

Snider Marine Surveyors Inc.
MARINE SURVEYOR AND CONSULTANT

1993, Ocean, 53 Super Sport

"XXXXXXXXX"



MEMBER OF SOCIETY OF ACCREDITED MARINE SURVEYORS

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Report of Marine Survey

Of The Vessel

"XXXXXXXX"

1993, Ocean, 53 Super Sport

Conducted by
Steve Snider-AMS

MARINE SURVEYOR

PREPARED FOR:

XXXXXX XXXXXX

XXXXXX

TABLE OF CONTENTS

SECTION	PAGE NO.
I. INTRODUCTION	1
II. GENERAL INFORMATION	2
III. SYSTEMS	4
HULL DECK AND SUPERSTRUCTURE.....	4
CABIN APPOINTMENTS	5
PROPULSION	6
FUEL SYSTEM.....	7
ELECTRICAL SYSTEMS.....	7
FRESH WATER SYSTEM.....	8
SANITATION	9
STEERING SYSTEM.....	9
GROUND TACKLE	9
ELECTRONICS AND NAVIGATION EQUIPMENT.....	9
THRU-HULLS	10
BONDING SYSTEM	12
SAFETY EQUIPMENT	12
OUT OF WATER INSPECTION	13
AIR CONDITIONING AND HEAT (AIR CONDITIONING).....	13
SEATRIAL REPORT	13
IV. FINDINGS AND RECOMMENDATIONS	15
V. SUMMARY AND VALUATION	22
VI. PHOTOGRAPHS	24

I. INTRODUCTION

SCOPE OF SURVEY

Acting at the request of XXXXX, the attending surveyor did attend onboard the XXXXX, XXXX beginning on June XX, XXXX at 0750 where an "in-the-water-survey" was conducted at , XXXXX, XXXX. The ship's papers were not sighted on on board. The Hull Identification Number (HIN) was recorded from the transom. A sea trial was performed. An out-of the water inspection of underwater machinery and the exterior of the hulls wetted surface area was performed today at this location. 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 GRP-33 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 recommended 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 GUIDELINES IN 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.

This surveyor is not a licensed appraiser in the State of Florida and all values placed on the vessel are a product of BUC and Soldboats.com. BUC Val Professional is a subscription-based service for marine industry professionals who require comprehensive, detailed boat evaluations. Soldboats.com is a subscription based service that provides recent sale figures. The "Fair Market Value" of this vessel was the BUC published value minus 20 % and Soldboats.com listed sale prices. This "Fair Market Value" is an estimation by this surveyor for the south Florida area.

VESSEL DESCRIPTION

The 1993, Ocean, 53 Super Sport is a vessel designed for offshore fishing and cruising. Three (3) staterooms, full galley, two (2) heads with showers and a large salon provide accommodations for family and friends. There are many fishing amenities and power is provided by twin Detroit Diesel 735 hp inboards. A 13.5 KW generator provides electrical power for the vessel.

II. GENERAL INFORMATION

GENERAL INFORMATION

FILE NUMBER:..... XXXXXX
SURVEY PREPARED FOR:..... XXXX XXXXX

NAME OF VESSEL: XXXX
TYPE OF SURVEY: Pre-Purchase for Buyer
OVERALL VESSEL RATING: **** FAIR
ESTIMATED MARKET VALUE: \$165,000.
ESTIMATED REPLACEMENT COST: \$1,420,000.
YEAR/MAKE/MODEL OF VESSEL: 1993, Ocean, 53 Super Sport
BUILDER: Ocean Yachts
YEAR BUILT: 1992
MODEL YEAR: 1993
MAKE OF VESSEL: Ocean Yachts
MODEL OF VESSEL: 53 Super Sport
HULL IDENTIFICATION NUMBER (HIN): XXXXXXXXXXXXX
HAILING PORT: XXXXX, XX
USCG DOCUMENTATION NUMBER: XXXXXXXXXXXXXX USCG Documentation Number sighted in bilge.
PLACE OF SURVEY: XXXXX, XXXX
DATE/TIME OF SURVEY: XXXX XX XXXX XXXX
HULL MATERIAL: FRP (Fiber Reinforced Plastic).
HULL TYPE: Deep-V
LENGTH OVER ALL (L.O.A.): 53'
BEAM: 16' 4"
REGISTERED BEAM: 16.3'
DRAFT: 4' 4"
DEPTH: 7.2'
DISPLACEMENT: 50,000 lbs dry reported
GROSS TONS: 41
NET TONS: 33
PROPULSION SYSTEM: Twin diesel engines
FUEL TYPE: Diesel.
FUEL CAPACITY: 860 gals
AC POWER: Yes, 220 volts/50 amps.
DC POWER: Yes, 12 volt.
FRESH WATER CAPACITY: 200 gals
HOLDING TANK: Yes

II. GENERAL INFORMATION

GENERAL INFORMATION (*continued*)

INTENDED USE/BUYER:..... **Recreational near coastal fishing/cruising.**

INTENDED USE:..... **Recreational**

No findings were found in this section.

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)

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**

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

HULL CONSTRUCTION

TYPE: Deep-V, planing type, with flared bow.

MATERIAL: FRP (fiber reinforced plastic)

- * **EXTERIOR HULL:** [B1] Black bottom paint with white hull sides. The hull sides appear to have been recently compounded and waxed. Good cosmetic appearance. The exterior hull shows large blisters scattered on the hull port and starboard. Inside the cabin area at the forward stateroom on the starboard side below the closet the fabric covering the wall was loose and it appears that fiberglass repairs have been made at the inside of the hull in this area. There was also fiberglass repairs below the port stateroom floor hatch where the fiberglass resin was tacky to the touch. The port stateroom outboard cabinet also shows evidence of fiberglass repairs. Moisture meter readings were sighted to be high at various areas of the hull. Sounding the hull with a phenolic hammer produced a negative (dull) sound at the forward starboard hull area.

BULKHEADS: Bulkheads appear sound.

- * **STRINGERS:** [B2] Hull stiffness provided by FRP over wood longitudinal stringers. Complete inspection not possible due to limited access. There was fiberglass tabbing delamination sighted at the aft port stringer.

STEM: Curved stem.

TRANSOM: FRP transom with transom door starboard. Appears serviceable.

BILGE: Below decks bilge area provides the area for most boat systems and tankage.

CHAIN LOCKER (DRAINAGE): Chain locker drains overboard port.

KEEL: Molded FRP keel.

FLOOR TIMBER CONSTRUCTION: FRP

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

FRAMES (RIBS): Partitions, bulkheads, and stringers.

MOISTURE CONTENT: Noted in a previous section.

- * **OTHER:** [B3] The port rudder fasteners show corrosion and are weeping a brown fluid.
- * **NOTE:** [B4] The aft swim platform shows minor fiberglass and gelcoat damage at the center aft platform area.

DECK CONSTRUCTION

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

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

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

NOTE: No findings were found in this section.

HULL-TO-DECK JOINT

TYPE: Chemically bonded together and appears serviceable.

