Condition & Valuation Marine Survey Report of

[redacted]

2014 Tes 28 Magnam

CONDUCTED BY

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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 purchase interest
Declared Intended Use of the Vessel	Canadian inland, protected waterways and Great Lakes. Recreational.
Name of the Vessel's Current Owner(s)	[redacted], per Pleasure Craft Licence
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 hauled on her trailer in the yard at [redacted] on 3rd September 2024. A sea trial was conducted from 17:00 on the same day, departing from [redacted]. Conditions at sea trial were sunny skies, light winds and light swell. The current owners, listing broker and prospective purchaser were present for sea trial. The current owners and listing broker were present for the beginning of the out of water inspection. 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.

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 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]
Designer	Tomasz Siwik
Manufacturer	Tes Sailboats, Poland
Model	28 Magnam
Type	Swing keel fractional sloop rig sailing vessel
Year of Manufacture	2014 estimated
Model Year	2014
Hull Identification Number (HIN)	[redacted]
Vessel License Number	[redacted]
Maximum Speed	Not provided
Cruising Speed	Not provided
Approximate Range	Not provided
Hull Material	Fibreglass reinforced plastic (FRP)
Deck Material	Fibreglass reinforced plastic (FRP)
Vessel Documents	The following documents were presented to the attending surveyor: i [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)	8.68m (28‘,0”) (reported by manufacturer)
Load Waterline Length	7.95m (26’,0”) (reported by manufacturer)
Beam	2.98m (9‘,11”) (reported by manufacturer)
Draft	1.40m (4‘,7”) approx. (reported by manufacturer)
Displacement	2,900kg (6,400 lbs.) approx. (reported by manufacturer)
Ballast	800kg (1,760 lbs.) internal fixed ballast (cast iron blocks), 100kg (220 lbs.) swing keel (reported by manufacturer)
Sail Area	34.5 sq.m (380 sq.ft), reported (manufacturer)
Fuel Capacity	53L (14 gal. US) per tank label(s)
Water Capacity	120L (32 gal. US) (reported by manufacturer)
Holding Capacity (black water)	60L (16 gal. US) (reported by manufacturer)
Passenger Capacity	No capacity label sighted


[redacted]

FIGURE 1 - HULL IDENTIFICATION NUMBER (HIN)


[redacted]

FIGURE 2 - VESSEL LICENSE NUMBER

SECTION 4: VESSEL HISTORY, LAYOUT & CONSTRUCTION

4.1 Vessel History

The current owners acquired the vessel in 2015 from the agent who had brought the vessel to Ontario from the manufacturer in Poland. No information was provided as to prior ownership history or liens. No history of claims or damage reported to the attending surveyor. The current owners reported the following additions to the vessel during the course of their ownership:

- Extended bow roller
- Stainless steel lift for dinghy outboard fitted to transom starboard side
- Custom screens for hatches
- Custom cushion covers for cabin seating

FIGURE 3 - PORT STERN VIEW

FIGURE 4 - STARBOARD STERN VIEW

FIGURE 5 - STARBOARD BOW VIEW

FIGURE 6 – DECK VIEW

4.2 Vessel Layout

[redacted] is an aft cockpit displacement hull swing keel sailing vessel with a single rudder and single inboard shaft diesel auxiliary propulsion. A large deck is fitted atop the cabin, with side decks fitted alongside the raised cabin trunk, and a forward weather deck. An open aft cockpit is fitted. Auxiliary propulsion is fitted amidships. Stainless steel stanchions with lifelines are fitted along the perimeter of the vessel, with removeable life belts fitted at the aft cockpit and transom. Four hatches are fitted to the foredeck, two of sufficient size to offer escape in the event of an emergency and two suitable for ventilation only. Fixed portlights are fitted to the hull topsides and cabin trunk port and starboard. One opening portlight is fitted in the aft berth, opening to the cockpit. An anchor well is fitted at the bow. Polished stainless steel mooring cleats are fitted to the port and starboard side decks and transom.

The subject vessel is fitted with a single helm pedestal in the aft cockpit. Fibreglass bench seating is fitted aft of the helm, and along the port and starboard edges of the cockpit. Lazarettes have been fitted below the port and starboard cockpit benches.

The cockpit is fitted with canvas dodger and full enclosure. The cockpit sole and bench seating is finished with teak-look matting that appeared well-adhered throughout.
The subject vessel is rigged with fractional sloop rigging, with a single mast and single boom. The mast is deck-stepped. The mast and boom are constructed of anodized aluminum. The mast step is constructed of stainless steel with stainless steel fasteners and is fitted atop the coach roof. A boom vang with block & tackle system is fitted to the aft cockpit. The head sail is fitted with a rigid furling unit. Chain plates are installed port and starboard. No access to the chain plates for inspection due to the installation configuration. Shrouds/stays constructed of 1x19 stainless steel wire with stainless swages and turnbuckles. Halyards are constructed of colour-coded nylon rope. Two Spinlock triple rope clutches are fitted to the coach roof and labelled with function. Two jib tracks with traveller cars are fitted to the port and starboard side decks. Two Andersen 18ST single speed winches are fitted to the aft cockpit port and starboard. One Andersen 12ST single speed winch is fitted to the coach roof port side. One Lofrans 12VDC electric winch is fitted to the coach roof starboard side, with the control fitted below.
The cabin is accessed via a multi-section plexiglass companionway door with sliding FRP top, fitted at the forward end of the cockpit, and with steps down into the cabin. The cabin is configured with a double V-berth forward, dinette/settee with fold-away table, head to port, galley to starboard in the mid-cabin, and aft berth fitted below cockpit sole. The compact galley consists of an artificial marble countertop, round stainless sink with tap set, chest-style refrigerator and 2-burner alcohol-fuelled stove, with cabinetry fitted above and below. The head consists of a vanity with sink and tap set, Jabsco electric toilet and floor drain with cover. Interior joinery is constructed of marine plywood with a mahogany finish. The cabin sole is constructed of marine plywood with a teak-look finish. The headliner is constructed of moulded FRP. Ample storage lockers are provided throughout. Cabin lighting is provided by 12VDC LED light fixtures installed throughout.

