

BONES MARINE SURVEY, LLC
TONY LENGYEL, SAMS-SA®
MARINE SURVEYOR AND CONSULTANT

2004 Sea Ray 480 Sedan Bridge

"BIG BREEZE"



MEMBER OF SOCIETY OF ACCREDITED MARINE SURVEYORS

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Report of Marine Survey

Of The Vessel

"BIG BREEZE"

2004 Sea Ray 480 Sedan Bridge

Conducted by
TONY LENGYEL, SAMS-SA®

SAMS Member, ABYC Standards Technician

PREPARED EXCLUSIVELY FOR:

Graham XXXXXX

April 27, 2017

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I. INTRODUCTION

SCOPE OF SURVEY

Acting at the request of Graham XXXXXX, the attending surveyor did board the 2004 Sea Ray 480 Sedan Bridge, "BIG BREEZE" beginning on , 4/27/2017 8:30 AM where an "in-the-water-survey" was conducted at Lakewood Yacht Club, 2425 NASA Park Way, Seabrook, TX. 77586. The ship's papers were on board and appeared to be in order. The Hull Identification Number (**HIN**) SERPXXXB404 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 on 4/27/2017 10:30 AM at the location of Marine Max 3001 NASA Parkway, Seabrook, TX. 77586. The reason for the survey, was to ascertain the physical condition and value of the vessel for Pre-Purchase. Moisture readings taken and referenced throughout the body of the report, were taken with the Master Moisture meter. AC and DC power was used to check operation of the electrical systems specified in this report only. No reference or information should be construed to indicate evaluation of the internal condition of the engines or the propulsion system's operating capacity. Electronic equipment was checked for "power up" only.

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

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

CONDUCT OF SURVEY:

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

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

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

Note:

An engine surveyor was not on board during the hull survey.

I. INTRODUCTION

VESSEL DESCRIPTION

The Sea Ray 480 Sedan Bridge, has a large following among cruisers. Possibly one of the best-selling sedan bridge offerings in her size, despite being discontinued after a long production run. Built on a cored hull with solid FRP bottom with prop pockets to reduce the shaft angles and reduce her shallow draft, the 480 boasts a surprisingly large interior. This vessel offers all of the amenities found in a small condo including overnight accommodations for 8 in 3 private cabins, and a generous salon, 2 heads complete with enclosed showers. The galley is quite large offering plenty of counter-space and a full range of appliances. The dinette is raised and well suited for entertaining and offers unobstructed exterior viewing. There is a nice size salon with convertible sofa and 2 barrel chairs for entertaining opportunities. On deck, molded cockpit steps lead up to the bridge where wraparound lounge seating is located forward of an extremely well designed helm console; The helm is positioned on the centerline and provides an unobstructed view to the bow, port, starboard and aft allowing the captain excellent line of sight for backing down. Additional features include high-gloss cherry interior joinery, an extended swim platform, transom storage, wide side decks, and a fiberglass hardtop.

"BIG Breeze" optional higher cost equipment add-on's include: Remote hydraulic swim platform, Zetus Bow Thruster, Glendinning Cable Master, ISO Transformer, DSS Satellite TV, Teak wood cockpit flooring, Bose Surround Sound audio system, Bridge AC, Washer Dryer combo, Central vacuum system and all chain windlass anchor. Propulsion is provided through 640 H.P. QSM-11 Cummins diesel engines. The vessel sea trialed, performed well without hesitation, see sea trial report.

II. GENERAL INFORMATION

GENERAL INFORMATION

FILE NUMBER: BMS33117

SURVEY PREPARED FOR: Graham XXXXXX, Address: 1 West 16th Street Circle, Raven, FL.
32440

NAME OF VESSEL: "BIG BREEZE"

TYPE OF SURVEY: Pre-Purchase for Buyer

OVERALL VESSEL RATING: ABOVE AVERAGE

ESTIMATED MARKET VALUE: \$286,500

ESTIMATED REPLACEMENT COST: \$836.000

YEAR/MAKE/MODEL OF VESSEL: 2004 Sea Ray 480 Sedan Bridge

BUILDER: Sea Ray Boats, Knoxville, TN. (MIC: SER) DIV OF Brunswick Corp.

YEAR BUILT: ***2004

HULL IDENTIFICATION NUMBER (HIN): US-SERXXXB404

HOME PORT: League City, TX.

USCG DOCUMENTATION NUMBER: 1158XXX Exp. 3/31/2018

USCG DOCUMENTED FOR: Gary XXXXXX

OWNER'S NAME: Gary XXXXXX

OWNER'S ADDRESS: 3 Mariner Court, Kemah, TX. 77XXX

PLACE OF SURVEY: Lakewood Yacht Club, 2425 NASA Park Way, Seabrook, TX. 77586

DATE/TIME OF SURVEY: April 27, 2017 8:30 AM

HULL MATERIAL: FRP (Fiber Reinforced Plastic) with other core materials.

HULL TYPE: *****Deep-Vee

LENGTH OVER ALL (L.O.A.): *****51' 2"

BEAM: *****15' 3"

DRAFT: *****3' 9"

DISPLACEMENT: *****40,400 Lbs

GROSS TONS: ***38 GRT

NET TONS: ***30 NRT

PROPULSION SYSTEM: Twin Cummins 640 H.P. each diesel engines. Straight drive's. Port
Serial # 35089439 Starboard Serial # 35089347

FUEL CAPACITY: 510 Gallons from tank labels.

AC POWER: 120/240 volt.

DC POWER: 12 volt.

II. GENERAL INFORMATION

GENERAL INFORMATION(*continued*)

FRESH WATER CAPACITY: *140 Gallons.
HOLDING TANK: *68 Gallons.
INTENDED USE/BUYER: Recreational cruising.
BUYER'S EXPERIENCE: Reportedly many years experience in this type of vessel.
INTENDED CRUISING AREA: Florida Gulf Coast.

DEFINITION OF TERMS

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

APPEARS:

Indicates that a very close inspection of the particular system, component or item was not possible due to constraints imposed upon the surveyor

(e.g. no power available, inability to remove panels, or requirements not to conduct destructive tests).

FIT FOR INTENDED USE:

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

SERVICEABLE: ADEQUATE:

Sufficient for a specific requirement.

POWERS UP:

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

EXCELLENT CONDITION:

New or like new.

GOOD CONDITION:

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

FAIR CONDITION:

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

POOR CONDITION:

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

USE OF *:

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

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

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

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

HULL CONSTRUCTION

TYPE: Deep-V planing type, with flared bow, hard chines, 15 degree dead rise.

MATERIAL: Vinylester resin and FRP (fiber reinforced plastic) with other core material construction. Topside's above waterline: FRP with other core material and stiffeners. Hull bottom: FRP, hand laid solid. Condition: Good, serviceable.

EXTERIOR HULL: Flag Blue gelcoat with white boot stripe, and moderate sheer. Gelcoat is buffed to a high shine and shows very well with very few small scratches at the swim platform. All other hull exterior area's look well serviced. The boot stripe has 5 to 6 scratches on the port side aft ranging in length from 3 to 10 inches long. (These are very narrow scratches not overly noticeable in appearance, cosmetic only).

* **PORTLIGHTS: [C1]** Four (4) fixed stainless steel and plastic portlights two each port and starboard. Six (6) opening stainless steel and plastic portlights three each port and starboard. No leaks sighted. Serviceable. Note: One fixed portlight in the forward cabin starboard aft side has the interior stainless steel trim ring loose from the interior hull topside's. (cosmetic ,no leaks).

BULKHEADS: Athwartships reinforcement enhanced by wood bulkheads bonded to the hull with FRP (fiber reinforced plastic). Bulkheads finely fit where sighted. Serviceable.

STRINGERS: Hull stiffness provided by FRP (fiberglass reinforced plastic) longitudinal stringers. Complete inspection not possible due to limited access. Serviceable where observed.

* **TRANSOM: [C2]** Reinforced, FRP (Fiberglass reinforced plastic) cored transom. The FRP swim platform is remote operated Hydraulic with attached metal mechanism through-bolted to the transom with stainless steel fasteners and backing plates. The platform also serves as a docking point for the tender. (tender was not onboard). There is a 36" stainless steel telescoping ladder under a hatch positioned to the center of the platform. The transom locker above the swim platform gives access to connection points for TV, phone and city water. The transom locker also provides stowage for, fenders and lines. The transom door is positioned to port. There is a built in hand shower wand here too. The swim platform attachment points appear securely fixed. All fit for intended use. Note: There were five cracks sighted under the swim platform in the gelcoat, they appear superficial in nature (see attached photos). The parameter plastic finishing strip has three loose screws. The affected area's were sounded and checked for moisture without negative report at this time.