NOTE: No findings were found in this section.

DECK FITTINGS

STANCHIONS: Welded aluminum rail system at forward perimeter of vessel. Appears serviceable.

BOW PULPIT (BOW RAIL): Part of stanchion system. Appears serviceable.

TOE RAILS: Molded FRP toe rails, part of deck layup.

VENTILATION: Appears adequate.

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

CHOCKS AND CLEATS: Chocks and cleats appeared to be stainless steel all sighted were thru-bolted and serviceable.

WINDLASS/GIPSY: Lewmar windlass powered up and appears serviceable.

DECK SURFACE: White gel coat or Awlgrip with non-skid. Condition is serviceable.

HATCHES: Deck hatches appear serviceable.

GRAB RAIL: Hand rails at various locations on vessel appear adequate.

CLEATS: Chocks and cleats appeared to be stainless steel all sighted were thru-bolted and serviceable.

ANCHOR PLATFORM: FRP anchor platform with removable anchor bow roller assembly.

DAVITS: Davit at starboard forward deck appears serviceable. No dingy on vessel to test the davit.

OTHER: Dingy mount at forward deck appears serviceable.

NOTE: No findings were found in this section.

SUPERSTRUCTURE

MATERIAL: Molded FRP (fiber reinforced plastic)

DECK HATCHES: Appear serviceable.

WINDOWS/PORTS/DOORS: Windows, ports, and doors appear serviceable.

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

SUPERSTRUCTURE*(continued)*

FITTINGS AND HARDWARE: Fittings and hardware appear serviceable.

JOINERY STRESS: Yes inside the port stateroom cabinet. (Noted in a previous section)

CANVAS AND SUPPORT STRUCTURE: Hardtop with welded aluminum support structure appears serviceable. White canvas and clear vinyl at flybridge appears serviceable.

SUPERSTRUCTURE HOUSE TO DECK JOINT: Appears serviceable.

MOISTURE CONTENT: Moisture content was sighted to be acceptable topside where measured topside deck.

NOTE: No findings were found in this section.

BRIDGE DECK

MATERIAL: FRP (fiber reinforced plastic) molded flybridge.

TYPE: Bridge provides helm station and crew seating area with access to cockpit via ladder starboard.

COCKPIT: Cockpit provides area for fishing and access to platform.

SEATS: White vinyl cushioned seats appear serviceable in good condition.

WINDSHIELD: Lexan windshield appears serviceable.

SAFETY RAIL SYSTEM: Safety rail system at flybridge appears serviceable.

NOTE: No findings were found in this section.

ADDITIONAL EQUIPMENT AND ACCESSORIES

GENERAL EQUIPMENT: Cockpit bait prep sink and faucet, tackle drawers, docking station starboard, fresh and salt water wash downs, coaling pads and transom door appear serviceable. Cockpit spreader lights are not operable.

DOCK LINES: Various dock lines appear serviceable.

FISHING EQUIPMENT

LIVE BAIT WELLS: Live bait well powered up and appears serviceable.

WASH DOWN SYSTEM: Both fresh water and salt water wash down hose bibs are available at the cockpit.

ROD HOLDERS: Various rod holders appear serviceable.

FISH BOX(S): Appears serviceable.

OUTRIGGERS: Outriggers port and starboard appear serviceable.

NOTE: No findings were found in this section.

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:

JOINERY AND FINISH: The joinery and finish of the interior appears in good condition.

CABIN BRIGHT WORK: Cabin bright work appears in above average condition.

INTERIOR BULKHEADS: The interior bulkheads appear sound.

WATER INTRUSION SIGNS: None Sighted.

STORAGE AREAS: The cabinets, lockers, drawers, and shelving were well crafted and finely fit where sighted.

HEADLINERS: Light colored vinyl headliner appears serviceable.

DOORWAYS: Cabin and head doors appear serviceable.

FABRIC AND CUSHIONS: Fabrics and cushions appeared serviceable. Above average condition.

FLOOR AND WINDOW COVERINGS: Teak and holly galley and head sole appears in good condition. Wood blinds for window treatments. Beige carpet. Good condition.

ACCOMMODATIONS: Three (3) staterooms, two (2) heads with showers, full galley and large salon.

* **HEADS:** [B5] Two (2) heads with showers. The forward head would not flush today. Reportedly the macerator is not operable.

SHOWERS: Appear serviceable.

FAUCET FIXTURES: The faucet fixtures and sinks were operable.

LIGHT FIXTURES: 12 volt cabin lights throughout the vessel were operable.

SALON FURNISHINGS: Good condition.

CABIN FURNISHINGS: Cabin furnishings appear serviceable in good condition.

VENTILATION: Appears adequate.

AIR CONDITIONING UNITS: Air conditioning system powered up today and cooled the cabin.

* **TELEVISIONS:** [C1] The televisions in the staterooms would not power up. The salon flat screen television powered up.

STEREO, ETC.: Jensen stereo at the helm powered up. Speakers appear serviceable.

CONDITION AND DEFICIENCIES: The overall house keeping for this vessel was above average. It reflects the care of a conscientious crew, with good sea keeping skills.

III. SYSTEMS

CABIN APPOINTMENTS

GALLEY

LOCATION: Port

SINKS: Single stainless steel sink. Appears serviceable.

REFRIGERATION: Sub-Zero below counter refrigerators appear serviceable.

STOVE/OVEN: Galley Maid three burner electric stove with oven. Powered up and appears serviceable.

HEAT PROTECTION (INSULATION): Folding stainless burner cover. Serviceable.

ACCESSORIES: Black & Decker coffee maker. Not tested. Galley lights and exhaust fan powered up.

OTHER: Kenmore dishwasher and Whirlpool trash compactor powered up. Kenmore washer and dryer located in closet powered up. Salon U-Line ice maker powered up. Salon wet bar sink and faucet were operable.

NOTE: No findings were found in this section.

PROPULSION

MAIN ENGINES

TYPE: Two (2) V-8 diesel two cycle, turbo charged, inter-cooled engines.

MANUFACTURER: Detroit Diesel. Model 8V92TIB

SERIAL NUMBERS: Port: XXXXXXXX Starboard: XXXXXXXX

HORSE POWER: 735 hp @ 2300 rpm.

NUMBER OF CYLINDERS: Eight (8) in a V configuration.

INDICATED HOURS: No hour meters.

THROTTLE CONTROLS: Morse mechanical lever/cable type, at helm station.

* **EMERGENCY SHUT DOWN:** [A1] Emergency shut down cable is broken. Not operable.

ENGINE MOUNTS AND BED: Main engine beds are heavy longitudinal stringers inboard and outboard. In conjunction, adjustable motor mounts are bolted to the stringers and are used to adjust the propshaft alignment as well as secure the engines to the hull stringer structure.

* **LUBRICATION:** [C2] Level and Condition: Level indication is normal. Note: The surveyor recommends that engine oil and filter be renewed as soon as possible.

VENTILATION: Ventilation appears adequate.

BILGE BLOWERS: One (1) bilge blower appears serviceable. Powered up.

