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Bolz & Bolz Marine Survey Company

"2002 Sea Ray 340 w twin Mercury 8.1S Horizon engines"

"Sample 2002 Sea Ray 340"

INDEPENDENT MARINE SURVEY SERVICE

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Report of Marine Survey

Of The Vessel

"Sample 2002 Sea Ray 340"

"2002 Sea Ray 340 w twin Mercury 8.1S Horizon engines"

Conducted by
Brad Bolz

for
Anonymous

August 21, 2020

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I. INTRODUCTION

SCOPE OF SURVEY

Acting at the request of Anonymous, the attending surveyor did attend onboard the "2002 Sea Ray 340 w twin Mercury 8.1S Horizon engines", "Sample 2002 Sea Ray 340" beginning on August 21, 2020 from 8 am to 12:36 pm, where an "in-and-out-of-the-water-survey" was conducted at , Slip W1, Marine Max @ Lake Ozark, Missouri. The ship's papers were on board. Maintenance records were not available.

The Hull Identification Number (HIN) was verified 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. The reason for the survey was to ascertain the value and condition of the vessel for pre-purchase purposes. Moisture readings were not taken. AC & DC power was used to check operation of the electrical systems specified in this report. 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 and otherwise inaccessible areas precluded 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.

Unless otherwise specified, capacity information, general measurements and other specifications come from sources other than direct measurement. I use owner's manuals, manufacturer's websites, www.BUC.com, the USCG documentation websites and other sources for particular model specifications. If I actually physically measured something, I'll state that in the report.

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 deficiencies reported herein reflect the conditions observed at the time the survey was conducted.

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

I. INTRODUCTION

This report's photographic images were taken using a Samsung Galaxy S20 Ultra phone camera which uses a hybrid optical zoom and features a wide angle lens which can extend as wide as 140°.

Because so many of these boats are surveyed in extreme lighting conditions, I use a color match light such as the Braun CRI (Coloring Rendering Index) 95+ which seems to allow my photographs to more accurately represent the colors and condition of the object being photographed. The strength of the wide angle lens is being able to take a single image of a cabin space. The deficiency is that if there is not enough light, it can be very difficult to get a close image in focus because of the wide angle lens.

The most significant deficiency of these additional light sources is that around the edges of their output, you can often see the colors of the rainbow. The lens produces a circular shaped output up to 455 lumens strong. In some instances, you'll be able to see the effect in the periphery of my images.

My images are often lightened and corrected for coloration but in no case will an image be intentionally produced which does not represent the object being photographed. I will occasionally insert arrows or draw circles or indication lines in the image in order to highlight the area I want emphasized. Most of the time but not always, I will retain the original image in a computer file.

VESSEL DESCRIPTION

This is a 2002 Sea Ray 340 with twin Mercury Mercruiser 8.1S Horizon 496 cubic inch displacement gasoline powered engines. The boat has exceptional eye appeal. She features a mooring cover which extends from the forward most portion of her windshield to her aft bulkhead.

She's in exceptional condition with very few deficiencies. The port side propeller shaft strut has been removed and replaced at some point in the near past and shows evidence of leaking.

She was surveyed while in her slip, W1 at Marine Max in Lake Ozark, Missouri.

II. GENERAL INFORMATION

GENERAL INFORMATION

FILE NUMBER:	**Sample 2002 Sea Ray 340 08-21-2020 HIN SERT9863D202**
SURVEY PREPARED FOR:	**Anonymous**
NAME OF VESSEL:	**"Sample 2002 Sea Ray 340"**
TYPE OF SURVEY:	**Pre-purchase**
OVERALL VESSEL RATING:	**Above Average**
ESTIMATED MARKET VALUE:	**$ 74,900**
ESTIMATED REPLACEMENT COST:	**$ 327,000 per BUC ValuPro**
YEAR BUILT:	**April 2002**
MODEL YEAR:	**2002**
HULL IDENTIFICATION NUMBER	**Unknown**
OFFICIAL NUMBER:	**Anonymous**
STATE REGISTRATION	**Anonymous**
FOR:	**for**
SURVEY REQUESTED BY:	**Anonymous**
PLACE OF SURVEY:	**Slip W1, Marine Max @ Lake Ozark, Missouri**
HULL MATERIAL:	**Fiberglass**
HULL TYPE:	**Modified Deep vee**
LENGTH OVER ALL (L.O.A.):	**36' 3"**
BEAM:	**11' 5"**
DRAFT:	**3'**
DEPTH:	**6'**
DISPLACEMENT:	**13,000 lbs**
GROSS TONS:	**15 gross tonnes**
NET TONS:	**12 net tonnes**
PROPULSION SYSTEM:	**Mercury Mercruiser MiE 8.1 S Horizon 496 cubic inch displacement gasoline engine**
FUEL TYPE:	**Gasoline**
FUEL CAPACITY:	**One tank was 116 gallons, other tank information was obscured. Sea Ray shows 225 Gallons overall.**
AC POWER:	**125 Volt, 30 amps via Shore Power or Generator**
DC POWER:	**12 volt negative ground lead acid batteries**
FRESH WATER CAPACITY:	**40 gallons**
HOLDING TANK:	**20 gallons**
INTENDED USE/BUYER:	**Recreational Boating**

DEFINITION OF TERMS

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

FIT FOR INTENDED USE:
Use which is intended by Survey Purchaser (present or prospective owner).

DEFINITIONOF TERMS:*(continued)*

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.

Very Good Condition:
Nearly new, with only minor wear or structural discrepancies noted.

