# **RJE Marine Services Inc.**

## MARINE SURVEYOR AND CONSULTANT

# Hunter 28 Lily Mar



MEMBER OF SOCIETY OF ACCREDITED MARINE SURVEYORS

# **Report of Marine Survey**

Of The Vessel

Lily Mar

**Hunter 28** 

Conducted by RJE Marine Services, Inc.

PREPARED EXCLUSIVELY FOR:



May 30, 2023

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## I. INTRODUCTION

#### SCOPE OF SURVEY

Acting at the request of the Acting at the registration, where an "in-the-water-survey" WAS conducted at the Acting the St. Augustine, FL. The ship's papers were on board and appeared to be in order. The Hull Identification Number (HIN) WAS verified from the starboard side hull and Florida State registration. A sea trial WAS NOT performed. An out-of the water inspection of underwater machinery and the exterior of the hulls wetted surface area WAS NOT performed on May 30, 2023. The reason for the survey, was to ascertain the physical condition and value of the vessel. Moisture readings taken and referenced throughout the body of the report, were taken with the GE Proimeter Aqunate moisture meter. AC and DC power WAS used to check operation of the electrical systems specified in this report only. No reference or information should be construed to indicate evaluation of the internal condition of the engines or the propulsion system's operating capacity. Electronic equipment was checked for "power up" only.

This vessel was surveyed without removals of any parts, including fittings, tacked carpet, screwed or nailed boards, anchors and chain, fixed partitions, instruments, clothing, spare parts and miscellaneous materials in the bilges and lockers, or other fixed or semi-fixed items. Locked compartments or otherwise inaccessible areas would also preclude inspection. Owner is advised to open up all such areas for further inspection. Further, no determination of stability characteristics or inherent structural integrity has been made and no opinion is expressed with respect thereto. This survey report represents the condition of the vessel on the above dates, and is the unbiased opinion of the undersigned, but it is not to be considered an inventory or a warranty either specified or implied.

**NOTE:** It is recommend and understood that all DIESEL engines be surveyed by a qualified Engine Surveyor to determine the condition of the engines, gears and pumps, heat exchangers, coolers, etc.

#### **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 GUIDELINESIN THE CONDUCT OF THIS SURVEY.

The use of the word "appears" is intended to indicate that a close or complete inspection was not possible or it was not deemed appropriate at the time of this survey. The deficiencies reported herein reflect the conditions observed at the time the survey was conducted.

Use of asterisks \* in the body of the report will indicate that a finding will be listed in the *Findings and Recommendations* section pertaining to the asterisked item, following the body of the report.

## I. INTRODUCTION

This vessel was manufactured prior to enactment of some of the U.S.C.G. (33 CFR) requirements, NFPA and ABYC recommendations in effect today. This survey addressed those recommendations thought to be necessary for safety, but did not suggest complete compliance with current requirements or standards.

#### LIMITED LIABILITY:

- 1. The survey will be conducted in accordance with generally accepted marine standard and criteria utilized in the marine surveying industry. Persons or entities entitled to reply upon this report are advised the Surveyor is not an engineer nor does he posses any specialized knowledge beyond the degree of skill commonly possessed by others in the same employment.
- 2. Neither the Surveyor nor the Company guarantees the accuracy of this survey, or the condition of the vessel. Neither the Company, nor its officers, surveyors, employees, directors, representatives, or agents under any circumstances whatsoever, are to be held responsible for any error in judgment, default or negligence of the Corporations agents. Neither shall the Company nor its officers or directors, under any circumstances to be held responsible for any omission, mis-represtation, or misstatement in any certificate of report.
- 3. Client shall obtain written boarding authorization for Surveyor to board the Vessel for the purpose of conducting a Marine Survey, and shall indemnify and hold Surveyor harmless from all liability for consequential damages, personal injury damages, properly loss damages, and punitive damages, arising out Clients failure to obtain boarding authorization.
- 4. Surveyor shall have no liability for consequential damages, no liability for personal injury damages, no liability for property damages, no liability for punitive damage, all of which shell be deemed to have knowingly and voluntary waived upon use of the Marine Survey Report.
- 5. In no event shall the legal liability of RJE Marine Services, Inc., exceed the fee paid for this survey report, regardless of claims or suits regardless of whether under theory or tort, contract, products liability, admiralty, or otherwise.
- \* The Terms and Conditions as well as Limited Liability listed above in referenced from the signed and received Survey Agreement by the party conducting the survey.

## II. GENERAL INFORMATION

#### **GENERAL INFORMATION**

...... 0530FOX FILE NUMBER: SURVEY PREPARED FOR: ....... NAME OF VESSEL: ..... Lily Mar TYPE OF SURVEY: ..... Condition and Value **FAIR / AVERAGE** OVERALL VESSEL RATING: ...... \$10,500 \$95,000 ESTIMATED REPLACEMENT COST: ..... YEAR/MAKE/MODEL OF VESSEL: ...... 1990 Hunter 28 ...... Hunter Marine Company BUILDER: P.O. Box 1030 Alachua, FL 32615 1989 YEAR BUILT: ...... 1990 MODEL YEAR: ...... MODEL OF VESSEL: ..... Cruising Sloop HUN28091H990 HULL IDENTIFICATION NUMBER (HIN): ...... **HULL NUMBER: HOME PORT:** St. Augustine, FL USCG DOCUMENTATION NUMBER: ..... 971053 (expired) STATE VALIDATION STICKER NUMBER: ..... Expired: 10/2022 FL 5242 JB STATE REGISTRATION NUMBER: ...... OWNER'S NAME: ..... OWNER'S ADDRESS: ...... St. Augustine, FL PLACE OF SURVEY: ..... 5/30/2023 DATE/TIME OF SURVEY: ...... FRP (Fiber Reinforced Plastic). HULL MATERIAL: ...... HULL TYPE: ..... Full displacement hull LENGTH OVER ALL (L.O.A).: ..... (LOAD) LENGTH WATERLINE (L.W.L).: ..... BEAM: DRAFT: ..... 5' 4" \*\*\* DEPTH: DISPLACEMENT/BALLAST: ..... 7,400 lbs. / 2,800 lbs. \*

