	***Recommendation*** NFPA Standard 302 recommends installation of single station smoke alarms in enclosed accommodation spaces.
F916	***Finding*** No high-water alarm sighted onboard the vessel.
R916	***Recommendation*** On vessels with an enclosed accommodation compartment, it is recommended that a high-water alarm be installed, in compliance with ABYC Standard H-22.

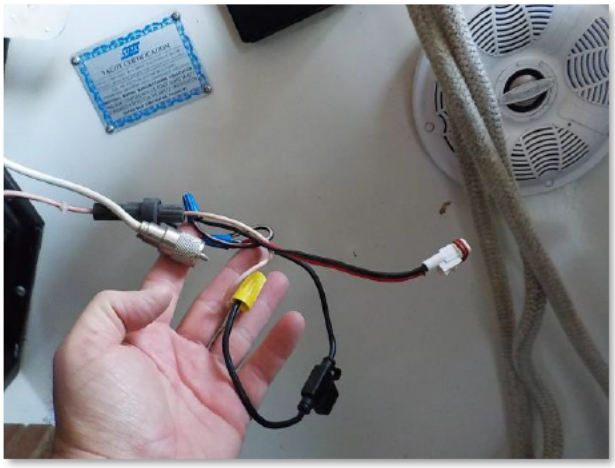

FIGURE 33 – WIRE NUTS OBSERVED AT VHF CONNECTIONS IN COCKPIT

FIGURE 34 – NON-APPROVED WIRE TYPE OBSERVED AT BATTERY CABLES IN THE ENGINE SPACE

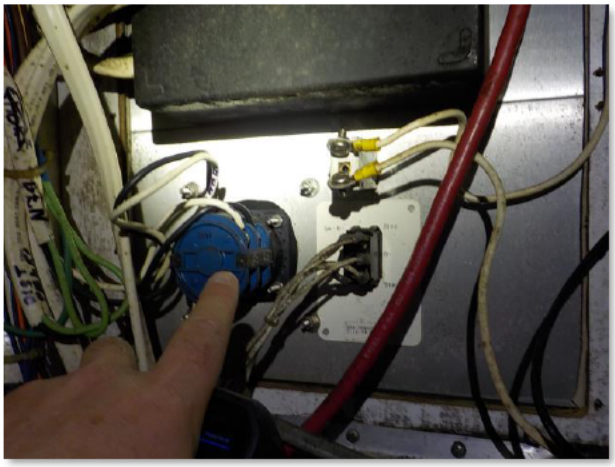

FIGURE 35 – SHIP/SHORE SWITCH CONNECTION EXPOSED IN HEAD CABINET

FIGURE 36 – UNSUPPORTED WIRE OBSERVED ON GENERATOR ENCLOSURE IN THE ENGINE SPACE

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)

CODE	DESCRIPTION
F405	***Finding*** Significantly elevated relative moisture readings were obtained in the following areas, along with dull soundings: • Bow pulpit • Aft platform • Both lower side decks
R405	***Recommendation*** Moisture in the affected area(s) 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.
F406	***Finding*** Slightly elevated relative moisture readings with bright soundings were obtained in the following areas: • Much of the accessible hull framing in the engine space
R406	***Recommendation*** Moisture in the affected area(s) 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.
F406	***Finding*** Moderately elevated relative moisture readings with bright soundings were obtained in the following areas: • Foredeck, port side, forward of horn
R406	***Recommendation*** Moisture in the affected area(s) 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.
F480	***Finding*** Marine growth on bottom paint below the waterline.
R480	***Recommendation*** Bottom wash to permit a more thorough bottom inspection.

FIGURE 37 – ELEVATED MOISTURE OBSERVED PORT SIDE LOWER SIDE DECK

FIGURE 38 – ELEVATED MOISTURE OBSERVED ON FOREDECK

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.*

CODE	DESCRIPTION
F409	***Finding*** Some of the cabinet doors in the cabin were found to have broken latches and loose hinges.
R409	***Recommendation*** Cabinet doors around the cabin that could not be secured closed should be repaired in the interest of crew safety while underway.
F410	***Finding*** Non-displaced, non-structural stress cracks were observed in the following areas: • Decks • Cockpit area
R410	***Recommendation*** Affected areas 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.
F412	***Finding*** The following items are considered by the attending surveyor(s) to be cosmetic in nature: • Topsides scuffs & scratches • Peeling decals • Shrunken weather strip in windshield frame • Broken cup holders in cockpit • Peeling stickers on cabin trunk, forward of helm and aft of windshield • Oxidized gelcoat topsides • Broken screen for V-berth hatch
R412	***Recommendation*** Cosmetic items listed can be repaired at the discretion of the vessel owner, to improve appearance and preserve the value of the vessel.
F413	***Finding*** Gelcoat chips with exposed mat, with a maximum diameter of roughly 2.5cm (1"), were observed at port topsides astern, starboard hatch, and aft deck.
R413	***Recommendation*** Gelcoat should be repaired to prevent moisture ingress to the underlying laminate.