EXHAUST SYSTEM: Raw water exhaust appears serviceable. Double clamped.

LUBE TRANSFER: Reverso oil change system. Appears serviceable.

INSULATION: Aluminized foam rubber sound deadening insulation was noted in engine room. Appears serviceable.

PROP SHAFTS: Stainless steel 2 " diameter. Appeared serviceable.

* **ENGINE ALARMS:** [A2] Low oil pressure alarm and coolant over heat warning not audible at helm station.

ENGINE SHUT DOWN: Switches (stop buttons) clearly marked at the helm.

* **STUFFING BOX:** [B6] Dripless packing appears serviceable. The hose clamps at the dripless packing show rust. Renew the hose clamps that show corrosion using accepted marine practices.

* **CONDITION AND DEFICIENCIES:** [C3] Both of the engines show rust and corrosion at engine components. Rust on engines was painted over with white paint.

NOTE: Engine surveyor was on the vessel today. See engine surveyors report for more details regarding the serviceability of the Detroit diesel motors.

COOLING SYSTEM

TYPE: Closed reservoir type cooling with raw water cooled exhaust.

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

COOLANT LEVEL: Normal level observed.

HOSES AND CLAMPS: Appear serviceable.

BELTS AND PULLEYS: Belts condition appears serviceable.

SEACOCKS AND STRAINERS: Raw water seacocks were ball valve type and were operable.

NOTE: Engine surveyor was on the vessel today. See his report for more details.

TRANSMISSIONS

MANUFACTURER: Twin Disc, model DD 5111

DRIVE TYPE: Inboard

GEAR RATIO: 1.5:1 ratio

* **FLUID LEVEL AND CONDITION:** [C4] Recommend transmission fluids be renewed.

CONTROLS: Morse type mechanical cable and linkage.

III. SYSTEMS

PROPULSION

TRANSMISSIONS(continued)

PROP SHAFT: Size: 2 " Material: Stainless Steel.

PACKING GLAND: Dripless packings appear serviceable. Monitor frequently. (Finding noted in a previous section)

COOLER: Yes: External engine mounted raw water heat exchanger. Appears serviceable.

NOTE: Engine surveyor was on the vessel today. See his report for more details.

FUEL SYSTEM

MAIN ENGINE(S) FUEL SYSTEM

FUEL TYPE: Diesel.

MATERIAL: Aluminum fuel tanks.

NUMBER OF TANKS: Four (4)

TANKS CAPACITY: 860 gals

SECURED: Yes, secured adequately.

LOCATION: Fuel tanks are port and starboard, outboard forward and aft in the engine compartment.

MANUFACTURING LABEL: The ABYC required labels were sighted on the fuel tanks.

FILL PIPE LOCATIONS: Port and starboard side decks marked for DIESEL.

FILL PIPE MATERIAL: Appears serviceable.

FILL PIPE FITTINGS: Fill deck fitting clearly marked as to fuel type: Yes.

HOSE CONNECTIONS, CLAMPS: Appear serviceable.

- * **FUEL LINES AND FITTINGS:** [B7] Fuel lines appear serviceable with no leaks or fumes detected today. Note: Diesel fuel line hose manufacturers generally warranty fuel hoses for 5-7 years. The fuel lines on this vessel are older than 10 years.

VENT LOCATION: Port and starboard topsides, fuel vents were sighted.

FUEL FILTERS: Remote fuel filters appear serviceable.

- * **FILTER/FUEL CONDITION:** [C5] No record of fuel filter service sighted on the vessel.

- * **NOTE:** [C6] The fuel tank was sighted to be 1/4 full today and without the fuel tank topped off this surveyor could not attest to the fuel tank serviceability. The fuel tanks are recommended to be topped off and inspected or pressure tested to attest serviceability. Top off fuel tanks and inspect or test per ABYC (American Boat and Yacht Council) standards. Test to at least 3 psi and use CFR 183.510 as a guide.

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (D.C. SYSTEM)

VOLTAGE: Lead acid battery powered 12 volt system.

- * **BATTERIES:** [C7] Eight (8) batteries located in engine compartment aft of engines and two (2) batteries for bow thruster forward bilge. No date of manufacture sighted on the batteries. Load test all batteries to determine battery condition.

BANKS: Five (5) banks. Generator starting battery, port engine starting battery, starboard engine starting battery, bow thruster batteries and house battery.

MAIN BATTERY SWITCHES: Perko battery switches appear serviceable.

PANEL: Overcurrent Protection: Circuit breakers. Location: Helm and cabin DC electrical panel.

ROUTING/SUPPORT: Appear serviceable.

CHARGING SYSTEM: Alternators on main diesel engines, and diesel generator. Appears serviceable.

- * **CHARGING SYSTEM (BATTERY CHARGER):** [B8] Two (2) marine grade battery chargers: Intelli-Power model PD2040 and PD2140. When powered up and tested the PD2040 battery charger was sighted to be pegged at the amp gauge.

CHARGING SYSTEM (ALTERNATOR): Alternators on main engines appear serviceable.

- * **OTHER:** [A3] Positive battery posts not covered as required by ABYC (American Boat and Yacht Council). ABYC standards state in section 11.5.2.7.5 "Continuously energized parts, such as positive battery terminals and both ends of all wire connected thereto, shall be physically protected with boots, or other form of protection, that cover all energized surfaces to prevent accidental short circuits." Comply with ABYC standards using accepted marine practices.

ELECTRICAL SYSTEM (A.C. SYSTEM)

SHORE POWER INLET: Cablemaster located forward cockpit starboard.

SHORE POWER: Cablemaster cord is 50' and appears serviceable.

AC SOURCE SELECTOR SWITCH: Switch type: Manual rotary type. AC / Generator: Manual selector switch for shore or ship power. Location: Main A.C. panel, main salon starboard. Appears serviceable.

MAIN BREAKER: Main breaker is located at the main AC electrical panel in the cabin.

BRANCH BREAKERS: Individually switched branch breakers. Location: Main A.C. panel. Well marked.

- * **CIRCUIT LOAD MONITORS:** [C8] Yes voltage and amperage analog gauges in the main electric panel. The AC volt gauge is not accurate. Reads high.

III. SYSTEMS

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (A.C. SYSTEM) (continued)

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

ROUTING: Well routed and supported where sighted.

- * **OUTLETS:** [A4] Various A.C. outlets available throughout yacht, appear adequate and conveniently located. GFCI (ground fault circuit interrupter) outlets sighted at galley and heads. The 110V outlet at the starboard forward head is not operable. ABYC (American Boat and Yacht Council) recommends in section E-11.15.3.5 "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)".

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

- * **GALVANIC ISOLATOR:** [B9] Galvanic Isolator panel shows not operable.

NOTE: This surveyor recommends that a marine electrician attend the vessel to update AC wiring to ABYC (American Boat and Yacht Council) standards.

GENERATORS AND INVERTERS

TYPE: Generator driven by diesel powered internal combustion engine.

MANUFACTURER: Onan fuel injected diesel. Model 13.5MDKA2-1955. Serial #: D020364047.