## II. GENERAL INFORMATION

#### **GENERAL INFORMATION**(continued)

 OVERHEAD CLEARANCE:
 47' 6" \*

 GROSS TONS:
 7 \*\*\*

 NET TONS:
 7 \*\*\*

PROPULSION SYSTEM: ..... Yanmar, model 2GM20, serial #13621.

FUEL TYPE: Diesel

FUEL CAPACITY: ..... 18 gallons \*

AC POWER: One (1) 30 amp/125 volt inlet.

DC POWER: ..... 12 volt

FRESH WATER CAPACITY: ..... 30 gallons \*

HOLDING TANK: ..... 6 gallons \*

INTENDED USE/OWNER: ..... Intracoastal and Coastal Cruising

OWNER'S EXPERIENCE: ..... Owned and maintained this vessel for several years.

INTENDED CRUISING AREA: ...... Southeast Intracoastal and Coastal Waters.

The manufacture's manuals for the vessel was sighted on the vessel.

#### **DEFINITION OF TERMS**

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

#### APPEARS:

Indicates that a very close inspection of the particular system, component or 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 tests).

#### FIT FOR INTENDED USE:

Use which is intended by Survey Purchaser(present or prospective owner).

#### SERVICEABLE: ADEQUATE:

Sufficient for a specific requirement.

#### POWERS UP:

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

#### **EXCELLENT CONDITION:**

New or like new.

#### **GOOD CONDITION:**

Nearly new, with only minor cosmetic or structural discrepancies noted.

#### **FAIR CONDITION:**

Denotes that system, component or item is functional as is with minor repairs. (MONITOR OFTEN)

## **II. GENERAL INFORMATION**

## **DEFINITION OF TERMS:**(continued)

#### POOR CONDITION:

Unusable as is. Requires repairs or replacement of system, component or item to be considered functional.

#### USE OF \*:

Use of \* in the body of this report will indicate that a finding will be listed in the "Findings and Recommendations" section pertaining to the \* item.

Asterisks \* in this General Information section refers to the source of such information as follows:

- \* Per Manufacturer's Specifications
- \*\*Refer to Summary and Valuation Section
- \*\*\* Per USCG Documentation
- \*\*\*\* Per Buc Book

#### **HULL DECK AND SUPERSTRUCTURE**

#### **HULL CONSTRUCTION**

**TYPE:** Full displacement

MATERIAL: FRP (fiber reinforced plastic).

**EXTERIOR HULL:** White gelcoat with green stripes and moderate sheer. Serviceable.

**PORTLIGHTS:** Five (5) white plastic framed opening (12" x 4 1/2") portlights. Serviceable.

**BULKHEADS:** Athwartships reinforcement enhanced by wood bulkheads bonded to the hull with epoxy resin and FRP (fiber reinforced plastic).

**STRINGERS:** The longitudinal strength is enhanced by stringers. Full length stringers laminated to the topsides, as well as a heavy grid system in the area of the keel.

STEM: Cruiser bow

**TRANSOM:** Reinforced, FRP slightly rounded with reverse transom, integrated stepped swim platform and three (3) step re-boarding ladder. Serviceable.

**BILGE:** A smooth white gelcoat surface was used in the shallow bilge area, condition was generally clean.

**CHAIN LOCKER (DRAINAGE):** The chain locker is forward and accessible through a hatch on the foredeck and drains overboard. Serviceable.

**BALLAST (KEEL BOLTS):** The keel bolts were inspected in the bilge and appear serviceable.

**LIMBER HOLES:** Limber holes are of adequate size and clear where sighted.

**NOTE:** Title 46, United States Code of Federal Regulations, Chapter 121, states any vessel for which a certificate of documentation has been issued are required to have the documentation numbers permanently fixed to the hull. Sighted and noted starboard side cockpit compartment, (see photo).

#### **DECK CONSTRUCTION**

**TYPE:** Molded FRP (fiber reinforced plastic) with white gelcoat and non-skid surface.

MATERIAL: Cored FRP (fiber reinforced plastic) with white gelcoat, molded non-skid surface.

#### **HULL-TO-DECK JOINT**

**TYPE:** Hull has inward turning flange for the deck joint.

FASTENERS: Thru-bolted stainless steel nuts and bolts every 6" to 8" centers where sighted.

**BEDDING COMPOUND:** Appeared to be elastomeric compound.

**NOTE:** Aluminum mechanically fastened toe rail. Appears serviceable.

#### **DECK FITTINGS**

**STANCHIONS:** Stainless steel stanchions with double cable life lines that run the perimeter of deck. Appears serviceable.

BOW PULPIT (BOW RAIL): Stainless steel stanchions and rail system. Appears serviceable.

