



Lakeshore Professional Marine Surveys, LLC
3098 View Point, Jenison MI 49428-9160
WWW.PROMARINESURVEYS.COM



REPORT OF MARINE SURVEY

PRE-PURCHASE CONDITION & VALUE
of the vessel

1998 Sea Ray 33' Sundancer 330



PREPARED EXCLUSIVELY FOR:

Ms. Mary Brown
123 Old House Lane
Jenison, MI 49428

CONDUCTED BY:

Bob Ptak, AMS #842 - S.A.M.S.
Society of Accredited Marine Surveyors
on
8/26/2010

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SCOPE OF SURVEY & GENERAL INFORMATION

SCOPE OF SURVEY

Report file no: Bob P - Sample
Inspection date(s): 8/26/2010.
Date report written: 8/27/2010.
Survey requested by: This survey was performed at the request of the purchaser, Ms. Mary Brown, who was not present at the time of the survey.
Purpose of survey: Assess the overall condition and value of vessel for pre-purchase decision making and if purchased, used for insurance underwriting and/or financing.
Conducted by: Bob Ptak, AMS #842 - S.A.M.S.
Intended use: Pleasure- Lake Erie.
Vessel surveyed at: 456 Castle Ave., Jenison MI 49428
Weather conditions: Clear & dry, Temperature was 81F.
How survey conducted: The vessel was pulled the day prior and was resting in the travel lift slings, then launched and survey completed in the water.
Sea trial: A sea trial was performed as part of this survey. The results are included in the Sea Trial section.
Electrical systems checked: AC shore power was used to check AC electrical systems. DC power was used to check DC electrical systems. Onboard generator was also started to test AC power output.
Moisture checks: The Tramex Skipper Plus moisture meter was used for moisture readings referenced in this report. All moisture readings are comparative to surrounding areas with terms of normal or relatively dry, relatively moist or relatively wet. If delamination is present with above normal moisture readings further testing is advised.

VESSEL CONDITION & VALUE

Condition rating: AVERAGE CONDITION+
Estimated fair market value: \$ 63,400.
Estimated replacement cost: \$ 280,000.

NOTE: *The overall vessel condition and value is for the vessel in its current condition at the time of survey prior to any repairs or maintenance and was established after a complete inspection of stated vessel, the results of which are included in this report of survey. The estimated fair market value and replacement cost includes all listed auxiliary equipment. See "Condition & Value Summary" section for additional details.*

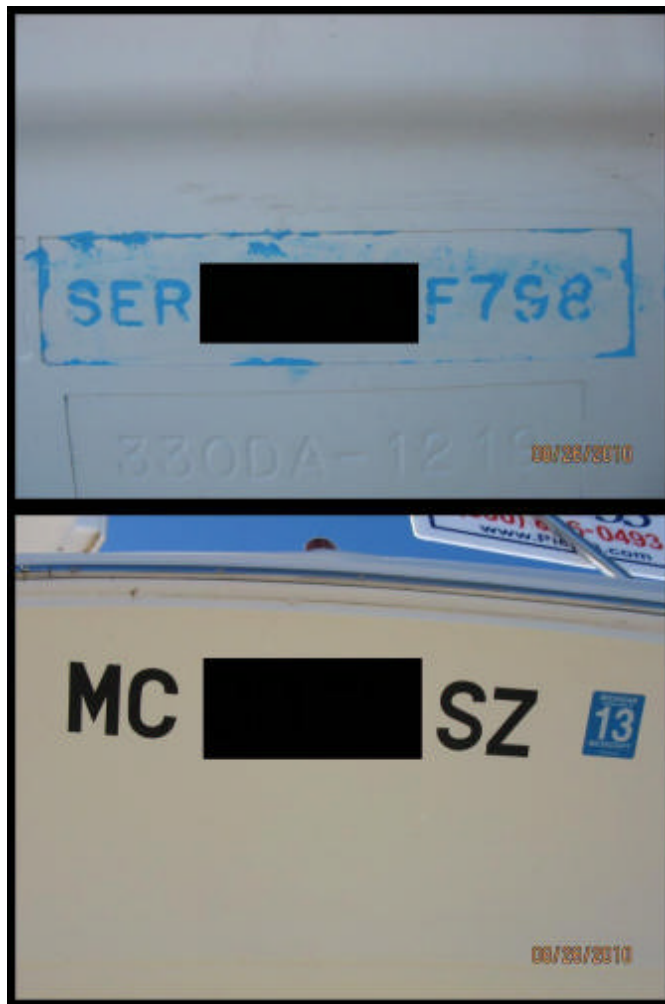
SURVEY REQUESTED BY

Client name: Ms. Mary Brown
Street address: 123 Old House Lane
City/State/Zip: Jenison MI 49428
Cellular phone: 123 456-7890.

VESSEL INFORMATION

Vessel Yr/Make/Model: 1998 Sea Ray 33' Sundancer 330.
Vessel name: No name on vessel.
Hailing port: None sighted.

Hull ID number (HIN): SER____F798 - A true digital photograph of the hull ID number of the referenced vessel is shown here. HIN was pencil/chalk enhanced to show more clearly.



State registration no.: MC ____ SZ Michigan, Expires 2013.

Registered owner: Joe _____ per state registration papers sighted. *NOTE: The vessel registration should be kept aboard the vessel at all times. You will be required to show this document if you are boarded by law enforcement authorities such as the USCG, Sheriff, Fish & Wildlife, Water Patrol etc.*

Manufacturer/Builder: Sea Ray Boats, Knoxville TN.

Month/Year built: June 1997 sold as 1998 model.

Vessel description: The Sea Ray 330 Sundancer is a 33' open express cruiser with radar arch and camper canvas enclosure. She accommodates up to 6 people with a V-Berth, convertible dinette and aft cabin sleeping area. One head with vacuum flush pump. The galley has a solid surface counter top, sink, microwave, two burner electric / alcohol cook top and a 12V/120V refrigerator. She is powered by twin MerCruiser 7.4L Multi Port Fuel Injection V-8 engines. A Westerbeke 3 cylinder Generator is also available. The overall condition of this vessel is in generally very good overall condition and shows that she was well cared for.

VESSEL SPECIFICATIONS

Type: Fiberglass, Planing, Deep Vee hull Conventional sheer.
Length overall (L.O.A.): 33'6" per ABOS Marine Blue Book.
Beam: 11'5" per ABOS Marine Blue Book.
Draft: 3' per ABOS Marine Blue Book.
Displacement: 11,200 lbs per ABOS Marine Blue Book.

SURVEY STANDARDS

Standards followed: *This survey was completed using as reference the federal regulations and amendments issued and enforced by the United States Coast Guard under the*

authority of Titles 33 and 46 of the United States Code of Federal Regulations (CFR's). In addition the American Boat and Yacht Council (ABYC) and National Fire Protection Association (NFPA-302) voluntary standards were used as reference during the survey. These ABYC and NFPA voluntary standard practices are generally followed by most vessel manufacturers today. 100% adherence is not guaranteed.

SURVEY INSPECTION COMMENTS

Comments:

- All systems and components inspected and described herein apply only at Time of Survey and are considered serviceable and/or functional except as indicated in the survey report and listed in the Recommendations section. Electronic devices and instruments were checked for power up only - not for functionality. Areas not inspected include vessel structure areas which are covered, unexposed or inaccessible such as screwed down or false panels or bulkheads, moldings or any area that was not readily open for visual inspection. If a component is not identified in this report, it was not inspected.
- It is the nature of marine vessels that deterioration, wear and accidents do occur and as such, this report therefore represents the condition of the vessel only on the date the survey was conducted. It provides no guarantee and no prediction of the vessel's condition on any later date.
- "**Priority I Recommendations**" are related to Safety & Regulatory findings and are printed **RED** in the report.
- "**Priority II Recommendations**" are related to Maintenance & Standards findings and are printed **BLUE** in the report.
- "**Other Observations**" are findings that are relatively minor in nature and are printed **GREEN** in the report.