Good Condition:
A vessel in above average condition with expected wear & tear.

Average Condition:
A vessel in average condition, most vessels fit into this category.

Fair Condition:
A vessel that is functional but shows wear & tear in most areas.

Poor Condition:
Requires repairs or replacement of various system components to be considered fully functional. Does not preclude usage but requires constant attention to ensure safe operation.

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

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

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

HULL DECK AND SUPERSTRUCTURE

HULL CONSTRUCTION

ANCHOR INFORMATION: The anchor is a galvanized plow style with Progressive windlass which can be operated remotely from the bow of the ship or from the helm. The anchor's rode is chain & rope. The windlass powered on from the remotes and the helm station.

The remote's cover plates are beginning to waste. At this time, they appear to be sound but it is self evident that the sun has taken a toll on their structural strength.

Anchor Remote Controls

Anchor Starboard

LIMBER HOLES: Where sighted, limber holes were open and clear.

MOISTURE CONTENT: The vessel's exterior hull was not tested for moisture content because not enough time lapsed between pull out and my inspection. The wetted surface of the vessel was not given time to dry.

RUB RAIL: The rub rail was without obvious blemish.

DECK CONSTRUCTION

COCKPIT: The cockpit features L shaped seating aft of the captain's and navigator's seat. The captain's seat provides room for the captain, the navigator's bench type seat could accommodate two. There's a small galley in the cockpit.

The cockpit has flat wiring running around some of it's sole's exterior and the captain - navigator's area. This wiring provides blue light when triggered by a rocker switch at the far starboard edge of the helm station. A portion of this wiring no longer provides blue light and has pulled away from the cockpit sole's bulwark.

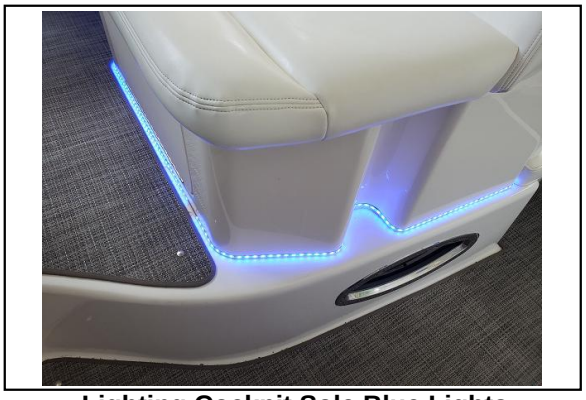
Cockpit Overview

Cockpit Galley Overview

HULL DECK AND SUPERSTRUCTURE

DECK CONSTRUCTION *(continued)*

*** COCKPIT:** ***(continued)***



Lighting Cockpit Sole Blue Lights

DECK FITTINGS

BOW PULPIT (BOW RAIL): The bow rail was solid.

*** VENTILATION:** The vessel has quite a bit of ventilation capability. There are 2 port holes on each side. There are 2 deck hatches which ventilate the cabin and a larger deck hatch which opens over the master berth's pedestal bed. This master berth hatch has trim work that is separating. Additionally, you could open the entry doorway from the cockpit and of course, you have air conditioning. The aft berth has a window which opens to the sole of the cockpit.

[B.1] The master berth's ventilation hatch has trim that is separating.

SCUPPERS: Where sighted, scuppers and their drain hoses appeared to be clear and clean.

CLEATS & LINES: Cleats are 316L Stainless Steel

Lines Very Adequate

SUPERSTRUCTURE

SWIM PLATFORM & LADDER: The swim ladder articulated in and out easily. The swim platform is solidly attached and covered with SeaDek.

JOINERY STRESS: No sign of joinery stress was found.

MOORING COVER: The mooring cover is light brown canvas and covers the cockpit from the front of the windshield to the aft bulkhead.

HULL DECK AND SUPERSTRUCTURE

BRIDGE DECK

BIMINI: A light brown bimini top extends forward and aft of the radar arch. It's support structures were solid and in serviceable condition. The canvas portion at the aft port side shows sign of having been repaired by virtue of an area approximately six inches square which shows extensive stitching. A ring that holds a pin in the bimini's support structure has lost it's attachment wire. The attachment wire prevents the ring from being lost overboard. Replace this to maintain value and aid in the boats appearance.

Bimini Top Pin Wire Loose

Bimini Top Stitched Repair

WINDSHIELD: The windshield was without obvious blemish. It's a Taylor Made Clear Curve. Ventilation to the cockpit is aided by the electronically controllable low center positioned vent.

ADDITIONAL EQUIPMENT AND ACCESSORIES

FENDERS: Fenders are an amazing orange color produced by Poly-form. They are adequate in size and number for normal docking situations. Four of the fenders are mounted in brackets on the foredeck, giving this vessel an immediate unsurpassed recognition factor.

Fender Information Polyform

Fenders Very Adequate

CABIN ACCOMMODATIONS: The cabin integrates the aft berth, the stairway entrance, the head, the galley and the master berth. The cabin itself features a pull out on a rail couch that makes into additional sleeping area.

HULL DECK AND SUPERSTRUCTURE

ADDITIONAL EQUIPMENT AND ACCESSORIES *(continued)*

*** CABIN ACCOMMODATIONS: *(continued)***

Cabin Starboard

LIGHTS POWERED ON: Lights powered on throughout the vessel with the exception of the aft port light in the aft berth.

Light did not Power On

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:

MASTER BERTH: The master berth features a pedestal bed with privacy curtain. The foredeck hatch is located directly over the bed allowing moonlight and sunlight entertainment.