**VENTILATION:** Provided by portlights and hatches in the topsides and deck. Serviceable.

**SCUPPERS:** Cockpit has drains at port and starboard aft corners. Appears serviceable.

#### **HULL DECK AND SUPERSTRUCTURE**

#### **DECK FITTINGS**(continued)

CHOCKS AND CLEATS: Four (4) aluminum 7" cleats thru-bolted (forward/aft). Serviceable.

**PUSHPIT (STERN PULPIT):**Stainless steel stanchions and rail system. Serviceable.

Note: Two (2) "Sternperch" seats port and starboard. Serviceable.

**DECK SURFACE:** White gelcoat with molded in non-skid. Condition is serviceable.

**HATCHES:** Solid FRP construction for access to the anchor locker and cockpit storage compartments. Serviceable.

**GRAB RAIL:** Two (2) teak hand rails port and starboard along the coach roof. Serviceable.

#### **SUPERSTRUCTURE**

MATERIAL: Cored FRP (fiber reinforced plastic).

\* DECK HATCHES: [C1] Three (3) tinted acrylic, (one (1) 16" x 17" and two (2) 9" x 10", (see findings). Serviceable.

Note: One (1) sealed.

WINDOWS/PORTS/DOORS: Sliding tinted acrylic companionway hatch and one (1) removable tinted acrylic panel.

Serviceable.

FITTINGS AND HARDWARE: Various teak handles mounted in strategic places. Appears serviceable.

CANVAS AND SUPPORT STRUCTURE: Stainless steel tubular support structure with green bimini. Serviceable.

Note: Green canvas with clear panels sighted stored in the forward area of the cabin.

SUPERSTRUCTURE HOUSE TO DECK JOINTCoach roof and deck appeared to be molded seamlessly, no joint was observed.

\* MOISTURE CONTENT: [B1] Moisture content readings indicated normal ranges, (see findings).

Note: All surfaces, (decks, cockpit and coach roof), were percussion sounded with a phenolic hammer, (a tool to detect voids, separations, delaminations and areas of deterioration) and tested for moisture levels with a moisture meter.

#### **BRIDGE DECK**

MATERIAL: FRP (fiber reinforced plastic) molded cockpit.

**TYPE:** U-shaped FRP molded cockpit seating with storage and white vinyl cushions. Serviceable.

**COCKPIT:** Open cockpit with aft walk-thru. Serviceable.

**SAFETY RAIL SYSTEM:** Stainless steel tubular rail and stanchion system surrounds the cockpit area. Appears serviceable.

#### **ADDITIONAL EQUIPMENT AND ACCESSORIES**

**GENERAL EQUIPMENT:** Handheld hot/cold shower, (SSI products) port side aft cockpit. Serviceable.

CANVAS AND COVERS: Green mainsail cover. Serviceable.

**FENDERS:** Several pneumatic fenders. Serviceable.

**DOCK LINES:** Various sizes and lengths appropriate for this vessel.

#### CABIN APPOINTMENTS

#### **INTERIOR DESCRIPTION:**

\* JOINERY AND FINISH: [C2] The joinery and finish of the interior was well constructed and in serviceable condition, (see findings).

CABIN BRIGHT WORK: Satin varnish finish on all teak doors and trim.

\* INTERIOR BULKHEADS: [C3] The interior bulkheads were well fit where sighted, (see findings).

**WATER INTRUSION SIGNS:** Previous signs of water intrusion sighted port and starboard forward and aft bulkheads, monitor periodically and repair as necessary.

**STORAGE AREAS:** There are cabinets, lockers, drawers, and shelving. Appear serviceable.

**HEADLINERS:** Off-white FRP headliner. Serviceable.

DOORWAYS: Solid cabin head door. Serviceable.

**FABRIC AND CUSHIONS:** Green vinyl and cloth cushions. Serviceable.

FLOOR AND WINDOW COVERINGS: Simulated teak and holly cabin sole. Serviceable.

**ACCOMMODATIONS:** Four (4), two (2) in the forward berth and two (2) in the aft stateroom

**HEADS:** One (1) manual flush.

**SHOWERS:** Stand up shower incorporated into the head with floor drain.

FAUCET FIXTURES: The faucet fixtures and sinks were operable in the head, cockpit area and galley.

\* LIGHT FIXTURES: [C4] Swivel and recessed 12 volts lights throughout the vessel, (see findings).

**CABIN FURNISHINGS:** Teak and Formic top table with leaf's and storage. Serviceable.

#### **GALLEY**

LOCATION: Midship port side.

**SINKS:** One (1) 11" x 9" stainless steel. Serviceable.

**REFRIGERATION:** One (1) top-loading insulated ice box. Appears serviceable.

STOVE/OVEN: Origo, model 4000, two (2) burner, (alcohol). Did not prove.

**NOTE:** The galley counter tops are Formica. Serviceable.

#### **PROPULSION**

#### **MAIN ENGINES**

**TYPE:** One (1) four cycle I-2 diesel naturally aspirated engine.

MANUFACTURER: Yanmar, model 2GM20, serial #13621.

**LABELS AND NOTICES:** All required labels appeared to be in place and readable.

HORSE POWER: Reportedly 18 horsepower each @ 2800 RPM.

