

ROBERT A. NOYCE & ASSOCIATES
MARINE SURVEYORS & APPRAISERS

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REPORT OF MARINE SURVEY
Pre-purchase condition & value survey
of the vessel

"FREE RANGE CHICKEN"
2006 Custom Perry 59



PREPARED EXCLUSIVELY FOR:

Michael Stewart
2140 Aurora Ave.
Muskegon, MI 49442

CONDUCTED BY:

Robert A. Noyce & Associates
Robert A. Noyce
on

October 12, 2022

GENERAL SURVEY INFORMATION

SCOPE OF SURVEY:

Survey file no: H1222817.CVS.Stewart
Date of survey: October 12, 2022
Date of written report: October 13, 2022
Type of survey: Pre-purchase condition & value survey
Survey conducted by: Robert A. Noyce
Requested by: This survey was performed at the request of the purchaser Michael Stewart who was present at the time of the survey.
Purpose of survey: Assess the overall condition and value of vessel for pre-purchase decision making.
Vessel surveyed at: Bert Jabin's Yacht Yard
Survey conducted with vessel: The vessel was surveyed both while afloat & hauled out of the water.
Sea trial: A sea trial was performed as part of this survey. The results are included in the Sea Trial section.
Engine survey: The engine survey was conducted by Jeff Leitch of Bay Shore Marine.
Sailboat rigging: The mast, boom, standing and running rigging were inspected from deck level only.

INTENT OF SURVEY:

COMMENTS: This survey is intended to report observations only. The findings should be considered prior to any agreement or purchase and used as a guideline only for obtaining cost estimates from reliable experts in the categories mentioned. No cost estimates are inferred in this document. The value of the vessel is based on market interest, in upgraded condition considering completion of the essential and recommended items, unless otherwise noted. The purchaser must consider personal experience and willingness to obtain additional information from experts regarding full discernment of the observations. Please be sure that any questions regarding the observations are made prior to your decision. *The intent of this survey is for the exclusive use of the client listed only, this report is not transferable to any other person or entity. The intended users of this survey are the client and those lenders and underwriters considering financing or insuring this vessel for this client only.*

INSURANCE STATUS: With full compliance of the attached essential repair list, "FREE RANGE CHICKEN" in my opinion, will be an acceptable risk for hull underwriting purposes. With the recommended and essential repairs attended to, and the normal safety gear and precautions adhered to, she will be an able vessel for inland and coastal waters. If the vessel is going offshore for an extended cruise, significant readying and prudent seamanship must be considered.

VESSEL CONDITION & VALUE:

Conditions for valuation: The surveyor/appraiser has inspected the vessel both inside and out and made a local market inquiry with comparable boat builders, brokers, and manufacturers. All available publications, databases and areas available that may apply or furnish an unbiased, unprejudiced opinion as to the estimated fair market value of this vessel have been considered.

Condition rating: **GOODS-AVERAGE CONDITION**
See Condition & Value Report Summary Page for rating qualifications scale.

Est. fair market value: \$550,000.00
Est. replacement cost: \$3,800,000.00

SURVEYED AT THE REQUEST OF:

Client name: Michael Stewart
Mailing address: 2140 Aurora Ave.
Muskegon, MI 49442
Cellular phone: 231-206-3085

VESSEL INFORMATION:

Vessel Yr/Make/Model: 2006 Custom Perry 59
Vessel name: FREE RANGE CHICKEN
Hailing port: YAKUTAT, AK
Hull ID number verification: WM2P5901D406
Taken from USCG Documentation
U.S.C.G. Official 118559
Documentation No:
Manufacturer/Builder: Westerly Marine
Designer: Robert Perry
Vessel description: Auxiliary Cutter

SURVEY STANDARDS:

Standards followed: This survey was completed using as reference the federal regulations and amendments issued and enforced by the United States Coast Guard under the authority of Title 46 of the United States Code of Federal Regulations (CFR's). In addition, the American Boat and Yacht Council (ABYC) and National Fire Protection Association (NFPA-302) voluntary standards were used as reference during the survey. These ABYC and NFPA voluntary standard practices are generally followed by most vessel manufacturers today.