Report terms used:

- **FRP:** Fibre reinforced plastic-Also known as Fiberglass. This is the typical construction material for most modern day yachts and small craft.
- **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, behind screwed down panels, or requirements not to conduct destructive tests).
- **FUNCTIONAL/OPERABLE:** Functions as intended.
- **POWERS UP:** Device was tested for Power Up only, not for full design functionality.
- **SERVICEABLE:** Sufficient for a specific requirement.
- **EXCELLENT CONDITION:** New or like new.
- **GOOD CONDITION:** Shows minimal wear with possible minor cosmetic discrepancies.
- **FAIR CONDITION:** Denotes that system, component or item is functional as is with minor repairs. (MONITOR OFTEN)
- **POOR CONDITION:** Requires repair or replacement of system, component or item to be considered fully usable.

EXTERIOR HULL & BOTTOM INSPECTION

HULL EXTERIOR-SIDES

Construction material: Hand laid and molded fiberglass, with white gel coat surface and gold and blue boot stripe.



Hull cosmetics: Hull cosmetics are in good condition-minor nicks and scratches which are typical for a vessel of this age.

Moisture/Delamination: All moisture meter readings on side hull near the water line and surrounding thru hull fittings were relatively dry with normal comparative moisture meter readings.

Stem: Moderate flare- Solid, no cracks on external inspection. Moisture readings relatively Dry.



Stem thru hull fittings: Bow eye for trailering is well secured thru stem. Chain locker drains thru both sides of stem.

Side thru hull fittings: Plastic mushroom head fittings, used for: A/C discharge drain(s), Sink drains, Bilge/Sump drains, All thru hull fittings are adequately secured and sealed to hull.

Rub rail: Rub rail is stainless steel with backing of white plastic. Well secured in good condition with only minor scrapes. An area on the starboard side shows a flattened portion of stainless steel rail but all remain serviceable.



Port Lights: Port side: Two, Starboard side: Two, all are non opening type and are secure.

Engine room vents: Vents are attached near transom and in good condition- no cracks sighted.

TRANSOM

Transom type: Conventional transom, and an attached swim platform. Well secured, no cracks or defects sighted.



Moisture/Delamination: All moisture meter readings on transom and surrounding thru hull fittings were relatively dry with normal comparative moisture meter readings.

Stress cracks: None sighted.

Transom thru hull fittings: Trim tabs, Hull zinc. Transom storage compartment off swim platform. All well secured and functional.



Swim Platform Attached Fiberglass platform. Weaver davits mounting bracket only - NO davits--well secured to swim platform.

Boarding ladder: The boarding ladder is stainless steel that is mounted in swim platform pocket. The ladder rungs, have plastic steps, The ladder is well secured and functional.

Transom storage: Storage area for fenders, lines, hoses etc.

Transom door: Transom door on port side off swim platform.

HULL BOTTOM

Construction material: Fiberglass, with hard chines and molded in prop pockets, No cracks or separation sighted on any portion of hull bottom. NOTE: Bottom was dirty and not power washed. All bottom observations were made with the bottom covered with some dried algae/marine growth.----- Recommend full bottom inspection when vessel can be hauled out and power washed.

Bottom paint: Anti-fouling bottom paint appeared to be in good condition.

Stress cracks: None sighted.

Osmotic blistering: NO evidence of blisters was found on hull bottom during bottom inspection.

Blister comments: *Blisters are an unknown factor on all boats and if not currently present, there is no guarantee that they will not appear in the future. Blisters have a tendency to dry out over winter storage unless severe or large. Blisters (if any) best appear after vessel has been in water for an entire season. In addition, the symptomatic evidence of*

blistering can be obscured by bottom coatings, a dry storage period during which blisters spontaneously depressurize, bottom laminate sanding, and other conditions or actions. Recommend full inspection for blisters immediately after haul-out and power wash. Surveyor has no firsthand knowledge of the history of bottom maintenance, blistering, repairs or prophylactic coatings on this vessel.

Moisture:

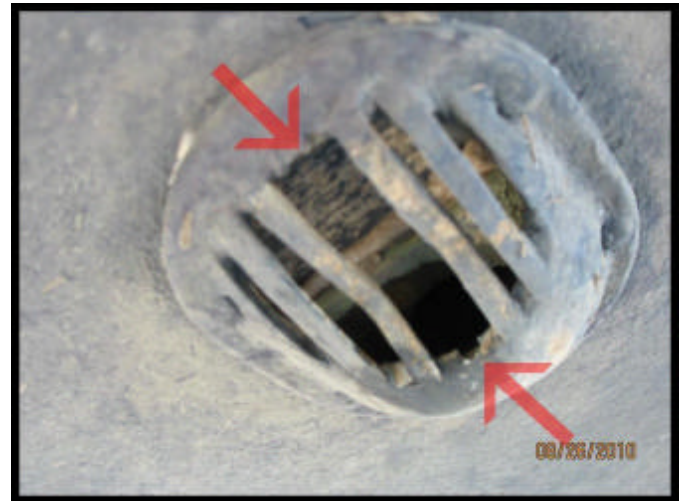
All moisture meter readings were relatively dry.

Grounding damage:

None noted.

Strainers/Scoops/Screens:

All strainers/screens are well secured to hull bottom. Clear of debris & zebra mussels. **Port side strainer is bent and one vane is missing but remains serviceable. Replace as desired.**



Transducers:

Transducer for depth is adequately sealed and bonded to the hull.

Thru Hull fittings:

Mushroom type bronze fittings for all below water line sea cock locations. Well secured to hull bottom. Also underwater exhaust tubes for both engines are well secured and functional.



External drain plugs:

Transom mounted bronze drain plug fitting. *NOTE: Remove drain plug at the end of each boating season after haul out to allow bilge areas to completely drain off. Suggest tying removed drain plug to steering wheel to serve as a reminder when launching vessel in spring that it must be re-installed prior to launch.*

Grounding plate(s):

Well secured and functional.

PROPELLER(S)/SHAFT(S) / STRUT(S)

Prop(s) description:

Props have three blades and are made of bronze alloy with a diameter and pitch of 17 X 17. Port is LH Starboard is RH. Props are in excellent condition. No bent, chipped or damaged prop blades. Prop nuts are secure and properly locked in place with jam nut and properly cotter pinned.



Spare props: None sighted.

Shaft size / material: Shafts are sized 1-1/2" and made of Stainless steel. No pitting, cracks or corrosion sighted. Prop shaft(s) do not appear bent.

Strut(s): Single bronze P-Strut per shaft. Strut(s) appears to be in line. Well secured-no separation or cracking sighted.

Cutlass (shaft) bearing(s): Good condition. No play found in cutlass bearing, for either shaft. *NOTE: Monitor condition of cutlass bearing(s) after each haul out and replace if play is excessive or if shaft vibrations are felt when underway.*

RUDDER(S)

Rudder type: Bronze, Spade, Well secured.. No cracks or bending or damage sighted in either rudder. *Some fore/aft rudder play on port side rudder. RECOMMENDATION: If rudder leaks, have rudder mounts checked for excess wear and repair as necessary. See sea trial section - for more info.*

Rudder alignment/swing: Full rudder swing to both port and starboard shows equal amount of travel. Rudder is not bent and in full alignment with the keel.

TRIM TABS, STABILIZERS AND THRUSTER SYSTEMS

Trim tabs: Bennett single ram hydraulic trim tabs. Power up and function OK. No leaks sighted.

ANODES

Trim tab: Yes- Good condition. No deterioration sighted.

Hull mounted: "Camp" anode securely mounted on transom. Good condition. No deterioration sighted.

Anode notes: *Monitor all anodes frequently on hull and underwater equipment and replace when they are no more than 50% wasted. Anodes are normal replacement items designed to protect the running gear from electrolysis. Keep spares aboard vessel.*

TOP DECK & SUPERSTRUCTURE

MAIN DECK & FITTINGS

Deck Surface:

Molded, cored fiberglass deck construction (core not sampled). White gel coat with molded in non skid fiberglass surface. Good condition. Deck is solid under foot, no soft spots discovered and no visible cracks or chips sighted.