**INDICATED HOURS:** 4.4 on the engine meter.

**THROTTLE CONTROLS:** Mechanical lever/cable type.

#### **PROPULSION**

#### MAIN ENGINES (continued)

**ENGINE MOUNTS AND BED:** Main engine beds are encapsulated fiberglass longitudinal stringers inboard and outboard with cushioned motor mounts are bolted to the stringers. Appears serviceable.

DRIP PANS: FRP molded (integral) drip pan area. Appears serviceable

**LUBRICATION:** Level and Condition: Appears serviceable. Filters: Engine mounted NAPA p/n 1064 spin on/off canister type filter.

\* **EXHAUST SYSTEM:**[B2] Raw water cooled with cast iron riser and flexible connections to central muffler then exiting outboard to side exhaust fitting. Hose to pipe connections are double clamped where sighted and appear serviceable, (see findings).

**LUBE TRANSFER:** Oil evacuation hoses fixed to the bottom of the oil pan. Appear serviceable.

**INSULATION:** Sound deadening insulation was noted in engine compartment. Appears serviceable.

**PROP SHAFTS:** Stainless steel 1" diameter. Appeared serviceable.

**ENGINE ALARMS:** Low oil pressure alarms and coolant over heat warning audible alarms at helm station. Serviceable.

**STUFFING BOX:** Stuffing box and packing gland, with plastic hex nut type boot appeared serviceable. Monitor Frequently for leakage and proper adjustment.

**NOTE:** Engine is monitored by Teleflex gauges. Powered up.

#### COOLING SYSTEM

**TYPE:** Freshwater reservoir type cooling with raw water cooled wet exhaust.

**RAW WATER STRAINERS:** Perko bronze alloy with sight glass. Appears serviceable.

**COOLANT LEVEL:** Normal level observed.

**HOSES AND CLAMPS:** Double clamped where sighted. Appears serviceable.

**BELTS AND PULLEYS:** Belts condition appears serviceable.

**SEACOCKS AND STRAINERS:** Raw water seacock was a ball valve type and was operable.

#### **TRANSMISSIONS**

MANUFACTURER: Kanzaki, model KMA2P, serial #24664.

**DRIVE TYPE:** Straight drive unit.

GEAR RATIO: Transmission tag: 2.62 to 1 ratio.

**CONTROLS:** Mechanical cable and linkage.

**PROP SHAFT:** Size: 1" Material: Stainless Steel.

**COUPLER (SAFETY WIRE):** Safety wired and lock washers. Appears serviceable.

PACKING GLAND: Hex type plastic nut packing gland. Appeared serviceable.

#### **FUEL SYSTEM**

#### MAIN ENGINE(S) FUEL SYSTEM

**FUEL TYPE:** Diesel

#### **FUEL SYSTEM**

#### MAIN ENGINE(S) FUEL SYSTEM(continued)

MATERIAL: Polyethylene, (dated 07/1989).

**NUMBER OF TANKS:** One (1)

TANKS CAPACITY: Labeled 17 gallons.

SECURED: Nylon straps. Appears serviceable.

**LOCATION:** The fuel tank is centerline under the aft cockpit.

MANUFACTURING LABEL: The ABYC required label was sighted on the fuel tank.

FILL PIPE LOCATIONS: Starboard side aft deck labeled DIESEL.

**FILL PIPE GROUNDED:** Plastic fuel fitting. No ground wire required.

\* FILL PIPE MATERIAL: [B3] Type A2 U.S.C.G approved hose, (see findings).

**HOSE CONNECTIONS, CLAMPS:** Appears serviceable and approved where sighted.

**FUEL LINES AND FITTINGS:** Grade USCG type A1. Appears serviceable where sighted.

**RETURN LINES:** Grade USCG type A1. Appears serviceable where sighted.

**VENT LOCATION:** Starboard aft cockpit bulkhead, flame screens were sighted.

**FUEL FILTERS:** Both remote mounted Racor 110 filter/water separator (primary) and engine mounted canister spin on/off type (secondary) filter. Appear serviceable.

#### **ELECTRICAL SYSTEMS**

#### **ELECTRICAL SYSTEM (D.C. SYSTEM)**

VOLTAGE: 12 volt system.

\* BATTERIES: [B4] One (1) West Marine, "Starting", Group 24, model 15020100, 800 MCA, (dated 04/2017), located aft starboard outboard head compartment, (see findings). Tested 12.66 volts / 28 MCA.

MAIN BATTERY SWITCHES: One (1) Perko rotary selector switch, located port side stateroom bulkhead. Serviceable.

**PANEL:** The main electrical panel was mounted at the nav station. Serviceable.

BREAKERS/FUSES: One (1) main and seven (7) individually switched breakers at the main panel. Serviceable.

**TYPE CONNECTORS:** Round Lugs: Captive type, where sighted. Condition: Appears serviceable.

**ROUTING/SUPPORT:** Well supported and secured where sighted.

**CHARGING SYSTEM:** Alternator on main engine and battery charger.

CHARGING SYSTEM (BATTERY CHARGER) ProMariner, model ProSport 12, serial #SMT0029057. Tested 13.58 volts.

Note: The battery charger set up to be installed.

**OUTLETS:** 12 Volt outlets, (USB) were sighted at the nav station. Tested serviceable.

TERMINAL BLOCKS: Plastic double sided terminal block with captive lugs, well mounted and supported where sighted.