FIGURE 7 – AFT COCKPIT

FIGURE 8 – DINETTE/SETTEE MID-CABIN

FIGURE 9 – FORWARD V-BERTH

FIGURE 10 - HEAD

4.3 Vessel Construction

Limited access to some areas of the hull bottom with vessel on the trailer. The hull is constructed of moulded FRP. Accessible spans of the hull laminate below decks appeared to be solid laminate without cored areas. Bottom paint appeared in mostly serviceable condition. Some areas of bottom paint were observed to be ablated where the vessel sits on the trailer and could be touched up. The laminate appears to be intact and without significant visible cracks or blistering. No osmosis was observed, although the bottom paint prevents thorough visual inspection of the laminate, and may mask the presence of osmosis. Very limited access to the keel when retracted with the vessel on the trailer and no access to the keel when deployed with the vessel in the water. The subject vessel is fitted with a swing keel constructed of stainless steel. 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. Hull framing is constructed of fibreglass reinforced plastic. A FRP liner is installed below the cabin sole, designed with a series of transverse frames and longitudinal framing forming a grid around the keel bolts, portions of which are accessible by removal of some sections of the cabin sole. Accessible spans of hull framing appeared intact. Filleting at framing appeared intact, where accessible for inspection. No cracks or visible delamination observed at framing. 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. Exposed weather decks are constructed with a white gelcoat non-slip finish. Deck and cockpit sole appeared intact. Cabin trunk appeared intact. Limited access to the hull/deck joint due to vessel design. Access available only in limited spans below the gunwales port and starboard. The hull/deck joint appears to be of an inboard flange type, with the deck flange sitting atop the hull flange, mechanically fastened and bonded. An external stainless steel rub rail is fitted, with a vinyl 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 drop-down aft swim platform constructed of fibreglass reinforced plastic (FRP). The subject vessel is fitted with a bolt-on bow pulpit constructed of stainless steel tubing with a wooden seat. Platforms appeared intact. No cracks observed. Platform supports appeared intact and securely fastened. Mounting fasteners and related hardware appear to be intact and securely fastened.

Bright soundings were audible to percussive sounding tests throughout the hull bottom, topsides, transom, decks and accessible structure below deck. Some moisture readings taken across the hull bottom and topsides produced slightly elevated moisture levels. The readings were sporadic and isolated in nature, and just inside the range to be considered "slightly elevated", per the definition given in Section 2.4. Therefore, the attending surveyor considers the hull to be dry.

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 BOTTOM VIEW

FIGURE 12 – HULL FRAMING BELOW CABIN SOLE

FIGURE 13 – BOW PULPIT

FIGURE 14 – DROP-DOWN AFT SWIM PLATFORM

SECTION 5: SPARS AND RIGGING

5.1 Standing Rigging

Mast appeared intact and serviceable where accessible for inspection. Appeared securely stepped, in column, and without noticeable distortion or excessive rake. Spreaders appeared intact with secure fastenings at mast and shrouds/stays. Paint coating appeared largely intact and serviceable. Lighting and navigation fixtures appeared securely mounted. The mast appeared secure with operational hardware and fixtures while underway during sea trial.

The mast step appeared intact and securely fastened to coach roof. No movement observed at mast step while under sail during sea trial.

Boom appeared intact and serviceable where accessible for inspection. Accessible sheaves, blocks, cleats, and fasteners appeared intact, securely fastened and serviceable. Openings for halyards appeared intact and undamaged. Paint coating appeared largely intact and serviceable. Boom appeared to operate as intended while under sail during sea trial.

Furling unit appeared intact and serviceable where accessible for inspection. Furler appeared to operate properly and without binding or excessive force required while underway during sea trial.

1x19 wires appeared intact and securely fastened, without any broken strands visible. Stainless fittings appeared intact, straight and without visible cracks where accessible for inspection. Rigging appeared to be properly tuned and serviceable during sea trial.

FIGURE 15 – MAST INSPECTED ON DECK

FIGURE 16 – MAST RAISED VIEWED FROM DOCKSIDE

5.2 Running Rigging

Sails appeared to be in serviceable condition. Seams and stitching appeared intact. Sails were fully hoisted and appeared clean and serviceable during sea trial.

Colour-coded lines fitted, appeared in serviceable condition. Rigging cleats appeared securely fastened and serviceable. Clutches appeared intact and serviceable. Clutches are clearly labeled as to function. Tracks appeared securely fastened to

decks. Travelers appeared functional, locked securely into track detents. Blocks appeared to be intact and serviceable. Halyards and hardware appeared serviceable and operational during sea trial.
Winches tested during the sea trial appeared to be fully operational.