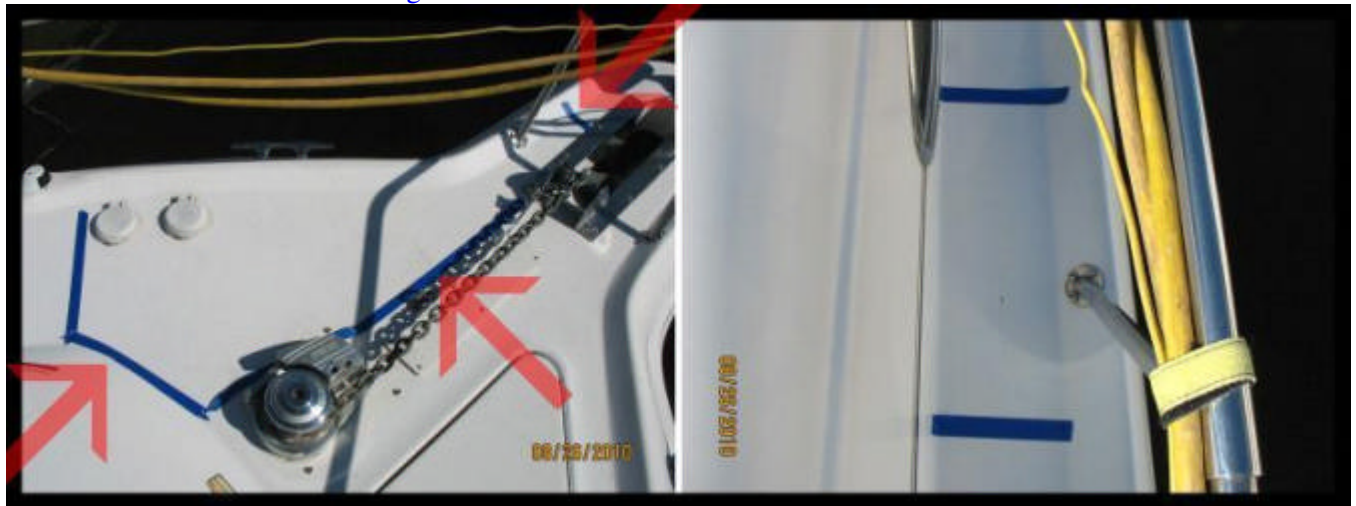
Moisture/Delamination:

Most of the top deck had normal relatively Dry moisture meter readings. Higher than normal moisture readings found in deck surface as follows: (Most marked with tape for clarity or use of arrows/circles on photo)

- 1) Foredeck area near windlass
- 2) Near anchor locker
- 3) Port side near port light and stainless steel rail support
- 4) Slanted area in front of windshield.

Percussion hammer used to test deck surface and no apparent delamination was found in any high moisture areas. Deck is not spongy or soft and is solid under foot. It is not unusual to discover some deck moisture in older vessels.

RECOMMENDATION: To seal off deck from further moisture penetration, deck fittings near elevated moisture areas should be removed and resealed.





Toe rail(s):	Molded in, no cracks or separation sighted.
Anchor platform:	Integrally molded FRP platform. Well secured-no cracks sighted. Stainless steel insert with dual anchor rollers. Well secured-no cracks sighted.
Anchor/chain locker:	Yes accessed from top deck with hatch lock. Functional.
Windlass:	Lofrans Progress 1, Combination Chain/Rope gypsy. Foot controls tested and found the UP control OK but the Down control is not operational with foot control or from helm. RECOMMENDATION: Have the Down controls checked and repaired as necessary to make fully operational.
Spotlight:	ITT Jabsco spotlight is well secured. (See Helm section for operational condition)
Bow pulpit/rail:	Stainless steel with side rails, Well secured.
Cleats & fairleads:	Horn cleats are all well secured to deck and side deck and are functional.
Boarding gate:	Port side transom swing gate with slide lock. Gate is secure and functional.
Joinery stress:	None noted.
Deck hatches:	Yes, well secured, seals in good condition, support arm(s) in place and hatch sun covers in place.
Cabin (house) to deck joint:	Molded in -- no stress cracks noted.
Grab rail(s):	Stainless steel, on both sides of helm area and well secured.
Cabin house window(s):	Opening type port lights on both port and starboard sides. Functional.
Windshield:	Large three piece aluminum framed with tapered side panels. No cracks or separation sighted. Center lower section has powered vent that opens to foredeck for ventilation. Vent powers up OK.
Radar arch:	Fiberglass and well secured and housing antennas which are all well secured.
Transom shower:	Yes- Tested OK. No leaks sighted.
Shore fresh water inlet:	Located in cockpit in starboard side storage area. The fresh water inlet is not secured to hull and is loose. RECOMMENDATION: Have the inlet fitting secured to prevent possible future leaks. NOTE: Be sure that dockside water pressure is turned off when the boat is unoccupied for any length of time. A burst hose or other water system malfunction could cause serious damage to the



vessel or possibly sink the vessel at its assigned slip.

Horns:

Built into top deck at bow area. NOTE : See Safety Equipment/Sound devices for condition.

COCKPIT

Cockpit & Helm seating

Adjustable helm bench seat. Port side bench seat. Transom and aft facing bench seat. All vinyl seat coverings are in very good condition. No holes or tears sighted.



Sole:

FRP (fiber reinforced plastic) with molded in non skid, with carpet cover available - stored below deck .Carpet installed at helm location.

Moisture/Delamination:

All moisture meter readings on sole were relatively dry with normal comparative moisture meter readings.

Scuppers/deck drain(s):

Drains thru transom.

Cockpit equipment:

Cockpit table stored under seat. Sink/Wet bar has molded in sink w/ cold pressure faucet and small ice box with drain. Refrigerator(s)/ice maker(s): Norcold, DE-351D. Refrigerator/Icemaker powers up OK.



Canvas:

Camper top canvas enclosure with stainless steel frame support, with plastic windows, All canvas, stainless steel support, side curtains and isinglass appeared to be in good condition.



Cabin entrance:

Sliding FRP door for cabin entrance with lock.



Storage:

Built in transom storage area plus two side cockpit storage lockers. Storage under wet bar/sink area.

Bolster pads:

Coaming bolster pads are in good condition. No cracks or separation sighted. Serviceable.

INTERIOR HULL & STRUCTURAL INSPECTION

HULL INTERIOR & STRUCTURAL COMPONENTS

Hull to deck joint:

Overlap (Shoe box type), as sighted in anchor locker Fasteners sighted were stainless steel screws spaced approximately 8" to 10". Appear secure. Elastomeric compound

sighted in hull to deck joint. No leaks sighted thru any part of hull to deck joint area sighted.

Bilge(s):

Clean but with an inch or two standing clean water.

----- Keep bilge areas as dry as possible by identifying and eliminating the source of all water intrusion as soon as it is discovered. *NOTE:*

Whenever you visit your boat, it's good practice to check the bilge area(s) for higher than normal levels of water and proper functionality of the bilge pump(s) or anything else that could be causing trouble.



High water pump on left

Stringers:

Hull stiffness provided by FRP covered wooden longitudinal stringers that run the length of the vessel. Complete inspection not possible due to limited access. Stringers were sighted in the engine compartment and under portions of cabin sole and are well glassed into hull where sighted. Stringers sounded with hammer where accessible and appeared very sound. No soft spots, separation, cracks rotting or splitting sighted. Limber holes appear to be adequately sealed where sighted. Stringers checked with Moisture meter where accessible and all readings were relatively Dry.

Bulkheads:

Athwartships reinforcement enhanced by structural bulkheads bonded to the hull with FRP (fiber reinforced plastic). All tabbing appears serviceable and sound with no cracks or separation of tabbing sighted in any compartments. No visual evidence of movement sighted in any bulkhead.

Stem:

Solid stem, no cracks or separation sighted inside.

Inside of transom:

Reinforced. Secure-no cracks or separation sighted.

ALL THRU HULL FITTINGS

Sea valves:

Bronze seacock ball valve(s) installed, Sea valves sighted are used for: Air Conditioner(s) raw water intake(s), Engine(s) raw water intake(s), Generator raw water intake.

Sea valve condition:

Sea valves are all functional.

Sea valves piping:

Marine rubber covered reinforced hose. Hoses are double clamped. Monitor all hoses periodically and replace if cracks appear.

Sea strainers:

Internal strainer(s) installed for engine raw water, generator raw water, air conditioner raw water pickup.

Transducers:

Depth transducer installed in area.

HELM & NAVIGATION ELECTRONICS

NAVIGATION ELECTRONICS

Helm station: Main Helm station.



Compass(es): 4" Ritchie, Mounted at main helm Appears functional.
VHF radio(s): Mounted at main helm.
Powers up OK, Serial no was not sighted. Unit is built in. Standard Horizon Nova.