#### **ELECTRICAL SYSTEMS**

#### **ELECTRICAL SYSTEM (A.C. SYSTEM)**

**SHORE POWER INLET:** One (1) Marinco 30 amp/125 volt inlet, mounted starboard side cockpit compartment. Serviceable.

**SHORE POWER:** One (1) Marinco 50' vinyl 30 amp/125 volt cord. Serviceable.

Note: Marinco, 50 amp to 30 amp splitter, Marinco 50 amp to 30 adapter and Marinco 30 amp to 110 volts adapter, sighted onboard.

MAIN BREAKER: One (1) main breaker located in the electrical panel. Serviceable.

BRANCH BREAKERS: Three (3) individually switched branch breakers. Serviceable.

**CONNECTIONS (TYPE):** Appeared serviceable where sighted.

**WIRE TYPE (SIZE AND RATING):**Size and rating, where sighted, appears well routed and supported, serviceable for intended use.

**ROUTING:** Well routed and supported where sighted.

\* OUTLETS: [B5] There are no GFCI outlets on the vessel, (see findings).

POLARITY: The polarity was checked by myself at each outlet that I could find and proved normal.

#### FRESH WATER SYSTEM

#### FRESH WATER SYSTEM: (POTABLE WATER)

**STORAGE TANKS:** Plastimo, rubber / nylon bladder tank.

**CAPACITY:** 30 gallons

**LOCATION:** Centerline under the forward berth.

FILL PIPE LOCATION: Starboard side anchor locker marked for water.

**VENT PIPE LOCATION:** Appears to be starboard side anchor locker.

PUMPS: One (1) Flojet, model 4405-143, 3.3 GPM, mounted under the forward centerline bench seat. Serviceable.

FILTERS: In line at the pump. Appears serviceable.

HOSES AND CLAMPS: Plastic tubing and fittings throughout vessel, fixtures and appliances.

#### FRESH WATER SYSTEM (HOT WATER SYSTEM)

TYPE: 110 electric. Marine type.

MANUFACTURER: Atwood, model EHM6-SM, serial #136184, mounted under the forward centerline bench seat. Serviceable.

**CAPACITY:** 6 gallons.

PRESSURE RELIEF VALVE: Copper pressure relief valve built into tank. Tested operational.

**HEAT EXCHANGER AND PLUMBING:**Engine mounted heat exchanger. Appear serviceable.

#### **SANITATION**

#### **SANITATION (BLACK WATER)**

MANUFACTURER: Jabsco, manual head. Serviceable.

#### **SANITATION**

#### **SANITATION (BLACK WATER)**(continued)

NUMBER OF HEADS: One (1) head located starboard side aft cabin.

M.S.D TYPE USCG SYSTEM:Certification Type: MSD U.S.C.G. Type III. (holding tank)

**RAW WATER SUPPLY AND CLAMPS:** Thru-hull at individual head location; double clamped and serviceable (see thru-hull diagram).

DISCHARGE HOSES AND CLAMPS: Thru-hull at individual head location, double clamped. (see thru-hull diagram).

**PUMP-OUT LOCATION:** Starboard side aft deck marked for waste.

\* "Y" VALVES: [C5] Jabsco "Y" valve located starboard side aft cockpit compartment, (see findings).

**VENT LOOP:** Appeared serviceable.

\* HOLDING TANK: [C6] Polyethylene, located centerline aft cockpit, (see findings).

CAPACITIES: 6 gallons.

### **SANITATION (GREY WATER)**

BASINS, SHOWERS, HOSES AND CLAMPS: The basins on the vessel drain to topside thru-hulls in immediate area of basin.

#### STEERING SYSTEM

#### STEERING SYSTEM

MANUFACTURER: Edson Manufacturing Pedestal.

NUMBER OF STATIONS: One (1) main helm station at the cockpit.

**PULLEYS, CABLE AND CHAIN CONDITION:** Appeared serviceable where sighted.

RUDDER STOCK: Steel 2" diameter.

**PACKING GLAND:** Pressed-in compression gland. Serviceable.

EMERGENCY TILLER: Access under aft cockpit deck and the tiller arm was sighted in the starboard side forward V-berth area.

**NOTE:** The helm steering wheel is a 28" Edson stainless steel wheel. Serviceable.

#### **GROUND TACKLE**

#### **GROUND TACKLE**

**ANCHORS:** One (1) claw / plow type, appropriate size for this vessel. Appears serviceable.

Note: A second anchor of appropriate size should be place on the vessel for additional safety.

**RODE MATERIAL:** 1/2" braided marine grade nylon, approximately 75' feet in the locker sole.

 $\label{lem:rode construction: Galvanized shackles. Appears serviceable.}$ 

Note: No thimble in the line.

**CHAIN:** Approximately 40 feet of 5/16" chain attached to the anchor. Appears serviceable.

#### **GROUND TACKLE**

#### **GROUND TACKLE**(continued)

**NOTE:** Safety line in place.

Note: The anchor should be fully deployed to confirm the rode is properly secured to the vessel.

#### **ELECTRONICS AND NAVIGATION EQUIPMENT**

#### **ELECTRONICS AND NAVIGATION EQUIPMENT**

VHF: Uniden, model MHS75, serial #625A-68002148, (handheld). Powers up and operational.

SPEED LOG: Standard/Horizon, model SC10, serial #91U122123, (speed/log).

DEPTH SOUNDER: Raymarine, model E70327, serial #0371440, (digital). Powers up and operational.

**COMPASSES:** 3 3/4" Ritchie. Appears serviceable, no deviational card sighted.

**ANTENNAS:** All antennas sighted appear to be well mounted and serviceable.

OTHER: Standard / Horizon, model WS45, (wind) indicator.