FIGURE 17 – MAIN SAIL AT SEA TRIAL

FIGURE 18 – CLUTCH FITTED TO PORT SIDE OF CABIN TRUNK

SECTION 6: PROPULSION SYSTEMS

6.1 Primary Propulsion Machinery & Specifications

COMPONENT	DESCRIPTION
No. of Engines	One (1)
Type	3-cylinder diesel inboard shaft.
Manufacturer	Yanmar
Model	3YM20
Engine Serial No.	[redacted]
Model Year	2013, per manufacturer label
EPA Label	Yes, as pictured in figure 19
Displacement (each engine)	0.854L (52.1 CID)
Rated Power (each engine)	15.3kW (21 HP)
Engine Hours	299, according to hour meter at helm
Compartment Ventilation	Passive ventilation via ducting installed to vents port side
Reduction Gear Model/Type	Yanmar/Kanzaki model KM2P-1
Reduction Gear Serial Nos.	[redacted]
Gear Ratio	2.62:1
Shaft(s)	7/8" diameter stainless shaft
Shaft Seal Type	Vetus dripless shaft seal
Struts/Bearings	A single cutlass bearing installed to the after face of the skeg. No propeller shaft strut is fitted to this vessel.
Propeller(s)	Single Varifold foldable 3-blade 16x13 pitch propeller
Steering Gear	Single station, foldable wheel with VETUS hydraulic steering system. Single fibreglass rudder.
Trim Tabs	None fitted.
Bow Thruster	Side Power 12VDC
Stern Thruster	None fitted.

6.2 Propulsion Systems

6.2.1 ENGINES

COMPONENT	DESCRIPTION
Engine block(s) and cylinder head(s)	Cast iron
Engine beds/mounts	Cast iron/aluminum
Cooling system	Closed, freshwater cooling system with raw water cooled heat exchanger.

Exhaust system	Wet-type exhaust with overboard discharge via plastic Waterlock muffler
Automatic oil changer	None fitted.

FIGURE 19 – EPA LABEL

FIGURE 20 - ENGINE

FIGURE 21 – WATERLOCK EXHAUST MUFFLER

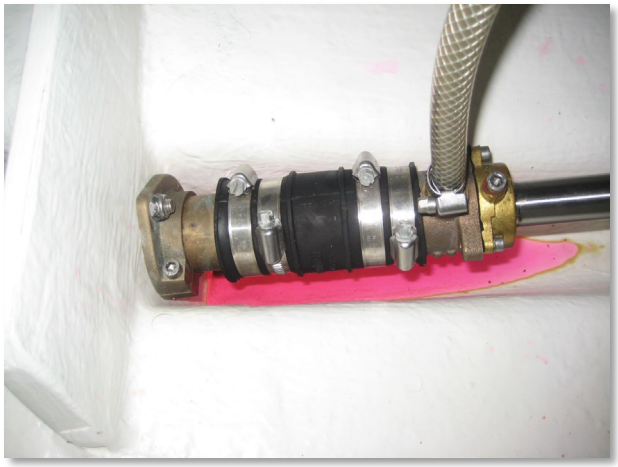


FIGURE 22 – SHAFT SEAL

Engine appeared serviceable during the survey inspection. Nonetheless, a full mechanical inspection was not undertaken as a part of this survey. Engine appeared securely installed to engine beds amidships. Drive belts appeared to be intact, serviceable and properly tensioned. Machinery guards were observed to be in place as required. There were no fuel, oil, cooling or exhaust leaks found where components were accessible for inspection. The engine ran well during sea trial. Engine(s) started easily and without notable smoke during cold start-up. Idle speed appeared normal, vessel came up on plane quickly under full power. Engine 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 areas of unacceptably high temperatures in the engine and exhaust system castings during sea trial.

6.2.2 OIL ANALYSIS

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

6.2.3 CONTROLS/GAUGES

COMPONENT	MAKE/MODEL	SERIAL NO.	TYPE	LOCATION
Shift/throttle control	Not sighted	Not sighted	Side-mount	Helm
Engine gauges	Yanmar	Not sighted	Analogue gauge for engine speed (tachometer)	Helm
Stop switch/tether	Yanmar	Not sighted	Integral stop switch	Helm

FIGURE 23 – SHIFT/THROTTLE CONTROL AT HELM

FIGURE 24 – ENGINE SPEED GAUGE AT HELM

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.

SECTION 7: HULL PIPING, PUMPS & TANKAGE

7.1 Propulsion Fuel System

COMPONENT	DESCRIPTION
Fuel type	Diesel
No. of tanks	One (1)
Tank material	Plastic
Tank locations	Stern, below aft cockpit sole
Deck fill locations	Stainless steel, transom starboard side
Fuel valves	Valve fitted to supply line at tank top
Filtration	Water-separating type fitted to bulkhead in engine space
Pumps	Not sighted
Tank monitors	Single Wema fuel level gauge at helm Electronic sending unit fitted to tank top

FIGURE 25 – FUEL TANK

FIGURE 26 – DECK FILL FITTING AT TRANSOM

Tank appeared to be intact and securely fastened to the vessel. Tank label observed and appeared to be compliant. It was noted that the fuel tank is labelled gasoline but is reported to be the original installation by the manufacturer. No leaks were sighted at the tank or tank fittings. Deck fill fitting appeared to be intact, securely fastened and serviceable. Venting appeared intact where accessible for inspection. Plastic fuel tank does not require grounding. No deck fill grounding sighted. Fuel valves appeared serviceable and without leaks or weeping at valve bodies or fittings. Fuel valves were cycled and confirmed operational. Fuel filters secured to the vessel and appeared serviceable. No leaks sighted at fuel filters or related fittings. Compliant hoses sighted for fuel fill, vent and supply, no dates sighted. Fuel hoses appeared intact and serviceable 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. Engine fuel pumps not sighted. Fuel level gauge appeared serviceable but were not tested for accuracy as part of this survey.