Depth sounder(s): Lowrance 3500 Mounted at main helm Powers up OK, Serial no was not sighted. Unit is built in.

GPS: Not sighted.

Radar: Raytheon, Pathfinder RL 70 Display mounted at main helm. Powers up OK, Serial no was not sighted. Unit is built in.



Horn: Electric horn switch is fully functional.

ENGINE INSTRUMENTS AND CONTROLS

Throttle and shift controls: Teleflex --Separate levers for each engine throttle and shift control. Controls work smoothly.

Engine room blowers: Engine room blower(s) power up and are fully functional.

Engine alarm/Shutdown: Alarm tested and found functional.
Engine status: All engine instruments are OEM. (Original Equipment Manufacturer)
Panel lights: Could not sight due to brightness of day. ----- Check after dark to verify panel lights are all functional.
Hour meter(s): Port: 491.5 Starboard: 498.2 hrs on meter before sea trial.
Engines synchronizer: OEM.
Tachometer(s): OEM.

OTHER ELECTRONICS AND CONTROLS

12 volt outlet: Yes-12 Volt outlet located at Helm tests OK.
Antenna(s): VHF, Radar, GPS, TV, all securely mounted on radar arch.
Bilge pump switches: One bilge pump switch-- powers up bilge pump. (See bilge pumps section for details on operational status.)
Courtesy lights: Functional.
Fire alarms: Automatic - Charged/Discharged Signal Light at Helm Station. Appears functional.
Spotlight controls: Powers up and turns properly port/starboard/up/down.
Trim Tabs: Trim tabs switches are operational and no leaks sighted.
Windlass control: Helm controlled down switch is Not functional as previously reported.
Windshield wiper(s): Two Wipers- both power up.
Stereo controls: Clarion remote stereo control- functional.

CABIN INTERIOR APPOINTMENTS

MAIN SALON

Style: Contemporary.



Cabin steps: Carpeted cabin entrance steps.
Sole: Carpeting installed throughout with snap down carpet protectors.
Bulkheads/Trim: Padded soft vinyl covered. Clean and unmarred.

Headliner: Soft padded vinyl. Clean. No tears, splits or stains sighted. **The headliner on the starboard side in main cabin area is not well secured to top deck. RECOMMENDATION: Secure headliner to cabin top.**



Doors: Composite door for head. Sliding privacy curtain/door for V-berth as well as aft berth.
Hatch screens: Hatch screens available for all hatches.
Framing Trim: White Ash trim around all doors and counter tops.
Water intrusion signs: No evidence sighted.
Seat cushions: Ultra leather, Excellent condition-No holes or tears sighted.
Side windows: Port light windows-Opening type with screens. Well sealed and appear serviceable.
Curtains: Yes, -- cloth curtains.
Light fixtures: 12 volt cabin lights throughout the vessel, 110 Volt lamps also available, both direct and indirect.
Storage: Storage under seats, Storage drawers, hanging locker(s) storage cabinets.
Entertainment equipment: Yes- See Entertainment Electronics Section below.
Overall interior condition: Interior is in overall very good condition.

ENTERTAINMENT ELECTRONICS

Stereo(s): Main salon: Clarion Marine model M3170. AM/FM with tape player. Unit is built in and well secured. Powers up OK and appears functional. Serial no was not sighted.



Speaker(s): Four speakers located in Cockpit plus two in Main Salon. All speakers powered up OK with the stereo.

Television with VCR: Main salon: Panasonic 13", well secured with TV swivel bracket and with remote. Unit is built in and well secured. Powers up OK and appears functional. Serial no was not sighted.



CD player(s): Main salon: Clarion M605 six disc. Unit is built in and well secured. Serial no was not sighted. Unit is built in. Not tested.

GALLEY

Location: Port side, with solid surface counter top.



Stove: Kenyon, two burner, alcohol/electric. Electric burners tested and are functional. Alcohol function not tested. Power indicator lights are functional. **Safety switch is functional but sticks in down position.---- Switch may need some light lube so it comes up when glass top cover is raised.**

Refrigeration: Refrigerated compartment serviced by a Norcold, model DE-451 with freezer. Door safety lock is installed and functional. Operates on 110V or 12V. Refrigeration tested on both AC and DC circuits separately and powers up in both modes.

Water system: Pressurized hot and cold, Tests OK as pump holds pressure without cycling.
Sink(s): Single molded in, Drains overboard.

Microwave oven:

Goldstar, Unit is built in and well secured. Powers up OK and appears functional. Serial no was not sighted. Unit is built in.



Vent fan:

Powered vent exhaust fan is operational.

Storage:

Good. Cabinets above and drawers and storage areas below the galley.

DINETTE

Table type:

Removable table for converting to extra sleeping berth. Excellent condition.

Seating:

U-shaped seating around table.

BERTHS / STATEROOMS

Master stateroom:

In V-berth area.



Guest stateroom 1:

In Aft cabin area.



Other accommodations:

Convertible dinette berth with removal/lowering of table.

HEAD(S)

Number/Location: One head on Port side, off main salon area.



Toilet(s): Sealand, VacuFlush system, Appeared functional when tested. No leaks sighted. Powers up.

Raw water supply: Raw water intake thru bronze seacock. Hose secure. Hose is secure with double clamps.

Sink: Plastic, Hot & Cold pressure water fixture at sink. Drains overboard.

Shower(s): Head area doubles as shower with pull out handheld fixture. Drains to sump tank.

Medicine cabinet: Yes available and with separate shelf .

Vent fan: Functional.

Shower pump: Located in sump tank with auto float and Rule 800 GPH automatic bilge pump. Not tested-Float inside sealed sump container.

AIR CONDITIONING

Manufacturer & Type: Cruisair, 120 volt - reverse cycle.

Locations / BTU Capacity: Main salon- BTU: 12,000.

Temp Controls: Cruisair SMX II digital temperature controls, A/C temperature pull down was 20 degrees and within allowable limits. Unit was also checked for heating function on reverse cycle. The reverse cycle heat functioned properly.

Filter(s) Condition: Filters appeared clean. *Recommend that A/C filter(s) be checked and cleaned frequently to allow the A/C unit to operate at maximum efficiency.*

Drip trays: Yes, Functional with drains.

A/C Raw water Bronze sea cock for A/C Raw water intake. Fully functional and hose is double clamped.

Thru hull strainer: Strainer located at A/C raw water pump inlet seacock. Strainer is clear. Hoses are clamped and secure on all fittings sighted.

Hoses & connections: Hoses appear to be adequate size and serviceable for application. No cracks or hose damage sighted. Hoses are clamped and secure on all fittings sighted.

Raw water cooling pump: 120 Volt pump functioned well when testing A/C units.

ELECTRICAL SYSTEMS

D.C. ELECTRICAL SYSTEMS

D.C. Voltage system: 12 Volt system.

Primary batteries: There are four batteries (two sets of two) located in the engine compartment that are Group 27 Lead acid which provide service to the main engines, generator and house. Each set of two are wired in parallel producing 12 volts. Batteries are well secured in boxes with straps or hold down brackets. Cables are properly color coded and positive terminals are properly covered with boots or box covers.



Battery selector switch: Not equipped. RECOMMENDATION: ABYC E-11.7 recommends a battery switch be installed for each battery or bank with a CCA rating of 800 Amps. Recommend compliance for safety reasons.

Charging system: Both engine mounted alternators plus the battery charger is a Professional Mariner, -- Pro Mariner 30 AMP. Charger powers up and was functional.

Distribution panel: Yes located in main salon, combined with AC Power panel.



Breaker(s)/fuse(s): All D.C. circuits are adequately protected by branch or switched breakers.

D.C. usage meter(s): Analog type.

D.C. wiring: All wiring runs are properly secured every 18" per ABYC E-11 recommendations. Ring spade or crimp on connectors sighted for wiring connections per ABYC recommendations.

DC Electrical ground: DC electrical system is properly tied into vessels electrical ground system using the engine as a common ground.