Berth Forward Pedestal Bed

CABIN APPOINTMENTS

INTERIOR DESCRIPTION: ***(continued)***

AFT BERTH: The aft berth makes into a full size bed and has a privacy curtain.

One light did not power on in the aft berth.

Berth Aft

* **STORAGE AREAS:** The aft storage area at the swim platform has a rubber gasket that is beginning to shrink and has slightly pulled away (1/2 inch) from a corner of the area it is protecting.

The cabin and other areas of the boat provide considerable storage space.

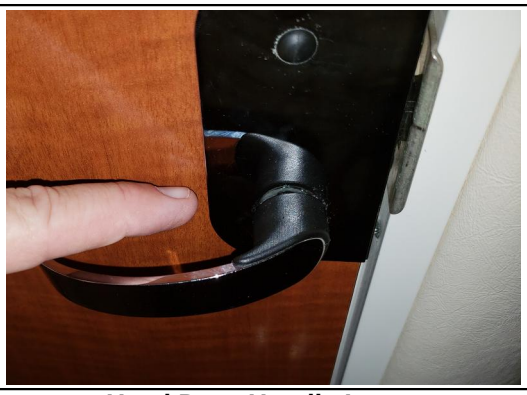
[C.1] The aft bulwark's storage space has a gasket which has begun to shrink.

* **HEADS:** There is a head with manually operated Vacu-flush toilet. There is a single basin molded fiberglass sink with extending faucet which doubles as the shower head. Ventilation is aided by a porthole. The lights powered on and an air conditioning vent was allowing cool air into this area.

The door handle to the head is slightly loose.

[C.2] The door handle to the head is slightly loose.

Head Overview



Head Door Handle Loose

CABIN SOLE: The cabin's sole provides storage space and houses the shower's sump pump. The storage areas were dry.

CABIN APPOINTMENTS

INTERIOR DESCRIPTION: *(continued)*

AIR CONDITIONING UNITS: Air conditioning is provided by TaylorMade's Cruiseairrrrrrr division which provides the 12,000 BTU unit, model SXR12-R4, serial # D020001.

Reverse Cycle System
(12,000 BTU - 1-Ton)
Custom Integral Vent System

The cooling flow of water appeared to be adequate.

TELEVISIONS: Entertainment via TV is provided by a large flat screen unit located at the aft of the cabin. Additionally, a factory installed TV/VCR/Radio Combo, 13" w/Remote & Outlet for Antenna & TV Coax to Dockside

STEREO, ETC.: The radio system powered on. It's a Clarion radio controller at the helm backed up by some awesome speakers built into the radar arch, etc..

GALLEY

GALLEY INFORMATION: The galley sits on the port side of the cabin. It features a Sylvania microwave, a 2 burner Kenyon electric stove, a Norcold refrigerator / freezer and a single basin molded sink faucet, a Black & Decker coffee maker and Corian countertop. The sink's drain collar is corroded from what appears to be hard water staining. The refrigerator's vinyl coated shelves are somewhat corroded and should be replaced to maintain value.

All appliances powered on using shore power or generator. The generator was able to power on the microwave, the 2 burner electric stove, the refrigerator, the lights and the air conditioning at the same time. I doubt the microwave would have heated a glass of water, but power was provided to everything, which is remarkable.

The cockpit's miniature galley has a single basin sink with faucet, a fiberglass countertop and a non-functioning ice maker.

Galley Microwave on Generator

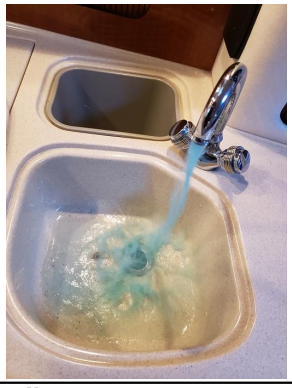
Galley Norcold Refrigerator Grates are

CABIN APPOINTMENTS

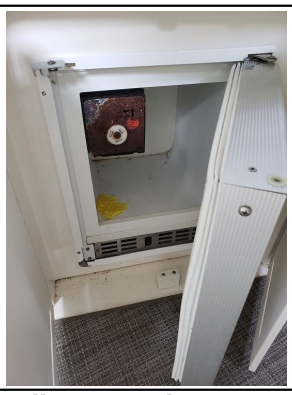
GALLEY*(continued)*

*** GALLEY INFORMATION: *(continued)***

Galley Stove on Generator



Galley Water Powers ON



Cockpit Galley Ice Maker Does Not Work

Cockpit Galley Overview

PROPULSION

MAIN ENGINES

ENGINE INFORMATION: The engines are Mercury Mercruiser MiE 8.1 S Horizon models, 496 cubic inch displacement and are gasoline powered. When new, they were designed to create 370 horsepower each.

Their WOT range is from 4200 to 4800 RPM and at idle with the boat in gear, the engines should be around 650 RPM.

The engines show 357 hours usage Port side and 356.7 hours usage Starboard.

The serial number information is missing from the plastic cowling that is present on each engine.

The numbers I show in the photos are not engine serial numbers, I provided you a photo of the information so you would know these were not your engine numbers.

I obtained the serial numbers by calling Sea Ray.

The port engine serial # is: 0M312562 and the starboard engine serial # is: 0M312563

The engine compartment's blower hoses powered on. They were tied in place and their ends open.

The engine's exhaust hoses were double clamped per ABYC & USCG requirements.