7.2 LPG (Propane)/CNG (Compressed Natural Gas) Systems

None fitted.

7.3 Potable Water System

COMPONENT	DESCRIPTION
Pressure pumps	Jabsco 12VDC 25psi on-demand pump installed below V-berth
Filtration	None sighted
No. of tanks	One (1)
Tank material	Steel
Tank locations	Below V-berth
Deck fill locations	Stainless steel, port side deck forward
Shore water fittings	None sighted
Transom shower	None fitted
Water heater type/capacity	Quick Nautic Boiler 20 Litre behind port side cabinetry in aft berth
Water heater engine coolant loop	Yes
Pressure relief	6 bar / 87 psi
Tank monitors	Wema gauge at electrical panel in salon Electronic sending unit fitted to tank top

FIGURE 27 – FRESH WATER TANK

FIGURE 28 – FRESH WATER PUMP

FIGURE 29 – WATER HEATER

FIGURE 30 – DECK FILL FITTING

Potable water tank, lines and fittings appeared securely installed to the vessel, serviceable and without visible leaks, where accessible for inspection. Water system pump powered up, provided water pressure at all tap sets during dockside testing. The water heater appeared intact and undamaged, with no visible leaks from fittings and no standing water around the base of the tank. Water heater was powered up and confirmed operational during dockside testing.

7.4 Sanitation System

COMPONENT	DESCRIPTION
Pumps	None sighted
Vent filtration	Filter fitted in aft steering compartment
No. of holding tanks	One (1)
Holding tank material	Steel
Holding tank locations	Below aft berth
Deck pump out fitting locations	Stainless steel, transom port side
Holding tank monitors	Wema gauge fitted to electrical panel in salon Electronic sending unit fitted to tank top
No. of shower sumps	One (1) 12VDC Rule-Mate 500GPH pump with integral float switch
Location of shower sumps	Below drain cover in head

FIGURE 31 – HOLDING TANK

FIGURE 32 – TANK MONITORS

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. Powered up and confirmed operational.

7.5 Pumps & Dewatering Systems

7.5.1 WASHDOWN

COMPONENT	DESCRIPTION
Pumps	Jabsco 12VDC 70psi behind port side cabinetry in aft berth
Filtration	None sighted
Source/through-hull locations	Vessel potable water system
Spigot locations	Port side deck

Pump, fittings, hoses and related components appeared serviceable. Pump powered up briefly and sounded operation, but the washdown system was not fully tested as a part of this survey.

7.5.2 AIR CONDITIONING PUMPS

None fitted.

7.5.3 BILGE PUMPS

COMPONENT	DESCRIPTION
No. of pumps sighted	Two (2)
Pump type	12VDC Whale & Rule 360GPH
Pump locations	Below cabin sole approximately midships
Float switches	Yes – integral and separate

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

FIGURE 33 – BILGE PUMPS FITTED BELOW CABIN SOLE

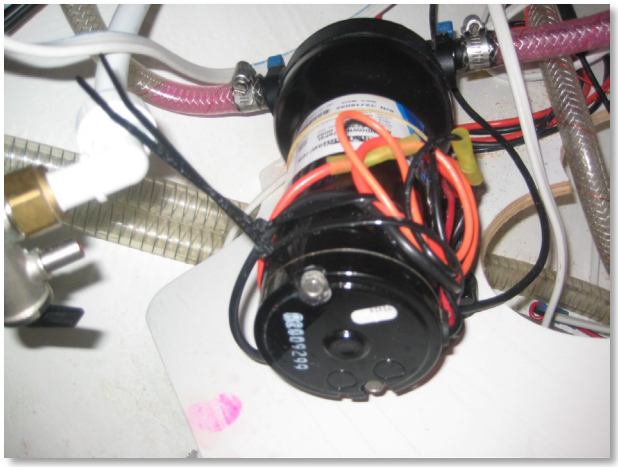


FIGURE 34 – WASHDOWN PUMP

7.6 Hydraulic Fluid Tanks & Piping

None fitted.

7.7 Seacocks, Through-hulls & Drainage

COMPONENT	DESCRIPTION
Topsides through-hull fittings	Plastic and stainless
Through-hulls below the waterline	Bronze
Seacocks type	Ball valves
Hull drain fittings	None fitted
Lifting/trailering eyes	Stainless steel bow eye fitted at bow
Scuppers	None fitted. Vessel is fitted with self-bailing decks.

FIGURE 35 – PORT TOPSIDE THROUGH-HULL FITTINGS

FIGURE 36 – BALL VALVE FITTED TO THROUGH-HULL FOR HEAD SINK DISCHARGE

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. Bow eye appeared intact and securely fastened. No leaks were sighted from accessible through-hull fittings while underway during sea trial.