Other notes: *Note: For 12 volt systems, a fully charged battery reads 12.7 Volts, 75% charged battery reads 12.4 Volts, 50% charged battery reads 12.2 Volts, 25% charged battery reads 12.0 Volts and a discharged battery reads 11.9 Volts or less. Check battery condition frequently.*

A.C. ELECTRICAL SYSTEMS

A.C. Voltage system:	30 Amp - 120 Volt system. Shore Power: Two inlets provided by Marinco 30 Amp capacity. located on Port side of cabin top.
Shore power cord(s):	Marinco, Two 30 AMP cords, -length not measured. Cord(s) appear serviceable with no burnt or corroded fittings & cord shows no cracks.
Shore power breaker:	Dual pole breaker for shore power at main power distribution panel per ABYC recommendations.
A.C. power selector switch:	AC / Generator manual break/make lever switches for each circuit located in main AC panel.
Distribution panel(s):	Yes combined with DC power panel.
Branch breakers:	All A.C. circuits are adequately protected by branch breakers.
Reverse polarity indicator:	Functional and outlets tested OK for proper polarity.
GFCI protection:	GFCI protection is provided for galley and head and other wet locations. GFCI trips properly when tested in galley and head locations.
A.C. meter(s):	Analog type.
A.C. wiring:	Stranded copper boat cable- size and rating, where sighted, appears correct and serviceable for intended use. All wiring runs are properly secured every 18" per ABYC E-11 and NFPA 302 recommendations. A.C. wiring is properly terminated. No wire nuts or loose connections sighted. Ring spade or crimp on connectors sighted for wiring connections per ABYC recommendations.
Anti-chafe protection:	Yes sighted at all compartment pass thru locations.
A.C. Electrical ground:	A.C. electrical system is properly tied into vessels electrical ground system using the engines as a common ground.

GENERATOR

Location/Manufacturer: Westerbeke, Generator installed in engine space.



Type & Size:	Gasoline powered, Three cylinders.
Serial number:	Tag not readable.
Kilowatt/Voltage rating:	120 Volts AC, Kilowatt rating could not be read off label.
Hour meter:	Meter reads 41.5 hrs.
Generator test:	The generator started without any excess cranking and rapidly came up to speed. Generator maintained voltage when loaded with all AC units running as well as other AC electrical components.
Type of installation:	On tray.
Hoses and clamps:	Properly double clamped.
Belts and pulleys:	Belts condition are serviceable. No cracks or splits sighted. Pulleys/belts appear to be in line.
Cooling system(s):	Fresh water / heat exchanger cooled with water intake through lever action seacock.

Coolant level low in tank for generator. ----- Top off coolant reservoir and monitor frequently for leaks.

Oil level and condition: Clean & full on dipstick. No evidence of water or cuttings in lube oil.
Flame arrestor(s): Yes- USCG approved.
Ignition protection: Yes -OEM and ignition protected.
Fuel pump(s): Engine mounted. No leaks sighted.
Fuel supply lines: USCG A1 flex.
Fuel pump to carb hose: OEM rigid fuel line. No leakage sighted.
Fuel filter(s): Engine mounted. No leaks sighted.
Engine mounts and beds: Engine mounts appear to be well secured to the support mounting.
Engine ground cable: Generator is properly grounded with a proper size conductor cable.
Exhaust piping: Side hull exhaust, Flex hose. Exhaust hose is properly double clamped at both ends.
Muffler: Fiberglass water lift muffler double clamped at both ends.
Ventilation: Blower and natural. Blower powers up OK.
Warning labels: Yes.
Accessibility: Good.

GROUND/BONDING SYSTEM

Main bonding conductor: Twin engines are properly connected to each other by a common conductor circuit. The remaining ground/bonding system is well established where sighted; Electrical system, Seacocks, Shaft logs, Rudders, Sea Strainers, Pumps, Fuel system/tanks, Hull Zincs were all bonded. The bonding system is using individual green insulated wire.

PROPULSION SYSTEM

MAIN ENGINE(S)

No./Type/Cylinders Two, MerCruiser, 7.4 Litre
Inboard Gasoline, V8,
Naturally aspirated Multi
Port Fuel injection.



Serial no(s): Port engine: Tag not sighted on engine. Starboard engine: 0L00 ____.
Engine(s) hours: Port: 491.5 Starboard: 498.2.
Raw water hoses: Good condition-No cracks, soft spots or leakage sighted.
Belts and pulleys: Belts condition are serviceable. No cracks or splits sighted. Pulleys/belts appear to be in line.
Cooling system(s): Raw water cooled, Raw water strainer(s) installed and clear.
Oil level and condition: Clean & full on dipstick(s). No evidence of water or cuttings in lube oil as sighted on dipstick(s).
Flame arrestor(s): Yes- USCG approved.
Ignition protection: Yes -Alternator and Starter are OEM and ignition protected.
Engine ventilation: Natural ventilation for engine space is provided. Power exhaust ventilation blower(s) are installed. Power vents are fully operational.

Fuel pump(s): Engine mounted. No leaks sighted.
Fuel supply lines: USCG A1 flex. No leaks, cracks or soft spots sighted.
Fuel filter(s): Engine mounted. No leaks sighted at fuel filters.
Drip pad(s) : No Pads in place beneath engine(s). Fluids and debris fall into bilge area. -----
 Consider installing drip pads beneath engine(s) to catch fluid drippings and rapidly identify leaks of any kind.

Engine mounts and beds: Engine mounts appear to be well secured to the support stringers. *NOTE: See Hull Interior section for condition of stringers themselves.*

Engine ground cable: Engines are properly grounded together with a proper size conductor cable.
Insulation: Yes.
Last major overhaul: Unknown- Service records not available or sighted.
Engine(s) operated: Yes on sea trial. See sea trial section for details.
Engine room summary: Engine room is accessed by power lift hatch which was fully functional.
Other notes:

- *It is good practice when buying a used vessel that all fluids (Engine/Transmission or Outdrive) be changed and the raw water cooling impeller(s) also be changed.*
- *As stated in the Terms and Conditions agreement, It is understood that the attending surveyor is not an engine/transmission surveyor. As such, I recommend that all engines and transmissions be inspected by a qualified expert engine surveyor/mechanic to determine the internal condition and any repairs necessary of the engine(s), transmission gears, and pumps, heat exchangers, coolers, etc.*

EXHAUST SYSTEM

Exhaust manifold: Excellent condition- No cracks or leakage sighted using inspection mirror.
Piping/Clamps: Fiberglass and flex hose, Securely double clamped as required. No cracks soft spots or evidence of leaks sighted in exhaust system.



Discharge location(s): Aft hull/transom corners. Also Hull bottom water exhaust tubes are well secured.

TRANSMISSION(S)

Manufacturer/Model: V-Drive-Hydraulic Gear driven utilizing transmission hydraulic fluid.
Gear ratio: Could not read label.
Fluid level and condition: Good, Fluid levels show full, fluid is bright red and does not smell burnt. *NOTE: The port transmission dip stick does not fit very tight in the transmission case. RECOMMENDATION: Consider repair/replacement to prevent it from possibly "jumping out" in rough seas.*

Propeller shaft(s): Stainless steel, 1-1/2", No pitting, cracks or corrosion sighted. Couplers are properly safety wired.
Stuffing box(es): Boot was double clamped and appeared serviceable for both shafts. Monitor Frequently for leakage and proper adjustment. No leaks sighted.

STEERING SYSTEM

STEERING SYSTEM

Type:	Hydraulic lines and ram cylinder with attached rudder tiller on rudder stock. Wheel stops in place.
Mounting(s):	Cylinder & ram actuator well secured-no leaks sighted.
Rudder stock(s):	Visually sound. 1 1/4" Bronze. Appears serviceable.
Steering tie bar:	Well mounted with rudder steering arms connected by a steel lateral bar.
Packing glands:	<p>Very small leak sighted on port side rudder packing gland.</p> <p>RECOMMENDATION: Have packing gland adjusted to prevent any leakage. <i>NOTE: Rudder packing glands should always be totally dry. Check frequently and adjust if necessary.</i></p>



Wheel brake: Wheel brake is available and holds wheel properly when tested.

