

2000 52' Jefferson Hershine Rivanna Cockpit Motor Yacht "SAMPLE ONE"



 $Membership\ with\ the\ Society\ of\ Accredited\ Marine\ Surveyors\ and\ the\ American\ Boat\ \&\ Yacht\ Council$

Of the Vessel

"SAMPLE ONE"

2000 52' Jefferson Hershine Rivanna Cockpit Motor Yacht

CONDUCTED BY

Capt. Rick Whiting, AMS STARBOARD MARINE

PREPARED FOR

John Q. Public

May 1, 2023

INTRODUCTION

PURPOSE & SCOPE

The attending Surveyor attended aboard the 2000 Jefferson Hershine Rivanna Cockpit Motor Yacht "SAMPLE ONE", at the request of John Q. Public, beginning May 1, 2023. The Survey was requested to determine the physical condition and value of the vessel. No reference or information should be construed to indicate evaluation of the internal condition of engines, transmissions, drives or generators, nor the propulsion system's or the auxiliary power system's operating capacities. Electrical and electronic equipment was powered up and some electrical equipment may have been tested for basic and/or limited function only. The wiring was inspected where accessible and was found to be in generally serviceable condition, unless otherwise noted. A significant amount of wiring could not be observed due to the wiring looms and conduits that transit areas which would require dismantling and removals for their inspection. If a detailed report as to the condition and capacities of the wiring and electrical components is desired, it is recommended that a qualified ABYC Certified Marine Electrical Engineer be engaged. Vessel tankage was visually inspected where accessible. No obvious leakage was observed, unless otherwise noted; however, the tanks were not confirmed to be full at the time of inspection. If a more thorough assessment is desired, the tanks should be filled and checked under full tank status or pressure tested to attest to their condition.

The vessel was Surveyed without the removal of any parts, including fixed partitions, fastened panels, fittings, headliners & wall-liners, heavy furniture, tacked carpeting or other fixed flooring material, appliances, electrical equipment or electronics, instruments, anchors line & chain, spare parts, personal gear, clothing, miscellaneous items in the bilges, cabinets, lockers or other storage spaces, or other fixed or semi-fixed items. Only installed items were inspected, including but not limited to enclosures, covers and tops. Locked compartments or otherwise inaccessible areas would also preclude inspection. Survey requester is advised to open up all such areas for further inspection. A visual inspection was conducted only on accessible structures and no destructive testing was performed. Naval architecture and engineering analysis were not a part of this Survey. Furthermore, no determination of stability characteristics or inherent structural integrity has been made, and no opinion is expressed with respect thereto. Complete compliance with, identification of, and reporting on all standards, codes and regulations is not guaranteed. This signed report represents the findings of the Survey and supersedes any and all conversations, statements and representations, whether verbal or in writing. This Survey Report represents the condition of the vessel on the above date or dates and is the unbiased opinion of the undersigned, but it is not to be considered an inventory, warranty or guarantee, either specified or implied. The Survey Report is for the exclusive use of the client and those lenders and underwriters that will finance and insure the vessel for this client only, and is not assignable to any other parties for any purpose.

CONDUCT OF SURVEY

THE MANDATORY STANDARDS PROMULGATED BY THE UNITED STATES COAST GUARD (USCG), UNDER THE AUTHORITY OF TITLE 46 UNITED STATES CODE (USC); TITLE 33 AND TITLE 46 CODE OF FEDERAL REGULATIONS (CFR), AND THE VOLUNTARY STANDARDS AND RECOMMENDED PRACTICES DEVELOPED BY THE AMERICAN BOAT AND YACHT COUNCIL (ABYC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAVE BEEN USED AS GUIDELINES IN THE CONDUCT OF THIS SURVEY.

DEFINITION OF TERMS

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

APPEARED:

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

SERVICEABLE:

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

POWERED UP:

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

GOOD or GOOD WORKING ORDER:

The system or component was found fully operational.

FUNCTIONAL:

The system or component was found fully operational.

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

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

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

- ** Per Manufacturer's Documentation
- *** Per Registration Documentation
- **** Per BUC Book Data

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

SURVEYOR NOTES

TRIAL RUN COMMENTS

A trial run was not performed during the Survey inspection.

OUT OF WATER INSPECTION COMMENTS

An out of the water inspection of the hull's wetted surfaces and running gear was not performed during the Survey inspection.

ELECTRICAL INSPECTION COMMENTS

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

HIN (HULL IDENTIFICATION NUMBER) VERIFICATION COMMENTS

The vessel's HIN (Hull Identification Number) was verified during the Survey inspection.

ENGINE/MECHANICAL SURVEY

There was no Mechanical/Engine Surveyor onboard during the Survey. It is highly recommended and understood that all propulsion & auxiliary power systems (engines, transmissions, gears, drives, generators) be inspected by their respective Manufacturer's Certified Technician to determine their condition.

GENERAL RECOMMENDATIONS

Recommend implementing/maintaining vessel trip and machinery maintenance log books. If not already onboard, the vessel's owner/operator manuals and equipment operating manuals should be sourced and carefully studied. Any missing equipment manuals can typically be obtained by the manufacturer, sourced online or by other third party resources.

GENERAL VESSEL INFORMATION

TYPE OF SURVEY REQUESTED: Underwriter's Condition & Value

DATE AND TIME OF SURVEY: May 1, 2023 / 1030 Hrs.

FILE NUMBER: 001

VESSEL TYPE: Motor vessel

VESSEL BUILDER: Jefferson Yachts, Inc.