GENERAL PARTICULARS:

COMMENTS:

- The purpose of this survey is to determine the vessel's general integrity and condition, and evaluate all accessible machinery, major structural members, hull, deck, thru-hull fittings, bulkheads, underwater machinery, bottom, plumbing, electrical and fuel systems. Also the mast, standing and running rigging, (observed by eye only at deck level), sails and steering, to establish a fair market value.
- Following is a full condition/value (CVS) survey report, complete with a list of "recommended regulation compliance or repairs" (RR), "essential repairs" (ER), and items noted as "recommended service" (R), "proved" (P), "not proved" (N/P). **Some highlighted items may require regular maintenance or additional attention.**
- Any reference to recommended service or repair outside the scope of this survey is offered as practical advice. Therefore, also included are cues for "service" or "as required". These may be part of "essential" or "recommended" categories, but are intended as practical advice.
- It is not this surveyor's intention or responsibility to instruct the client regarding maintenance requirements during the course of the vessel's use. All requirements are noted, but not necessarily under respective categories.
- This report is not meant to detail all inventory and apparatus functions.
- No destructive testing or tools were used to access areas not readily visible for normal inspection. There has been no removal of gear or equipment blocking access to areas normally accessible for inspection.
- **DEFINITION: "serviceable" was observed to be functioning, but not new or in a condition that could be guaranteed for a predictable period of time.**
- **DEFINITION: "as observed", the surveyor was able to view the item or function but not guarantee the serial or part number or predict the functional life of the item mentioned.**

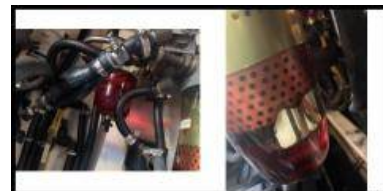
- The use of moisture meters is intended to create a base line or to confirm results of percussion sounding. Moisture meter readings are subject to influences that may present erroneous data. The results must be kept in perspective.

It is the nature of marine vessels that deterioration, wear and accidents do occur and as such, this report therefore represents the condition of the vessel only at the time the survey was conducted.

PROPULSION SYSTEM

MAIN ENGINES:

No./Type/Cylinders	Single motor Inboard 4 cylinder.
Horsepower:	Rated at 125 HP.
Make / Model:	Yanmar 4JN3-DTE
W.O.T. RPM:	Rated at 3800 RPM.
Fuel type:	Diesel
Serial nos:	SN: E32083
Year:	Original
Engine condition rating	Fair (see Bay Shore mechanical survey for more comprehensive information.
Engines hours:	5068 hrs on meter.
Fuel filters/water separators:	Twin remote Racors are installed with vacuum pressure gauge. No fire bowl located under filter assembly as per ABYC 33.5.6: Glass or clear sight bowl under filter or plastic filter assemblies do not comply with a 2-½ minute burn exposure, install proper fire bowl assembly or move filter outside of engine space (RR) . There are also two Goldenrod fuel filters that appeared to be part of a polishing system, they are also non-conforming (No fire bowl located under filter assembly as per ABYC 33.5.6 (RR) .
Fuel hoses and clamps:	Type A1 fuel hose is installed, however there are several sections of non-conforming potable water hose used, replace with USCG "Type A SAE J1527" approved marine fuel hose as per ABYC H-24 / H-33 requirements (ER) .
Belts and pulleys:	Evaluate and service belts as needed (see Bay Shore report) (RR) .
Engine mounts and beds:	Resilient mounts are showing signs of wear and should be evaluated for replacement (ER) .
Throttle and shift controls:	Single combination lever.
Air intake filter:	Signs of deterioration, service filter (R) .

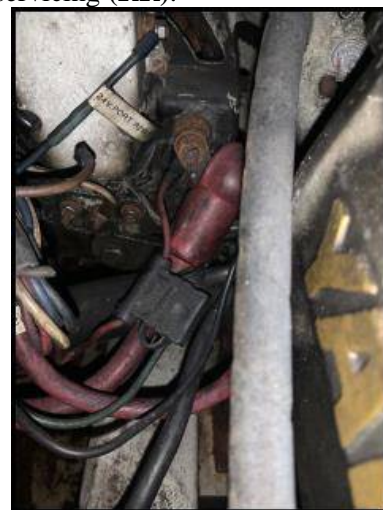


Oil System: A remote oil filter is installed. See mechanical report for additional information. A 12-volt Oil X-Changer system is installed. Oil changer system has not been tested or proven.