F414	***Finding*** Several mooring cleats along port and starboard side decks were found to be slightly loose where fastened to the decks.
R414	***Recommendation*** Check & securely re-bed affected cleats to prevent damage to the deck or failure of the cleat.
F580	***Finding*** Engine raw water cooling disassembled for off-season.
R580	***Recommendation*** Re-commission vessel prior to launch
F612	***Finding*** Plastic topsides through-hull fittings were found to be chalky, porous and brittle.
R612	***Recommendation*** Replace topsides plastic through-hulls as soon as practicable, in order to prevent the risk of water ingress and possible vessel submersion in the event of thru-hull failure.
F623	***Finding*** Fuel hoses found onboard the vessel appeared to be original (dated 2004) and may be due for replacement soon.
R623	***Recommendation*** Consider replacement fuel fill, vent and supply hoses due to age and increased likelihood of permeation. EPA has identified a useful life of 10 years for fuel hoses. 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).
F727	***Finding*** Mild surface corrosion/staining observed inside the fridge in the galley.
R727	***Recommendation*** Clean corrosion and monitor for progression over time.
F780	***Finding*** Ducting off head vent fan below the V-berth.
R780	***Recommendation*** Reattach the ducting to the fan assembly.
F781	***Finding*** No sacrificial anodes sighted on the vessel.
R781	***Recommendation*** Consider installation of anodes to protect underwater metals from corrosion.
F782	***Finding*** Broken bonding wire at starboard rudder in engine space
R782	***Recommendation*** Repair connection.
F905	***Finding*** No current recertification tag(s) sighted affixed to all the portable fire extinguishers found onboard the vessel.
R905	***Recommendation*** Fire extinguishers should be recertified and tagged or replaced, in the interest of maintaining the extinguishers in serviceable condition.
F911	***Finding*** No secondary anchor sighted onboard the vessel.
R911	***Recommendation*** Installation of a secondary anchor with sufficient rode is recommended (4x vessel length is a good rule of thumb).
F918	***Finding*** No mousings observed at the two (2) anchor shackles fitted at the bow.
R918	***Recommendation*** Install mousings to prevent loosening of the shackle pin(s) with potential loss of the anchor.

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 1.39 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):		8
Average asking price (CAD):	$	31,641.30
Adjusted avg. price (CAD):	$	25,658.65
Adjusted high average (CAD):	$	36,924.88
Adjusted low average (CAD):	$	14,721.05

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):	11
Date range of sample:	2022 - 2024
Average asking price (CAD):	$29,444.91
Average reported sold price (CAD):	$23,877.55
Pct. of ask price (how 'adjusted price' was calculated for current listings above):	81%

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

(CAD)	$37,540.00	Tacoma, WA, USA
(CAD)	$29,197.00	Sodus Point, NY, USA
High average of sold boats reported (CAD):		$33,368.50

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

(CAD)	$11,000.00	Lefroy, ON, Canada
(CAD)	$13,904.00	Seneca, IL, USA
Low average of sold boats reported (CAD):		$12,452.00

The subject vessel was not located in the SoldBoat.com data.

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:	$33,938.24	to	$37,674.56
BUC Fair Market Value midrange average (CAD):	$35,806.40		
BUC Fair Market Value high average (CAD):	$41,177.36		
BUC Fair Market Value low average (CAD):	$23,274.16		
BUC published replacement value (CAD):	$389,200.00		

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 overall structural condition but has more limited appeal with developing moisture issues in the side decks and the platforms. 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 upper midrange of market values.

Comparable Approach Average:

Adjusted Values Low		**Adjusted Values Midrange**		**Adjusted Values High**	
Current Adj Listings	$14,721	**Current Adj Listings**	$25,659	**Current Adj Listings**	$36,925
Sold Boats Data	$12,452	**Sold Boats Data**	$23,878	**Sold Boats Data**	$33,369
BUC ValuPro	$23,274	**BUC ValuPro**	$35,806	**BUC ValuPro**	$41,177
LOW AVG VALUE	$16,816	**MIDRANGE AVG VALUE**	$28,448	**HIGH AVG VALUE**	$37,157

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$30,000.00-$35,000.00_