FUEL TYPE: Diesel

KILOWATT RATING: 13.5 KW

VOLTAGE RATING: 110 /220 AC.

NUMBER OF CYLINDERS: Four (4)

INDICATED HOURS: 2313 hours.

LOCATION: Engine compartment port aft.

- * **FLUID LEVELS:** [C9] Coolant normal. Oil normal. Surveyor recommends that all fluids be renewed according to the manufactures recommended specifications as soon as possible.
- * **COOLING SYSTEM:** [B10] Closed coolant and raw water exhaust type. The generator raw water hose is in poor condition and shows cracks in the hose.
- FUEL SUPPLY:** Fuel System: Engine mounted mechanical pump.
- FUEL FILTER:** Remote Racor filter/water separator.
- LUBRICATION SYSTEM:** Engine mounted mechanical oil pump with spin on/off type filter.
- EXHAUST SYSTEM:** Raw water exhaust system appears serviceable.
- LOCATION & VENTILATION:** Engine room aft. Ventilation appears adequate.
- * **OTHER:** [C10] No record of last generator water pump impeller service sighted on the vessel.
- * **NOTE:** [B11] Generator was run today during the sea-trial and appeared serviceable when load tested. The generator base shows heavy corrosion.

FRESH WATER SYSTEM

FRESH WATER SYSTEM: (POTABLE WATER)

STORAGE TANKS: Yes, one (1) poly tank.

CAPACITY: Reportedly 200 gallons.

LOCATION: Forward bilge area.

FILL PIPE LOCATION: Port forward topsides.

VENT PIPE LOCATION: Appears to be port topsides.

PUMPS: A 110 volt demand diaphragm type water pump. It is operable and appears serviceable.

FILTERS: Yes, in line at pump.

HOSES AND CLAMPS: Appears serviceable.

NOTE: No Findings were found in this section.

FRESH WATER SYSTEM (HOT WATER SYSTEM)

TYPE: 110 electric. Marine grade.

MANUFACTURER: Force 10, model 448111, serial #: 1031360.

CAPACITY: 11 gallons.

PRESSURE RELIEF VALVE: Yes, pressure relief valve built into tank.

NOTE: No Findings were found in this section.

III. SYSTEMS

SANITATION

SANITATION (BLACK WATER)

MANUFACTURER: Raritan, electric flush.

MANUAL OR ELECTRIC TYPE: Electrically operated.

NUMBER OF HEADS: Two (2) heads on vessel.

M.S.D TYPE USCG SYSTEM: Certification Type: MSD U.S.C.G. Type III. and holding tanks.

RAW WATER SUPPLY AND CLAMPS: Yes, appears serviceable where sighted.

DISCHARGE HOSES AND CLAMPS: Appears serviceable.

PUMP-OUT LOCATION: Starboard side deck aft. Clearly marked: Yes.

* **MACERATOR:** [B12] Macerator is not operable. Heads would not flush.

SANITATION (GREY WATER)

BASINS, SHOWERS, HOSES AND CLAMPS: The basins on the vessel drain to topside thru-hulls in immediate area of basin. The showers drain to a sump and is pumped overboard.

SUMP TANK LOCATION: Midships bilge area, centerline.

MATERIAL: Plastic, specific type not determined. Appears serviceable.

PUMPS: Sump pump with remote float switch. Operable.

NUMBER OF TANKS: One (1). Size appears adequate for number of basins and showers.

DISCHARGE: Overboard, starboard topsides.

NOTE: No findings were found in this section.

STEERING SYSTEM

STEERING SYSTEM

TYPE: Hydraulic, by Hynautic, where sighted appeared serviceable.

MANUFACTURER: Hynautic system.

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

LINES AND FITTINGS: Reinforced flexible hose, with metallic fittings. Appears serviceable.

ACTUATOR CYLINDER: Hydraulic ram appears serviceable.

MOUNTING: Appeared serviceable.

RUDDER STOCK: Stainless steel rudder stock size not determined due to access.

PACKING GLAND: Appeared serviceable. Monitor frequently.

NOTE: No findings were found in this section.

GROUND TACKLE

GROUND TACKLE

ANCHORS: Plow anchor with chain and rope rode appears serviceable.

WINDLASS: Lewmar windlass powered up.

NOTE: No findings were found in this section.

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT

VHF: Uniden VHF at helm powered up. Standard Horizon VHF in salon powered up.

RADAR: Furuno Nav-Net powered up. Produced targets.

GPS: Furuno Nav-Net GPS powered up and showed a fix.

* **AUTOHELM:** [B13] Robertson auto-pilot is not operable.

SPEED LOG: Datamarine Navigator speed log powered up.

DEPTH SOUNDER: Furuno Nav-Net powered up. Showed depth.

COMPASSES: Danforth compass appears serviceable.

* **WATER TEMPERATURE GAUGE:** [C11] Dytek water temperature unit was not operable.

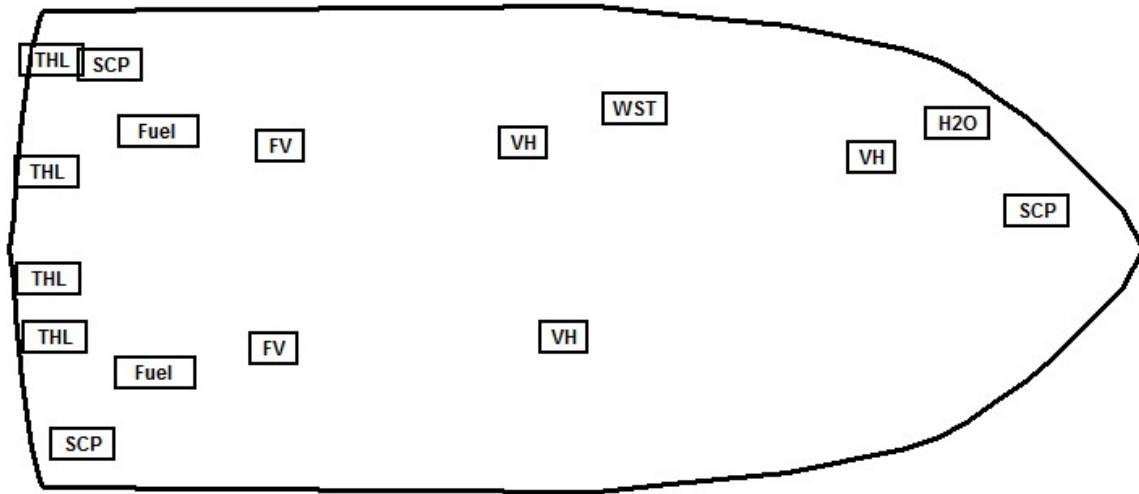
OTHER: Bennett trim tab electric hydraulic system. Powered up.