Cooling systems: Freshwater cooled heat exchanger cooled. The end caps on the heat exchanger are corroded this is an indication of leakage, recommend servicing (**RR**).

Starter/Alternator There are two 24 volt and one 12 volt alternator. Assure that the positive terminals are cleaned and protected from contact (**RR**). The alternator brackets may need some service, adjustment or repair.



Insulation: Yes some loose or deteriorated insulation (**RR**).

Engine alarms: Yes - functioned on start-up.

Accessibility: Poorly accessible from the area below the galley sink console.

Engines operated: Yes, at sea trial (see Sea Trial section).

Raw water intake - engine: The ball valves and hoses appeared to be in serviceable condition and double hose clamps are installed, however they all require regular maintenance and close inspection. Assure that the hoses (especial the enda at barbs or nipples) are isn required condition (**RR**).

NOTE: It is highly recommended that when a vessel changes hands that all machinery be serviced, if for no other reason than to give an accurate and reliable time frame for future routine maintenance. It is suggested that a competent marine engine specialist perform a complete engine survey should a more inclusive engine analysis be required.

TRANSMISSIONS:

Type: Hydraulic

Manufacturer: See the bay Shore report for more comprehensive information.

Mounts: Resilient Mounts, There is some corrosion on mounts, it is prudent to replace all mounts (**ER**).

Propeller shafts: No excessive corrosion or cracks sighted on shafts.

Packing Glands:

Water-injected Packless shaft seal system. Service packing gland per manufacturer **(ER)**. Note: It is recommended by manufacturers that shaft seal system is serviced or replaced as required and every 5 years and checked on a regular basis.



Couplers:

The coupling bolts were secure.

EXHAUST SYSTEM:

Components:

Water-injected elbow to muffler to overboard discharge

Exhaust hose:

USCG approved, serviceable.

Hose clamps:

All clamps appeared to be serviceable.

Water-injected elbows:

The stainless steel elbow appeared serviceable however there are stains and minor corrosion observed. The raw water injection hose appeared worn. It is prudent to have a mechanic disassemble and inspect the hoses and elbow for wear **(RR)**.



Mufflers:

Fiberglass inline waterlift muffler appeared in serviceable condition however the hose ends at the nipples appear to be leaking (salt build up) and should be disassembled for inspection and service. That is to determine if hoses are deteriorated enough for replacement **(ER)**.



GAUGES AND INSTRUMENTATION:

Instrument Panel:

A Yanmar engine panel is installed with tachometer, hour meter, oil and temperature gauges and audible and light alarms.

GENERATORS:

Number / Type: One Diesel
Manufacturer: Onan
Number of cylinders: Four cylinders.
Kilowatt rating: Rated at 11.5 KW.
Serial numbers: SN: C050757040
Model numbers: 11.5MDKAW-1953B
Hour meter: 5986 hrs on meter.
Location: Utility space below cockpit.
Fuel type: Diesel
Fuel hoses and clamps: Type A1 fuel hose is installed.
Fuel filters/water separators: A remote Racor is installed. No fire bowl located under filter assembly as per ABYC 33.5.6: Glass or clear sight bowl under filter or plastic filter assemblies do not comply with a 2-½ minute burn exposure, install proper fire bowl assembly or move filter outside of engine space **(RR)**.
Hoses and clamps: Serviceable.
Belts and pulleys: Serviceable.
Gauges: Remote panel.
Type of installation: In enclosed box. **Note rust damage to hush box.**

Cooling systems: Fresh water cooled, raw water heat exchanger -- internal strainer installed. There is a metal cooling water pipe that is chafing on the drip pan under the generator motor. The pipe should be inspected and effort made to determine cause of water leaks, chafe material should be installed to avoid future damage. The pan should be restored (rust and waste oil).

NOTE: The strainers acrylic bowl is fractured and must be replaced (ER).

Oil level and condition: No water or cuttings noted.
Exhaust components: Water-injected elbow to muffler to overboard discharge.
Exhaust hose connections double clamped: Yes.
Mufflers: Fiberglass waterlift.
Water-injected elbows: Serviceable.
Ventilation: Good.
Insulation: Loose, service as needed **(R)**.
Accessibility: Good.
Generator set operated: Yes. operated at sea trial.
Raw water intake - generator: Bronze seacock ball valve installed, it is prudent to inspect the hoses for replacement **(RR)**.