* **BILGE: [C3]** Deep (below deck) amidships and lazarette aft bilge areas provides for most boat mechanical, electrical systems and tankage. The forward shallow bilge area provides good access to the forward sump pump and float switch. The bilge areas were finished in smooth white gelcoat and were found mostly clean, the forward engine space bilge pump area and the aft-most bilge pump area against the transom in the lazarette were dirty.

CHAIN LOCKER (DRAINAGE): The chain locker is forward and accessible through a deck hatch at the bow. The locker drains overboard through two (2) pee holes located at port and starboard with clam shells over. Drains are clear and free of debris.

MOISTURE CONTENT: The hull, decks, stringers, transom and swim platform were free of excessive moisture where tested. In addition the areas were percussion tested without negative report. Note: Complete testing was not possible due to limited access. Appears serviceable where tested.

DECK CONSTRUCTION

TYPE: Deck and Cockpit: Molded FRP (fiber reinforced plastic) with core materials, stiffeners and end grain Balsa coring, white gelcoat and moulded non-skid surface. Condition: Good, serviceable.

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

HULL-TO-DECK JOINT

TYPE: Visible from the forepeak in the chain locker the hull to deck joint was of the deck overlap type, bedding compound-adhesive, Serviceable where sighted. Factory reported stainless fasteners are not visible. From the exterior the rub rail was inspected at the joint, there were no visible signs of stress or separation from flex or impact. All exterior stainless steel insert screws are in place and the caulking about the exterior is adhering well at this time. Note: It is advised to periodically check the rubrail where it is fastened to the deck/hull for caulking that has failed, removing old caulk and re-caulking when necessary. This area is highly subjected to flex and possible impact it can become a source for water intrusion.

DECK FITTINGS

STANCHIONS: Welded stainless steel stanchions well attached to the deck with stainless steel fasteners and bedding compound. Secure, Fit for intended use.

BOW PULPIT (BOW RAIL): The bow rail is the continuous stainless steel type, welded to the upright stanchions and runs from midships forward. Welds and finish are in good condition. Fit for intended use.

VENTILATION: Ventilation provided by two (2) pop-out type windows in the salon, one each at port and starboard and operable portlights topside's in guest cabin, crew cabin and owners cabin, in addition the owners cabin has an overhead hatch with screen and sun shade. Total of ten (10) portlights. Four (4) fixed and six (6) opening portlights with screens. One (1) hatch 20" x 20" The hatch serves as an emergency exit providing a minimum clear opening dimension of 14 1/2" and 270 square inches. Large enough for a 14 1/2" dia. circle to be scribed and in compliance with ABYC H-3.5.2.2 standards. Seals are good, no leaks sighted. Fit for intended use.

SCUPPERS: Cockpit and decks drain overboard. Scuppers sighted at transom. Free of debris, Serviceable.

CHOCKS AND CLEATS: Cleats are stainless steel all sighted were well fastened thru-bolted to the deck and transom. Condition: Good, Serviceable.

WINDLASS/GIPSY: Automatic two-way windlass by Lofran's, Model: Progress 2, Serial # PD002504. 200' of 10 mm galvanized chain. Galvanized 60 Lbs plow anchor, seized shackle. Stainless davit with plastic anchor roller guide. Fit for intended use.

DECK SURFACE: Foredeck and side decks are a molded aggressive diamond patterned non skid. The deck's surface was percussion sounded with a phenolic hammer approximately every 6"-8" and was found to be in good condition. The cockpit teak planking was percussion sounded with a phenolic hammer approximately every 6"-8" and was found to be tight to the FRP laminate with the caulking in good condition. All in serviceable condition.

SUPERSTRUCTURE

MATERIAL: Molded FRP (fiber reinforced plastic) and other core materials. The superstructure's exterior surfaces were percussion sounded with a phenolic hammer approximately every 6" to 8" and was sound with no detectable evidence of voids or delamination.

* **WINDOWS/PORTS/DOORS: [C4]** Large fixed windows flank the salon cabin. The port fixed window gasket has come loose from the frame and is deformed at the aft lower corner. It does not appear to be leaking at this time. (See photo).

FITTINGS AND HARDWARE: Various stainless steel handles mounted in strategic places. In good condition.

CANVAS AND SUPPORT STRUCTURE: The flybridge enclosure is of navy blue canvas material with clear plastic window material. The support structure is a molded FRB custom factory hardtop. Good condition, serviceable.

SUPERSTRUCTURE HOUSE TO DECK JOINT: The Deck house and deck appeared to be molded seamlessly, no joint was observed. The structure is in good condition where sighted and serviceable.

MOISTURE CONTENT: Readings were taken without negative report. Areas were percussion tested without negative report.

BRIDGE DECK

MATERIAL: Molded FRP (fiber reinforced plastic) laminated end grain Balsa and other core materials.

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

BRIDGE DECK(*continued*)

TYPE: The molded flybridge is bonded to the deckhouse with the use of sealant and stainless steel fasteners. The fit and condition at the joint looks secure. A single level flybridge type layout provides for a helm station positioned on the centerline with consol and full array of gauges for monitoring engine operation and engine controls as well as navigational instrumentation. The Captains chair is positioned bridge center and provides excellent 360 degree unobstructed views to bow, port starboard and aft. There is a captains companion chair positioned to starboard. Crew and guest U-shaped seating arrangement in front of the helm area and to starboard, with stowage beneath. Overhead is a FRP custom factory hardtop, appears well bonded to the bridge section. All appears well polished and cared for in serviceable condition.

SEATS: The Captain and Captains companion chairs are cushion white vinyl material. They have multiple adjustments and a folding bolsters as well as arm rest. The forward crew and guest seating are cushioned white vinyl U-shaped bench type. Excellent condition.

* **WINDSHIELD: [C5]** The flybridge faring is made of white powder coated finished Aluminum frame and plastic window material. The powder coating finish on the faring is lifting/peeling in four areas on the exterior. The areas are approximately four inches in length, cosmetic in nature. The faring is fit for intended use.

OTHER: Bridge refrigerator. Location: Forward port. Tested 48 degrees, Serviceable.

ADDITIONAL EQUIPMENT AND ACCESSORIES

CANVAS AND COVERS: Navy Blue canvas helm cover and canvas seat covers. Good condition. Fit for intended use.

FENDERS: Four (4) 12" fenders. Good condition.

DOCK LINES: Dock lines of various lengths and sizes were sighted stowed in the vessel. Serviceable.

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:

JOINERY AND FINISH: The cabin bright work is of the Sea Ray Cherry high-gloss finish in the salon, galley and fore and mid cabins. Fit and finish is in excellent condition.

INTERIOR BULKHEADS: The interior bulkheads were finely fit where sighted.

WATER INTRUSION SIGNS: None Sighted.

HEADLINERS: Headliner material in the cabin areas is a light colored vinyl. Excellent condition.

DOORWAYS: Solid wood cabin and head doors throughout vessel. Finely fit, serviceable.

FABRIC AND CUSHIONS: Neutral earth tone color high quality fabrics on the forward berth with matching pillows and window coverings. The port guest cabin offers the same. The starboard crews quarters berth offers a light color canvas fabric with the same window coverings. The salon sofa (two darker fabric pillows) and dinette are upholstered in a light color ultra-leather and matching color fabric window coverings in the salon and galley areas. Two custom fabric covered barrel chairs in the salon. Everything is well coordinated. The condition and appearance is excellent.

FLOOR AND WINDOW COVERINGS: Floor covering is light colored heavy nylon pile carpet in the salon, hallway, mid cabins and forward cabin areas. The salon and hallway areas have protective canvas carpet runners. The galley flooring is finished in teak. Window coverings match adjacent fabric upholstery. Condition is excellent throughout.

ACCOMMODATIONS: Double berth in the owners cabin with stowage beneath, hanging lockers to port and starboard. Port guest cabin with double berth with stowage below, stowage cabinets to port and hanging locker with draws below to port forward. This cabin offers private access through a bulkhead forward to the guest head. The crews quarters are positioned amidships to starboard with an L-shaped berth for two, with stowage draws beneath and a hanging locker to port. This cabin also has a combo washer dryer unit positioned to port in a hidden cabinet. The salon and galley area's include an entertaining area and entertainment center. There is a full service galley and a raised dinette. General condition is excellent and serviceable.

III. SYSTEMS

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:(continued)

HEADS: Two heads. One guest head is positioned down and to the port side that has a direct access from the port guest cabin. One ensuite head in the owners cabin positioned to starboard aft. The head interiors offer a full molded fiberglass liner with smooth white gelcoat finish and provides a fiberglass vanity with molded sinks and Corian counter tops, stowage beneath and mirrored medicine cabinets above. Each head has a Vacuflush toilet and shower with clear plastic enclosure, shower wands and 12 Volt exhaust vent. The heads are neat and clean. All features found fit for intended use.