III. SYSTEMS

THRU-HULLS

THRU-HULLS:

THRU-HULLS ABOVE WATER LINE (DIAGRAM):



Abbreviation	Description
Fuel	Fuel Fill
FV	Fuel Vent
H2O	Water Fill
SCP	Scupper
THL	Thru-hull
VH	Vent Hose
WST	Waste Pump Out

****Red Icon(s) with white text indicates inoperable item.**

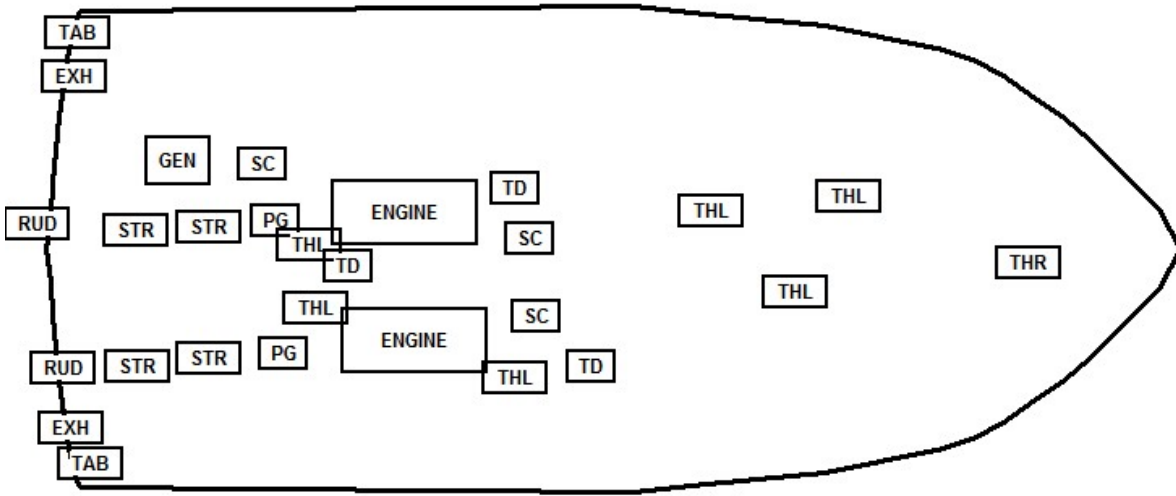
NOTE: The above the water line thru hulls appear serviceable.

III. SYSTEMS

THRU-HULLS

THRU-HULLS(continued)

THRU-HULLS BELOW WATER LINE (DIAGRAM):



Abbreviation	Description
ENGINE	Engine
EXH	Exhaust
GEN	Generator
PG	Pkng Gland
RUD	Rudder
SC	Seacock
STR	Strut
TAB	Trim Tab
TD	Transducer
THL	Thru-Hull
THR	Thruster

****Red Icon(s) with white text indicates inoperable item.**

* **NOTE:** [B14] The below the water line thru-hull valves on this vessel were ball valve type and were NOT all operable. Two (2) seacocks would not close. Some of the below the water-line thru-hulls/seacocks show corrosion. One (1) thru-hull is plugged off and does not have a hose clamp. Service ALL below the water-line thru-hulls/seacocks/hoses/clamps using accepted marine practices.

MATERIAL: Bronze

TYPE: Ball valve

* **BONDED:** [B15] They were not all bonded. Bonding wires were sighted loose in the bilge and disconnected.

OPERABLE: No see note.

* **NOTE:** [C12] This surveyor recommends that a vessel of this age if service documentation of recent thru-hull service cannot be provided have all below the water-line thru-hulls closely inspected by removing the hose clamps and hoses from the below the water-line thru-hulls and inspecting the internal condition of the thru-hull. ABYC (American Yacht and Boat Council) recommends in section H-27.6 Figure 1 a seacock static load test of 500 lbs.

COMMENTS: It is recommended that all seacock ball valves be managed in the closed position when vessel is afloat unattended.

III. SYSTEMS

BONDING SYSTEM

BONDING SYSTEM

MAIN BONDING CONDUCTOR: The bonding system is mostly well established where sighted. A separate bonding system was not performed and I did not use a corrosion meter to establish the level of protection. However the bonding system is using individual green insulated wire and appeared to be serviceable were sighted. I also noted a hull mounted zinc on the transom under the swim platform. Monitor it frequently for condition and adequate protection.

THRU-HULL FITTINGS: The thru-hull fittings are not all bonded. (noted in a previous section)

SHAFTS AND SHAFT LOGS: The propeller shafts are not bonded. The propeller shaft logs appear to be bonded.

RUDDER SHAFTS AND SHAFT LOGS: Rudder shafts and rudder shaft logs appear to be bonded.

SEA STRAINERS: All sea strainers appeared to be bonded.

GROUNDING PLATES: Yes, ground plate sighted port aft hull.

ENGINES AND GENERATORS: Engines/generator appear bonded and grounded.

ZINC (HULL ZINC): Zincs tied into bonding system. One (1) sighted at transom.

NOTE: No findings were found in this section.

SAFETY EQUIPMENT

SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

NUMBER AND TYPE OF PFD'S: Eight (8) U.S.C.G. approved. Comply with USCG regulations regarding personal floatation devices.

NUMBER OF THROWABLE PFD'S: One (1) Type IV-U.S.C.G. approved throwable device.

* **FIRE EXTINGUISHERS:** [A5] Three (3) fire extinguishers sighted. not enough fire extinguishers for a vessel this size. ABYC (American Boat and Yacht Council) in section A-4 table II recommends that boats 40ft to 65ft in length have four (4) USCG type ABC fire extinguishers onboard and located outside the engine compartment, steering position, crews quarters and galley. Comply with ABYC recommendations and USCG regulations regarding fire extinguishers.

* **VISUAL DISTRESS SIGNALS:** [A6] Day/night visual distress signals are hand held flares. Out of date.

* **SOUND DEVICES:** [B16] Yes, air horn. Operable. Horn button is broken.

NAVIGATION LIGHTS: Navigation lights are operable.

"NO OIL DISCHARGE" PLAQUE: Yes, found properly displayed in engine space.

TRASH DISPOSAL PLACARD: Yes, found properly displayed in galley area.

* **WASTE MANAGEMENT PLAN (OVER 40'):** [C13] No written waste management plan sighted. Note: Vessels over 40' are required to have a written waste management plan onboard.

VENTILATION: Yes provided by power blower in the engine compartment. Appears serviceable.

AUXILIARY SAFETY EQUIPMENT

* **E.P.I.R.B.:** [C14] None Sighted. But highly recommended. Acquire a E.P.I.R.B. and register in your name.

* **SMOKE DETECTOR:** [A7] Smoke detector sighted and tested not operable.

* **BILGE WATER ALARM AND SAFETY SWITCHES:** [A8] High bilge water alarm is not operable.

* **FIXED FIRE EXTINGUISHING SYSTEM (HALON TYPE):** [A9] Yes, Halon 1301 in engine room automatic and manual activated. Dated 1998. Inspection tag is not current. ABYC (American Boat and Yacht Council) recommends in section A-4 Ap. 6.3 " At one year intervals, a full maintenance check should be made by a qualified extinguishing system service facility in accordance with the manufacturers maintenance instructions. A tag should be attached showing the date of such maintenance check. " Comply with ABYC recommendations regarding fire extinguisher system inspections.