SECTION 8: ELECTRICAL SYSTEMS

8.1 Direct Current Systems (less than 50V)

COMPONENT	DESCRIPTION
Voltages	12-volt, negative ground
Main disconnects	Three battery master switches for engine and house loads located below aft berth Single battery master switch for bow thruster and windlass located in V-berth
Panel boards/overcurrent protection	Main DC panel board and overcurrent protection located in salon port side
Batteries – no., type, locations	1 x 27-series and 1 x 24-series 12V flooded lead acid batteries installed below the V-berth for bow thruster and windlass. 6 x 45RC 12V AGM batteries installed below aft berth for engine starting and house loads.
Alternators	1 x engine-mounted, 125A reported by manufacturer (specification not sighted)
Battery isolators	None sighted.
Automatic charging relays	Dual BEP Voltage sense relays installed in engine space
Solar charging system	None fitted
Parallel solenoid	None sighted
12-volt outlet locations	Helm pedestal and at electrical panel in salon

FIGURE 37 – BATTERY MASTER SWITCHES IN AFT BERTH

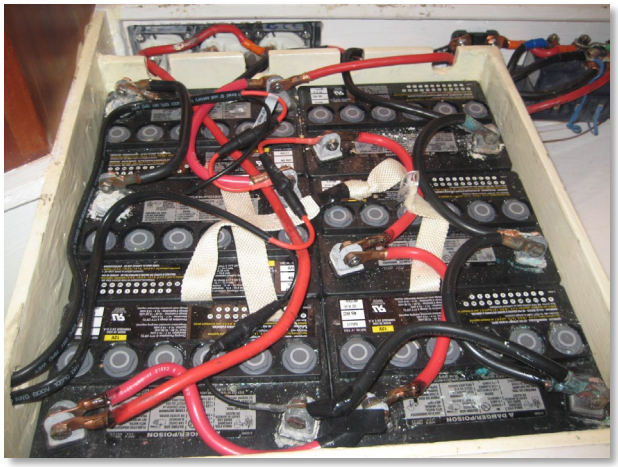


FIGURE 38 – ENGINE AND HOUSE BATTERIES

Battery master disconnect switches 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 mostly securely installed in custom trays/boxes. Battery connections appeared mostly clean and secure. Proper electrolyte containment observed for engine starting and house load batteries. No protective boots installed at positive terminals. Wiring insulation, connections and related fixtures appeared mostly compliant and in serviceable condition where accessible for inspection. Alternator appeared securely mounted and serviceable. Relays appeared to be securely installed and serviceable but not tested as a part of this survey.

8.2 Alternating Current Systems (over 50V)

COMPONENT	DESCRIPTION
Voltages	120VAC
Shore power inlet receptacles/locations	Single 120VAC 30A fitted to transom port side
Main disconnects	Below port cockpit lazarette
Panel boards/overcurrent protection	Main AC panel and overcurrent protection located in salon port side
120-volt GFCI receptacle locations	Salon port side, galley, behind cabinetry in aft berth
120-volt non-GFCI receptacle locations	None sighted
Battery charger	ProMariner ProSport 12amp installed below aft berth

Inverter	MotoMaster Eliminator 1000W inverter installed below galley cabinetry
Isolation Transformers	None sighted

FIGURE 39 – MAIN AC PANEL BOARD IN SALON

FIGURE 40 – SHORE POWER BREAKER IN COCKPIT

FIGURE 41 – BATTERY CHARGER

FIGURE 42 - INVERTER

Panel board installation appeared compliant and serviceable, where accessible for inspection. 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 fixtures appeared mostly compliant and in serviceable condition where accessible for inspection. AC power appeared consistent on relevant tested circuits while underway during sea trial. Battery charger appeared securely installed and serviceable. Unit appeared to be mostly correctly installed, with secure connections and sufficient, suitable overcurrent protection. No case grounding wire sighted. Powered up and appeared operational. Inverter unit currently installed has not been designed for marine use. No overcurrent protection sighted at inverter DC power supply. No warning label sighted at main AC electrical distribution panel. No inverter control/status panel installed. No GFCI protection sighted at built-in receptacles. Inverter installation has been completed since date of manufacture and is considered by the attending surveyor as a modification to the vessel's electrical systems.

8.2.1 GENERATORS

None fitted.

8.3 Appliances & Galley Equipment

8.3.1 REFRIGERATION

MAKE	MODEL	TYPE	LOCATION
WAECO	Not sighted	Chest type fridge/freezer	Galley Compressor unit installed below starboard settee

FIGURE 43 – CHEST TYPE REFRIGERATOR IN GALLEY

FIGURE 44 – COMPRESSOR UNIT FOR REFRIGERATOR

Refrigeration appliances appear to be intact and serviceable. Refrigeration units appear to be properly secured to the vessel structure. Refrigeration appliance powered up during dockside testing but did not appear to be cooling correctly.

8.3.2 OVENS/COOKTOPS

MAKE	MODEL	TYPE	LOCATION
Cook Mate	3100	2-burner alcohol-fuelled range top	Galley

FIGURE 45 – GALLEY VIEW

FIGURE 46 – RANGE TOP IN GALLEY

Cooking appliances sighted onboard appeared serviceable. Cooking appliances stowed/secured as required for crew safety while underway. Range top not tested during this survey.

8.4 Heating, Ventilation & Air Conditioning Systems

COMPONENT	DESCRIPTION
No. of air conditioners/air handlers	One (1)
Locations and capacities of air unit installations	Webasto AirTop Evo heater installed in salon
System voltages	12VDC
Heating system	Diesel powered

No access to heater installed in the salon due to disassembly of cabinetry required beyond the scope of this survey. Heating unit found onboard appeared serviceable. Powered up and confirmed operational during dockside testing.