VESSEL DESIGNER: Design team

HIN (HULL IDENTIFICATION NUMBER):

MODEL YEAR:

YEAR BUILT:

HULL NUMBER:

HS000 (See photo appendix for image)

2000 (per Hull Identification Number)

556 (per Hull Identification Number)

VESSEL CLASSIFICATION/STANDARD: Recreational DOCUMENTED HAILING PORT: Napa, CA HAILING PORT DISPLAYED: At transom

HOME PORT: Ballena Bay Marina, Alameda, CA

OFFICIAL NUMBER: 100001 ***
U.S.C.G. DOCUMENTATION NUMBER: 1093899 ***
U.S.C.G. DOCUMENTED FOR: Recreation

VESSEL MATERIAL: FRP (Fiberglass)

 LENGTH OVERALL (LOA):
 52' 04"' **

 REGISTERED LENGTH:
 52.3 ***

 BEAM:
 16' 00" **

 REGISTERED BEAM:
 16.0 ***

 DRAFT:
 4' 00" **

 OVERHEAD CLEARANCE:
 13' 04" **

 DISPLACEMENT:
 44,500 lbs. **

DEPTH: 9.3 ***

GROSS TONNAGE: 52 GRT ***

NET TONNAGE: 41 NRT ***

LOCATION OF SURVEY INSPECTION: Ballena Bay Marina, Alameda, CA

PERSONS IN ATTENDANCE DURING SURVEY: Rick Whiting, surveyor.

WEATHER CONDITIONS PRESENT: Cool, overcast and windy with mild showers.

RATING & VALUATION

VESSEL OVERALL RATING: ABOVE AVERAGE

ESTIMATED MARKET VALUE: \$1
ESTIMATED REPLACEMENT COST: \$1

VESSEL CONSTRUCTION HULL ARRANGEMENT

VESSEL DESCRIPTION AND LAYOUT

Chain locker forward / forward accommodation with island queen berth, hanging locker, en-suite head compartment / galley area with large pantry to starboard, galley to port / up steps to the saloon area with starboard side helm station, sofa to starboard, entertainment area aft, barrel. chairs to port, low bar to port / down aft steps to port to the aft accommodation with island queen berth, hanging lockers, vanity table, en-suite head compartment with shower to starboard / from saloon aft up steps to the raised aft deck with starboard access ladder to the cockpit with port side transom door to the swim platform; up forward ladder at aft deck to the flybridge with centerline helm station, helm seats, additional bench seating port, starboard and aft / port and starboard side decks lead forward to the foredeck with ground tackle.

HULL DESIGN TYPE

Modified-V, planing type, with rising sheer-line, flared bow, hard chines and partial keel.

HULL MATERIAL

Reportedly, solid FRP (fiber reinforced plastic) below the waterline, with End-Grain Balsa Wood sandwich core above the waterline.

EXTERIOR FINISH

White gelcoat, with blue cove and boot stripes.

GENERAL EXTERIOR CONDITION

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

TRANSOM

Reportedly, cored transom with center escape hatch, port side transom door.

SWIM PLATFORM

Cored fiberglass swim platform.

BOARDING SWIM LADDER

Telescoping stainless steel boarding ladder installed at the swim platform.

BULKHEADS

Athwartships reinforcement enhanced by bulkheads, bonded/tabbed to the hull with FRP (fiber reinforced plastic).

STRINGERS/TRANSVERSALS

Hull stiffness was reportedly provided by cored fiberglass longitudinal stringers and athwartships transversals.

STEM

Raked stem.

KEEL

Partial keel molded into the hull's layup schedule.

RIIGES

A gelcoated surface was used in the bilges. Recommend keeping the bilges clean & dry.



FINDING B-1

GENERAL BILGE CONDITION

Standing water was sighted in the mid bilge area.

BILGE LIMBER HOLES

The limber holes appeared to be appropriately sized and clear, where sighted.

VESSEL LIST

The vessel did not have any significant listing, during the Survey (a nearly straight waterline was observed).

MOISTURE COMMENTS

There did not appear to be any significantly elevated conductivity readings (possible moisture intrusion or other conductive material) around the hull, deck and superstructure penetrations, when tested with a Moisture Meter.

COMMENTS

Limited Electronic Moisture Testing was performed only on the vessel's surfaces above the sheer-line. Boat builders utilize various construction materials, fasteners, coatings, fairings and composites, many of which have been proven to trigger higher conductivity readings and false positive readings for moisture on Moisture Meters. It must be understood that Moisture Meters are designed to detect the "conductivity" of substrates; including moisture, among various other conductive materials, and their ability to detect conductivity can be limited by many factors, such as the depth of the conductive material, air space present in between the laminate and the conductive material, etc. If a more thorough assessment of possible moisture content in the vessel's laminates is desired, it is recommended that a non-destructive Thermal Imaging Survey be performed to the "Infraspection Institute's Standards for the Inspection of Recreational Yachts & Small Craft Constructed of Fiberglass Reinforced Plastic and Composite Materials". Destructive testing may also be considered if a more definitive conclusion regarding possible moisture content is desired.

DECK ARRANGEMENT

DECK MATERIAL

Reportedly, cored FRP (fiber reinforced plastic) with white gelcoat and textured non-skid.





BULWARKS

Molded fiberglass bulwarks (part of the deck's layup).

TOE-RAILS

Molded fiberglass toe-rails (part of the deck's layup).

RUB-RAILS

Molded fiberglass compression rails with stainless steel striker strips.

HULL-TO-DECK JOINT TYPE

Appeared to be an overlapping flange type joint.

HULL-TO-DECK JOINT REINFORCEMENT

The hull-to-deck joint was fiberglass tabbed internally, where sighted.

HULL-TO-DECK JOINT BEDDING COMPOUND

Appeared to be Elastomeric Polyurethane compound.