#### **ELECTRONICS (ENTERTAINMENT)**

STEREO SYSTEM: Dual, model AM400W, AM/FM/CD stereo.

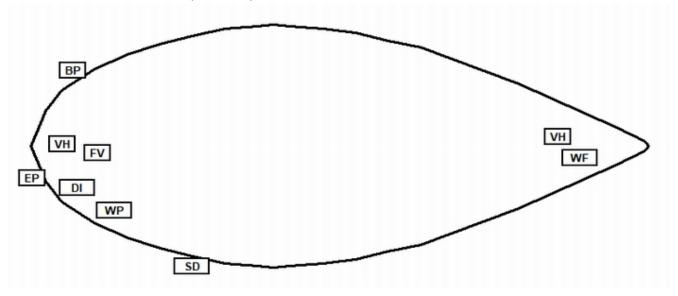
Note: To be installed.

**SPEAKERS:** Various speakers around the vessel.

#### **THRU-HULLS**

**THRU-HULLS:** 

## THRU-HULLS ABOVE WATER LINE (DIAGRAM):



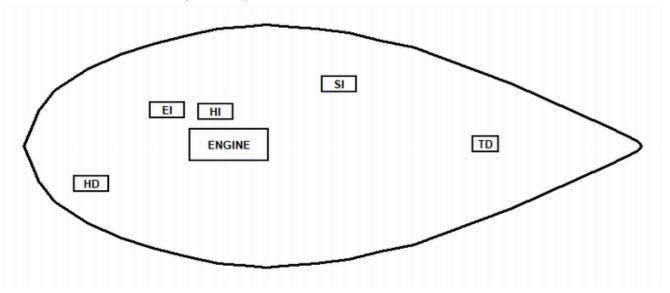
Abbreviation	Description
ВР	Bilge Pumps
DI	Diesel Fill
EP	Exhst Ports
FV	Fuel Vent
SD	Sink Drain
VH	Vent Hose
WF	Water Fill
WP	Waste Pump Out

<sup>\*\*</sup> Red Icon(s) with white text indicates inoperable item.

#### **THRU-HULLS**

#### THRU-HULLS:(continued)

#### THRU-HULLS BELOW WATER LINE (DIAGRAM):



Abbreviation	Description
EI	Engine Intake
ENGINE	Engine
HD	Head Overboard
н	Head Intake
SI	Sink Drain
TD	Transducer

<sup>\*\*</sup> Red Icon(s) with white text indicates inoperable item.

**NOTE:** The below the water line thru-hull valves on this vessel were ball valve type and were all operable.

#### **SAFETY EQUIPMENT**

#### SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

NUMBER AND TYPE OF PFD'S: Eight (8), six (6) Type II-U.S.C.G. approved and two (2) Type III-U.S.C.G. approved.

**NUMBER OF THROWABLE PFD'S:**Two (2) Type IV-U.S.C.G. approved throwable devices.

**FIRE EXTINGUISHERS:**Two (2) Kidde BC dry chemical fire extinguishers, one (1) mounted by the galley and one (1) mounted in the nav station. Both have green gauges and appear serviceable.

\* VISUAL DISTRESS SIGNALS:[A1] Day/night visual distress signals are hand held flares. Expired: 07/2019

**SOUND DEVICES:** Tested hand-held compressed air horn. Operable.

#### **SAFETY EQUIPMENT**

#### SAFETY EQUIPMENT (UNITED STATES COAST GUARD) (continued)

\* NAVIGATION LIGHTS: [A2] The steaming light is operable.

The white transom light is operable.

The red side light is inoperable.

The green side light is operable.

The mast/anchor light is inoperable.

INLAND NAVIGATION RULE BOOK (12M-39'4" OR LONGER): Not sighted.

"NO OIL DISCHARGE" PLAQUE: Found properly displayed in the cabin.

TRASH DISPOSAL PLACARD: Found properly displayed in the cabin.

**NOTE:** Ship's bell mounted in the cabin.

#### **AUXILIARY SAFETY EQUIPMENT**

**SMOKE DETECTOR:** Not sighted, recommend if over night sleeping.

SEARCH LIGHT: Not sighted but recommended.

FIRST AID KIT: Located the cabin.

\* FUME SNIFFER ALARM SYSTEMS:[B6] Carbon monoxide fume detectors are highly recommended.

**NOTE:** Tapered wooden plugs sighted on the vessel.

#### **BILGE PUMPS**

\* LIST: [C7] Two (2), one (1) Rule 800 GPH with remote float switch, (midship) and one (1) Rule manual bilge pump, (cockpit). Serviceable, (see findings).

**NOTE:** Manual operating switch located at the electrical panel. Operable.

#### STANDING RIGGING

#### STANDING RIGGING

MAST: Z-Diffusion, anodized aluminum. Appears good condition.

MAST STEP: Deck stepped with painted metal compression post and shoe. Good condition.

**SPREADERS:** Double spreader rig. Appears serviceable.

SHROUDS AND STAYS: Fractional rigging, forestay and shrouds and uppers and intermediates are stainless steel, appear 1/4" and 3/16" wire. Appears serviceable.

**BOOMS:** Aluminum boom. Appeared Serviceable.

TURNBUCKLES: Stainless turnbuckles of the open design. Appeared serviceable.