7.5 Corrosion Protection Systems

COMPONENT	DESCRIPTION
Locations of sacrificial anode installations	Bow thruster impeller and propeller hub
Through-hull bonding	No
Impressed-current corrosion protection	None fitted.
Galvanic isolation	None sighted.

Anodes appeared to be securely installed and in serviceable condition. Metallic through-hulls below the waterline did not appear to be bonded where accessible for inspection.

SECTION 9: ELECTRONICS & NAVIGATION SYSTEMS

9.1 Navigation & Communications Electronics

COMPONENT	DESCRIPTION	LOCATION
Magnetic compass	Plastimo	Helm
GPS/plotters	Standard Horizon GPS Chart CP390i	Helm
Depth/speed temperature	Raymarine depth and speed displays Through-hull depth transducer	Helm Hull bottom below v-berth
Autopilot	Raymarine ST7001 control head display Raymarine electronic compass	Helm Below cabin sole in salon
Rudder indicator	Raymarine	Helm
Radar	None fitted.	-
Wind speed/direction	Raymarine display Wind speed/direction transducer (anemometer)	Helm Atop mast
Radios/loud hailers	Standard Horizon Explorer	Salon with remote at helm
Automatic Identification System (AIS)	None fitted.	-
Intercom/phone system	None fitted.	-
Computers	None fitted.	-
Ethernet	None fitted.	-
NMEA networks	No NMEA network sighted.	-
Security systems	None sighted,	-
Video	None sighted.	-
TV/monitors	None sighted.	-
Audio	WMA stereo Pyle speakers	Salon Cockpit and cabin

FIGURE 47 – COMPASS AT HELM

FIGURE 48 – VHF RADIO IN SALON

Navigation equipment powered up and confirmed mostly operational during sea trial. Helm displays appeared properly installed and serviceable. Cables and connections appeared secure and well-supported. Audio equipment appeared serviceable and securely fastened. Cable connections appeared to be correctly installed, serviceable and well supported. Powered up but appeared inoperable during dockside testing.

SECTION 10: SAFETY SYSTEMS & EQUIPMENT

10.1 Exterior Lighting

COMPONENT	DESCRIPTION	LOCATION
Navigation Lights	Bi-colour red and green All-round white/anchor light	Bow Atop mast
Emergency Lighting	None fitted.	-
Docking Lights	None sighted.	-
Spotlight/Searchlight	None fitted.	-
Courtesy Lights	None fitted.	-
Deck Lights	None fitted.	-
Spreader Lights	1 x 12VDC LED	Lower starboard spreader
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 mostly operational.

10.2 Safety Equipment

COMPONENT	DESCRIPTION	LOCATION
Signal Horn/Bell/Whistle	Manual	Helm
Radar reflector	None sighted.	-
MOB recovery	Kisby ring (life ring) with attached buoyant heaving line	Aft starboard railing
EPIRB/Lights	None sighted.	-
Boat Hooks	2 x plastic with aluminum pole	Atop cabin trunk port and starboard
Paddles	None sighted	-
Bailer	None sighted.	-
Re-boarding ladders/gangways	2 x Telescoping stainless steel	Aft swim platform and bow pulpit
Liferafts	None present for inspection.	-
First aid kits	None sighted.	-
Visual distress signals	None sighted.	-
Personal flotation devices	Several adult PFDs of various types	Cabin
Emergency hatches	Two (2)	Foredeck above salon and v-berth

10.3 Ground Tackle

COMPONENT	DESCRIPTION	LOCATION
Fenders & mooring lines	Plastic fenders, nylon lines	Port and starboard side decks
Anchors/rode	10kg galvanized steel Rocna anchor Secondary Fortress anchor Approximately 50' 5/16" chain with 150' 5/8" titan rode	Anchor well at bow Forepeak rode locker
Windlass	Quick 12VDC vertical	Anchor well at bow

Fenders and mooring lines appeared serviceable. Anchors 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 and overcurrent protection installed in v-berth. Powered up and confirmed operational.

10.4 Detection, Alarm & Fire Suppression Systems

COMPONENT	DESCRIPTION	LOCATION
Detectors	None fitted.	-
Alarms	Engine warning system	Helm
Fixed fire extinguishing & fire ports	None fitted	-
Portable fire extinguishers	1-A:5-BC, serial number BP-217632, dated 2013, last serviced 06/2023 5-BC, serial number E69985445, dated 2018	Starboard side of companionway Salon dining table
Fire buckets & axes	None sighted	-
Self-contained breathing apparatus	None sighted	-

FIGURE 49 – PORTABLE FIRE EXTINGUISHER AT COMPANIONWAY

FIGURE 50 – PORTABLE FIRE EXTINGUISHER AT DINING TABLE

No carbon monoxide or smoke detectors sighted onboard. No high water alarm sighted onboard. Engine warning system alarm not tested. Portable fire extinguishers mounted, gauge shows fully charged.

SECTION 11: ADDITIONAL EQUIPMENT

11.1 Davits

Stainless steel lift for tender's outboard motor installed at the stern starboard side. Appeared serviceable but not tested as part of this survey.

11.2 Tender

The tender has been included in this report for valuation purposes only, and the attending surveyor(s) cannot certify its condition or suitability for intended use. The tender is included in the sale of the subject vessel along with the electric outboard motor, cover, inflation pump, manual bilge pump and set of oars.