FAUCET FIXTURES: Grohe faucet and fixtures in the heads and galley are serviceable and operable. No leaks sighted.

LIGHT FIXTURES: A nice array of LED lighting fixtures both 12 volt and 120 volt AC type throughout the vessel offer, good coverage. Both adjustable spot type lights, fixed overhead and fluorescent fixtures provide the vessel with good lighting flexibility. Operable.

CABIN FURNISHINGS: All cushions and upholstery are in excellent condition.

VENTILATION: Natural ventilation provide by portlights and overhead hatch. Fit for intended use.

AIR CONDITIONING UNITS: Each cabin has built-in venting with digital AC controls. Operable. (See air conditioning section).

CABIN HEATING: The air conditioning units have reverse cycle function for heat. (See air conditioning section).

CONDITION AND DEFICIENCIES: The overall house keeping for this vessel is above average, excellent condition. It reflects the care of a conscientious owner with strong commitment to detail, shows pride of ownership.

OTHER: Beam Central Vacuum System. Location: Crew quarters under berth. Operational.

GALLEY

LOCATION: The galley is positioned forward of the salon to the starboard side and is arranged in a U-shape. The countertop is molded FRP with granite colored gelcoat and molded sink with electric on demand hot and cold water. The cabinetry allows for plenty of storage space opportunities both above and below. This galley offers a well equipped convenient area for meal preparation. Cabinetry and appliances are all upscale. Condition is clean, well organized and fit for intended use. A raised dinette is positioned to the port side directly across from the galley. Excellent condition.

SINKS: Single molded Fiberglass galley sink with filler for added counter space. Fit for intended use.

REFRIGERATION: One under counter Nova Kool refrigerator. Model: R5812, Serial # 263508. Dual voltage 120V/12V. Labels sighted. One under counter Sub Zero freezer. Model # 249R. Clean and operational.

STOVE/OVEN: Kenyon two burner electric cook top 240V. With stainless steel safety rail. Clean and operational.

MICROWAVE: Microwave/Convection oven. Sharp Grill 2 Convection. 120 V. Clean and operational.

OTHER: Contoure coffee maker. Powers up.

PROPULSION

MAIN ENGINES

TYPE: Diesel Two (2) Inline-6 diesel four cycle, turbo charged, after-cooled engines.

MANUFACTURER: Twin Cummins QSM 11. 640 H.P. each from labels. Port serial # 35089439, Starboard serial # 35089347. Factory labels in place. Fit for intended use.

INDICATED HOURS: 630 hours from helm gauges.

THROTTLE CONTROLS: Electronic/Mechanical engine controls. Smooth operation, Serviceable.

EMERGENCY SHUT DOWN: Auto device: Engine space auto fire suppression system, (not tested). Clearly marked at helm. Appears Operable.

ENGINE MOUNTS AND BED: Main engine beds are heavy FRP longitudinal stringers inboard and outboard. In conjunction, metallic adjustable motor mounts are bolted to the stringers and are used to adjust the propshaft alignment as well as secure the engines to the hull stringer structure. Mounts are corrosion free. Back down tested, no abnormal movement or malfunction sighted. Good condition.

DRIP PANS: Clean.

III. SYSTEMS

PROPULSION

MAIN ENGINES(*continued*)

LUBRICATION: Level and Condition: Level indication is normal in starboard engine. The port engine level was a little low. The condition looks good (Appears recently changed). Filters: Cummins, engine mounted spin on/off canister type filters. Last service logged 10/2016. See main engine note the end of this section.

VENTILATION: Two (2) Power blowers with flex tubing, tubing tabbed down in good condition. blowers operational. Natural, flow ventilation provided by cowl vents.

BILGE BLOWERS: Sighted and functional.

- * **EXHAUST SYSTEM: [A1]** Hose to pipe joints double clamped and hose found to be serviceable from external visual examination. System installation from Stainless engine mounted pipes, USCG approved flexible hose aft to FRP (fiber reinforced plastic) power pac/lift system silencers located under the cockpit sole. Then exiting through stainless fittings at hull sides port and starboard aft near transom. Hose to pipe connections are double clamped where sighted. Note: The port exhaust connection flex hose to silencer, where the exhaust enters the silencer is leaking and clamps are corroded. (See findings A.1 Exhaust System). All but where noted the exhaust system appears to be in serviceable condition.

LUBE TRANSFER: Lubrication transfer system by 12 volt Reverso pump exchange pump. The pump was not operated, connection hoses, rotary valves and manifold system appears serviceable.

INSULATION: Aluminized 2" foam rubber sound deadening insulation was noted under the engine room hatch. Well attached, Serviceable.

PROP SHAFTS: Stainless steel 2 1/2" diameter. Serviceable.

ENGINE ALARMS: Low oil pressure alarm and coolant over heat warning both visual and audible at helm station. Serviceable.

ENGINE SHUT DOWN: Electrical shut down system at helm station clearly marked. Operable.

ENGINE SYNCHRONIZER: Synchronization is provided by a Glendinning unit with the port throttle as slave. Sea Trial tested operational.

- * **CONDITION AND DEFICIENCIES: [C6, C7]** A) All but for mentioned port inboard exhaust hose leak (See findings A.1 Exhaust System), See Surveyors Notes And Observations: C.8 Raw Water Strainers. Propulsion and machinery appear in proper working order, upon visual inspection house keeping in the engine space appears good.
B) The engine space hatch is loose from its attachment point to the deck.
C) Port engine pulley shroud is missing.

OTHER: ENGINE INSTRUMENTATION by SmartCraft provides for a full array of engine/systems monitoring capabilities (Includes: 4 in 1 multi gauges - Fuel level, Oil pressure, Voltmeter, Water temperature). SmartCraft Speedometers (Includes: Air and Water temperature. SmartCraft Tachometers (Includes: Depth, Engine alarms, hour meters, Fuel consumption/usage and trim level). All systems check, Fit for intended use.

NOTE: It is good practice to change all filters and fluids upon making a vessel purchase to establish a benchmark for future service. I recommend this service be performed and logged. At this time the engine fluids and condition look ok all but where noted.

COOLING SYSTEM

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

- * **RAW WATER STRAINERS: [C8]** Groco bronze alloy type with sight glass. Model: ARG 2500. Raw water Sea Strainers are serviceable except where noted: (See findings A.2 Hoses and Clamps). Note: Raw water strainers have taken on heavy silt and appear fouled due to the vessel area of operation (shallows).

COOLANT LEVEL: Normal level observed.

- * **HOSES AND CLAMPS: [A2]** Re-enforced rubber hoses double clamped and well routed and supported, where sighted. * Note: The starboard raw water inlet hose from the strainer to the main engine is showing signs of fatigue and is leaking at the clamp.

III. SYSTEMS

PROPULSION

TRANSMISSIONS

MANUFACTURER: ZF Hurth, ZF 325-1A IV, Gear Ratio 1.733:1. Port serial # 20034616. Starboard serial # 20034617. Factory labels sighted. Shifted smoothly. Fit for intended use.

DRIVE TYPE: Straight drive with couplers and thrust bearings.

FLUID LEVEL AND CONDITION: Normal level indicated on dipsticks. Condition appears good. Serviceable.

PROP SHAFT: Size 2 1/2" diameter. Material: Stainless Steel. Serviceable.

PACKING GLAND: Dripless type stuffing boxes with seal, rubber hose and stainless steel clamps. Serviceable.

NOTE: Surveyor recommends transmission fluids and filters be change upon vessel purchase to set a benchmark for regular service intervals.

FUEL SYSTEM

MAIN ENGINE(S) FUEL SYSTEM

FUEL TYPE: Diesel fuel system.

MATERIAL: Aluminum, Two tanks, 255 Gallons each taken from manufacturing labels. Secured outboard engine space, one port and one starboard. Backsides and bottoms of tanks were not visible due to limited access. Although all of the tank's surfaces could not be sighted there were no diesel fuel odors detected in the tank areas or any obvious fuel leaks sighted. Appears serviceable.

SECURED: Secured to FRP frames and stringers with stainless steel mechanical fasteners. Serviceable.

MANUFACTURING LABEL: Manufacture: Florida Marine. Model: FMT-255S-SR. The ABYC required labels were sighted on the fuel tanks.

FILL PIPE LOCATIONS: Port midships, two deck fill pipes marked for diesel. Serviceable where sighted.

FILL PIPE GROUNDED: The deck fill pipes fittings appear to be properly grounded.

FILL PIPE MATERIAL: USCG Type A2 flexible hose with double clamped hose to pipe joints. Serviceable.