**TOGGLES:** Stainless steel toggle appeared serviceable.

**TANG ENDS:** Appeared serviceable where sighted.

**CHAIN PLATES:** Stainless steel strap chain plates bolted to the decks and FRP integral molded pods (grounded) with external chain plates aft and forward thru-bolted, where sighted appeared serviceable.

NOTE: Note: Rigging was inspected from deck level. The surveyor did not go aloft.

#### **RUNNING RIGGING**

#### **RUNNING RIGGING**

**WINCHES:** Three (3) Barient winches, two (2) #21 w/tailing mounted at the cockpit and one (1) #17 w/tailing mounted on the coach roof. Serviceable.

**BLOCKS:** Harken blocks. Appear serviceable.

MAIN SHEET TRAVELER: Schaefer mainsheet traveler. Appeared serviceable.

HALYARDS: Halyards were braided and color coded no wire splices were observed.

**SHEETS:** The sheets onboard appeared in serviceable condition.

ROLLER FURLING GEAR: Sea Furl, (stainless steel), roller furling. Appeared serviceable.

**CAM CLEATS:** Three (3) cam cleats coach top mounted. Appeared serviceable.

**SWIVEL BLOCKS:** Appeared serviceable where sighted.

#### **SAILS**

#### **SAILS**

SAILS: (INVENTORY): Two (2) Dacron sails, one (1) main sail and one (1) genoa (w/blue UV protection). Appear good condition.

Note: Mainsail flaked out to inspect and genoa partially unrolled.

NOTE: Manufacture reports approximately total 398.9 sq. ft. of sail area.

## IV. FINDINGS AND RECOMMENDATIONS

Deficiencies noted under "SAFETY" should be addressed before vessel is next underway. These findings represent an endangerment to personnel and/or the vessel's safe and proper operating condition. *Findings may also be in violation of U.S.C.G.regulations*.

Deficiencies noted under "OTHERDEFICIENCIES" should be corrected in the near future so as to maintain standards and to help the vessel to retain it's value.

Deficiencies will be listed under the appropriate heading:

- A. SAFETY DEFICIENCIES
- B. OTHER DEFICIENCIES NEEDING ATTENTION
- C. SURVEYORS NOTES AND OBSERVATIONS

#### A. SAFETY DEFICIENCIES:

FINDINGS RECOMMENDATIONS

#### A.1 (PAGE 15) VISUAL DISTRESS SIGNALS:

All visual distress signals have expired.

U.S.C.G. 46 CFR, section 175.110 requires a minimal of three (3) "Visual Distress Signals" and/or combination of approved electric distress light, orange flag or Pyrotechnics. (see table 175.130). Comply with U.S.C.G. Safety Regulations, add current visual distress signals to safety equipment.

#### A.2 (PAGE 16) NAVIGATION LIGHTS:

The red side navigational light and anchor light are inoperable.

Comply with USCG Safety Regulations and investigate further and repair or renew as necessary to make serviceable.

#### **B. OTHER DEFICIENCIES NEEDING ATTENTION:**

#### FINDINGS RECOMMENDATIONS

#### **B.1 (PAGE 7) MOISTURE CONTENT:**

Higher than normal moisture readings noted with rebounding forward of the mast on the coach roof approximately 48" x 38" in size, no stress cracks noted at this time.

Monitor frequently for progressing delamination and/or deteriorating of the core materials. Repair in accordance with good marine practices if necessary.

#### **B.2 (PAGE 9) EXHAUST SYSTEM:**

The exhaust hose from the muffler to the coupling fitting is cracked and deteriorating.

Replace with marine grade exhaust hose of similar like and kind product, double clamp with stainless steel per ABYC.

#### **B.3 (PAGE 10) FILL PIPE MATERIAL:**

The fuel fill hose is cracked and deteriorating.

Replace with new marine grade U.S.C.G. approved hose and double clamp per ABYC recommendation.

#### **B.4 (PAGE 10) BATTERIES:**

The battery tested "replace" on a load down test.

Replace/renew the battery with like and kind designed for this application. Clean each terminal connection and properly apply anti-corrosive materials.

## IV. FINDINGS AND RECOMMENDATIONS

#### **B. OTHER DEFICIENCIES NEEDING ATTENTION:**

#### **FINDINGS**

#### **RECOMMENDATIONS**

#### **B.5 (PAGE 11) OUTLETS:**

Add GFCI outlets per ABYC recommendations.

ABYC E-11.15.3.5 recommends any receptacles if installed in a head, galley, machinery space, or on a weather deck, the receptacle shall be protected by a Type A (nominal 5 milliamperes) Ground Fault Circuit Interrupter (GFCI).

#### **B.6 (PAGE 16) FUME SNIFFER ALARM SYSTEMS:**

No carbon monoxide and/or smoke detectors sighted on the vessel.

NFPA Standard 302.12.3 Smoke Detection: All vessels 26' or above in length with accommodation spaces intended for sleeping shall be equipped with a single smoke alarm that is listed to UL217 fro recreational vehicles and shall be installed and maintained according to the device manufacture's instructions. ABYC A-24.7.2 recommends CO detectors shall be located to monitor the atmosphere in the main cabin and each sleeping area.

#### C. SURVEYOR'S NOTES AND OBSERVATIONS:

#### **FINDINGS**

#### **RECOMMENDATIONS**

#### C.1 (PAGE 7) DECK HATCHES:

The tinted acrylic panels on the deck hatches are crazed and the securing hardware is stiff and binding. Monitor periodically and repair or renew as necessary to maintain serviceability.