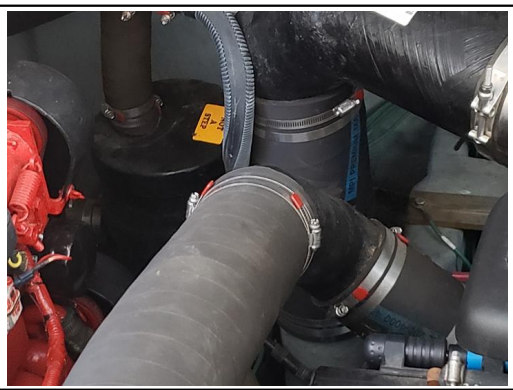
There is very little unused space in your engine compartment.

Some standing water was observed in the port side of the area. I did not find an explanation for the standing water until the vessel was hauled out. See that section of the report, which shows the propeller shaft strut photograph.

Exhaust Hoses Double Clamped

Engine Port Overview

Engine Starboard Overview



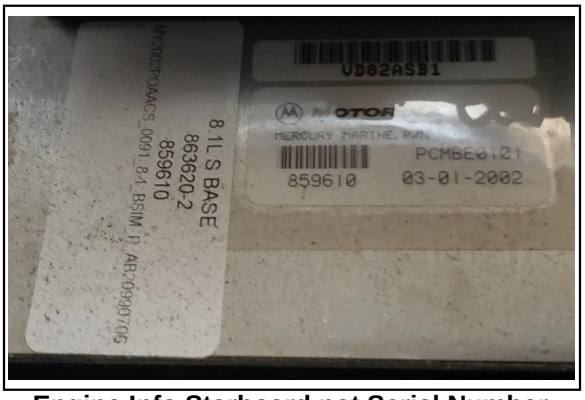
Engine Exhaust Hoses Double Clamped (2)

PROPULSION

MAIN ENGINES *(continued)*

*** ENGINE INFORMATION: *(continued)***

Engine Compartment Overview



Engine Info Starboard not Serial Number

*** PROP SHAFTS:** The propeller shafts were tested during the haul out portion of the survey and found to be rock solid. The propellers had no movement in them and they appeared to be without deficiency. The propeller strut on the port side appeared to have been removed and replaced recently because white silicone was hanging loose. The starboard strut appeared to be original installation.

Because this area is under the engine, I was not able to obtain a photograph of the bolts & nuts from the engine compartment. There was standing water immediately next to where I believe the strut comes through the hull.

The prop shafts do not have sacrificial anodes attached.

[A.1] The port propeller strut appears to have been removed and replaced recently. It seems likely that this strut is the source of the water in the port side of the engine compartment.

Propeller Info Port

Bottom Prop Shaft no Anodes

PROPULSION

MAIN ENGINES *(continued)*

*** PROP SHAFTS:** ***(continued)***

Bottom Prop Strut has had Maintenance

ENGINE SYNCHRONIZER: The engine has a gauge allowing you to manually synchronize the engines, it is not an electronic function that synchronizes the engines for you.

FUEL SYSTEM

MAIN ENGINE(S) FUEL SYSTEM

FUEL TANKS: The port fuel tank was visible, the starboard tank was not. The port side fuel inlet hose was solid. I could not see the upper end of the hose to ensure it was double clamped, the end that attaches to the fuel tank was double clamped per ABYC & USCG standards. Having one of these hoses come off and then pouring fuel into your boat is a bad idea so when able during scheduled maintenance, you should have a mechanic remove the necessary "whatever" and have them ensure the fuel inlet hoses are all double clamped.

Fuel Tank Inlet Hose Double Clamped

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (DC SYSTEM)

*** BATTERIES:** The batteries are 12 volt lead acid negative ground batteries. Their positive terminals were covered but the rubber gasket used does not fully cover the terminal because battery manufacturers have changed the style of the terminals, by adding an additional post.

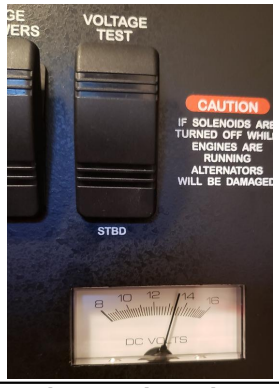
The batteries are maintained by an inverter / charger manufactured by Inteli-Power. Their model # PD2130, 30 amp.

[A.2] The batteries positive terminals are not fully covered to prevent accidental shorts.

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (DC SYSTEM) *(continued)*

*** BATTERIES:** ***(continued)***

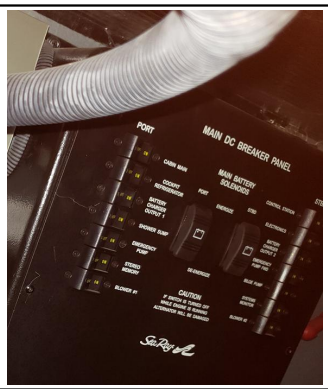


Batteries Starboard 14 Volt

Battery + Terminals not Covered (2)

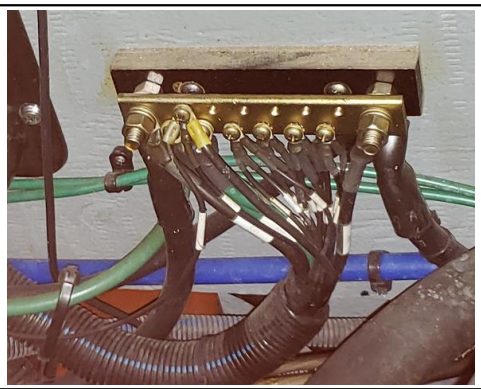
BREAKERS/FUSES: The breaker for the AC & DC electricity is located in the cabin. There is a DC panel in the engine compartment. Fuses are located at the helm near the captain's shin.