SEA TRIAL

SEA TRIAL DETAILS:

Date: October 12, 2022
Vessel operated from/to: Back Creek to the Severn River and back
Attendees: Buyers, Brokers, Engine surveyor, Surveyor.
Vessel operated by: Broker
Seas: The seas were 1 to 2 feet
Winds: 8-knots of wind.
Comments: The Yanmar diesel engine was inspected and found to be in serviceable condition. The engine compartment is poorly ventilated and poorly accessible from the galley console. The engine thru-hull and ball valve via raw water strainer, was double clamped. The exhaust system from the turbo charger to the muffler was in serviceable condition. The startup was satisfactory and the engine alarms proved. The resilient engine mounts were in questionable condition. Belts and controls were in need of service. The engine responded normally to all controls. When servicing engine, pencil zincs should be replaced. The packing gland appeared in poor condition. The overall general performance of the engine was serviceable but requiring maintenance. Be sure to consider the Bay Shore mechanical survey as an more comprehensive addition to this report.

The vessel was operated for a brief sea trial. The engine was run at idle and cruising speeds. The engine was also operated at wide open throttle under full load briefly. The conditions allowed for setting of main, staysail and jib, tacking and testing of furling devices. The vessel operated normally with the exceptions of the items that MAY be noted in the following.

Please be aware that results of the sea trial are limited by time allowed and conditions. It is prudent to look beyond the sea trial and be prepared to provide service or repairs.

OBSERVATIONS:

Engine start in gear: The engine will start in Forward or Reverse gears at dockside, extreme caution should be used when starting vessel to assure clutch lever is not engaged.

Start-up/Cranking: The engine started without excessive cranking.

Exhaust smoke: The engines' exhaust smoke was minimal and appeared normal throughout the sea trial.

Cooling water: The cooling water exhaust appeared adequate and normal.

Instruments: The engine instruments all operated within normal operating limits at idle, cruising speed, and maximum throttle.

Alternator output: Digital meter reading was taken and read 26.7 and 13.9 volts.

Vessel tachometer readings: Manufacturer's recommended max RPM is 3800, The tachometer reading was 4000 RPM, The photo-tachometer reading was not available.

Engine temps: The vessel's gauges ranged from 75 to 100 degrees celsius. Overheating occurred at about 82 degrees celsius. See Bay Shore report regarding engine temperatures **(ER)**.

Oil pressure: The vessel gauge read +-50 PSI.

Vessels Speed at WOT: Wide open throttle speed on GPS was +-9.8 knots without consideration for wind or current.

Navigation Equipment: Functioned normally.

Steering: The steering system operated normally/smoothly from stop to stop.

Throttle levers: The throttles operated normally/smoothly.

Transmissions: The transmissions operated normally/smoothly. The back-down test was satisfactory. Engine mounts secure & no unusual movement of the engines was sighted. **NOTE: THE propeller failed tp feather when under sail. See propeller information (RR).**

Vibrations: There were no excessive vibrations noted at any time during the sea trial run.
Packing Gland: The PSS shaft seal leaked during seatrial, service is required **(ER)**.
Shaft Creep: There was no noticeable shaft creep while gears in neutral.
Leaks: See engine survey for details.
Generator: Generator Output was recorded at 119 Volts and 60 HZ.
Other Observations: The Python Drive system should be inspected and considered for repair service or rebuilding **(ER)**.
Comments: **THERE MAY BE AN ENGINE OIL LEAK THAT CANNOT BE OBSERVED, SEE BAY BHOORE REPORT FOR RECOMENDATIONS (ER).**

TANKAGE

FUEL TANKS:

No Tanks/Capacity: Two tanks reportedly 390 gallons total.
Tank locations: Below cabin sole.
Tank material: Fiberglass.
Fuel supply lines: USCG A1 flex hose from tank to fuel pump.
Diesel return lines: Engines use grade USCG Type A1.
Shut off valves: At manifold on tank.



Fill pipe & condition: Not visible for inspection.
Tank Vent: Serviceable (where visible).
Tanks grounded: Yes.
Tanks secured: Yes.
Inspection/cleaning access: Limited.
Tanks condition: Not visible for inspection. No obvious signs of problems sighted.
Fuel pumps: Fuel transfer pump installed.
NOTE: The tanks must be filled to discern structural integrity and make certain fills, vents and pickups are satisfactory.