* **SEARCH LIGHT:** [A10] Hard top mounted search light. Not operable.

FIRST AID KIT: Yes, first aid kit on board vessel.

* **FUME SNIFFER ALARM SYSTEMS:** [A11] No carbon monoxide detectors sighted. Carbon monoxide fume detectors are highly recommended for all boats with enclosed accommodation spaces per ABYC A-24. During the burning of any fuels, Carbon Monoxide (CO) gas may be created due to incomplete combustion from propulsion systems or stove as well as nearby boats running generators. Adequate ventilation must be provided at all times while burning any of these fuels, but CO may also be drawn into the cabin through ventilation systems. This is especially true of boats running air conditioning. CO is a silent menace and kills without warning, therefore this surveyor recommends installation of a CO detector in any occupied spaces below decks. Comply with ABYC section A-24.

* **MAN OVERBOARD SYSTEM:** [C15] No. A man-overboard system is highly recommended.

BILGE PUMPS

LIST: Three (3) Rule 2000 bilge pumps with float switches. Not tested for actual ability to pump water overboard.

NOTE: Bilge pumps were tested for power up only. Not tested for actual ability to pump water overboard.

III. SYSTEMS

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY

- * **PROPELLER(S):** [B17] Two (2) bronze alloy, four bladed propellers. 28 X 31P. The starboard propeller was loose and tightened during this haul-out. Both propellers have blades damaged (bent at ends) and require service.
 - PROPELLER SHAFT(S):** Stainless steel 2". Appears serviceable.
 - PROPELLER SHAFT (LOGS) TUBE(S):** Appear serviceable.
 - SHAFT BEARING (CUTTLESS BEARING):** Cuttless bearing showed no signs of sloppiness or end play.
 - STRUTS:** Dual I-beam struts. Appear serviceable.
 - RUDDER(S) MATERIAL:** Cast bronze and appears serviceable.
- * **RUDDER(S) MOUNTING:** [C16] Appears serviceable. Port rudder is little loose. Not leaking.
 - TRIM TABS:** Bennett trim hydraulic tabs. 23' X 13". Appear serviceable.
 - THRUSTERS:** Bow thruster appears serviceable. Powered up.
- * **THRU-HULLS:** [B18] The thru-hull located 2/3 forward and starboard has a 1/4" gap that is filled with silicone and the thru-hull flange is not flush with the hull.
 - TRANSDUCERS:** Appears serviceable.
 - GROUNDING PLATES:** Grounding plate sighted port aft hull area. Appears serviceable.
- * **ZINCS:** [B19] Zincs are wasted beyond effectiveness.
 - OTHER:** Bow thruster appears serviceable.

CONDITION OF HULL (WETTED SURFACE)

- * **BLISTERS:** [B20] Large blisters 4"-6" in size sighted at various areas of the hull area as described in the hull section of the body of the report.
- * **CONDITION OF BOTTOM PAINT:** [B21] Bottom paint is peeling in various areas.

AIR CONDITIONING AND HEAT (AIR CONDITIONING)

AIR CONDITIONING AND HEAT (AIR CONDITIONING)

- MANUFACTURER:** Marine Air.
- NUMBER OF UNITS:** Two (2) compressors and three (3) air handler units with controls.
- BTU CAPACITY:** Compressors rated at 12,000 BTU master cabin and 16,000 BTU for the main salon.
- THRU-HULL STRAINER:** Yes, Perko sight style. In the engine room.
- HOSES, CLAMPS AND CONNECTORS:** Appear to be adequately sized and serviceable for application.
- RAW WATER COOLING PUMP:** 110 volt electric pump system is equipped with a seacock and sea strainer assembly. Appears serviceable.
 - Condensation drip pans: yes, drain into gray water sump.
- NOTE:** No findings were found in this section.

SEATRIAL REPORT

INTRODUCTION

- INTRODUCTION:** The "XXXXXXX" was operated from the dock at XXXXX Boat yard, XXXXX, FL to the Atlantic Ocean and back between the hours of 1100 - 1250 on July 4, XXXX. The vessel was operated by the owner's Captain. Attending the sea trial were Captain, owner, engine surveyor and myself.

III. SYSTEMS

SEATRIAL REPORT

OBSERVATIONS

- * **OBSERVATIONS:** [B22, B23, C17]
1. The engines started without excessive cranking. (Engines were warm. No cold start of engines today)
 2. The engine exhaust on the port side showed smoke at start up. (see engine surveyors report)
 3. The cooling water exhaust appeared adequate and normal.
 4. The engine instruments did not operate within normal operating limits at idle, cruising speed, and maximum throttle. The engine water temperature gauges read 185F and the engine surveyor reported readings in excess of 200F. Overheat situation> see engine surveyors report.
 5. Manufacturer's recommended max RPM is 2300.
Engines reached 2150 RPM at full throttle. Low rpm at wide open throttle.
 6. The steering system operated normally.
 7. The throttles operated normally.
 8. The transmissions operated normally/smoothly.
 9. The backdown test was satisfactory.
 10. There were no excessive vibrations noted.
 11. The trim tabs operated normally.
 12. There were no oil or coolant leaks observed. (On main engines or in exhaust water)

The water temperature is in Fahrenheit. The oil pressure is in pounds per square inch. Revs refers to revolutions per minute. Batts are in volts of charge from the alternator. These figures are comprised of data read from the vessels gauges while underway on the above stated date and time of the sea trial.

TRIAL RUN DATA

PORT ENGINE:

REVS	BATT'S	OIL PRESS	H2O TEMP
1000	12.8	32	175
1900	12.8	40	185
2150	13	42	185

STARBOARD ENGINE:

REVS	BATT'S	OIL PRESS	H2O TEMP
1000	13.2	30	178
1900	13.6	48	185
2150	13.6	48	190

NOTE: Top speed obtained was 26.9 KNOTS.

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 "**OTHER DEFICIENCIES**" should be corrected in the near future so as to maintain standards and to help the vessel to retain its 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 6) EMERGENCY SHUT DOWN:

Emergency shut down cable is broken. Not operable.

Repair the emergency shut down system.

A.2 (PAGE 6) ENGINE ALARMS:

Low oil pressure alarm and over heat warning NOT audible at helm station. Audible warning horn did not sound with the switch in the ON position.

Investigate further. A overheat and low oil pressure warning horn is highly recommended.

A.3 (PAGE 7) OTHER:

Positive battery posts not completely covered as required by ABYC (American Boat and Yacht Council). ABYC standards state in section 11.5.2.7.5 "Continuously energized parts, such as positive battery terminals and both ends of all wire connected thereto, shall be physically protected with boots, or other form of protection, that cover all energized surfaces to prevent accidental short circuits."

Comply with ABYC standards and USCG regulations regarding covering of all positive conductor posts and ends using accepted marine practices.