Breakers AC & DC



Breakers DC in Engine Compartment

BONDING SYSTEM: The ship's electrical system is bonded together to prevent electrolysis and galvanic corrosion. The wires and the bus appeared to be without corrosion.



Bonding System Intact & Clean

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (AC SYSTEM)

SHORE POWER INLET: The vessel appears to come with two shore power cables, each providing 120 volt and 30 amp service. Their ends appeared serviceable.

It's important to realize that the AC electrical breaker has 2 legs, each providing power to different portions of the vessel. Your air conditioning will be on a specific leg so if you choose to only use one shore power cable, it's possible that the air conditioning unit is powered by the other leg.

The generator provides power to both legs.

Shore Power Cables Two

OUTLETS: Outlets in wet areas are protected by GFCI. The "on-deck" outlet is further protected by a self closing cover. I tripped the GFCI outlet and it was able to be reset. No polarity issues were noted.

Electrical Outlets are GFCI

GENERATORS AND INVERTERS

GENERATOR INFORMATION: The generator is a 4.5 KW gasoline powered Westerbeke. The unit has 934.7 hours usage and was manufactured in March of 2002. It is engine serial number 220971-C203.

4.5 KW is insufficient to power the air conditioning, the electric stove's burners, and microwave. You will need to observe power management in order to cook, etc..

It showed 220.1 hours usage. The generator can be started at the breaker box. It started easily. It is raw water cooled and the flow of water appeared to be adequate.

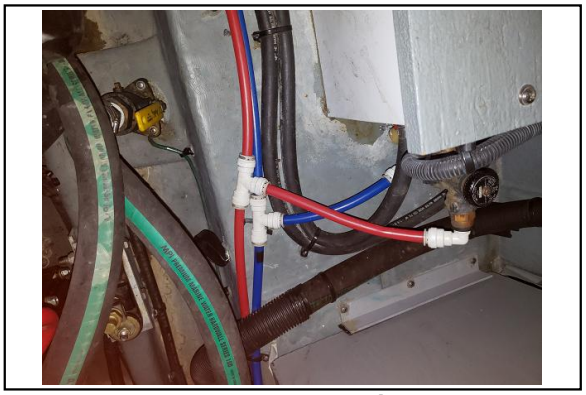
FRESH WATER SYSTEM

FRESH WATER SYSTEM: (POTABLE WATER)

* **FRESH WATER SYSTEM:** The water system was tested by turning on the faucet at the galley sink. Green winterizing fluid came rushing out and I did not test anything further. The water gauge at the AC / DC Breaker showed that the water tank was empty.

  There is a water spigot at the swim platform located inside the aft storage tank on the port side. This faucet is missing its turn handle.

  [C.3] The water spigot at the aft storage compartment is missing its turn handle.

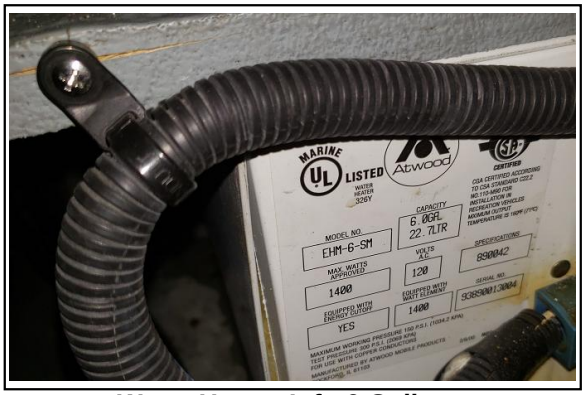


Water Hoses Modern

Water City Handle Missing

FRESH WATER SYSTEM (HOT WATER SYSTEM)

WATER HEATER INFORMATION: The water heater is an Atwood, 6 gallon capacity. Model EHM-6-SM. Serial # 93890013004.



Water Heater Info 6 Gallons

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AT THE HELM STATION: The helm features all the normal gauges and adds a Garmin EchoMap SV chart plotter. There is a Lowrance 3500 depth finder and a Jabsco search light.

Oil pressure
Water temperature
Voltage
Fuel levels

I ran the engines prior to the sea trial and the oil pressure was nearly identical port to starboard at 40 psi. The water temperature however, while within the expected operating range of 150 to 170 degrees Fahrenheit, the port engine was cooler by roughly 20 degrees. I have no way of knowing if the difference is due to faulty gauges or if the engines are putting out different levels of heat.

Additionally, there is a 4" Ritchie compass and Uniden UM415 VHF radio. Because you are moving the boat to a different geographic region and it is possible that you would take her into salt water, far away from shore..... you should take the time to adjust the compass. From Missouri to Florida there is more than 6 degree difference in heading indication due to the varying strength of the earth's magnetic influence.

Helm Overview

Helm Fire Extinguisher Shows Charged

THRU-HULLS

THRU-HULLS:

NOTE: All under water thru hulls where sighted were double clamped, their hoses in good shape and their sea cocks moved easily. There is no regulatory authority in the United States which requires double clamps on under water thru hull hoses, but it is simply a matter of good seamanship. If those hoses come off, you're dealing with a 1 inch hole in your boat and your bilge pumps are not designed to handle that much water.