FRESH WATER TANKS:

No & locations of tanks: Two under cabin sole.



Capacity: Reportedly 250 gallons total.
Supply lines: Mixed vinyl lines.

Tank material: Fiberglass.
Tanks secured: Yes.
Inspection/cleaning access: Limited.
Tanks condition: Not visible for complete inspection, No obvious signs of problems sighted.
Accumulator tanks installed: Yes.
Water pump: 24 volt demand pumps located in engine room. All pumps functional.
NOTE: The tanks must be filled to discern structural integrity and make certain fills, vents and pickups are satisfactory.

HOLDING TANKS - BLACK WATER:

Marine Sanitation Device (MSD) Type: Certification Type: MSD U.S.C.G. Type III (Holding tank). Waste tank is connected to deck waste fitting for pump out.
No & Location of tanks: Two under cabin sole.
Tanks Material: Fiberglass.
Capacity: Reportedly 50 gallons each.
Tanks secured: Yes.
Tanks condition: Not visible for inspection. No obvious signs of problems sighted.
Inspection/cleaning access: Limited.
Lines: Sanitation hose. It is prudent to upgrade the hoses as use increases **(R)**.
Discharge lines: Deck pump out or overboard.
Macerator pumps: 24-Volt powers up but not proven.
Head Pumps: SeaLand.
Tank watch system: Yes.
Comments: Assure that the gray PVC tailpiece on the discharge thruhull is rated for underwater use **(RR)**.

WATER HEATERS:

Manufacturer/Capacity: ISOtemp, thought to be 40 liters. Some repair or service is needed **(RR)**.



How powered: 110V with heat exchanger coil.

WATER MAKING SYSTEM:

Manufacturer: Spectra Newport 400 NOTE: The water make was inspected, found to be in good physical condition but not operated. It is prudent to have the watermaker proved by a technician prior to making passage **(RR)**.

LPG (PROPANE) TANKS:

Tanks condition: Two tanks aluminum alloy, poor condition.
Secured: Yes.
Locker vented: Yes.
Regulator: Yes - Appropriate LPG regulator.
Pressure gauge: Yes.

Shut off valves: LPG shut off valve at the tank top. In addition, an LPG electrical solenoid shut-off valve switch is available near the galley and is functional. **NOTE: The DC solenoid is badly rusted and should be replaced (ER).**



Supply lines: Flex LPG type hose. Good condition where could be sighted.

Inspection/cleaning access: Good.

NOTE: **CAUTION: DRAINS IN PROPANE LOCKERS MAY BE PLUGGED OR OBSTRUCTED BY DEBRIS. IF THIS OCCURS, LEAKING PROPANE FUEL IS UNABLE TO ESCAPE AND IGNITING OF THIS FUEL IS POSSIBLE. CHECK DRAINS AND VENTS BEFORE EACH USE.**

GENERAL TANKAGE COMMENTS:

NOTE: Tank Vents: Vents (water, fuel or waste) serve as a pressure vacuum release and safety overflow for thru-hull fittings equipped with flame arresters. It is imperative that all screens are kept clean and in good repair. Replace damaged screens and periodically check vents to insure they are not clogged. Spiders and creatures love to call the vents their home.

HULL DECK AND SUPERSTRUCTURE

HULL GENERAL:

Type: Auxiliary cutter.
Construction material: The vessel is of hand laid fiberglass in a female mold type construction The deck is of fiberglass and sandwich core construction
Length overall (L.O.A.): 59'0"
Beam: 16'0"
Draft: 8'6"
Displacement: N/A.
NOTE: Vessel dimensions are provided per vessel listing. Dimensions were not measured first-hand by the surveyor.

HULL EXTERIOR:

Port Lights: Secure.
Swim Platform Molded swim step transom.
Hull cosmetics: The LPU coating is in good condition.



Moisture content: All moisture meter readings on side hull near the water line were relatively Dry. A

moisture meter was used to random sample hull moisture and around all thru hull fittings and all readings were relatively dry.

Structural condition:

The structural condition appeared satisfactory; there were only a few common irregularities and some minor crazing in the surface.