A.4 (PAGE 8) OUTLETS:

Various A.C. outlets available throughout yacht, appear adequate and conveniently located. GFCI (ground fault circuit interrupter) outlets sighted at galley and heads. The 110V outlet at the starboard forward head is not operable. ABYC (American Boat and Yacht Council) recommends in section E-11.15.3.5 "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)" .

Comply with ABYC recommendations regarding GFCI protected A.C. outlets.

A.5 (PAGE 12) FIRE EXTINGUISHERS:

Three (3) fire extinguishers sighted. not enough fire extinguishers for a vessel this size. ABYC (American Boat and Yacht Council) in section A-4 table II recommends that boats 40ft to 65ft in length have four (4) USCG type ABC fire extinguishers onboard and located outside the engine compartment, steering position, crews quarters and galley.

Comply with ABYC and NFPA recommended standards for fire protection.

A.6 (PAGE 12) VISUAL DISTRESS SIGNALS:

Day/night visual distress signals are hand held flares. Out of date.

Comply with USCG regulations for Visual Distress Signals.

IV. FINDINGS AND RECOMMENDATIONS

A. SAFETY DEFICIENCIES:

FINDINGS	RECOMMENDATIONS
A.7 (PAGE 12) SMOKE DETECTOR: Smoke detector sighted and tested not operable.	<i>Repair or replace the smoke detector.</i>
A.8 (PAGE 12) BILGE WATER ALARM AND SAFETY SWITCHES: High bilge water alarm is not operable.	<i>Repair or replace the high bilge water alarm.</i>
A.9 (PAGE 12) FIXED FIRE EXTINGUISHING SYSTEM (HALON TYPE): Yes, Halon 1301 in engine room automatic and manual activated. Dated 1998. Inspection tag is not current. ABYC (American Boat and Yacht Council) recommends in section A-4 Ap. 6.3 " At one year intervals, a full maintenance check should be made by a qualified extinguishing system service facility in accordance with the manufacturers maintenance instructions. A tag should be attached showing the date of such maintenance check. "	<i>Comply with ABYC recommendations regarding fire extinguisher system inspections.</i>
A.10 (PAGE 12) SEARCH LIGHT: Hard top mounted search light. Not operable.	<i>Further investigate and repair or replace the search light using accepted marine repair practices.</i>
A.11 (PAGE 12) FUME SNIFFER ALARM SYSTEMS: No carbon monoxide detectors sighted. Carbon monoxide fume detectors are highly recommended for all boats with enclosed accommodation spaces per ABYC A-24. During the burning of any fuels, Carbon Monoxide (CO) gas may be created due to incomplete combustion from propulsion systems or stove as well as nearby boats running generators. Adequate ventilation must be provided at all times while burning any of these fuels, but CO may also be drawn into the cabin through ventilation systems.	<i>CO is a silent menace and kills without warning, therefore this surveyor recommends installation of a CO detector in any occupied spaces below decks. Comply with ABYC section A-24.</i>

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS	RECOMMENDATIONS
B.1 (PAGE 4) EXTERIOR HULL: Black bottom paint with white hull sides. The hull sides appear to have been recently compounded and waxed. Good cosmetic appearance. The exterior hull shows large blisters scattered on the hull port and starboard. Inside the cabin area at the forward stateroom on the starboard side below the closet the fabric covering the wall was loose and it appears that fiberglass repairs have been made at the inside of the hull in this area. There was also fiberglass repairs below the port stateroom floor hatch where the fiberglass resin was tacky to the touch. The port stateroom outboard cabinet also shows evidence of fiberglass repairs. Moisture meter readings were sighted to be high at various areas of the hull. Sounding the hull with a phenolic hammer produced a negative (dull) sound at the forward starboard hull area.	<i>Request disclosure regarding history of repairs to the vessel and this surveyor recommends a thermal imaging hull inspection to determine the serviceability of the hull. Bottom paint should be removed and blisters investigated with destructive testing (grind out the blisters) to determine the extent of repairs required for the blisters. Repair with accepted marine repair practices.</i>
B.2 (PAGE 4) STRINGERS: There was fiberglass tabbing delamination sighted at the aft port stringer.	<i>Further investigate and repair with like kind materials in keeping with accepted marine repair practices.</i>
B.3 (PAGE 4) OTHER: The port rudder fasteners show corrosion and are weeping a brown fluid.	<i>Investigate further. Repair or replace fasteners as necessary.</i>

IV. FINDINGS AND RECOMMENDATIONS

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS	RECOMMENDATIONS
B.4 (PAGE 4) NOTE: The aft swim platform shows minor fiberglass and gelcoat damage at the center aft platform area.	Further investigate and repair with like kind materials in keeping with accepted marine repair practices.
B.5 (PAGE 5) HEADS: The forward head would not flush today. Reportedly the macerator is not operable.	Further investigate and repair the MSD (marine sanitation device) system.
B.6 (PAGE 6) STUFFING BOX: The hose clamps at the dripless packing show rust. Renew the hose clamps that show corrosion using accepted marine practices.	Renew the hose clamps that show corrosion using accepted marine practices.
B.7 (PAGE 7) FUEL LINES AND FITTINGS: Diesel fuel line hose manufacturers generally warranty fuel hoses for 5-7 years. The fuel lines on this vessel are older than 15 years.	This surveyor recommends all fuel lines over 10 years old in a diesel fuel application be renewed.
B.8 (PAGE 7) CHARGING SYSTEM (BATTERY CHARGER): Two (2) marine grade battery chargers: Intelli-Power model PD2040 and PD2140. When powered up and tested the PD2040 battery charger was sighted to be pegged at the amp gauge.	Investigate further and repair or renew the battery charger.
B.9 (PAGE 8) GALVANIC ISOLATOR: Galvanic Isolator panel shows not operable.	Repair or replace as necessary.
B.10 (PAGE 8) COOLING SYSTEM: The generator raw water hose is in poor condition and shows cracks in the hose.	Replace the generator raw water inlet hose as soon as possible.
B.11 (PAGE 8) NOTE: The generator base shows heavy corrosion.	Further investigate and repair as necessary.
B.12 (PAGE 9) MACERATOR: Macerator is not operable. Heads would not flush.	Investigate further and repair or renew the macerator.
B.13 (PAGE 9) AUTOHELM: Robertson auto-pilot is not operable.	Refit, refinish, refurbish, or replace as necessary.
B.14 (PAGE 11) NOTE: The below the water line thru-hull valves on this vessel were ball valve type and were NOT all operable. Two (2) seacocks would not close. Some of the below the water-line thru-hulls/seacocks show corrosion. One (1) thru-hull is plugged off and does not have a hose clamp. Service ALL below the water-line thru-hulls/seacocks/hoses/clamps using accepted marine practices.	Service ALL below the water-line seacocks/hoses/clamps using accepted marine practices.
B.15 (PAGE 11) BONDED: They were not all bonded. Bonding wires were sighted loose in the bilge and disconnected.	Connect all bonding wires where disconnected.
B.16 (PAGE 12) SOUND DEVICES: Yes, air horn. Operable. Horn button is broken.	Repair or replace the broken horn button.