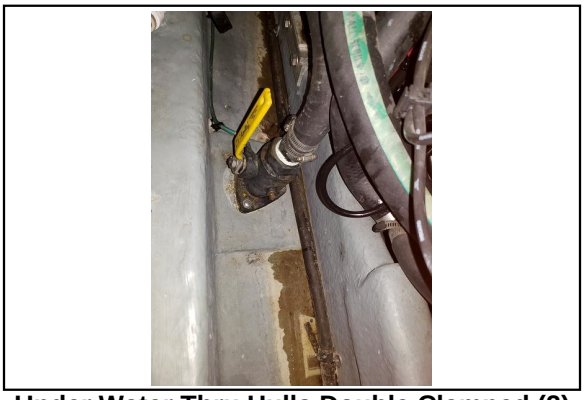
Under Water Thru Hull Clear (2)

Under Water Thru Hull Clear (3)

THRU-HULLS

THRU-HULLS: ***(continued)***

***** **NOTE:** ***(continued)***



Under Water Thru Hulls Double Clamped (2)

BONDING SYSTEM

BONDING SYSTEM

* **ZINC (HULL ZINC):** Sacrificial anodes were present on the trim tabs and they appeared to be in good condition although they were covered with marine growth and could not be directly observed.

  You should add anodes to the propeller shafts and to the rudders.

  In general terms, your boat's underwater metal fittings such as propellers, shafts, struts, thru-hulls, as well as the hulls of steel and aluminum, are susceptible to electrochemical corrosion. There are several types of corrosive influences:

  " Galvanic Corrosion -- occurs when two or more metals with different galvanic voltages are electrically connected and wetted by water. It is the result of the more active metal's natural tendency to give up electrical current to the less active metal. Galvanic corrosion may occur in fresh or salt water.

  " Stray Current Corrosion -- occurs when underwater metals are energized by an electrical current that has strayed from an electrical conductor or device powered by a battery, generator or dock power. This is the result of an electrical fault.
  "
  " You should install sacrificial anodes to protect your under water machinery from being subjected to galvanic corrosion or stray current corrosion.
  "
  " Zinc Alloy Anodes = Salt water only
  " Not recommended for use in fresh water
  " Alloy is manufactured to meet or exceed US Military Specification (MIL-A-18001K)
  "
  " Aluminum Alloy Anodes = Salt or Brackish water
  " Not recommended for use in fresh water
  " Proven to last longer than zinc due to increased capacity
  " Alloy is manufactured to meet or exceed US Military Specification (MIL-A-24779(SH))
  "
  " Magnesium Alloy Anodes = Fresh water only
  " Not recommended for use in salt or brackish water
  " The only alloy proven to protect your boat in fresh water

  Mercathode System

  The Mercury Precision Galvanic Isolator is a solid-state device that is series connected in line into the boat's green safety grounding lead ahead of all grounding connections on the boat. This device functions as a filter, blocking the flow of destructive low voltage galvanic (DC) currents, but still maintaining the integrity of the safety grounding circuit. A galvanic isolator is only necessary on boats utilizing a shore power connection.

  [A.3] The propeller shafts and rudders are not protected against stray current electricity nor against galvanic corrosion.

BONDING SYSTEM

BONDING SYSTEM *(continued)*

* **ZINC (HULL ZINC): *(continued)***

Trim Tab Starboard

SAFETY EQUIPMENT

SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

* **FIRE EXTINGUISHERS:** The fire extinguishers all showed in the green. The Sea Fire 1301 halon system in the engine compartment has a green light at the helm station which indicates the unit is charged. The helm's indicator powers on when the port engine's key is turned to the "on" position. There's also the ability to manually activate the engine compartment's fire extinguisher.

  [A.4] The fire extinguishers do not have signed inspection cards and the hand held extinguishers are not held in place in marine style brackets.

Fire Extinguisher Engine Halon 1301

VISUAL DISTRESS SIGNALS: No flares were sighted. If your area of use requires flares, you need to add them to the vessel.

If your boat becomes disabled, everyone understands that when a flare goes up, something is wrong. It is sometimes difficult to recognize hand waving as a distress signal.

Flares are not required on Lake of the Ozarks because it is a non-navigatable waterway.

SOUND DEVICES: The horn sounded.

SAFETY EQUIPMENT

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

POWER EXHAUST BLOWERS: The engine compartment's blowers powered on with their midsection still round shaped. The hoses were were tied in place by the use of plastic zip ties with their ends open.

NAVIGATION LIGHTS: The navigation lights powered on. The LED lights are much brighter than the older bulb type.

INLAND NAVIGATION RULE BOOK (12M-39'4" OR LONGER): If the boat is moved to navigatable waters, you'll need to have an inland navigation rule book aboard.

"NO OIL DISCHARGE" PLAQUE: Sighted.

TRASH DISPOSAL PLACARD: Sighted.

AUXILIARY SAFETY EQUIPMENT

SMOKE DETECTOR: No smoke detectors were sighted. Smoke detectors are not required aboard boats, but it is still a good idea to have them. National Fire Protection Association requirement 302 recommends that vessels over 26' with sleeping accommodations have a smoke detector.

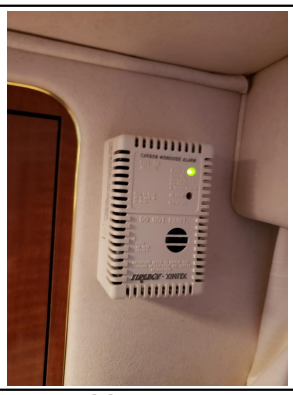
BILGE WATER ALARM AND SAFETY SWITCHES: The bilge pumps could be heard to power on. The engine compartment's pumps were located too far under the engines for access.

Bilge Water Standing

FIRST AID KIT: I did not find a first aid kit. It is a good idea to have a first aid kit appropriate to the size of the group and medical experience on board your vessel.