#### C.2 (PAGE 8) JOINERY AND FINISH:

The interior is dirty with mold along headliner, side panels, cushions and compartments.

Investigate further and repair or renew as necessary by thoroughly cleaning, disinfecting and treating.

#### **C.3 (PAGE 8) INTERIOR BULKHEADS:**

The wood at the bottom of the companionway and aft stateroom bulkheads are deteriorating.

Investigate further and replace / renew as necessary with like and kind materials designed for this application.

#### C.4 (PAGE 8) LIGHT FIXTURES:

Lights are inoperable at the nav station, head and port side cabin headliner.

Investigate further and repair or renew as necessary to make serviceable.

#### C.5 (PAGE 12) "Y" VALVES:

The "Y" valve is adrift and the handle is broken.

Investigate further and repair or renew as necessary with like and kind parts designed for this application and properly secure in position.

#### C.6 (PAGE 12) HOLDING TANK:

The holding tank is adrift and the vent hose is disconnected.

Further investigate and repair as necessary to properly secure the tank in position and re-connect the vent hose.

#### C.7 (PAGE 16) LIST:

The electric Rule bilge pump is adrift.

ABYC H-22.5.2.2 recommends the pump assembly shall provide a means to secure the pump to the boat to resist pump movement during normal marine service.

## V. SUMMARY AND VALUATION

#### STATEMENT OF OVERALL VESSEL RATING OF CONDITION:

STATEMENT OF OVERALL RATING OF CONDITION:

The surveyor's experience that develops an opinion of the OVERALL VESSEL RATING OF CONDITION. After a survey has been completed and the findings have been organized in a logical manner.

The grading of the 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 base values in the "BUC USED BOAT PRICE GUIDE", for a similar vessel sold within a given time period, as a consideration to the Market Value.

The following is the accepted marine grading system condition:

"EXCELLENT (BRISTOL) CONDITION", is a vessel that is maintained in mint or bristol condition - 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", ready for sale requiring no additional work and normally equipped for her size.

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

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

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

As a result of my investigation, as shown in the SYSTEMS, FINDINGS and RECOMMENDATIONS sections of this REPORT OF SURVEY and by virtue of my experience, my opinion is:

OVERALL VESSEL RATING:	FAIR / AVERAGE	
UVERALL VESSEL KATING:	FAIR / AVERAGE	

#### STATEMENT OF VALUATION:

1. The "FAIR MARKETVALUE" 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 market analysis (open resources) as well as BUC Value Professional and Sold Boats were used to reference the fair marker value of the vessel.

## V. SUMMARY AND VALUATION

Note: BUC 124 th Edition, Current Retail Value Range: \$10,000 - \$11,300

#### Market Analysis

The vessels currently listed as comparable vessels, (asking prices):

- 1. 1992 Hunter 28 \$14,900 FL
- 2. 1990 Hunter 28 \$29,900 MD
- 3. 1990 Hunter 28 \$21,900 NY
- \*\* Market conditions, vessel and propulsion systems, electronics, options, location and many other factors contribute to the sale of the vessel and list price. The above listings are for reference only.

#### **SOLD BOATS:**

- 1. 1990 Hunter 28 \$20,000 (04/2023) US
- 2. 1991 Hunter 28 \$18,000 (02/2023) OH
- 3. 1989 Hunter 28 \$12,000 (01/2023) NY
- 4. 1988 Hunter 28 \$19,900 (12/2022) LA

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

#### \$10,500

Ten Thousand Five Hundred Dollars

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

#### \$95,000

Ninety Five Thousand Dollars

## V. SUMMARY AND VALUATION

#### **SUMMARY:**

In accordance with the request for a marine survey of the Lily Mar, 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 30, 2023 and was found to be a well constructed, appointed and comfortable vessel. The vessel is very capably captained and well-kept. Subject to correction of deficiencies listed in section IV A. (Safety), the vessel is considered to be suitable for its intended use of Coastal and Intracoastal Cruising. Other deficiencies list should be attended to in a timely fashion.

#### 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 stipulate result, or the occurrence of a subsequent event.

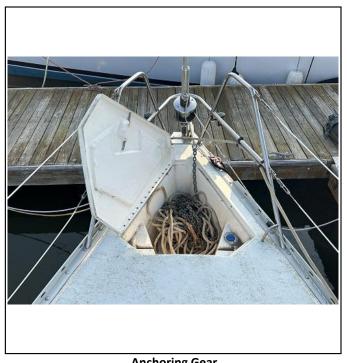
I have made a personal inspection of the vessel that is the subject of this report.

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

ROBERT J. ELDRIDGE, AMS #931:











Foredeck







Helm



Companionway



**Electrical Panel** 



Cabin



Galley



**Engine** 



**Engine Serial Number** 

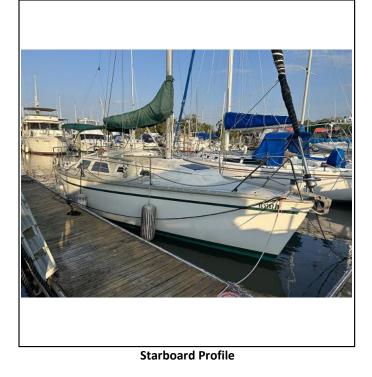


**Engine Gauges** 



**DOC Number** 





**HIN Number**