FUEL LINES AND FITTINGS: Both supply and return are flexible hoses. Fuel lines are supported correctly. In serviceable condition.

FUEL MANIFOLD VALVES: Ball type valves properly marked, operable.

VENT LOCATION: Port topside's, flame screens were free of debris and serviceable.

SHUT-OFF VALVE: Ball type valves, cross over fuel system with shutoff valves for main engines and generator. Well marked. Location: Under bridge stairs. Operable.

ANTI-SIPHON VALVE: Yes.

FUEL FILTERS: Both remote mounted outboard Racor sight glass filters/water separators, Model: 7590 Max. And remote engine mounted Cummins spin on/spin off canister type. No leaks sighted, serviceable.

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (D.C. SYSTEM)

VOLTAGE: Lead acid battery powered 12 volt system.

BATTERIES: Four (4) West Marine 8-D 12 volt batteries in series and parallel for main engine and house use and one (1) Super Start group 27 battery for generator. Batteries are located and secured in acid proof battery boxes. The batteries were not load-tested to determine their condition but appear serviceable. Expiration not listed. The batteries are installed to ABYC and NFPA standards.

MAIN BATTERY SWITCHES: Two (2) Guest rotary type main battery switches at DC panel, mounted in a dedicated cabinet under the stairs leading to the bridge, port cockpit area. Condition: Clean, corrosion free. Operable.

PANEL: Overcurrent Protection: 12V/120V/240V main distribution panel. Location salon starboard aft cabinet. Good access. Second 12V main distribution panel. Location: Cockpit in cabinet under the bridge stairs. Good access.

III. SYSTEMS

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (D.C. SYSTEM)(continued)

BREAKERS/FUSES: DC 12V salon panel: Twelve (12) switch type branch breakers well marked, one voltage meter and one amp meter. Serviceable. DC 12V cockpit panel: Eleven (11) switch type branch breakers in port bank and Eleven (11) switch type branch breakers in the starboard bank. Serviceable.

TYPE CONNECTORS: Captive lug type where sighted. Secure.

ROUTING/SUPPORT: Yacht is wired utilizing stranded copper conductors in compliance with ABYC E-11 standards. Color coded conductors are installed where appropriate with bus bars/terminal blocks utilized for electrical connections which were well supported and secured.

CHARGING SYSTEM: Inteli-Power Marine battery charger, Model: PD2050, 13.6 VDC, 50 amp. Operable. Engine mounted belt driven alternators and diesel generator. Operable.

OUTLETS: 12 Volt outlets sighted at various locations on vessel. Appeared serviceable.

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

ELECTRICAL SYSTEM (A.C. SYSTEM)

SHORE POWER INLET: Number: One (1) Location: Starboard side of transom. Weather Protected: Yes, Marincos type stainless steel with cap. Rating: 120V/240 VAC 50 Amp with fuses. Dedicated AC on/off selector switch under bridge stairs. Shore Power Inlet is wired within 10' of the dedicated breaker panel complying with ABYC E-11 standards. In addition this vessel is equipped with a Galvanic isolator and isolation transformer (as added protection). Fit for intended use.

SHORE POWER: Vinyl Cord: Glendinning Cable Master System, One (1) 75' long, 240 V/50 amp: Location: Starboard aft lazarette. Condition: Serviceable.

AC SOURCE SELECTOR SWITCH: Manual selector switch for shore power or ship's power. Location: Main A.C. panel. Serviceable.

MAIN BREAKER: Two (2) breakers on the main electrical panel for two lines.

BRANCH BREAKERS: Seven (7) 240 V rocker switch type breakers well marked. Nine (9) 120 V rocker switch type breakers. Serviceable.

CIRCUIT LOAD MONITORS: Two Voltage circuit load monitors. One Amp meter. Operational, Serviceable.

CONNECTIONS (TYPE): Captive lug type, solderless crimp-on terminals. Appear serviceable where sighted.

WIRE TYPE (SIZE AND RATING): Wire size and rating (where sighted) appears to comply to ABYC E-11 standards, utilizing stranded copper conductors which were well supported and secured.

ROUTING: Where sighted; conductors were well supported and secured in compliance with ABYC E-11 standards.

OUTLETS: Various A.C. outlets available throughout yacht, appear adequate and conveniently located. GFCI (ground fault circuit interrupter) outlets sighted, tested and serviceable.

POLARITY: Checked: At A.C. outlets, polarity normal.

GALVANIC ISOLATOR: Sighted: Galvanic Isolator 50 Amp. Location: Starboard transom. Appears operable.

OTHER: One (1) ISO Transformer 240 Volt/50 Amp. Location: Lazarette center aft. Appears operable.

GENERATORS AND INVERTERS

TYPE: Generator driven by diesel powered internal combustion engine.

MANUFACTURER: Factory label sighted: 4 cycle, four cylinder Onan 13.5 KW. Model # 13.5 MDKAZ-2871, Serial # AO40592681. Mounted in Lazarette with sound shield. Started easily. Test under load: Ran smoothly, no leaks were observed at the time of operation. General appearance: Clean and well cared for, free from corrosion. Hoses and connections appear good. Fit for intended use.

FUEL TYPE: Diesel.

VOLTAGE RATING: AC Volts: 120/240. HZ: 60. Amps: 112/56.3.

INDICATED HOURS: 867 hrs on meter.

III. SYSTEMS

ELECTRICAL SYSTEMS

GENERATORS AND INVERTERS(*continued*)

FLUID LEVELS: Generator coolant normal. Oil normal. Serviceable.

COOLING SYSTEM: Closed reservoir type cooling with centrifugal type circulating pump, heat exchanger and raw water cooled exhaust system. No leaks where sighted. Appears serviceable.

FUEL SUPPLY: The diesel fuel supply and return lines are flexible hoses in serviceable condition.

FUEL FILTER: Remote Racor 500MA filter/water separator and engine mount spin on/off type. Serviceable.

LUBRICATION SYSTEM: Engine mounted mechanical oil pump with spin on/off type filter.

EXHAUST SYSTEM: Up lift type FRP (fiber reinforced plastic). Raw water cooled. Connections: Double hose clamps on flexible USCG approved type exhaust hose. Serviceable.

ACCESSIBILITY: Fair.

NOTE: It is good practice to change all filters and fluids upon making a vessel purchase to establish a benchmark for future service. I recommend this service be performed and logged. At this time the engine fluids and condition look ok.

FRESH WATER SYSTEM

FRESH WATER SYSTEM: (POTABLE WATER)

STORAGE TANKS: One (1) plastic 140 gallon main water tank. Location: outboard of port stringer aft Lazarette. Complete inspection not possible due to poor access. Appears fit for intended use where sighted. Fill pipe location: Starboard transom, marked water, vent location: port topside's.

PUMPS: Dual 12 Volt Shurflo pumps located starboard side Lazarette. Operable.

FILTERS: Yes, in line at pump. (Recommend all filters elements are renewed prior to use).

HOSES AND CLAMPS: Poly lines and fittings throughout vessel, fixtures and appliances. Serviceable.

DOCK SIDE PRESSURE REGULATOR: Pressure regulator dock side hose connection located in the transom locker port side. Not tested.

FRESH WATER SYSTEM (HOT WATER SYSTEM)

TYPE: 120 Volt AC electric Marine grade water heater with engine supplied heat exchanger off the port engine.

MANUFACTURER: Atwood 11 gallon, Model # EHM11-220. Serial # 9455501150392, from labels. Location: Lazarette port aft. No leaks sighted. Tested: Hot

PRESSURE RELIEF VALVE: Yes, copper pressure relief valve built into tank. Pressure relief valve was operated and is serviceable. Drainage: Via drain hose installed to bilge.

HEAT EXCHANGER AND PLUMBING: Engine supplied heat exchanger. Heat exchanger hose plumbed to water heater.

SANITATION

SANITATION (BLACK WATER)

MANUFACTURER: Two serviceable Vacuflush marine heads plumbed to a U.S.C.G. TYPE III Marine Sanitation Device (MSD) holding tanks. This system is plumbed w/deck pump-out fitting and is plumbed for direct overboard discharge using a 12V on-demand macerator pump with Interlock System (option). Serviceable TYPE III Marine Sanitation Device (MSD) -- vessel is in compliance with U.S.C.G. Federal regulations.

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

RAW WATER SUPPLY AND CLAMPS: Both heads are fresh water supplied.

DISCHARGE HOSES AND CLAMPS: *Discharge thru-hull at engine space aft of starboard main engine, approved type hoses double clamped. Hoses and clamps serviceable. Note: The discharge thru-hull is leaking/weeping water where connected to the hull. (See findings B.1 Thru-Hulls List).

PUMP-OUT LOCATION: Starboard side deck, one fitting marked for waste.