SUPERSTRUCTURE ARRANGEMENT

SUPERSTRUCTURE MATERIAL

Cored FRP (fiber reinforced plastic).



SUPERSTRUCTURE-TO-DECK JOINT TYPE

The deck house and deck were molded seamlessly with no joint.

BRIDGE ARRANGEMENT

BRIDGE MATERIAL

Cored FRP (fiber reinforced plastic).

BRIDGE TYPE

The flybridge provided the helm station and crew seating area.

BRIDGE TOP

The flybridge enclosure was Sunbrella type fabric material, with window enclosure curtains and stainless steel support piping.

EXTERIOR EQUIPMENT

EXTERIOR BRIDGE EQUIPMENT

The flybridge included a wet-bar sink.

GENERAL EXTERIOR SOFT-GOODS CONDITION

The vessel's exterior soft-goods appeared serviceable with no significant wear or weathering.

GENERAL HARDWARE CONDITION

No significant corrosion was observed on the vessel's hardware.

GENERAL CAULKING/SEALANT CONDITION

No significant weathering was observed on the vessel's exterior caulking sealants.

EXTERIOR LIGHTING

Overhead lights in the raised aft deck hardtop enclosure. All illuminated when tested.

EXTERIOR WASHDOWNS

Freshhwater and saltwater washdowns were located at the bow, port and starboard side.

CABIN VENTILATION

Provided by the hatches, portholes and companionway doors.

DECK HATCHES

Opening deck hatch on the foredeck and aft in the owner's accommodation.

PORTHOLES/PORTLIGHTS

Opening portholes were located on the hull sides.



WINDOWS

Tinted & tempered, fixed and opening windows.

WINDSHIELD

Tempered glass windshield.

SPRAY-SHIELD

Clear spray-shield on the flybridge brow.

DECK RAILINGS

Stainless steel railings ran from amidships around the forward perimeter of the vessel.

BOW RAILING

Stainless steel bow railings integrated into the deck railing.

HAND RAILS/GRAB RAILS

Stainless steel handrails were located at convenient locations of the vessel.

DAVIT/CRANE

MarQuipt 1,500 lb. capacity electro-hydraulic davit on the port boat-deck. Powered up. Demonstrated.

DECK DRAINAGE

Self-bailing decks, with lower deck drains and flybridge/boat-deck drains.

CLEATS

Cleats throughout the vessel were stainless steel horn type.

LINE CHOCKS

Stainless steel bow and stern line guide chocks.

ANCHOR PLATFORM

Molded fiberglass bow pulpit with stainless steel fairlead anchor roller chute.

EXTERIOR STORAGE

Various exterior lockers and storage areas appeared serviceable, where sighted.

EXTERIOR DECK ACCESS HATCHES

Cored fiberglass deck hatches.

EXTERIOR COVERS

Sunbrella type fabric enclosures with isinglass panels at the flybridge. Various Sumbrella covers.

FENDERS

Several fenders were observed onboard.

MOORING LINES

Various dock/mooring lines were observed onboard (amount included unknown).

AUXILIARY MOTOR

Tohatsu 30 Hp. 4-stroke outboard engine. (Not tested.)

TENDER / AUXILIARY WATERCRAFT

TENDER/WATERCRAFT

AB Inflatables, rigid fiberglass bottom inflatable RIB.

HIN (HULL IDENTIFICATION NUMBER)

Not sighted.

ENGINE MODEL

Tohatsu 30 Hp. 4-stroke.

ENGINE SERIAL NUMBER

Not sighted.

TENDER COMMENTS

The tender and outboard engine are currently stored at the head of the slip on a pontoon.

COMMENTS

A basic/limited visual inspection was performed on the tender. Recommend inspection by a Qualified Inflatable Service Facility, as necessary.

CABIN APPOINTMENTS INTERIOR

SALON ARRANGEMENT

Salon sectional sofato starboard. Two (2) barrel chairs to port. Forward serving counter to port; helm station to starboard.







GALLEY ARRANGEMENT

The Galley was located down forward to port with a large pantry to starboard.







ACCOMMODATION ARRANGEMENT

Forward VIP Stateroom Berth with Ensuite Head. Master Stateroom Berth with Ensuite Head.







HEAD ARRANGEMENT

Two (2) Raritan manually operated heads.





SHOWER ARRANGEMENT

Stall type showers in the Heads.

INTERIOR CABINETRY & TRIM

The interior Satin finished Teak cabinetry and trim appeared serviceable.

INTERIOR DOORS

Satin finished Teak cabin doors.

INTERIOR STORAGE

The cabinets, lockers, drawers and shelving appeared serviceable, where sighted.

CEILING HEADLINERS

Headliner material was vinyl.

WALL-LINERS

Wall-liner material was vinyl wallpaper.

FLOORING

Teak cabin sole.

CABIN SOLE FOUNDATION

Solid teak.

COUNTER TOPS

Galley counter tops were Corian.

INTERIOR MIRRORS

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

GENERAL INTERIOR & SOFTGOODS CONDITION

The general maintenance of the vessel's interior appeared serviceable.

GENERAL INTERIOR FURNISHINGS & SOFT-GOODS CONDITION

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

INTERIOR JOINER WORK COMMENTS

The interior joiner work appeared serviceable.

INTERIOR BULKHEADS

The interior bulkheads appeared serviceable, where sighted.

WATER INTRUSION COMMENTS

None sighted.

INTERIOR SYSTEMS & EQUIPMENT

LIGHTING

12 Volt DC and 110 volt AC lighting fixtures. All lights illuminated.

HVAC/AIR CONDITIONING SYSTEM

Three (3) Cruisair Marine Air units. Two (2) 16,000 BTU & one (1) 10,000 BTU with digital controls. Powered up. Demonstrated.