IV. FINDINGS AND RECOMMENDATIONS

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS

RECOMMENDATIONS

B.17 (PAGE 13) PROPELLER(S):

Two (2) bronze alloy, four bladed propellers. 28 X 31P. The starboard propeller was loose and tightened during this haul-out. Both propellers have blades damaged (bent at ends) and require service.

Repair propellers using accepted marine practices.

B.18 (PAGE 13) THRU-HULLS:

The thru-hull located 2/3 forward and starboard has a 1/4" gap that is filled with silicone and the thru-hull flange is not flush with the hull.

Investigate further and repair or renew as necessary.

B.19 (PAGE 13) ZINCS:

Zincs at transom, shafts, trim tabs, and rudders are wasted beyond effectiveness.

Renew wasted zincs using accepted marine practices.

B.20 (PAGE 13) BLISTERS:

Large blisters 4"-6" in size sighted at various areas of the hull area as described in the hull section of the body of the report.

Investigate further to determine the scope of blister repair using destructive testing. Repair hull blisters using accepted marine practices.

B.21 (PAGE 13) CONDITION OF BOTTOM PAINT:

Bottom paint is peeling in various areas.

Renew the bottom paint using accepted marine practices.

IV. FINDINGS AND RECOMMENDATIONS

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS

RECOMMENDATIONS

B.22 (PAGE 14) OBSERVATIONS:

Engines reached 2150 RPM at full throttle. Low rpm at wide open throttle.

Investigate further. Service as necessary. Full service by an expert.

B.23 (PAGE 14) OBSERVATIONS:

The engine instruments did not operate within normal operating limits at idle, cruising speed, and maximum throttle. The engine water temperature gauges read 185F and the engine surveyor reported readings in excess of 200F. Overheat situation > see engine surveyors report.

Repair or replace the engine coolant temperature gauges and repair the engines so as not to overheat.

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS

RECOMMENDATIONS

C.1 (PAGE 5) TELEVISIONS:

The televisions in the staterooms would not power up. The salon flat screen television powered up.

Repair or replace the two (2) forward stateroom televisions.

C.2 (PAGE 6) LUBRICATION:

No record of engine oil/filter change on vessel.

The surveyor recommends that all engine fluids and filters be renewed as soon as possible.

C.3 (PAGE 6) CONDITION AND DEFICIENCIES:

Both of the engines show rust and corrosion at engine components. Rust on engines was painted over with white paint.

Remove rust and repaint using accepted marine practices.

C.4 (PAGE 6) FLUID LEVEL AND CONDITION:

No record of service regarding changing the gear oil.

Recommend transmission fluids be renewed

C.5 (PAGE 7) FILTER/FUEL CONDITION:

No record of fuel filter service on vessel.

Service the fuel filters using accepted marine practices.

C.6 (PAGE 7) NOTE:

Fuel tank was not full today. The fuel tank is recommended to be pressure tested or topped off to attest serviceability.

The fuel tank is recommended to be topped off or pressure tested to attest serviceability. Test per ABYC (American Boat and Yacht Council) standards. Test to at least 3 psi and use CFR 183.510 as a guide.

C.7 (PAGE 7) BATTERIES:

Eight (8) batteries located in engine compartment aft of engines and two (2) batteries for bow thruster forward bilge. No date of manufacture sighted on the batteries.

Load test all batteries to determine battery condition.

C.8 (PAGE 7) CIRCUIT LOAD MONITORS:

The AC volt gauge is not accurate. Reads high.

Further investigate and repair as necessary.

C.9 (PAGE 8) FLUID LEVELS:

No record of generator service sighted on vessel.

Surveyor recommends that all fluids be renewed according to the manufactures recommended specifications as soon as possible.

C.10 (PAGE 8) OTHER:

No record of last generator water pump impeller service sighted on the vessel.

Investigate last generator service of water pump impeller. The generator impeller is recommended to be replaced annually.

IV. FINDINGS AND RECOMMENDATIONS

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS

RECOMMENDATIONS

C.11 (PAGE 9) WATER TEMPERATURE GAUGE:

Dytek water temperature unit was not operable.

Investigate further and repair or renew as necessary.

C.12 (PAGE 11) NOTE:

No service records regarding thru-hull service sighted.

This surveyor recommends that a vessel of this age if service documentation of recent thru-hull service cannot be provided have all below the water-line thru-hulls closely inspected by removing the hose clamps and hoses from the below the water-line thru-hulls and inspecting the internal condition of the thru-hull. ABYC (American Yacht and Boat Council) recommends in section H-27.6 Figure 1 a seacock static load test of 500 lbs.

C.13 (PAGE 12) WASTE MANAGEMENT PLAN (OVER 40'):

No written waste management plan sighted. Note: Vessels over 40' are required to have a written waste management plan onboard.

Comply with USCG regulations for Trash dumping and plan. There is a large fine imposed here for non compliance.

C.14 (PAGE 12) E.P.I.R.B.:

No EPIRB sighted.

A EPIRB is highly recommended for offshore cruising.

C.15 (PAGE 12) MAN OVERBOARD SYSTEM:

No man-overboard system sighted on the vessel.

A man-overboard system is highly recommended.

C.16 (PAGE 13) RUDDER(S) MOUNTING:

Port rudder is little loose. Not leaking.

Further investigate and repair as necessary. Monitor frequently.

IV. FINDINGS AND RECOMMENDATIONS

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS

RECOMMENDATIONS

C.17 (PAGE 14) OBSERVATIONS:

The engine exhaust on the port side showed smoke at start up. *See engine surveyors report.*

NOTE: It is recommended that all below the water line thru-hulls be fully serviced and have a proper sized wooden plug attached to function as emergency plugging device.

V. SUMMARY AND VALUATION

STATEMENT OF OVERALL VESSEL RATING OF CONDITION:

It is the surveyor's experience that develops an opinion of the **OVERALL VESSEL RATING OF CONDITION** After a 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 my investigation, as shown in the **SYSTEMS AND FINDINGS AND RECOMMENDATIONS** section of this **REPORT OF SURVEY**, and by virtue of my experience, my opinion is

OVERALL VESSEL RATING: FAIR

STATEMENT OF VALUATION:

1. 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.

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:

\$165,000

One Hundred Sixty Five Thousand Dollars

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:

\$1,420,000

One Million Four Hundred Twenty Thousand Dollars

V. SUMMARY AND VALUATION

SUMMARY:

In accordance with the request for a marine survey of the XXX XXX , 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 **July 4, XXXX** Subject to correction of deficiencies listed in section IV A. (Safety), the vessel is considered to be suitable for its intended use. 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.

ATTENDING SURVEYOR:



A handwritten signature in dark ink, reading "Steve Snider-AMS", is written over a horizontal line.

Steve Snider-AMS #957

Member: SAMS

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Port view



Flybridge



Engine compartment



Hull view

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Running gear



Cabin



Galley



Fiberglass delamination aft port stringer

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Hull blisters



Fiberglass repair tacky at stringer under port stateroom floor



Props are damaged