III. SYSTEMS

SANITATION

SANITATION (BLACK WATER)(continued)

SYSTEM INSTALLATION: The head discharge seacock is locked in the closed position with valve leaver wire tied secure, (Macerator with Seacock Interlock System). (In compliance with USCG regulations). Per 33 CFR 159.7

HOLDING TANK: Polyethylene tank in the lazarette 68 gallon capacity.

SANITATION (GREY WATER)

BASINS, SHOWERS, HOSES AND CLAMPS: The basins and the cabin showers on the vessel drain to a centrally located sump and is pumped overboard with a Rule 2000 GPH pump with float switch. Serviceable. The sump pump is located in the forward bilge area beneath the deck with good access. Incoming connections were sighted for grey water runoff from AC units, showers and sinks and are well marked. Approved hoses and hose connections were double stainless steel clamped and in serviceable condition.

STEERING SYSTEM

STEERING SYSTEM

TYPE: Teleflex Sea Star Hydraulic.

NUMBER OF STATIONS: One (1) helm station located at the flybridge on the centerline. Steering operated normally. Serviceable.

LINES AND FITTINGS: Flexible hose with metallic swage fittings. Appears serviceable where sighted. Limited access, no leaks sighted.

PRESSURE/RESERVOIR TANK READING: Pressure tank reading: 21 Lbs. Reservoir fluid level: Normal. Serviceable.

ACTUATOR CYLINDER: Good condition. Serviceable.

MOUNTING: Actuator cylinder, ram, pivot and fasteners are well secured and serviceable.

RUDDER STOCK: Stainless steel, 2 1/2". No notable play in the port or starboard rudder. Serviceable.

PACKING GLAND: Serviceable. Note: packing glands should not leak under normal operation and should be monitored frequently.

OTHER: BOW THRUSTER: Mfg: Vetus Thrust 12 volt system. Oil reservoir level: Normal. Wiring connections: Serviceable and secured with terminals protected. No leaks sighted on the FRP thrust tube attachment. Operable.

* **NOTE:** [C9] The steering tie rod is showing signs of corrosion.

GROUND TACKLE

GROUND TACKLE

ANCHORS: One (1) 60 Lbs Galvanized Delta plow type, shackle seized. Stern anchor located in the dunnage box in the Lazarette. Fit for intended use.

CHAIN: 10 mm galvanized all chain 200'

WINDLASS: Lofran's Model: Progress 2. Serial # PD002504. With helm wired controls and foot controls at bow. Operated and serviceable. The oil level was not determined in the windlass.

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT

VHF: Two (2) VHF radios, both mounted on the bridge. One (1) Raymarine, Model: 230 with hailer. One (1) Standard Horizon, Model: GX2100 with Matrix AIS. Radio check, operational.

RADAR: Raymarine, Model: RL80C Plus with open array. Operational.

CHART PLOTTER: One Raymarine Model: C-80 color chart, GPS, Sounder. Operational.

AUTOHELM: Raymarine Ray Pilot: ST-7001 +. Test operational.

DEPTH SOUNDER: Lowrance, Model: LCF 1440 depth gauge. Operational.

COMPASSES: Ritchie 4" Powerdamp Plus. Appears serviceable. Deviation card not sighted.

III. SYSTEMS

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT(*continued*)

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

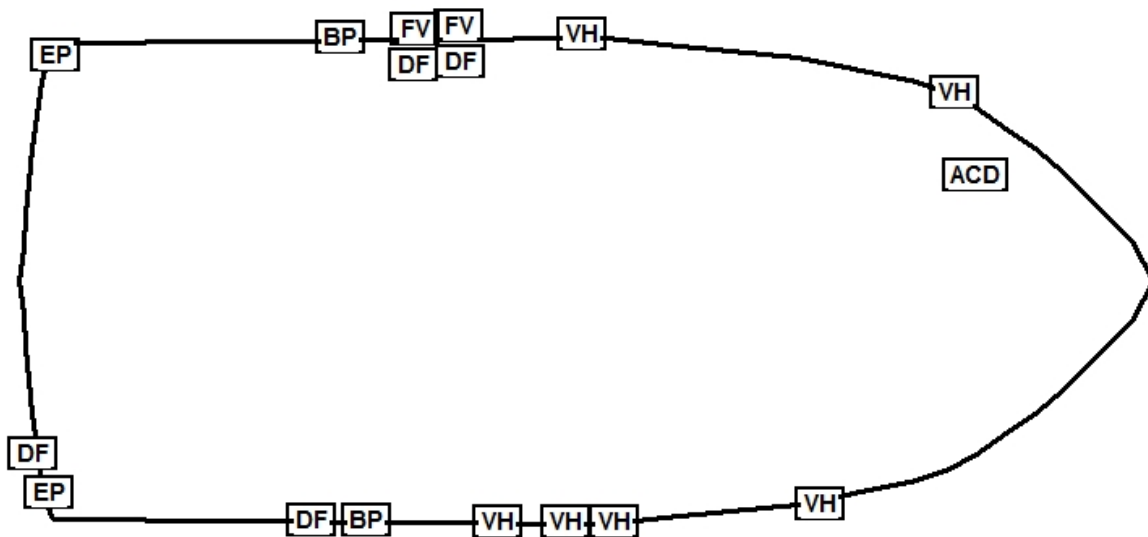
ELECTRONICS (ENTERTAINMENT)

STEREO SYSTEM: Location: Salon, 12V Cassette & Single CD w/6 CD Changer, Amplifier & 6 Clarion Speakers. Location: Owner cabin, Bose LifeStyle 35/DVD w/Accustimass and satellite speakers. Location: Bridge, 12V AM/FM Single CD, Satellite-Ready, Six CD Disc Changer, Amplifier, Subwoofer, 6 Speakers's with digital cockpit controls (Clarion). Bridge Stereo Fusion, Model; MS-IP500. The Bridge and Salon stereo systems provide quality sound and good sound coverage throughout the vessel. Sound systems operational.

THRU-HULLS

THRU-HULLS:

THRU-HULLS ABOVE WATER LINE (DIAGRAM):



Abbreviation	Description
ACD	AC Dischg
BP	Bilge Pumps
DF	Deck Fill
EP	Exhst Ports
FV	Fuel Vent
VH	Vent Hose

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

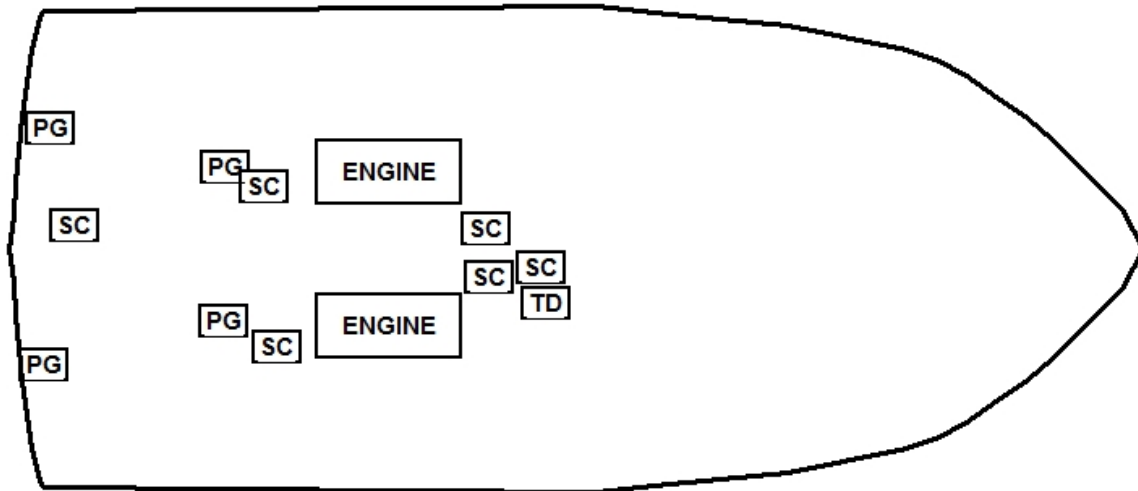
NOTE: Topside's above water venting for Exhaust (2), Bilge pump vents (2), Galley power vent, Washer drain, Vacuum vent, Head power vents (2), Fuel vents (2), AC discharge. All appear in serviceable condition.