Manufacturer	Mercury
Model	Not sighted
Type	Inflatable
Year of Manufacture	2013
Model Year	2013
Length Overall	2.2m (7', 2.6")
Hull Identification Number (HIN)	[redacted]
Rated Power Capacity	Not sighted
Outboard Engine Manufacturer/Model	Torqeedo T1003
Outboard Type	Tiller only
Outboard Fuel Type	Electric
Outboard Serial No.	[redacted]
Rated Power	3kW (4 HP)

11.3 Trailer

The trailer has been included in this report for valuation purposes only, and the attending surveyor(s) cannot certify its condition or suitability for intended use.

Manufacturer	Midwest Industries Inc.
Model	B/R80TBBL
Type	Painted steel
Year of Manufacture	2013
Model Year	2013
Capacity	4,531kg (9,990 lbs.)
Vehicle Identification Number (VIN)	[redacted]
Number of Axles	Tandem axle
Trailer Registration Document Provided	No

FIGURE 51 - TRAILER LOAD DECAL

FIGURE 52 - TRAILER AXLES

11.4 Non-Fixed Furnishings

None present for inspection.

SECTION 12: SUMMARY

Overall, the subject vessel presented as clean and well maintained. 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 13: 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.

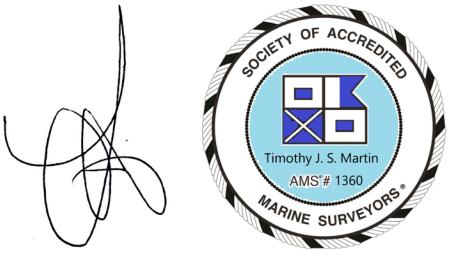
Signed:

Name of Surveyor: Sophie Foster, M.Eng

Surveyor Certification: Staff Surveyor/Naval Architect
Transport Canada Appointed Tonnage Measurer <24m

Date of Report: September 6, 2024

This report has been reviewed for content and compliance by:



Name of Surveyor: Timothy J. S. Martin

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

Date of Review: September 6, 2024

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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.

A-1	**Finding:**
	Inverter unit has not been designed for marine use. No warning label sighted at main AC electrical distribution panel. No GFCI protection sighted at built-in receptacles. No inverter control/status panel installed. No overcurrent protection sighted at inverter DC power supply. Inverter installation has been completed since date of manufacture and is considered by the attending surveyor as a modification to the vessel's electrical systems.
	Recommendation:
	Remove inverter from vessel. Replace inverter with model suitable for marine use, and have properly installed to comply with Parts 6 & 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.

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.*

B-1	**Finding:**
	Unsupported wiring was observed at the speaker installation in the aft starboard lazarette, at the autopilot unit installed in the aft berth cabinetry and at the transducer installed below the v-berth.
	Recommendation:
	Support/secure wiring every 18", to comply with Section 728(1) of the Small Vessel Regulations, Section 8.7.4 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and Section 11.14 of ABYC Standard E-11.
B-2	**Finding:**
	Bare wire ends were observed in the following locations: - starboard side of v-berth at speaker installation - autopilot installation in aft berth cabinetry - aft engine space bulkhead - upper galley cabinetry
	Recommendation:
	Remove unused wiring or properly terminate, to comply with Section 728(1) of the Small Vessel Regulations, Section 8.7.5 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and Section 11.14 of ABYC Standard E-11.

B-3 **Finding:**

Corrosion observed at bow thruster battery terminals. Insufficient electrolyte containment observed for bow thruster batteries. Positive (+) terminals not protected at both the bow thruster and engine/house load battery sets.

Recommendation:

Clean connections at battery terminals. Install a suitable means of providing electrolyte containment, such as a tray or box designed for the purpose. The positive terminals should be completely covered. Repairs should be completed in order 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.

B-4 **Finding:**

No case ground fitted to battery charger metal casing.

Recommendation:

Install proper case ground connection, 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.

B-5 **Finding:**

No fuel deck fill grounding sighted.

Recommendation:

Install grounding wire to deck fill in order to comply with Sections 721 thru 727 of the Small Vessel Regulations, Section 7.9 of TP1332E Construction Standards for Small Vessels (2004 & 2010), and Section 24.16 of ABYC Standard H-24.

Category C: Findings Related to Removable Safety Gear

This category is intended to include removable safety equipment, particularly items that may be routinely taken off the vessel for off-season storage. Examples of safety equipment considered to be removable are lifejackets/PFDs, man overboard recovery devices such as life rings and buoyant heaving line, visual distress signals etc. It is recognized by the attending surveyor that whilst the safety gear identified below was not present during the survey inspection, the vessel may normally be equipped with these items during operations.

C-1 **Finding:**

The safety gear is not included in the sale of the subject vessel.

Recommendation:

The new owner should ensure the vessel is equipped with the required safety equipment in accordance with Small Vessel Regulations.

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.

D-1 **Finding:**

No carbon monoxide detector sighted onboard.

Recommendation:

Install carbon monoxide detectors in accommodation spaces, in accordance with ABYC Standard A-24.

D-2 **Finding:**

No smoke alarm sighted onboard.

Recommendation:

NFPA Standard 302 recommends installation of single station smoke alarms in enclosed accommodation spaces.

D-3 **Finding:**

No high water alarm sighted onboard the vessel.

Recommendation:

On boats with an enclosed accommodation compartment, it is recommended that a high water alarm be installed, in compliance with ABYC Standard H-22.

D-4 Finding:

Accessible metallic through-hulls below the waterline are not bonded.

Recommendation:

Consider properly connecting grounding wire to metallic through-hull fittings in accordance with 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).