CABIN HEATING SYSTEM

The Marine Air units were reverse cycle for heat.

AUDIO/VISUAL EQUIPMENT

TELEVISION SYSTEM

Samsung Television with DVD Player in the cabin.

STEREO SYSTEM

Two (2) Sony Stereo/CD players, with speakers.

SATELLITE TELEVISION SYSTEM

KVH TracVision Digital Satellite TV Antenna.

GALLEY EQUIPMENT

REFRIGERATION

Two (2) 120 volt Sub Zero Refrigerator and Freezer. Powered up.

WINE CHILLER

Scotsman Stainless Steel Wine Chiller. Powered up.

ICE MAKER

U-Line Refrigerator/Ice Maker.

FINDING B-2

STOVE

Kenyon triple burner Stove with Ceramic Glass Cooktop. Powered up. Demonstrated.

MICROWAVE OVEN

General Electric Profile Stainless Steel Microwave Oven. Powered up. Demonstrated.

COFFEE MAKER

Kuerig coffee maker.

GALLEY SINK

Stainless Steel sink.

GALLEY ACCESSORIES

GE Washer/dryer. Powered up. Demonstrated.



PROPULSION & MACHINERY SPACE PROPULSION SYSTEM

ENGINE MODEL

Twin, Cummins Marine 6CTA8.3-M3 Diamond Performance Series, 8.3 Liter (505 cid). Turbocharged and Aftercooled with Airseps.





MANUFACTURE DATE Not sighted.

ENGINE HORSEPOWER 450 Horsepower each @ 2,300 RPM.

NUMBER OF CYLINDERS Six (6) in-line configuration.

ENGINE STARTER VOLTAGE RATING 12 Volt.

ENGINE HOURS

Port:1807 / Starboard:1765 , observed on the engine's analog service hour meters. (Engine hours at the lower helm station were quite different.)

FINDING B-3

ENGINE SERIAL NUMBERS

Port: 45876450 Starboard: 487----. (partially obscured.)

ENGINE LABELS & NOTICES

The data tag was affixed to the engines, but not readable on the starboard engine due to an equipment mount.

ENGINE DISPLAYS

Analog Engine System Monitoring Displays.

ENGINE INSTRUMENTATION

Main engine instrument gauges were installed at the helms. Readings were consistent between the two.

ENGINE ALARM SYSTEM

Audible engine alarms at the helm.

ENGINE EXHAUST SYSTEM

Raw water cooled with "Hard-Coat Insulated" stainless steel exhaust mixing risers by "Marine Exhaust Systems Inc.", and flexible connection silicone hoses to fiberglass surge pipes & mufflers, exiting through transom mounted discharges.

ENGINE COOLING SYSTEM TYPE

Closed reservoir type cooling with raw water cooled exhaust.

ENGINE DRIVE BELTS

Belt & pully system appeared servicible.

THROTTLE & SHIFT CONTROLS

Glendinning EEC Electronic Engine Control Systems Throttle & Gear Controls.

EMERGENCY ENGINE SHUT-DOWN

Engine shut-down keys at the lower helm.

ENGINE BED MOTOR MOUNTS

Adjustable motor mounts on longitudinal engine bed stringers with aluminum stringer caps.



ENGINE BED SUMPS

Integrated drip sumps under the engines.

MAIN ENGINE OIL LEVEL

Normal levels were observed on the engine sump dipsticks.

MAIN ENGINE COOLANT LEVEL

Normal levels were observed in the Heat Exchanger's Header Tanks.

MACHINERY & BILGE SPACE EQUIPMENT

ENGINE SPACE VENTILATION

Natural air flow ventilation appeared adequate.

ENGINE ROOM AIR BLOWERS

Four (4)12 Volt blowers were located in the port & starboard forward and aft engine room. Powered up.

SEACOCKS/SEA-VALVES

Raw water seacocks were bronze alloy ball valve type. Lubricate, exercise and monitor frequently. Recommend performing maintenance on all seacocks & sea-strainers annually (disassemble, inspect, clean and lubricate). It is also recommended that all below the waterline and near the waterline thru-hulls have a proper sized wooden plug attached to function as an emergency plugging device.



RAW WATER STRAINERS

Bronze alloy with sight glass and underwater strainer screens.

HOSES

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

HOSE CLAMPS

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

LUBE TRANSFER SYSTEM

Reverso 12 volt Lubrication Transfer Pump System.



MACHINERY SPACE INSULATION

Thermal & acoustical insulation was built into the engine room behind perforated sheeting.

TOOL BOX

One (1) Husky Tool Box installed in the engine room.



TRANSMISSIONS / GEARS / DRIVES

DRIVE SYSTEM TYPE
Direct Drive.

TRANSMISSIONS/GEARS
Twin Disc.



GEAR RATIO

Data tags stated, 1.98:1 ratio.

GEAR SERIAL NUMBERS

Unknown (data tag was partially illegible).

GEAR CONTROLS

Glendinning EEC Electronic Controls.



GEAR COOLERS/HEAT EXCHANGERS

Raw water heat exchangers. Check Zinc Anodes or bonding often.

GEAR FLUID LEVEL

Normal levels were observed on the transmission dipsticks.

PROPELLER SHAFTS

Size: 2 1/4". Material: Stainless Steel.

SHAFT BONDING BRUSHES

Shaft bonding brushes were installed at each shaft. Monitor for effective contact often.



PROPELLER SHAFT COUPLERS
Safety wiring was installed on both shaft couplers.



PROPELLER SHAFT PACKING GLANDS

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

FUEL SYSTEMS

FUEL SYSTEM TYPE Diesel.

FUEL TANK MATERIAL Coated steel.





NUMBER OF FUEL TANKS Four (4).