TANKAGE / PLUMBING

FUEL TANK(S)

No & Location:	Two tanks located In engine space, on the port and starboard sides.
Tank type & capacity:	5052 Aluminum - 108 gallons capacity per tank per each tank label.
Manufacturer' s label(s):	The USCG required label was sighted on fuel tanks.
Fuel supply lines:	<p>USCG A1 flex hose from tank to fuel pump. Well secured and No cracks, soft spots or splitting sighted. Serviceable, <i>NOTE: Most fuel hose manufacturers now recommend fuel hoses be replaced every five years.(just like replacing older signal flares). This is more important with the introduction of ethanol into gasoline as hoses can and do deteriorate from the inside. The date of manufacture is imprinted on all USCG approved fuel hoses. Consider replacing all flexible fuel hoses every 5 years as a part of routine maintenance. 33CFR183.540 Hoses: Standards and markings</i></p> <ul style="list-style-type: none">• Each "USCG Type A1" "USCG Type A2," USCG Type B1," and "USCG Type B2" hose must be identified by the manufacturer by a marking on the hose.• Each marking must contain the following information in English:<ol style="list-style-type: none">(1) The statement "USCG TYPE (insert A1 or A2 or B1 or B2)(2) The year in which the hose was manufactured.(3) The manufacturer's name or registered trade mark• Each character must be block capitol letters and numerals that are at least one eighth-inch high.• Each marking must be permanent, legible, and on the outside of the hose at intervals of 12 inches or less.
Shut off valve(s):	Anti siphon valve at tank fuel feed fitting.
Vent line/location:	Vent located on hull side(s), with flame screens or cleanable vents in place and clear. USCG A1 No cracks, soft spots or splitting sighted. Serviceable.
Fill line(s) located:	Side decks.

Fill pipe & condition: USCG A1 flex type hose, No cracks, soft spots or splitting sighted. Serviceable. Fill hose is properly double clamped at both ends of fill hose.

Fuel fill grounded: Fuel fills are properly grounded to the fuel tanks.

Tank(s) grounded: Yes-Both tanks are properly grounded.

Tank(s) secured: Yes straps with chafe protection.

Inspection/cleaning access: Limited.

Tank(s) condition: Visually good (where accessible)

FRESH WATER TANK(S)

No & locations of tanks: One tank - Not sighted due to no ready access but likely under sealed off compartment under aft berth area.

Water pump(s): 12 Volt. pump powers up and pressurizes the water lines. No leaks or pump cycling.

Tank Monitor System: Yes at power panel... appears functional.

Supply lines: Red & Blue plastic piping is used for all water connections. No leaks sighted.

Filling line(s) located: Side deck.

Vent(s) location(s): Side hull.

HOLDING TANK(S) - BLACK WATER

Marine Sanitation Device: Certification Type: MSD U.S.C.G. Type III. (Holding tank). Waste tank is connected to deck waste fitting for pump out. Overboard discharge lines and fittings are properly disabled to comply with USCG regulations for the Great Lakes and all inland waters.

No & Location of tanks: One holding tank located in engine compartment on port side.

Tank(s) type & capacity: Plastic with an unknown capacity.

Tank Monitor system: None sighted.

Tank(s) secured: Yes.

Tank(s) condition: Visually good (where accessible)

Inspection/cleaning access: Good.

Lines: Rubber hose, Lines are all well secured. No cracks or leaks sighted. Note: *If waste odors appear, consider changing all waste hoses to white sanitation hose which do not typically permeate with waste odors.*

Discharge line(s) located: Deck pump out.

Vent(s) location(s): Side hull.

WATER HEATER

Tank location: Engine compartment.



Manufacturer/capacity: Atwood 6 US gallons capacity.

How powered: 110V with heat exchanger coil.

Water heater test: Water heater tested using 110V system and found fully functional.

Pressure relief valve(s): Yes- Drains into bilge area.

Drain fixture(s)/plug(s): Yes- Appears functional.

Supply lines: Red/Blue plastic connections. No leaks sighted.

Heat exchanger hoses: Heat exchanger hoses appear to be in good condition where sighted. No cracks or leaks sighted.

Outer tank material: Aluminum.

Tank(s) secured: Yes, Tank is well secured to base.

Inspection/cleaning access: Limited.

Ignition protected: Yes, Water heater is marine type and ignition protected.

Other notes: NOTE: *Do not leave hot water heater AC switch on unless water is in the hot water tank or the heating element will burn out. Turn water heater off whenever leaving the vessel.*

SAFETY EQUIPMENT

U.S.C.G. REQUIRED

Navigation lights: All Navigation running lights were tested and found fully operational. Anchor light was tested and found functional.

Life Jackets(PFD's): The following USCG approved life jackets were sighted on board: USCG Type II, All appear to be in good condition.

Throwable type PFD's: One USCG approved buoyant cushion. All Throwable PFD's sighted appear to be in good condition Keep all throwable PFD's in a readily accessible location and although not a requirement, insure that a 30' to 50' floating tether line is attached.

Visual Distress Signals: Red hand held, Signals are current, plus expired spares, *NOTE: All visual distress signals have a printed expiration date- 3 years from date of manufacture. It is recommended that expired signals be retained for backup. You must have at least three aerial or three red hand held signals that are current.*

Sound devices: Electric horn control at helm station is functional.

USCG placards: "Discharge of Oil Prohibited" placard is posted. **MARPOL (Garbage) placard not sighted. This is required for any vessel 26' or longer. RECOMMENDATION: Acquire and post an official USCG approved Trash Disposal Placard near waste area to comply with USCG regulations 33 CFR 151.59.**

Flame arrestor(s): Yes- USCG approved.

Engine ventilation: Natural ventilation for engine space is provided, Power exhaust ventilation blower(s) are installed and are fully functional.

Ignition protection: Yes - all electrical equipment sighted in the engine space appears to be OEM / Ignition protected equipment.

FIRE FIGHTING EQUIPMENT-U.S.C.G. Required

Dry Chemical Size I: Two USCG approved USCG approved extinguisher(s) sighted at the following locations: Cockpit/Aft deck area and Galley. All gauge(s) read full.

Fixed /Clean Agent: **One USCG approved Halon 1301 automatic fire extinguisher, Gauge reads full. Located: in the engine compartment, Fixed fire extinguisher in engine space has outdated or no certification tag. ----- ABYC A-4 and NFPA 302 recommends that fixed fire protection systems be inspected and reweighed at one year intervals and tagged accordingly. Recommend compliance.**
NOTE: Halon or other "clean agent" type fire extinguishers must be weighed to determine true contents. Monitor lights and gauges only show there is pressure available and do not reflect the quantity available. Annual inspection and a tag to show date is recommended to meet ABYC A-4 and NFPA 302 standards.

Fire alarms: Automatic - Charged/Discharged Signal Light at Helm Station. Appears functional.

FIRE EQUIPMENT OBSERVATION:

- *ABYC A-4 recommends that portable fire extinguishers have a full maintenance check performed at least once per year by a qualified fire extinguishing service company a tag should be attached showing the date of the maintenance check.*
- *Fire extinguisher pressure gauges should be checked monthly to assure that*

Other notes:

readings are full or in the green area.
NOTE: NFPA recommends that dry chemical fire extinguishers be periodically shaken to ensure the dry chemical powder is loose and is not compacted. If in doubt, replace the extinguisher.

BILGE PUMPS

ELECTRIC PUMPS: Two electric pumps. Located at: Aft bilge. One pump is a high water pump. Pumps sighted are: Rule 12 volt, 1200 GPH, Main Pump powers up when switched on manually. Automatic built in float switch powers up pump when raised.

Bilge Pump Comments: *CAUTION----* Bilge pumps are high maintenance items. Bilge pumps are only the initial part of a de-watering system, which may include a strum-box, check-valves or occasionally anti-siphon loops and valves, piping, a seacock if the exit is below waterline and a thru-hull tailpiece. This entire system must be understood and maintained. Bilge pumps may fail at any time. No warranty as to longevity can be expressed or implied at survey. Tapered wooden plugs tied to seacocks are an inexpensive safety item and highly recommended under current ABYC standards. Keeping bilges clean and free of debris is a vital part of insuring proper operation. It is also recommended that each bilge pump be periodically tested by filling the immediate bilge area with water, to ensure the pump(s) and float switch(s) and or high water alarms (if equipped) are operating as designed.

GROUND TACKLE

Primary anchor: Danforth type, Sized: # 12 with undetermined length of raw chain and undetermined length of what appears to be three strand 1" anchor line, Anchor/rode shackle pins are all properly seized.