III. SYSTEMS

THRU-HULLS

THRU-HULLS:(*continued*)

THRU-HULLS BELOW WATER LINE (DIAGRAM):



Abbreviation	Description
ENGINE	Engine
PG	Pkng Gland
SC	Seacock
TD	Transducer

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

- * **THRU-HULLS LIST: [B1, B2]** Located in the engine space. Two (2) Main engine, raw water up take forward center engine space. One (1) generator, raw water up in lazarette bilge aft. One (1) Black water sanitation, raw water discharge behind the starboard main engine. Note: The blackwater sanitation discharge thru-hull is weeping/leaking where fastened to the hull, location behind the starboard main engine. One (1) AC, raw water up take forward center engine space. One (1) AC raw water up take behind port engine, aft engine space. Note: The raw water sea strainer up take for the generator, the incoming hose to the stainer and the out going hose to the generator are cracked/fatigued, location lazarette aft bilge.

MATERIAL: Bronze, ball type, all valves were operated and test serviceable.

GALVANIC ISOLATION: Galvanic Isolator sighted on inner transom starboard. Appears serviceable.

III. SYSTEMS

BONDING SYSTEM

BONDING SYSTEM

- * **MAIN BONDING CONDUCTOR: [B3]** The main bonding system is comprised of captive lug type connectors, green color coded insulated copper strand wire conductor and bus block terminals. Bonding wires are attached to a common zinc anode attached to the exterior transom below the waterline. THE BONDING SYSTEM IS INCOMPLETE where observed, both rudder post top bonding wires are broken at the lug. In addition the lower rudder bonding connections are corroded. The raw water up take seacock for the starboard main engine bonding wire to lug connection is very weak (connection almost broken). The bonding conductors/connections for the main engine raw water seacocks and the AC seacock are corroded, location center forward bilge engine space. A sound bonding conductor is not established. Comply with ABYC E-2 standards.

SHAFTS AND SHAFT LOGS: The propeller shaft logs appear to be bonded. The propeller shafts are protected with individual zincs.

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

SEA STRAINERS: All sea strainers, appear to be bonded where sighted.

PUMPS AND MOTOR HOUSINGS: All pumps and housings appeared to be bonded, where sighted.

ENGINES AND GENERATORS: Appears to be bonded and grounded.

ZINC (HULL ZINC): Hull zincs were sighted and appear to be connected to bonding system.

FUEL, WATER AND WASTE TANKS: The fuel and waste tanks have a sound connection, bonded.

LIGHTNING PROTECTION: Recommend lightning protection is installed in compliance with ABYC E-4 lightning protection standards.

SAFETY EQUIPMENT

SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

NUMBER AND TYPE OF PFD'S: Eight (8) Type I-U.S.C.G. approved. Four (4) Located beneath helm guest seating on bridge. Four (4) Located under transom seating at cockpit area. In serviceable condition.

NUMBER OF THROWABLE PFD'S: One (1) Type IV-U.S.C.G. approved 20" throwable device. Vessel is in compliance with U.S.C.G. Federal regulations. In serviceable condition. (Recommend that 60' of floating line is attached to the ring buoys).

FIRE EXTINGUISHERS: Type BI dry chemical with gauges. Appear serviceable. Location: One (1) Galley in lower cabinet, One (1) forward owners cabin hanging locker secured, One (1) helm area secured. (Good access). One (1) Sea Fire Type 1301 with gauge, DOT-E-11596, fixed to bulkhead in aft engine space. Tagged current expires Aug. 2017. Vessel is in compliance with USCG regulations with current inspection tags.

VISUAL DISTRESS SIGNALS: Flares were 12 gauge Day/night visual distress signals, Current, expiration date Aug. 2017. And hand held flares. Current, expiration date Aug. 2017. Vessel is in compliance with USCG regulations.

SOUND DEVICES: Horn and 8" bell sighted at helm and operable. Vessel is in compliance with U.S.C.G. Federal regulations..

POWER EXHAUST BLOWERS: Yes, Two (2) operable.

NAVIGATION LIGHTS: Sidelights, All-round lights, Sternlight, Anchor lights. Power up.

INLAND NAVIGATION RULE BOOK (12M-39'4" OR LONGER): Yes, Sighted: Required on vessels over (12M-39'4") meters and feet in length. Per 33 CFR 88.05. (After January 1, 1983, the operator of each self propelled vessel of 12 meters or more (39.4 feet) in length shall carry on board and maintain for reference a copy of the Inland Navigational Rules. Per 33 CFR 88.05). In compliance with USCG Federal regulations.

"NO OIL DISCHARGE" PLAQUE: Yes, found properly displayed in engine space under hatch. Vessel is in compliance with USCG Federal regulations.

TRASH DISPOSAL PLACARD: Yes, found properly displayed in galley area next to trash receptacle. Vessel is in compliance with USCG Federal regulations.

- * **WASTE MANAGEMENT PLAN (OVER 40'):** [C10] A written waste management plan was not sighted. Vessel is not in compliance with USCG Federal regulations.

III. SYSTEMS

SAFETY EQUIPMENT

AUXILIARY SAFETY EQUIPMENT

E.P.I.R.B.: None Sighted. But highly recommended.

SMOKE DETECTOR: None Sighted. Highly recommended.

FIRE ALARMS: None Sighted. Highly recommended.

BILGE WATER ALARM AND SAFETY SWITCHES: Yes, bilge high water alarm in forward engine space and aft bilge lazarette. Operable.

SEARCH LIGHT: Yes, 5" mounted at hard top, helm wired remote controls. Fit for intended use.

FIRST AID KIT: None Sighted. Highly recommended.

FUME SNIFFER ALARM SYSTEMS: Carbon Monoxide sniffers were sighted in all staterooms, tested and serviceable except in the salon, The salon Carbon Monoxide detector mounted on the starboard side entertainment cabinet, Test non operable. Recommend replacing battery or renew unit.

BILGE PUMPS

LIST: Two (2). Locations: Two (2) in the forward engine space, Rule 2000 GPH each with remote float switches and high water alarm. Two (2) in the aft bilge, Rule 2000 GPH each with remote float switch and high water alarm. All tested serviceable condition. Test bilge pumps and switches for operation frequently.

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY

PROPELLER(S): Two (2) Nibral, four bladed propellers. Size: 28" x 33" Pitch. Both have locking nut (nuts are installed in reverse order) and cotter pins, secure. Serviceable condition with no deformed or damaged blades. Two (2) Spare Nibral, four blade propellers on fixed mount in Lazarette. Size: 28" x 33" Pitch. Appears serviceable.

PROPELLER SHAFT(S): All cutlass bearings were checked for wear while the vessel hung in the travel lift slings. The shafts were free to turn without binding and the condition of the bearings are serviceable.

STRUTS: Cast bronze single I-beam type strut. Struts are well secured and serviceable.

RUDDER(S) MATERIAL: Two (2) Cast Bronze alloy 11" wide and 23" long" Fit for intended use.

RUDDER(S) MOUNTING: Rudders are mounted to the hull (typical stem mounting) and packing gland. No slop or play in the port or starboard rudder detected. Serviceable.

TRIM TABS: Stainless steel trim tabs with lines, fittings, hinges, fasteners and dual actuator connections. Size: 12" x 26" well connected and serviceable.

THRUSTERS: Bow thruster sighted with two three-blade propellers. The bow thruster and thrust tube is clear, clean and serviceable.

THRU-HULLS: All thru-hull fittings are clear of marine growth.

TRANSDUCERS: Serviceable.

STRAINERS/SCOOPS/SCREENS: All external bronze alloy slotted type strainers are in good condition.

ZINCS: All shaft, hull and trim tab zincs sighted are in serviceable condition.

CONDITION OF HULL (WETTED SURFACE)

BLISTERS: No blister sighted during bottom inspection. The hull's wetted surface was sighted and sounded with a phenolic hammer approximately every 6" to 8" and was found to be good condition, sound and serviceable with no readily detectable evidence of delamination in the hull's FRP laminate.

CONDITION OF BOTTOM PAINT: The hull's wetted surface was pressure cleaned to remove soft marine growth. The anti-fouling paint was well applied and appeared serviceable although its age and antifouling properties are unknown.

III. SYSTEMS

AIR CONDITIONING AND HEAT (AIR CONDITIONING)

AIR CONDITIONING AND HEAT (AIR CONDITIONING)

- * **TYPE: [C11]** Marine Air reverse cycle type. Lazarette: Size: 24,000 BTU. Aft salon: Size: 16,000 BTU. Master cabin: Size: 12,000 BTU. Bridge: Size: 12,000 BTU. Air discharge temperatures: Cool: 54°, 58°, 62° and 78° respectively. Heat: 78°, 65°, 78° and 78° respectively. The bridge AC failed testing below 78 degrees.
- * **THRU-HULL STRAINER: [B4]** Groco bronze strainer with sight glass. Air Conditioning strainers have taken on heavy silt and appear fouled.
- HOSES, CLAMPS AND CONNECTORS:** Approved hoses, double stainless steel clamps and closed eye bonding connectors were sighted on all thru-hull valves. Condition: Serviceable.
- RAW WATER COOLING PUMP:** 240/120 volt AC electric pump system is equipped with a seacock, sea strainer assembly and manifolding to all systems. Serviceable
- * **DRIP TRAYS: [C12]** Condensation drip trays: Yes all units, drains overboard through sump pump and thru-hull. *AC Drip tray at owners cabin and lazarette are corroding.