FUEL TANKAGE CAPACITY 600 Gallons in four (4) tanks.

FUEL TANK MANUFACTURER LABELING None sighted, due to access.

FUEL TANKAGE SECURING

The tank was framed in where sighted.

FUEL TANKAGE LOCATION

Port & starboard, outboard in the engine room; port & starboard in the cockpit lazarette.

FUEL FILL LOCATION

Port & starboard amidships side decks, and port & starboard in the cockpit, marked for diesel.



FUEL FILL MARKING

The deck fuel fill fittings were clearly marked as to fuel type.

FUEL TANK VENTILATION

Port & starboard hull sides, below the fuel fills.

FUEL TANKAGE & FUEL FILL GROUNDING

Unknown due to access. Recommend verifying grounding.

FUEL FILL HOSE/PIPE

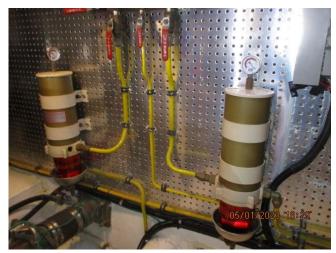
Unknown, due to access. Recommend verifying fuel fill hose type.

FUEL LINES/HOSES

USCG Approved Type A1 fuel lines, where sighted.

FUEL SHUT-OFF VALVES

Ball valves at the central manifold system, the fuel tanks and the Primary Fuel Filters.



FUEL MANIFOLD VALVES

Ball valves.

MAIN ENGINE PRIMARY FUEL FILTERS

Two (2) Racor 1000-MA Primary fuel filter/water separators.

MAIN ENGINE SECONDARY FUEL FILTERS

Engine mounted Secondary Fuel Filters.

GENERATOR PRIMARY FUEL FILTERS

Racor 500-MA fuel filter/water separator.

GENERATOR SECONDARY FUEL FILTERS

Engine mounted, spin-on canister type Secondary Fuel Filter.

FUEL FILTER CONDITION

No significant sediment was observed in the Primary fuel filter's sight bowls. Monitor/service often.

GENERATOR FUEL FILTER CONDITION

No significant sediment or algae was observed in the generator Primary fuel filter's sight bowl or on its diffuser. Monitor and service often.

FUEL COOLERS/HEAT EXCHANGERS

Engine mounted heat exchangers/coolers.

ELECTRICAL SYSTEMS DC ELECTRICAL SYSTEMS

DC SYSTEMS VOLTAGE 24/12 Volt systems.

BATTERIES

Four (4) 12 volt 4-D AGM (combined for 24 volt) - thruster batteries / one (1) 12 volt Group 27 Sealed Lead Acid - generator start battery / two (2) 12 volt 8-D Sealed Lead Acid - engine start batteries / six (6) Six volt deep cycle wet cell - house/inverter batteries.



BATTERY SWITCHES

One (1) Cole Hersey rotary switch at the DC panel.

MAIN DC BREAKERS

The main DC breakers were installed in the pilothouse's DC breaker panel.

DC ELECTRICAL PANEL BREAKERS/FUSES

The DC branch breaker panel was located in the saloon.

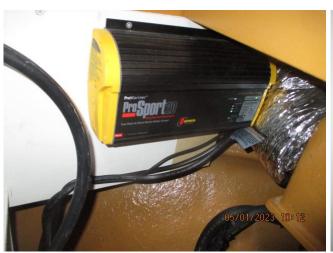


DC ELECTRICAL SYSTEM MONITORS

Analog DC voltage & amperage gauges in the main electric panel.

BATTERY CHARGERS

Two (2) Pro Mariner Pro Sport 24 volt; one (1) Mastervolt Chargemaster 12-50/3; one Newmar inverter/charger (2500 watt/100 Amp).









MAIN ENGINE ALTERNATORS

Two (2) 12 volt, engine mounted and belt driven.

BONDING SYSTEM (ABYC E-2 & E-11)

There were no bonding or grounding exceptions identified during the Survey.

DC SYSTEM WIRING TYPE

Appeared serviceable for intended use, where sighted.

DC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

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

COMMENTS

Always recommend verifying that the AC/DC electrical systems have properly sized & rated overcurrent circuit protection and conductor sizes.

AC ELECTRICAL SYSTEMS

AC SHORE POWER SYSTEM VOLTAGE 120 Volt @ 60Hz.

AC SHORE POWER PHASE RATING Single Phase.

AC SHORE POWER INLETS

Two (2) 50 amp. 120/240 volt shore power inlets. Two (2) 30 amp/125 volt shore power inlets.



AC SHORE POWER CORDS

50 Amp. vinyl shore power cord. 30 Amp. vinyl shore power cord.

AC SHORE POWER CORD ADAPTORS Several Smart "Y" adapters.

MAIN AC SHORE POWER BREAKERS

The main AC breaker was installed in the main electrical panel.

AC ELECTRICAL PANEL BREAKERS

AC branch breakers in the main cabin AC electrical panel.



AC ELECTRICAL SYSTEM MONITORS

AC voltage & amperage gauges in the main AC electric panel.

AC ELECTRICAL SOURCE SELECTOR SWITCHING

Manual rotary type selector switch for shore or ship power.

AC POWER ISOLATION TRANSFORMERS

GE Isolation Transforfmer



GALVANIC ISOLATION SYSTEM (ABYC A-28)

Highly recommended if not installed.

AC ELECTRICAL POWER OUTLETS

The AC outlets were tested using a UL Listed Circuit Tester. All GFCI protected outlets tripped at their test buttons, where sighted.

AC ELECTRICAL OUTLET POLARITY

AC electrical outlet polarity was checked and found to be wired correctly.