HULL INTERIOR:

- Bilge:** Some normal water levels in bilge area, generally clean with the exception of engine space.
- Bilges accessible:** Yes.
- Stringers:** No separation noted in hull stringers.
- Bulkheads:** Sound (where accessible) by visual inspection.
- Stem:** Solid stem, no cracks or separation sighted inside.
- Hull to Deck Joint:** The deck-to-hull joint is inspected visually where accessible. The joint showed no signs of working or water entry.
- Keel bolts:** Visually sound, no excessive corrosion sighted.



HULL BOTTOM INSPECTION:

- Keel Root:** The keel root has some moisture behind the fairing and should be repaired when hauled next for bottom painting (**RR**).



- Rudders:** The composite spade rudder has been removed to have the rudder bearing replaced, all components appeared to be in new condition. Assure that the rudder angle indicator installation is not compromised (**RR**).



- Bottom paint:** The anti-fouling bottom paint is in need of refreshing, some of the paint is "stretching" and come loose (**R**).



- Osmotic blistering:** The bottom was observed to be without obvious signs of osmotic blistering. Although there were no visible signs of blistering, there can be no guaranty against future manifestation.

Moisture content: Protimeter moisture metering was in the Low range (Dry laminate 0-157, wet laminate 235-999), the bottom average 160.



Delamination: There is an area at the port side about 10 feet aft of the stem that appears to have some delamination. It may be static compression damage from blocking. **Have that area inspected by a qualified FRP technician for repair (ER).**

Moisture checks: The GE Protometer moisture meter was used for moisture readings referenced in this report.

MAIN DECK & FITTINGS:

Deck Surface: Fiberglass deck with painted-in non-skid surface.
Moisture content: Moisture meter readings were all relatively dry.
Delamination: A percussion sounding hammer was used to test deck surface and no obvious delamination was found.
Inspection: The deck mold was inspected visually. The deck mold is in good condition.
Windshield: The frameless windows in the raised pilot house all appeared to be in good condition.
Ports/port lights: Aluminum framed opening and fixed type were in good condition.
Deck Hatches: Yes. The hatches are well secured and the seals in good condition. The support arms in place.
Ventilation: Ventilation to most areas of the vessel is good. The living area ventilation is acceptable with the hatches open.
Radar arch: An aluminum arch was at the transom.
Bow roller: Double stainless steel anchor roller.
Bow pulpit/rail: Stainless steel with side rails well secured.
Stern pulpit/push pit: Stainless steel well secured.
Stanchions/side rails: Stainless steel well secured.
Lifelines: Double 1X19 bare stainless steel with gates.
Toe rails: Molded in, no separation sighted.
Chocks and cleats: Horn cleats well secured.
Escape hatches: Forward.
Grab rails: Sides of cabin top grab rails are stainless steel.
Comments: **Some of the gas struts require replacement at the deck hatches (R).**



Structural condition: The structural condition appeared satisfactory; there were only a few common irregularities and some minor crazing in the surface.

BRIDGE DECK / COCKPIT:

Cockpit surface: Fiberglass deck with Painted-in non-skid surface.
Moisture content: Moisture meter readings were all relatively dry.
Delamination: No obvious signs of delamination were noted.
Cockpit hatches: Well secured.
Scuppers/deck drains: Yes open transom and drains overboard.
Cockpit Equipment: Twin pedestals, teak table. There is a hard dodger with the mainsheet traveler attached. **NOTE: Minor fractures at the side supports at the bases (R).**



BELOW WATERLINE EQUIPMENT

PROPELLERS:

Number and type of blades: Maxprop, three blade feathering type. **NOTE: The MAXPROP did not feather while on sea trial (RR).**



Prop condition: Prop is in good condition with no cracks, corrosion or bent, nicked or chipped blades.
Propeller runout: The propeller was indexed and found to be running clean and true.

PROPELLER SHAFTS:

Cutless (shaft) bearings: Good condition. No play found in cutless bearing.
Struts: P-Strut.



Shaft runout: The shaft was indexed and found to be running clean and true.

Comments:

There is a Python Drive system (constant velocity drive shaft system) that may require service (rusty) **(RR)**. Shafts cannot be inspected within cutless bearings, stuffing boxes, couplings and prop hubs. The shaft and propeller were coated with Prospeed, it is in poor condition, **prep and reapply when painting bottom.**



THRUSTERS:

Bow thruster:

There is a drop down bow thruster that was proved. The fairing plates are loose and should be restored **(ER)**.