SEATRIAL REPORT

INTRODUCTION

INTRODUCTION: Date: 4/27/2017 Time: 10:AM Location: Seabrook, TX.

The "BIG BREEZE" was operated out of the Lakewood Yacht Club into Clear Lake at various throttle settings in order to determine the vessel's performance. Five people were aboard the vessel including Tony Lengyel, SA® during the sea trial with the fuel tanks 75% full and the water tank 50% full. Prevailing weather conditions: Wind: SE approximately under 5 knots. Sea state: waves below 1/2 foot. Temp: 80°F. The yacht handled well and responded well with the following observations recorded during the sea trial activities:

III. SYSTEMS

SEATRIAL REPORT

OBSERVATIONS

OBSERVATIONS:

1. The engines started without excessive cranking.
2. The engine exhaust appeared normal.
3. The cooling water exhaust appeared adequate and normal.
4. The engine instruments operate within normal operating limits at idle, cruising speed, and maximum throttle.
5. Manufacturer's recommended max RPM is 2300.

Engines reached 2310 RPM at full throttle.

6. The steering system operated normally.
7. The throttles operated normally.
8. The transmissions operated normally/smoothly.
9. The back down test was satisfactory.
10. There were no excessive vibrations noted.
11. The trim tabs operated normally.
12. There were no oil or coolant leaks observed. (On main engines or in exhaust water).

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

TRIAL RUN DATA

PORT ENGINE:

he		RPM	BATT AMPS	OIL PSI	TEMP
CRUISE	26-27 MPH	1880	12	42	163
FULL		2310	12	42	163

STARBOARD ENGINE:

		RPM	BATT AMPS	OIL PSI	TEMP
CRUISE	26-27 MPH	1880	13	43	163
FULL		2310	13	43	163

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 9) EXHAUST SYSTEM: Note: The port exhaust connection flex hose to silencer, where the exhaust enters the silencer is leaking and clamps are corroded. (See findings A.1 Exhaust System). All but where noted the exhaust system appears to be in serviceable condition.	<i>Investigate further and repair or renew at connection as necessary and double clamp with new marine grade full stainless steel clamps.</i>
A.2 (PAGE 9) HOSES AND CLAMPS: * Note: The starboard raw water inlet hose from the strainer to the main engine is showing signs of fatigue and is leaking at the clamp.	<i>Renew with approved hose and replace with new double full stainless steel marine grade clamps.</i>

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS	RECOMMENDATIONS
B.1 (PAGE 15) THRU-HULLS LIST: The blackwater sanitation discharge thru-hull is weeping/leaking where fastened to the hull, location behind the starboard main engine.	<i>Further investigate and repair as necessary.</i>
B.2 (PAGE 15) THRU-HULLS LIST: Note: The raw water seacock up take hoses for the generator, entering the sea strainer and exiting the stainer going to the generator are cracked/fatigued.	<i>Renew with USCG approved hoses and double clamp with new marine full stainless steel clamps.</i>

IV. FINDINGS AND RECOMMENDATIONS

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS

RECOMMENDATIONS

B.3 (PAGE 16) MAIN BONDING CONDUCTOR:

The bonding system is incomplete where observed, both rudder post top bonding wires are broken at the lug. In addition the lower rudder bonding connections are corroded. The raw water up take for the starboard main engine seacock bonding wire to lug connection is very weak (connection almost broken). The bonding conductors for the main engine raw water seacocks and the AC sea seacock are corroded, location center forward bilge engine space.

Further investigate and repair with like kind materials to re-establish a sound bonding conductor, keeping with accepted marine practices. Comply with ABYC E.2 standards. (Monitor all bonding connections for corrosion and loose connections; apply a corrosion inhibitor to all connections and terminals.

B.4 (PAGE 18) THRU-HULL STRAINER:

Air Conditioning strainers have taken on heavy silt and appear fouled.

Clean strainers.

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS

RECOMMENDATIONS

C.1 (PAGE 5) PORTLIGHTS:

Note: One fixed portlight in the forward cabin starboard aft side has the interior stainless steel trim ring loose from the interior hull topside's. (cosmetic ,no leaks).

Fasten stainless steel screws.

C.2 (PAGE 5) TRANSOM:

Note: There were five cracks sighted under the swim platform in the gelcoat, they appear superficial in nature (see attached photos). The parameter plastic finishing strip has three loose screws. The affected area's were sounded and checked for moisture without negative report at this time.

On the next scheduled haul out, Recheck for possible moisture intrusion and refinish/gelcoat cracked area's beneath platform with like kind materials. Secure stainless steel screws at parameter plastic finishing strip.

C.3 (PAGE 5) BILGE:

The forward engine space bilge pump area and the aft-most bilge pump area against the transom in the lazarette were dirty.

Clean bilges as necessary and adhere to EPA practice.

C.4 (PAGE 6) WINDOWS/PORTS/DOORS:

The port fixed window gasket has come loose from the frame and is deformed at the aft lower corner. It does not appear to be leaking at this time. (See photo).

Repair or renew as necessary.

C.5 (PAGE 7) WINDSHIELD:

The powder coating finish on the faring is lifting/peeling in four areas on the exterior. The areas are approximately four inches in length, cosmetic in nature. The faring is fit for intended use.

Repair refinish as necessary.

IV. FINDINGS AND RECOMMENDATIONS

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS

RECOMMENDATIONS

C.6 (PAGE 9) CONDITION AND DEFICIENCIES:

C) Port engine pulley shroud is missing.

Renew.

C.7 (PAGE 9) CONDITION AND DEFICIENCIES:

B) The engine space hatch is loose from its attachment point to the deck.

Repair as necessary.

C.8 (PAGE 9) RAW WATER STRAINERS:

Note: Raw water strainers have taken on heavy silt and appear to be fouled due to the vessel area of operation (shallows).

Clean Raw Water Sea Strainers.

C.9 (PAGE 13) NOTE:

The steering tie rod is showing signs of corrosion.

Clean corrosion and use a rust inhibitor.

C.10 (PAGE 16) WASTE MANAGEMENT PLAN (OVER 40'):

A written waste management plan was not sighted. Vessel is not in compliance with USCG Federal regulations.

Comply with USCG Regulations.

C.11 (PAGE 18) TYPE:

The bridge AC failed testing below 78 degrees.

Repair or replace as necessary.

C.12 (PAGE 18) DRIP TRAYS:

*AC Drip tray at owners cabin and lazarette are corroding.

Clean corrosion.

NOTE: If cruising more than 25 nautical miles offshore it is also recommended that a USCG approved self-inflating life raft be fitted to the vessel. And a first aid kit and small manual watermaker be added to the ships safety gear.

V. SUMMARY AND VALUATION

STATEMENT OF OVERALL VESSEL RATING OF CONDITION:

It is the surveyor's experience that develops an opinion of the **OVERALL VESSEL RATING OF CONDITION** After 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. Other sources used include Yacht World Sold Vessels, N.A.D.A. Appraisal Guide, internet, published materials.

The following is the accepted marine grading system of condition:

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

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

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

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

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

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

As a result of my investigation, as shown in the **SYSTEMS AND FINDINGS AND RECOMMENDATIONS** section of this **REPORT OF SURVEY**, and by virtue of my experience, my opinion is
OVERALL VESSEL RATING: **ABOVE AVERAGE**

STATEMENT OF VALUATION:

1. The **"FAIR MARKET VALUE"** is the most probable price in terms of money which a vessel should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus.

Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- a. Buyer and seller are typically motivated.
- b. Both parties are well informed or well advised, and each acting in what they consider their own best interest.
- c. A reasonable time is allowed for exposure in the open market.
- d. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- e. The price represents a normal consideration for the vessel sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

V. SUMMARY AND VALUATION

APPRAISAL METHODOLOGY:

The following method of valuation was used to obtain the FAIR MARKET VALUE of the vessel: Two similarly equipped, same model vessels shown as sold on soldboats.com over the past 9 months with even date of sale were averaged together.

MARKET ANALYSIS:

Two comparable vessels sold on soldboats.com 2016.

Length Boats	Year	Listed	US\$	Sold US\$	Location	Yacht World Member
48' Sea Ray Sedan Bridge ...	2004	Listed (01/16)	\$289,000	Sold \$265,000	(07/16) SC, USA	
48' Sea Ray Sedan Bridge...	2003	Listed (03/16)	\$325,000	Sold \$275,000	(07/16) TN, USA	

A) The adjusted sale values ranged from \$265,000 to \$275,000. The averaged sale value was \$270,000.