AC SYSTEM WIRING TYPE

Appeared serviceable for intended use, where sighted.

AC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

Recommend thorough inspection and maintenance of the vessel's AC & DC wiring, by checking the security of all electrical conductor terminations (destructive testing), cleaning any corrosion off of the electrical conductors and applying a corrosion inhibitor where appropriate.

COMMENTS

AC shore power was made available during the survey. The generator was operated during the survey. All 120 volt AC systems were tested both with AC shore power and separately with the generator.

GENERATORS/AUXILIARY POWER GENERATORS

GENERATOR MODEL
Onan



GENERATOR SPEC

Spec: A.

GENERATOR FUEL TYPE

Diesel.

NUMBER OF CYLINDERS

Three (3).

GENERATOR KILOWATT RATING

15.0 KW.

GENERATOR ENGINE RPM RATING

1,800 RPM.

GENERATOR VOLTAGE RATING

120/240 Volts AC @ 60 Hz.

GENERATOR PHASE RATING

Single Phase.

GENERATOR STARTER VOLTAGE RATING

12 Volt.

GENERATOR HOURS

1804.8 Hours observed on the generator mounted hour meter.

GENERATOR SERIAL NUMBERS

D980732760

GENERATOR LABELS & NOTICES

None sighted.

GENERATOR INSTRUMENTATION GAUGES

Generator instrument panel installed at the generator.

GENERATOR ALARM SYSTEM

Generator audible alarms.

GENERATOR DRIVE BELT

Satisfactory.

GENERATOR LUBRICATION SYSTEM

Engine mounted mechanical oil pump with spin-on type filter.

GENERATOR OIL LEVEL

Oil level was normal on the generator's oil sump dipstick.

GENERATOR COOLING SYSTEM TYPE

Closed coolant with raw water exhaust type. Change Zinc Anodes regularly.

GENERATOR COOLANT LEVEL

The generator Coolant Recovery Expansion Tank's level was normal.

GENERATOR FUEL SYSTEM

Engine mounted fuel pump.

GENERATOR EXHAUST SYSTEM

Raw water cooled with fiberglass Water-Lift type muffler.

GENERATOR SPACE VENTILATION

Natural air ventilation for the generator space was provided by a hull side vent.

GENERATOR LOAD TEST INFORMATION

The generator operated with 120 volts @ 60 Hz, under a 45 amp. load.

WATER SYSTEMS FRESHWATER SYSTEM

WATER TANKAGE MATERIAL Mild Steel with paint coating.

NUMBER OF FRESHWATER TANKS Two (2).



WATER TANKAGE CAPACITY 200 gallons in two tanks.

WATER TANKAGE SECURING

The water tankage was well secured where sighted.

WATER TANKAGE LOCATION

Under aft accommodation berth.

WATER FILL LOCATION

Port aft raised aft deck, marked for water.

WATER FILL MARKING

Properly marked for water.

FRESHWATER TANKAGE VENTILATION

Port hull side, below the fill pipe.

FRESHWATER PUMPS

Jabsco ParMax 12 volt Demand type Freshwater Pump.



FRESHWATER FILTRATION

Inline filter at the freshwater pump. Monitor & replace/clean often.

FRESHWATER ACCUMULATOR TANK

Groco Accumulator Tank.

FRESHWATER PIPE/HOSE PLUMBING

PEX type (Cross-linked Polyethylene) tubing and rubber hoses.

WATER LEVEL MONITORING

The water level gauge appeared serviceable.



COMMENTS

Recommend periodically sanitizing the vessel's water tankage and water delivery systems.

HOT WATER SYSTEM

WATER HEATER

Raritan Engineering.



WATER HEATER TYPE
Marine Grade 120 volt.

WATER HEATER CAPACITY 20 Gallons.

WATER HEATER PRESSURE RELIEF VALVE Relief valve built into the tank.

BLACKWATER SYSTEM

MSD (MARINE SANITATION DEVICE) SYSTEM (33 CFR 159)

Type III MSD Waste System (utilizes a holding tank or similar device that prevents the overboard discharge of treated or untreated sewage).

BLACKWATER TANKAGE

Fiberglass blackwater (sewage) holding tank with reportedly 50 gallon capacity.

BLACKWATER TANKAGE VENTILATION

The Blackwater tank's vent fitting was plumbed overboard at the port hull side.

BLACKWATER SYSTEM DISCHARGE

Jabsco 12 volt. Powered up.

COMMENTS

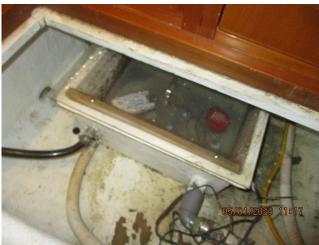
The vessel's operator is responsible for determining what type of MSDs (marine sanitation devices) are prohibited & permitted by law in the location of the vessel's intended use.

GREYWATER SYSTEM

GREYWATER TANKAGE

Two (2) Fiberglass greywater sump tanks.





GREYWATER DISCHARGE SYSTEM

Greywater Sump Pumps, tanks and automatic discharge.

PLUMBING FIXTURES

Supplied by a ParMax 12 volt DC Demand Pump.

GREYWATER SYSTEM COMMENTS

Recommend cleaning the greywater sump tanks periodically.

COMMENTS

The vessel's operator is responsible for determining whether direct greywater overboard discharge is prohibited or permitted by law in the location of the vessel's intended use.

STEERING SYSTEMS

STEERING SYSTEM TYPE

Hydraulic.

STEERING SYSTEM MANUFACTURER

Hynautic Steering System.

NUMBER OF STEERING STATIONS

Two (2): pilothouse helm and flybridge helm.

STEERING HOSES/LINES

Reinforced flexible hoses with metallic fittings.