AUXILIARY SAFETY EQUIPMENT

First aid kit: Yes.
Smoke detector(s): None sighted.----- Since 2004, NFPA 302-12.3 has recommended RV tested or more recently marine tested Smoke Detection devices for all vessels 26 ft (8m) or more in length with accommodation spaces intended for sleeping and is installed and maintained according to the manufacturer's instructions.
Carbon monoxide detectors: CO Detector located at Main Salon would not power up or test properly. **RECOMMENDATION:** Investigate and repair CO detector as necessary to make fully operational. *NOTE: During the burning of any of fuels, Carbon Monoxide (CO) gas may be created due to incomplete combustion from propulsion systems, cabin heater 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. Unlike smoke, CO is odorless and colorless and can't be detected by a human. CO is a silent menace and kills without warning, Regular testing of installed CO detectors in any occupied spaces below decks is highly recommended. Also, remember that CO alarms have a limited life span - five years according to most manufacturers. Check the manufacture date on the CO detectors on board and replace as recommended by the manufacturer.*

AUXILIARY EQUIPMENT

MISCELLANEOUS EQUIPMENT & ACCESSORIES

Dock lines: Multiple assorted length dock lines.
Fenders: Several fenders of various sizes sighted and appear serviceable.
Miscellaneous other: Boat hook, One folding canvas chair.

SEA TRIAL RESULTS

SEA TRIAL DETAILS

Date & Time: 8/26/2010 starting at 2PM and returning to slip at 3PM.
Vessel operated from/to: Vessel assigned slip to Lake Michigan and returning to assigned slip.
Attendees: Mark _____ of Pier 33 and Bob Ptak, AMS the attending surveyor.
Vessel operated by: Mark _____ of Pier 33.
Sea water temperature: 74F at the slip.
Ambient air temp: 81F.

SEA TRIAL DOCKSIDE OBSERVATIONS

Start Engine Hours: Port engine starting hours: 491.5, Starboard engine starting hours: 498.2.
Engine alarms: Both engine alarms were fully functional with ignition key on before starting engines.
Cranking: The engine(s) started without excessive cranking.
Exhaust smoke: The engine(s) exhaust smoke was minimal at dock side.
Cooling water: The cooling water exhaust appeared adequate and normal at dock side.
Instruments: The engine instruments all operated and within normal operating limits at idle. (See "Engine Instrument Readings" below.)
Shaft Creep: There was NO noticeable shaft creep with engine(s) running and with gears in neutral.
Stuffing Box/Log: Could not adequately sight due to location directly under engines.
Rudder packing glands: Rudder packing gland on port side showed minimal leak as previously reported. This should be corrected.
Leaks: There were no oil, coolant or other leaks observed during or after the sea trial.

UNDERWAY TESTS / OBSERVATIONS

Instruments: The engine instruments all operated and within normal operating limits at various speeds and at maximum throttle during the sea trial. (See "Engine Instrument Readings" below.)
Throttle levers: *The throttle levers were not in a similar position when operating at wide open or other speeds. The port throttle lever was much farther forward than the starboard. RECOMMENDATION: Have throttle linkage checked and adjusted as necessary.*
Transmissions: The transmissions operated normally/smoothly.
Vibrations: There were no excessive vibrations noted at any time during the sea trial run.
Exhaust smoke: The engine(s) exhaust smoke was minimal and appeared normal throughout the sea trial.
Cooling water: The cooling water exhaust appeared adequate and normal during the sea trial. Temperature gauge also reflected an adequate amount of cooling water.
Synchronizer: The engines synchronizer operated properly when tested.
Compass: Compass operated properly and appeared to continually showed correct headings thru out the sea trial.
Trim tabs: Trim tabs were fully functional.
Backdown: The back down test was satisfactory. Engine mounts secure & No unusual movement of the engine(s) was sighted.
Steering: The steering system operated normally/smoothly from stop to stop in wide sweeping turns.
Start in gear: The engine(s) properly would not start in Forward or Reverse gears. *Note: This was tested in open water in case of failure.*
Max Throttle: *Manufacturer 's recommended max RPM is 4000-4400. The port engine only read 3900 RPM during WOT check. The Starboard engine read 4200 RPM. This is likely related to the throttle linkage being out of adjustment as previously reported. RECOMMENDATION: Have serviced and rechecked after repair.*
Ending hour meter(s): Port engine ending hours: 492.7 Starboard engine ending hours: 499.1 Both engines hour meters were functional during the sea trial. Port and starboard engines hour

meters appeared to be properly incremented during the sea trial.

SEA TRIAL ENGINE INSTRUMENT READINGS

RPM: Port/Stbd= IDLE: 775 / 1000 CRUISE: 2500 / 2500 WOT: 3900 / 4200.
Above readings are all within the normal range. (Port idle was low but related to linkage finding as previously reported.)

VOLTS: Port/Stbd= IDLE: 12.5 / 14.0 CRUISE: 13 / 14 WOT: 13 / 14.
Above readings are all within the normal range.

WATER TEMP: Port/Stbd= IDLE: 170F / 170F CRUISE: 170F / 170F WOT: 170F / 170F
Above readings are all within the normal range.

OIL PRESSURE: Port/Stbd= IDLE: 40 / 40 CRUISE: 41 / 42 WOT: 45 / 45
Above readings are all within the normal range.

SPEED at WOT: Max speed obtained at wide open throttle (WOT) was 34 MPH (into the wind/waves),
The speed attained at Wide Open Throttle (WOT) is considered within the normal range.

SEA TRIAL ENGINE TEMPERATURE READINGS

Top of Risers: Port engine: Inboard side temp= 81F. Outboard side temp= 97F;
Starboard engine: Inboard side temp= 97F. Outboard side temp= 82F
The temperature readings were taken shortly after the WOT checks and the differentials are within normal range.

Exhaust manifold: Port engine: Inboard side temp= 97F - 82F.
Starboard engine: Inboard side temp= 97F - 98F
The temperature readings and the differentials are within normal range.

Transmission case: Port engine: 109F, Starboard engine: 109F.
The temperature readings are within normal range.

Engine Temperature comments: All temperature readings were conducted using a Raytek Model MT4 laser sighted infrared thermometer. Temperatures listed are in Fahrenheit. All above relative temperatures are considered to be within normal levels and were obtained with engine(s) RPM at 2000 RPM.

INSPECTION RECOMMENDATIONS SUMMARY

PRIORITY I - SAFETY & REGULATORY RECOMMENDATIONS

The items listed are required by state or federal laws and U.S.C.G. regulations or are considered by the attending surveyor to represent unsafe operating conditions at time of survey. Recommend these items be corrected before next use of vessel.

SAFETY EQUIPMENT

U.S.C.G. REQUIRED

USCG placards:

1. MARPOL (Garbage) placard not sighted. This is required for any vessel 26' or longer.

RECOMMENDATION: Acquire and post an official USCG approved Trash Disposal Placard near waste area to comply with USCG regulations 33 CFR 151.59.

PRIORITY II - MAINTENANCE & STANDARDS RECOMMENDATIONS

These are important maintenance items sighted at time of survey which in this firm's opinion should be performed. They may also include recommendations to conform to current ABYC and NFPA-302 voluntary standards which may not have been in effect or may not have been adhered to by the builder when the vessel was constructed. Some of these, if not addressed, could lead to a Priority I safety issue and/or may result in a reduced vessel market value.

EXTERIOR HULL & BOTTOM INSPECTION

RUDDER(S)

Rudder type:

1. Some fore/aft rudder play on port side rudder. RECOMMENDATION: If rudder leaks, have rudder mounts checked for excess wear and repair as necessary. See sea trial section - for more info.

TOP DECK & SUPERSTRUCTURE

MAIN DECK & FITTINGS

Moisture/Delamination:

2. Most of the top deck had normal relatively Dry moisture meter readings. Higher than normal moisture readings found in deck surface as follows: (Most marked with tape for clarity or use of arrows/circles on photo)

- 1) Foredeck area near windlass
- 2) Near anchor locker
- 3) Port side near port light and stainless steel rail support
- 4) Slanted area in front of windshield.

Percussion hammer used to test deck surface and no apparent delamination was found in any high moisture areas. Deck is not spongy or soft and is solid under foot. It is not unusual to discover some deck moisture in older vessels. RECOMMENDATION: To seal off deck from further moisture penetration, deck fittings near elevated moisture areas should be removed and resealed.

Windlass:

3. Foot controls tested and found the UP control OK but the Down control is not operational with foot control or from helm. RECOMMENDATION: Have the Down controls checked and repaired as necessary to make fully operational.