* **CARBON MONOXIDE DETECTORS:** The carbon monoxide detector powered on but appears to be originally installed equipment.

[A.5] Carbon monoxide detector appears to be originally installed equipment which makes it 17 years old



Carbon Monoxide Detector Powers On

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY

UNDER WATER MACHINERY: The under water machinery was visually inspected after the vessel was hauled out onto dry ground.

The rudders, propellers (18R22) & propeller shafts and struts were solid with no movement noted.

The port side propeller shaft strut appeared to have under gone recent maintenance and the silicone used to seal the unit to the hull appears to be improperly selected.

Rudder Outside View Port

Bottom Prop Shaft no Anodes

Bottom Prop Strut has had Maintenance

CONDITION OF HULL (WETTED SURFACE)

CONDITION OF BOTTOM PAINT: With the vessel out of the water and in Travel Lift slings, I was able to visually observe the wetted surface. I waited 20 minutes or so for the bottom to realize it was out of the water, waiting for blisters to appear.

The bottom appears to be in good condition, it's paint relatively strong. No blisters were observed and the paint appeared to still provide adequate protection to the hull.

I struck the hull using a phenolic hammer every 12 inches or so along its length and along and between each strake. I heard nor felt any disbonding or delamination.

OUT OF WATER INSPECTION

CONDITION OF HULL (WETTED SURFACE)*(continued)*

*** CONDITION OF BOTTOM PAINT:** ***(continued)***

Bottom SB Aft

SEATRIAL REPORT

OBSERVATIONS

SEA TRIAL OBSERVATIONS: The vessel was captained by Dave Coble and Brad Bolz went along as an observer. We left slip W1 at 10:57 am and returned at 11:27 am.

Weather conditions were clear skies, wind was 130 degrees at 15 mph with gust to 23 mph. Wave action was less than 2 feet.

The steering, throttles and transmission all operated normally. We performed a back down test and no unusual vibration or cavitation was heard or felt. The tilt and trim caused the boat to adjust accordingly..

The neutral safety switch prevented the engines from being started with the boat's transmissions in gear.

Mercury specifies that this particular engine produce from 4200 - 4600 RPM at WOT. The port engine made 4600 rpm and the starboard engine made 4400 rpm.

I recorded the oil pressure and water temperature with the engines running at idle without a load before we left the slip.

The vessel achieved a top speed of 36 mph according to my phone's GPS application.

Sea Trial Port RPMs 4600

Sea Trial Proof (2)

SEATRIAL REPORT

OBSERVATIONS *(continued)*

*** SEA TRIAL OBSERVATIONS: *(continued)***

Sea Trial Starboard RPMS 4300

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 it's value.

Deficiencies will be listed under the appropriate heading:

A. SAFETY DEFICIENCIES

B. OTHER DEFICIENCIES NEEDING ATTENTION

C. SURVEYORS NOTES AND OBSERVATIONS

A. SAFETY DEFICIENCIES:

FINDINGS	*RECOMMENDATIONS*
A.1 (PAGE 13) PROP SHAFTS:	
The port propeller strut appears to have been removed and replaced recently. It seems likely that this strut is the source of the water in the port side of the engine compartment.	*Investigate, replace & renew as necessary. If you can learn whom did this work, they may provide some sort of warranty.*
A.2 (PAGE 14) BATTERIES:	
The batteries positive terminals are not fully covered to prevent accidental shorts.	*ABYC E-11 requires any continuously energized part to be physically protected with boots, an enclosure or some other cover. These are usually at the batteries and the connections in the starting circuit. Whether it's a positive battery terminal or the positive starter post, if it's not protected by overcurrent protection (breaker or fuse), then it needs a boot or enclosure.*
A.3 (PAGE 20) ZINC (HULL ZINC):	
The propeller shafts and rudders are not protected against stray current electricity nor against galvanic corrosion.	*Add sacrificial anodes appropriate to the type of water you're going to use the boat in. Remove the existing anodes on the trim tabs and replace them with the type of metal you need for your area. (presuming they are not correct already)*

IV. FINDINGS AND RECOMMENDATIONS

A. SAFETY DEFICIENCIES:

FINDINGS	*RECOMMENDATIONS*
A.4 (PAGE 21) FIRE EXTINGUISHERS:	
The fire extinguishers do not have signed inspection cards and the hand held extinguishers are not held in place in marine style brackets.	*It is recommended that fire extinguishers be inspected annually and that a signature card be attached. Being in the green indicates that there is sufficient air pressure, it does not guarantee sufficient suppressant in the cylinder. It also does not guarantee that the suppressant in the cylinder is loose enough to be blown out of the cylinder.* *The extinguishers should be mounted in marine style brackets so they are exactly where you left them when you need them.* *Even with newly purchased extinguishers, it is recommended that you take them to someone that can inspect them and weigh them to assure there is a proper amount of suppressant. They need to be properly attached per NFPA 10 and USCG requirements. Coast Guard Approved extinguishers are hand-portable, either B-I or B-II classification and have a specific marine type mounting bracket. It is recommended the extinguishers be mounted in a readily accessible position. Minimums of a 5 B:C U/L rating and 2lbs. of dry chemical, 2 1/2 lbs. of Halon or 5 lbs. of CO2 are necessary to meet the requirements for a Coast Guard B classification. All extinguishers must be "restrained" in mounting brackets of the marine or motor vehicle type which have been subjected to the same rigid salt spray and vibration tests as the extinguishers (wall type brackets are not acceptable). A Marine Bracket must be used when mounting a fire extinguisher for marine use.*
A.5 (PAGE 22) CARBON MONOXIDE DETECTORS:	
Carbon monoxide detector appears to be originally installed equipment which makes it 17 years old	*Carbon monoxide detector manufacturers recommend replacing their units every 5 - 8 years.* *Consider installing lithium battery powered, stand alone, Carbon Monoxide detectors suitable for marine use.* *The new battery operated detectors do not require electrical power from your vessel and thus are on, even when your batteries are turned off or are discharged.* *It is important to realize that your boat may not be the source of a CO intrusion. When rafted together with another boat(s), it's possible for CO to waft over into your vessel.*