STEERING SYSTEM ACTUATORS

The steering ram appeared to be well secured.



UPPER RUDDER BEARINGS & RUDDER SUPPORT Bronze upper rudder bearings on cored fiberglass rudder tables.



RUDDER STOCKS

Bronze Rudder Stocks.

RUDDER LOG PACKING GLANDS

Bronze hex nut type packing glands appeared serviceable. Monitor frequently.

EMERGENCY STEERING SYSTEM

Engines.

TRIM TAB SYSTEM

Bennett Marine 12 volt Electro-Hydraulic Trim Tabs.

GROUND TACKLE

ANCHORS

CQR 65 lb. plow anchor.



ANCHOR RODE TYPE (Est.) 300' 3/8" galvanized chain.

ANCHOR WINDLASS

Maxwell 800, 12 volt Windlass. Powered up. Demonstrated.



COMMENTS

Highly recommend at least one additional spare anchor and rode for emergencies and added anchoring options.

ELECTRONICS & NAVIGATION EQUIPMENT

VHF RADIOS

Standard Horizon Matrix GX2150 VHF Radio with AIS. Standard Horizon RAM Mic.





COMPASSES

Two (2) Ritchie 5" Compasses. Recommend having the compasses swung, providing current deviation cards.

MULTI-FUNCTIONAL NAVIGATION DISPLAYS

Two Raymarine 8" Hybrid Touch Multi Function Navigation Displays with GPS Chartplotter, sonar, radar.





AIS (AUTO IDENTIFICATION SYSTEM)

Standard Horizon AIS (Automatic Identification System), interfaced with the Multi-Function Navigation Display.

CCTV CAMERA SYSTEM

Engine room camera

AUTOPILOT

Raymarine ST7001+ Autopilot. Powered up.

MULTI-DISPLAYS

Raymarine ST60 Tridata Multi Display, with Depth, Speed and Distance.

FINDING B-4

MARINE RADAR

Raymarine 72 mile Marine Radar with digital open array Antenna.

INTERCOM SYSTEM

Aiphone Vessel Intercom System. Powered up. Demonstrated.



BAROMETER Chelsea Barometer.



SHIP'S CLOCK Chelsea Clock.

ANTENNAS

The antennas appeared to be well mounted where sighted.

SAFETY EQUIPMENT SAFETY EQUIPMENT (U.S.C.G.)

WEARABLE PERSONAL FLOATATION DEVICES (33 CFR 175)

Twenty (20) Type II U.S.C.G. Approved PFD's.

THROWABLE PERSONAL FLOTATION DEVICES (33 CFR 175)

One (1) Type IV - U.S.C.G. Approved Throwable Device (ring).

FIRE EXTINGUISHERS (46 CFR 25)

Three (3) 10 lb. ABC Dry Chemical. Four (4) 2.5 lb. ABC Dry Chemical. (All new.) Recommend mounting all fire extinguishers in prominent locations throughout the vessel.

VISUAL DISTRESS SIGNALS (33 CFR 175.101)

Weems & Plath 12 volt digital emergency signaling device. USCG approved.

SOUND PRODUCING DEVICES (33 CFR 83)

12 Volt DC Electric Air Horn. Powered up. Demonstrated.

NAVIGATION LIGHTS (33 CFR 83)

All Navigation Lights illuminated when tested.

"NO OIL DISCHARGE" PLACARD (33 CFR 151/155)

Found properly displayed.

"TRASH DISPOSAL" PLACARD (33 CFR 151/155)

Found properly displayed.

"WASTE MANAGEMENT" PLAN (33 CFR 151) VESSELS OVER 39'4"

Found properly displayed.

U.S.C.G. NAVIGATION RULE BOOK (33 CFR 83) VESSELS OVER 39'4"

The U.S.C.G. International and Inland Navigation Rule Handbook was observed onboard.

GASOLINE ENGINE SPACE VENTILATION (33 CFR 175/183, 46 CFR 25)

The engine/machinery space appeared to have adequate ventilation as built.

GASOLINE ENGINE SPACE BLOWERS (33 CFR 175/183, 46 CFR 25)

Four (4) 12 volt electric blowers for the engine space was located in the engine space. Powered up. Demonstrated.



AUXILIARY SAFETY EQUIPMENT

FIXED FIRE SUPPRESSION SYSTEM

FE-241 Fixed Fire Suppression Tank in the engine compartment. Automatic thermal and manual activation, with override switch.

BILGE HIGH WATER ALARMS

One (1) Bilge High Water Alarm. Test sounded.

MAN OVERBOARD SYSTEM (MOB)

Lifesling M.O.B. Rescue Sling.

FIRST AID SUPPLIES

A small First Aid kit was observed onboard. Highly recommend a full Medical Kit and the periodic renewal of any outdated medical supplies.

CARBON MONOXIDE DETECTORS (ABYC A-24)

Three (3) Fireboy Xintex Carbon Monoxide Detectors. Test sounded.

SMOKE DETECTORS (NFPA 302)

None sighted. Recommend install Smoke Detectors inside the accommodation spaces.

SEARCH LIGHT

GoLight remote controlled Search Light.

FINDING B-5

VESSEL SAFETY PLAN

Recommend implementing, posting and continually updating a Vessel Safety Plan, outlining all of the vessel's specific safety procedures and the locations, maintenance protocols and serviceability or expiration dates of all onboard safety equipment.

BILGE PUMPING SYSTEMS

ELECTRIC BILGE PUMPING SYSTEMS

Three (3) Rule 2000, 12 volt Bilge Pumps with floatswitches. Powered up.



COMMENTS

Highly recommend weekly testing of bilge pump operation, adequate dewatering ability and removal of any bilge pump debris.