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)

E-1 Finding:

Slightly elevated relative moisture readings were obtained in on the foredeck along the forward edge of the forward hatch. Bright soundings audible in the affected areas.

Recommendation:

Moisture in the foredeck should be monitored and repaired when necessary. The surveyor has no immediate structural concerns in the affected areas of this vessel.

E-2 Finding:

Non-displaced gelcoat cracks were observed at the bow thruster tunnel on the port and starboard sides. On the port side, the crack extended in a circular direction along the forward edge. On the starboard side, the crack extended from the bottom edge downwards approximately 6.35cm (2.5").

Recommendation:

Repair gelcoat in order to protect the underlying FRP mat.

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.*

F-1 Finding:

Oxidized gelcoat observed along most of the port and starboard topsides.

Recommendation:

Buff and wax as necessary to restore finish.

F-2 Finding:

Bottom paint appeared ablated in the areas where the vessel sits on the trailer.

Recommendation:

Consider touch-up or reapplication of bottom paint.

F-3 Finding:

The cup holders fitted at the port and starboard bench seats in the aft cockpit were observed to be cracked around the perimeter. Cracks were observed at the aft port lazarette lid and stern hatch.

Recommendation:

Consider repairs to improve cosmetic appearance and prevent water ingress to underlying FRP.

F-4 Finding:

DC voltmeter at main electrical panel did not appear to be reading correctly.

Recommendation:

Further investigation recommended to determine and correct cause.

F-5	**Finding:**
	Stereo fitted in salon appeared to power up when power was applied but did not produce audio at speakers when tested.
	Recommendation:
	Further investigation recommended to determine and correct cause.
F-6	**Finding:**
	The door handle to the V-berth observed to be loose.
	Recommendation:
	Repair as necessary.
F-7	**Finding:**
	Damage observed to the casing of the Raymarine autopilot unit installed in the aft berth cabinetry. The autopilot control head fitted at the cockpit did not power up during sea trial and was therefore not tested. The client reported the unit was powered up successfully the following day.
	Recommendation:
	Further investigation recommended to determine urgency and best course of action for repair. Autopilot should be tested at next voyage.
F-8	**Finding:**
	Spreader light did not power up when power was applied.
	Recommendation:
	Further investigation recommended to determine and correct cause.
F-9	**Finding:**
	Chest type refrigerator fitted in galley did not appear to operate correctly when tested during dockside testing and did not reach an acceptably cool temperature.
	Recommendation:
	Further investigation recommended to determine and correct cause.
F-10	**Finding:**
	The fuel tank was observed to be marked “Gasoline”, despite the engine being diesel powered. It was reported to the attending surveyor that the fuel tank is original to the vessel. The fuel tank is marked as compliant with ISO21487, which is acceptable for both gasoline and diesel fuel tanks.
	Recommendation:
	No action required.
F-11	**Finding:**
	Fuel hoses found onboard the vessel appeared to be original and may be due for replacement soon.
	Recommendation:
	Consider replacement of 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).

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): 6
Average asking price (CAD): $112,451.18
Adjusted avg. price (CAD): $99,939.90
Adjusted high average (CAD): $115,480.70
Adjusted low average (CAD): $84,720.24

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): 4
Date range of sample: 2017-2021
Average asking price (CAD): $74,825.00
Average reported sold price (CAD): $66,500.00
Pct. of ask price (how 'adjusted price' was calculated for current listings above): 89%

The highest actual sales of vessels of the same or similar model and model year were:
(CAD) $90,000.00 Oakville, ON, Canada
(CAD) $48,000.00 NB, Canada
High average of sold boats reported (CAD): $69,000.00

The lowest actual sales of vessels of the same or similar model and model year were:
(CAD) $48,000.00 NB, Canada
(CAD) $60,000.00 Québec, QC, Canada
Low average of sold boats reported (CAD): $54,000.00

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

Data for the subject vessel was not available from BUCValuPro.com, therefore the data for a similar make and model of vessel has been used. 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: $134,034.55 to $148,236.95
BUC Fair Market Value midrange average (CAD): $141,135.75
BUC Fair Market Value high average (CAD): $162,306.11
BUC Fair Market Value low average (CAD): $91,738.24
BUC published replacement value (CAD): $266,625.00

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 and interior condition but has more limited appeal with the number of electrical deficiencies identified in this report. 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	$84,720	Current Adj Listings	$99,940	Current Adj Listings	$115,481
Sold Boats Data	$54,000	Sold Boats Data	$66,500	Sold Boats Data	$69,000
BUC ValuPro	$91,738	BUC ValuPro	$141,136	BUC ValuPro	$162,306
LOW AVG VALUE	**$76,819**	**MIDRANGE AVG VALUE**	**$102,525**	**HIGH AVG VALUE**	**$115,596**

Due to the limited information available for the make and model of the subject vessel, an additional valuation has been carried out using the Martin Scale for depreciation, based on Current Replacement Value. The manufacturer of the subject vessel provided a price of CAD$157,133.00 for a new-build of the same model with the same optional extras included. The Martin Scale for depreciation gives a 60% depreciation value for a 10 year old pleasure vessel. Therefore, the current market value using the Martin Scale is given as **CAD$94,280.00.**

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$98,500.00-$105,500.00.

Value Breakdown as follows:

Vessel only	CAD$92,000.00-$97,000.00
Trailer	CAD$3,000.00-$4,000.00
Tender	CAD$1,500.00-$2,000.00
Auxiliary Outboard Motor	CAD$2,000.00-$2,500.00