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS	*RECOMMENDATIONS*
B.1 (PAGE 6) VENTILATION:	
The master berth's ventilation hatch has trim that is separating.	*Replace or renew.*

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS	*RECOMMENDATIONS*
C.1 (PAGE 9) STORAGE AREAS:	
The aft bulwark's storage space has a gasket which has begun to shrink.	*Replace or renew to prevent water intrusion.*
C.2 (PAGE 9) HEADS:	
The door handle to the head is slightly loose.	*Replace or renew.*
C.3 (PAGE 17) FRESH WATER SYSTEM:	
The water spigot at the aft storage compartment is missing its turn handle.	*Replace.*

V. SUMMARY AND VALUATION

STATEMENT OF OVERALL VESSELL RATING OF CONDITION:

A surveyor's experience develops an opinion of the Overall Vessel Rating after the survey has been completed and the findings have been organized in a logical manner.

The grading of condition, developed by BUC Research, and accepted in the marine industry, for a vessel at the time of survey, determines the adjustment to the range of base values in the BUC Used Boat Price Guide, for a similar vessel sold within a given time period, as a consideration to determine the Market Value.

"Excellent (Bristol) Condition", is a vessel that is maintained in mint or Bristol fashion - equal to factory new or loaded with extras - the older a boat is the more rare it would be to be in Bristol condition.

"Above Average Condition", has had above average care and is equipped with normal electronic gear and outfitting. Has not spent an extensive length of time in salt water.

"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 this vessel has a value of $ 74,900

OVERALL VESSEL RATING: Above Average

STATEMENT OF VALUATION:

The **"Fair Market Value"** is the most probable price which a vessel should bring in a competitive and open market under 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.

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.

f. Deficiencies listed are attended to and rectified.

I specifically used BUC. BUC is a generic algorithm service which is valuable because their values are nearly always lower than what boats sell for here at Lake of the Ozarks.

BUC had a range of value for their Better condition ranging from $ 71,000 to $ 78,000.

I also used SoldBoats.com which is a subscription marina reporting service which details when a boat was listed, what price the boat was listed for, when the boat sold, what price the boat sold for and gives a geographical location.

SoldBoats had 17 vessels listed with the criteria set as time frame January 2018 through October 2018 and model year 2002. Of the 17, I chose these 4 to be most comparable to this vessel.

Sea Ray 340 Sundancer 2018 located in Michigan	Listed for $ 76,900 in Augsut 2018 and sold for $ 70,000 in September
Sea Ray 340 Sundancer located in Texas.	Listed for $ 74,900 in April 2018 and sold for $ 65,000 in May 2018,
Sea Ray 340 Sundancer located in Michigan	Listed for $ 74,900 in June 2018 and sold for $ 4,000 in August 2018,
Sea Ray 340 Sundancer located in Michigan	Listed for $ 73,900 in June 2018 and sold for $ 68,000 in August 2018,

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:
$ 74,900.00

$74,900
Seventy Four Thousand Nine Hundred Dollars

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: $ 327,000 per BUC ValuPro

$327,000
Three Hundred Twenty Seven Thousand Dollars

V. SUMMARY AND VALUATION

SUMMARY:

In accordance with the request for a marine survey of the "Sample 2002 Sea Ray 340", 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 **August 21, 2020** and was found to be a well constructed, appointed and comfortable vessel. The vessel has been well kept. Subject to correction of deficiencies listed, the vessel is considered to be suitable for its intended use. Deficiencies listed which are subject to legal action should be attended to in a timely fashion. Deficiencies which are safety issues should be attended to immediately. Other deficiencies listed should be dealt with as you desire.

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 analysis, opinions, and conclusions are limited by the reported assumptions and conditions, and are my personal, unbiased professional analysis, opinions, and conclusions.

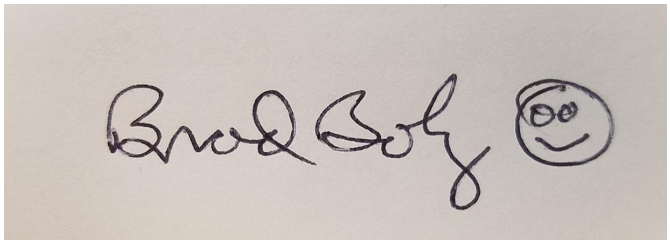
I have no present or prospective interest in the vessel that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

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:



Brad Bolz American Boat & Yacht Council Chapman School of Seamanship

Association of Certified Marine Surveyors

International Association of Marine & Shipping Professionals

Written report submitted August 21, 202

VI. PHOTOGRAPHS

aHIN SERT9863D202

Fore Deck Overview

View Bottom Stern

View Bow Port

VI. PHOTOGRAPHS

View Bow Starboard (2)

View Bow Starboard

View Stern Port (2)

View Stern Port

VI. PHOTOGRAPHS

View Stern Starboard (2)