VESSEL DOCUMENTATION

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

The vessel's HIN (Hull Identification Number) displayed on the starboard aft upper hull corner was fully legible.

DOCUMENTATION COMPLIANCE (46 CFR 67)

The vessel's USCG Documentation was aboard and the document number was permanently displayed.

Findings & Recommendations

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

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

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

Deficiencies will be listed under the appropriate heading:

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

B: OTHER DEFICIENCIES REQUIRING ATTENTION

FINDING B-1 BILGES

Slight water was observed collecting in the bilges.

Gelcoat surface material was beginning to lift and possibly clog bilge pumps.

RECOMMENDATION

Dewater bilges. Keep bilges clean and dry.

Remove debris from bilges. Consider painting bilges.

FINDING B-2 ICE MAKER

The Ice Maker powered up, but did not produce ice cubes.

RECOMMENDATION

Service, repair or replace as necessary.

FINDING B-3 ENGINE HOURS

The engine hour meters at the two helm stations were not matched closely in elapsed hours.

RECOMMENDATION

Investigate further, and service, repair or replace as necessary.

Findings & Recommendations

FINDING B-4 MULTI-DISPLAYS

The Raymarine ST60 Tridata Multi-Display did not display a depth reading.

RECOMMENDATION

Investigate further, and service, repair or replace as necessary.

FINDING B-5 SEARCH LIGHT

The search light did not power up when tested.

RECOMMENDATION

Service, repair or replace as necessary.

SUMMARY

VESSEL CONDITION

It is the Surveyor's experience that develops an opinion of the OVERALL VESSEL RATING OF CONDITION, after the Survey has been completed and the findings have been organized in a logical manner.

The grading of condition developed by BUC RESEARCH and accepted in the marine industry for a vessel at the time of Survey, determines the adjustment to the range of base values in the BUC USED BOAT PRICE GUIDE for a similar vessel sold within a given time period, as a consideration to determine the Market Value.

The following is the accepted Marine Grading System of Condition:

"EXCELLENT (BRISTOL) CONDITION", is a vessel that is maintained in mint or bristol fashion (usually better than factory new, loaded with extras, a rarity).

"ABOVE AVERAGE CONDITION", has had above average care and is equipped with extra electrical and electronic gear.

"AVERAGE CONDITION", ready for sale requiring no additional work and normally equipped for her size.

"FAIR CONDITION", requires usual maintenance to prepare for sale.

"POOR CONDITION", substantial yard work required and devoid of extras.

"RESTORABLE CONDITION", enough of hull and engine exists to restore the boat to usable condition.

As a result of the Survey, as shown in the REPORT OF MARINE SURVEY & FINDINGS AND RECOMMENDATIONS sections of this report and by virtue of my experience, my opinion is:

ABOVE AVERAGE

STATEMENT OF VALUATION

The "FAIR MARKET VALUE" 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 is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- a. Buyer and seller are typically motivated.
- b. Both parties are well informed or well advised, and each acting in what they consider 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 U.S. dollars or in terms of financial arrangements comparable 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.

APPRAISAL METHODOLOGY:

The following method of valuation was used to obtain the FAIR MARKET VALUE of the vessel: Similarly equipped, same or similar model vessels are shown as sold on soldboats.com in recent years and were adjusted for model year and date of sale and averaged together.

SIMILAR VESSELS RECENTLY SOLD: Soldboatd

1999 52' Jefferson Hershine Rihanna Cockpit Motor Yacht listed for \$285,000 and sold for \$268,000 in 2022 (FL).

SIMILAR VESSELS ON THE MARKET: Yachtworld

2006 52' Jefferson Pilothouse Motor Yacht listed for \$389,000 and located in FL.

BUCValuPro™ Retail Price Range: \$225,000 - \$247,500

BUCValuPro™ Adjusted for Region & Condition Range: \$282,500 - \$310,500

BUCValuPro™ Replacement: \$1,865,000

ADJUSTED ESTIMATES

The surveyor has chosen to consider

BUCValuPro™ Fair Market Value adjusted for condition & region with the range of \$262,000 - \$287,500 as well as comparisons from SoldBoats.com for the subject vessel's Fair Market Value.

The average sold price from the closest comparison listings mentioned above before adjustments would be calculated to \$268,000.

Considering the overall condition of the subject vessel, the surveyor has determined to add \$37,000 to the combined average in order to make a fair comparison. This vessel was found in exceptionally good condition.

This result of this equation was used for the subject vessel's Fair Market Value.

After consideration of the reliability of the data, the extent of the necessary adjustments and condition of the vessel, it is the Surveyor's opinion that the "FAIR MARKET VALUE" of the subject vessel is:

\$1

One US Dollar

2. The "ESTIMATED REPLACEMENT COST" indicates the retail cost of a new vessel of the same make/model with similar equipment offered by the same manufacturer. "ESTIMATED REPLACEMENT COST" of the subject vessel is:

\$1

One US Dollar

Report Summary

SUMMARY

In accordance with the request for a Marine Survey of the "SAMPLE ONE", for the purpose of evaluating its present condition and estimating its Fair Market Value and Replacement Cost, I herewith submit my conclusion based on the preceding report. The subject vessel was personally inspected by the undersigned on May 1, 2023. Subject to correction of deficiencies listed in sections A and B, the vessel is considered to be reasonably suitable for its intended use. Other deficiencies listed should be attended to in keeping with good maintenance practices or as upgrades.

SURVEYOR'S CERTIFICATION

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

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

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

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

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

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

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

Capt. Rick Whiting, SAMS Accredited Marine Surveyor

Signed and Submitted on: May 3, 2023.

"SAMPLE ONE" inspected by STARBOARD MARINE