Shore fresh water inlet:

4. The fresh water inlet is not secured to hull and is loose. RECOMMENDATION: Have the inlet fitting secured to prevent possible future leaks.

CABIN INTERIOR APPOINTMENTS

Surveyed for: Ms. Mary Brown - 1998 Sea Ray 33' Sundancer 330

Report file #: Bob P - Sample

Surveyed by: Lakeshore Professional Marine Surveys LLC, Jenison MI

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MAIN SALON

Headliner:

5. The headliner on the starboard side in main cabin area is not well secured to top deck.

RECOMMENDATION: Secure headliner to cabin top.

ELECTRICAL SYSTEMS

D.C. ELECTRICAL SYSTEMS

Battery selector switch:

6. Not equipped. RECOMMENDATION: ABYC E-11.7 recommends a battery switch be installed for each battery or bank with a CCA rating of 800 Amps. Recommend compliance for safety reasons.

PROPULSION SYSTEM

TRANSMISSION(S)

Fluid level and condition:

7. The port transmission dip stick does not fit very tight in the transmission case.

RECOMMENDATION: Consider replacement to prevent it from possibly "jumping out" in rough seas.

STEERING SYSTEM

STEERING SYSTEM

Packing glands:

8. Very small leak sighted on port side rudder packing gland. RECOMMENDATION: Have packing gland adjusted to prevent any leakage.

SAFETY EQUIPMENT

AUXILIARY SAFETY EQUIPMENT

Carbon monoxide detectors:

9. CO Detector located at Main Salon would not power up or test properly. RECOMMENDATION: Investigate and repair CO detector as necessary to make fully operational.

SEA TRIAL RESULTS

UNDERWAY TESTS / OBSERVATIONS

Throttle levers:

10. The throttle levers were not in a similar position when operating at wide open or other speeds. The port throttle lever was much farther forward than the starboard. RECOMMENDATION: Have throttle linkage checked and adjusted as necessary.

Max Throttle:

11. Manufacturer's recommended max RPM is 4000-4400. The port engine only read 3900 RPM during WOT check. The Starboard engine read 4200 RPM. This is likely related to the throttle linkage being out of adjustment as previously reported. RECOMMENDATION: Have serviced and rechecked after repair.

OTHER OBSERVATIONS & RECOMMENDATIONS

These are other less significant maintenance items or observations discovered at time of survey, that if not addressed, could lead to more important priority issues and/or could lead to a reduced vessel market value. The cost of addressing these recommendations is generally minimal.

EXTERIOR HULL & BOTTOM INSPECTION

HULL EXTERIOR-SIDES

Rub rail:

1. Rub rail is stainless steel with backing of white plastic. Well secured in good condition with only minor scrapes. An area on the starboard side shows a flattened portion of stainless steel rail but all remain serviceable.

HULL BOTTOM

Construction material:

2. Bottom was dirty and not power washed. All bottom observations were made with the bottom covered with some dried algae/marine growth.----- Recommend full bottom inspection when vessel can be hauled out and power washed.

Strainers/Scoops/Screens:

3. Port side strainer is bent and one vane is missing but remains serviceable. Replace as desired.

INTERIOR HULL & STRUCTURAL INSPECTION

HULL INTERIOR & STRUCTURAL COMPONENTS

Bilge(s):

4. Clean but with an inch or two standing clean water. ----- Keep bilge areas as dry as possible by identifying and eliminating the source of all water intrusion as soon as it is discovered.

HELM & NAVIGATION ELECTRONICS

ENGINE INSTRUMENTS AND CONTROLS

Panel lights:

5. Could not sight due to brightness of day. ----- Check after dark to verify panel lights are all functional.

CABIN INTERIOR APPOINTMENTS

GALLEY

Stove:

6. Safety switch is functional but sticks in down position.---- Switch may need some light lube so it comes up when glass top cover is raised.

ELECTRICAL SYSTEMS

GENERATOR

Cooling system(s):

7. Coolant level low in tank for generator. ----- Top off coolant reservoir and monitor frequently for leaks.

PROPULSION SYSTEM

MAIN ENGINE(S)

Drip pad(s) :

8. No Pads in place beneath engine(s). Fluids and debris fall into bilge area. ----- Consider installing drip pads beneath engine(s) to catch fluid drippings and rapidly identify leaks of any kind.

SAFETY EQUIPMENT

FIRE FIGHTING EQUIPMENT-U.S.C.G. Required

Fixed /Clean Agent:

9. One USCG approved Halon 1301 automatic fire extinguisher, Gauge reads full. Located: in the engine compartment, Fixed fire extinguisher in engine space has outdated or no certification tag. ----- ABYC A-4 and NFPA 302 recommends that fixed fire protection systems be inspected and reweighed at one year intervals and tagged accordingly. Recommend compliance.

AUXILIARY SAFETY EQUIPMENT

Smoke detector(s):

10. None sighted.----- Since 2004, NFPA 302-12.3 has recommended RV tested or more recently marine tested Smoke Detection devices for all vessels 26 ft (8m) or more in length with accommodation spaces intended for sleeping and is installed and maintained according to the manufacturer' s instructions.

CONDITION & VALUE REPORT SUMMARY

DECLARATION

OVERALL CONDITION & VALUE:

- RATING OF VESSEL CONDITION.....AVERAGE CONDITION+
- ESTIMATED FAIR MARKET VALUE.....\$ 63,400.
- ESTIMATED REPLACEMENT COST.....\$ 280,000
- INTENDED USE OF VESSEL.....Pleasure- Lake Erie.
- SUITABILITY FOR INTENDED SERVICE: Vessel IS considered fit for it's intended use and upon correction of all listed Priority I recommendations.

NOTE: All "Priority II" and "Other Observations" should be thoroughly reviewed to bring vessel up to current standards and or improve the value of the vessel.

Rating of vessel condition was determined at time of survey upon completion and review of all reported survey information including recommendations and comparing vessel to the same or similar age models. Possible vessel condition ratings are as follows:

- **EXCELLENT** - Essentially as new or bristol in appearance.
- **ABOVE AVERAGE** - Has had above average care with no obvious limitations.
- **AVERAGE** - Ready for sale. May need some maintenance, updates or cleaning.
- **FAIR** - Needs a fair amount of maintenance or repairs to prepare for sale.
- **POOR** - Needs substantial yard work, or repairs before use.

Estimated fair market value is the attending surveyors opinion based on open market data of 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 such as special or creative financing or sales concessions granted by anyone associated with the sale.

The estimated fair market value is a Market Based Valuation for the vessel in it's condition at time of survey prior to any repairs or maintenance and includes all reported auxiliary equipment. The valuation was determined by cross referencing data from Soldboats.com, BUC, ABOS, Yachtworld or PowerBoat Guide and other brokerage listings or local dealers. Commercially published used boat price guides such as those mentioned, rely heavily on archived data. Recent market changes have not been fully realized in their stated values. As such this surveyor has adjusted any published historical amounts to more accurately reflect current market conditions. Adjustments are then made for condition or equipment as necessary.

Estimated replacement cost was determined using information obtained from BUC, ABOS or local dealer prices using the same or similar make and model with similar equipment options.

REPORT SUMMARY & CERTIFICATION

CLOSING STATEMENT & SIGNATURE

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

- I have made a personal inspection of the vessel that is the subject of this report.
- This signed and sealed report represents the complete inspection findings at time of the survey and supercedes any and all conversations, statements and representations whether verbal or in writing.
- The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions as outlined in the signed Marine Survey Work Order. If this survey does not discuss a specific item, equipment or machinery, it is not covered by this survey.
- 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 the occurrence of a subsequent event.

This survey report:

- This survey report is sole property of Ms. Mary Brown without prejudice to the rights and/or interests of other concerned parties and is valid for the day of the survey only.
- This survey report is to be used as an entire document. No single section is meant to be used except as part of the whole and is copyrighted to the surveyor and can only be used by third party users with written consent of the owner. No third party warranty of any kind exists.
- This survey report is not transferable except for Ms. Mary Brown purpose of insuring, financing or repairing the vessel and may not be used for any other purpose or relied upon by any other person.

ATTENDING SURVEYOR:



Bob Ptak, AMS #842 - S.A.M.S.
Member Society of Accredited Marine Surveyors



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