B) BUC Values were adjusted for added optional equipment and general overall condition.

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:

286,500

Two Hundred Eighty Six Thousand Five Hundred Dollars

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

836,000

Eight Hundred Thirty Six Thousand Dollars

V. SUMMARY AND VALUATION

SUMMARY:

In accordance with the request for a marine survey of the "BIG BREEZE", 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 **4/27/2017** and was found to be a well constructed, appointed and comfortable vessel in above average condition. Given The light use average of 54 hours per year, the extensive options and general overall vessel condition, I here by submit. "Big Breeze" Subject to correction of deficiencies listed in section IV *A and IV *B, is fit for her intended use as a coastal cruiser. Other deficiencies listed should be corrected in a timely fashion. With a good continue maintenance program she could provide many years more service .

SURVEYOR'S CERTIFICATION:

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

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

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


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

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

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

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

ATTENDING SURVEYOR:



Tony Lengyel, SAMS-SA

VI. PHOTOGRAPHS



Cover



Bow Thruster



Central Vacuum System



Cummins 640 H.P. Turbo Diesel

VI. PHOTOGRAPHS



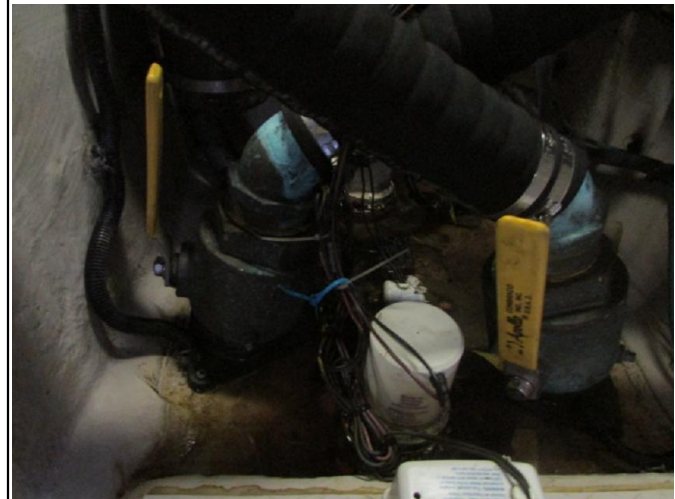
Dinette



Electronics 1



Electronics 2



Forward Engine Space Bilge

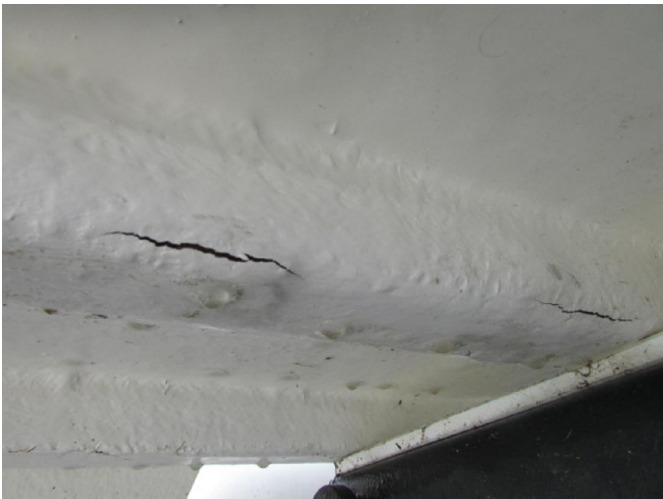
VI. PHOTOGRAPHS



Galley Forward



Galley



Gelcoat Crack Under Swim Platform



Gelcoat

VI. PHOTOGRAPHS



Guest Cabin



Hard Top Enclosure



Helm

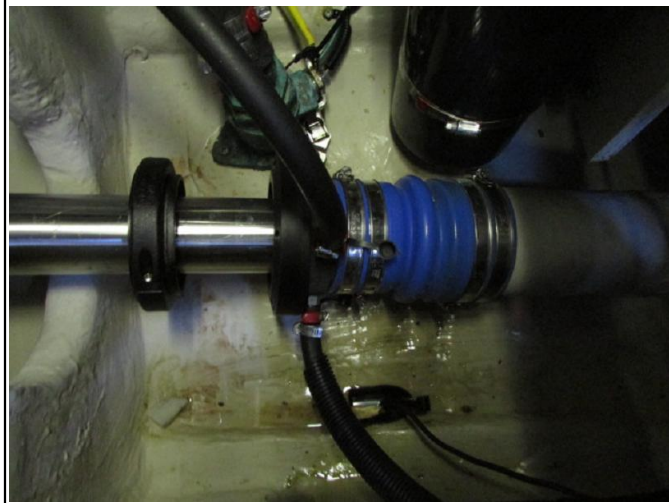


Hull ID Number

VI. PHOTOGRAPHS



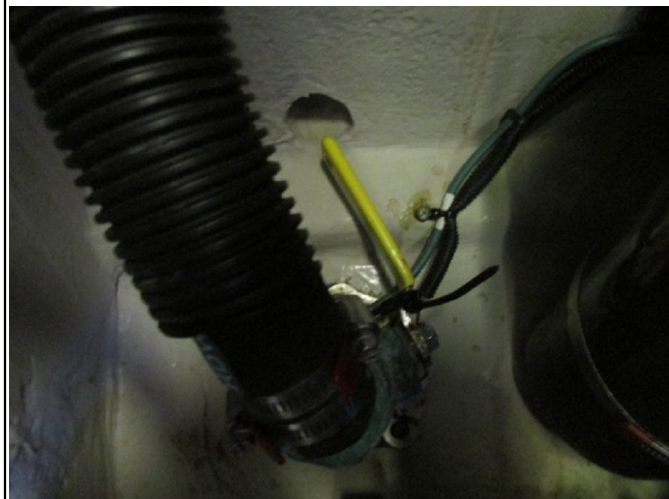
Hydraulic Swim Platform



Leak At MSD Seacock



Main AC DC Distribution Panel



MSD Seacock Fixed Closed

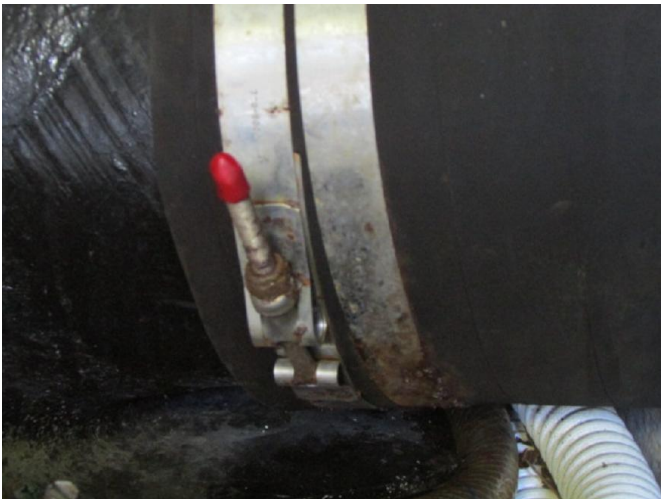
VI. PHOTOGRAPHS



Owners Cabin



Port Engine



Port Exhaust Hose Clamp



Running Gear

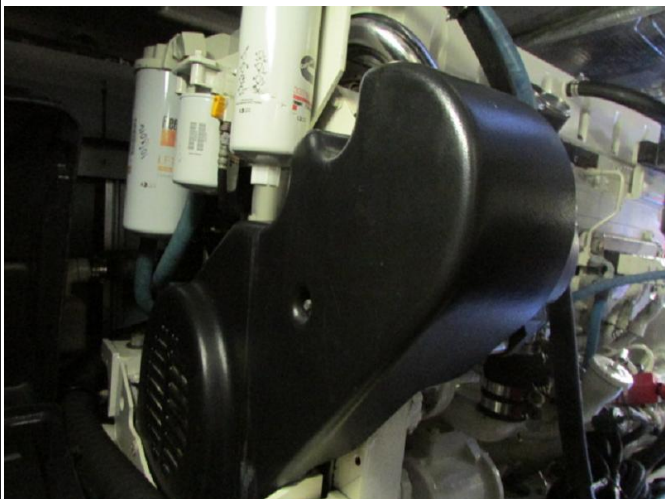
VI. PHOTOGRAPHS



Salon



Spare Portholes



Starboard Engine



Starboard Main Engine Raw Water Strainer Hose Leak

VI. PHOTOGRAPHS



Starboard Profile



Teak Aft Deck



Washer Dryer



Window Gasket Port.