ZINCS:

Condition:

Monitor all zincs frequently and replace as necessary.

OTHER BELOW WATERLINE:

Thru Hulls:

All thru-hull fittings are adequately sealed and bonded to hull. Inspect all hoses and replace with certified underwater hose if required **(RR)**.



Transducers:

Transducers for speed and depth appeared to be adequately sealed and bonded to the hull.

Strainers/Scoops/Screens:

All strainers/screens are well secured to hull bottom.

Grounding plates:

The grounding plate showed to be well secured and serviceable.

ELECTRICAL SYSTEMS

D.C. ELECTRICAL SYSTEMS:

D.C. Voltage system: 12 Volt and 24 Volt systems.



No. / Size of batteries: Per listing and observed:

24V -4x Caterpillar Lead Acid 210Ah 8D's, total 840Ah

12V-DC-260 AGM Lead Acid 260Ah 8D, total 260Ah

Batteries appeared to be in GOOD condition. No in-service date were on the batteries but indications that they were a mix of 2014, 2019 & 2020 was observed. **NOTE: It is prudent to anticipate battery replacement.**

Storage:

Batteries are installed in acid proof battery boxes.

Distribution panel:

Yes.



Breakers/fuses: DC switched breakers.

D.C. volt meters: Yes digital type.

D.C. AMP meters: Yes digital type.

D.C. wiring secured: Yes, where visible.

Charging system: Alternators, Battery charger.

NOTE: Most vessels over five years old will require some upgrading or replacement of electrical components as part of normal maintenance. ABYC recommends ongoing improvements regarding requirements. Be sure to inspect the AC and DC systems regularly and consult a qualified marine electrician for advice.

A.C. ELECTRICAL SYSTEMS:

A.C. Voltage system: 50 Amp - 220 Volt system.

Shore power inlets: Twin Marinc 50 AMP.

Shore power breaker: Separate shore power breaker for shore power inlet is within 10' wire run of power inlet per ABYC recommendations.

Shore power cords: (2) 50 AMP, serviceable condition.

A.C. source selector switches: Yes.

Distribution panel: Yes., with MAGNUM Inverter control panel.



Main breakers: Dual pole 30 amp breaker at main power panel.

Branch breakers: Yes.

Reverse polarity indicator: Yes.

Polarity Test: Polarity test indicated portions of wiring are not connected properly, an OPEN GROUND may be present, service is needed (**ER**).



GFCI protection: Burnt outlet sighted at galley area replace as required (**ER**).



A.C. Volt meters: Yes Digital type.

A.C. Amp meters: Yes, Digital type.

A.C. wiring secured: An open ground was indicated, have a qualified marine electrician inspect and correct (**ER**).

Other A.C.: C-Power 6KVA ISO Transformer



CONVERTERS:

Number of units: Charles 5000 SP Series 12v 60a for 12V Bank-replace panel (**RR**). Charles 5000 SP Series 24v 30a Auxiliary Charger for 24V Bank



INVERTERS:

Type: Magnum Energy MS4024 Pure Sine Wave 4000w Inverter/105a Charger for 24V Bank

NAVIGATION ELECTRONICS

NAVIGATION ELECTRONICS:

Compass: Ritchie Powerdamp Compass
Navigation and Communication: Per listing and observed:
B&G Vulcan 9" MFD
B&G Triton Autopilot Keypad
2x B&G Triton2 Displays
B&G Zeus3 12" MFD
B&G Triton2 Display
Icom M504 VHF w/DSC
(2)Ritchie Powerdamp Compasses 4x B&G 20/20HV Displays
B&G Zeus3 9" MFD
JRC Satellite Phone with JRC Inmarsat dome antenna mounted on stern arch
Icom M802 SSB w/AT-140 Automatic Tuner (tuner recently replaced)
Standard Horizon Quantum GX2360S VHF
Fusion RA70NSX Stereo, controllable from iPhone/Android and any of the Zeus displays (recently installed)
Ambient Weather Weather Station
Autohelm Handheld Electronic Compass
Vesper Watchmate XB-8000 WiFi/NMEA2000 AIS with separate AIS antenna mounted on stern arch



AUXILIARY EQUIPMENT

MISCELLANEOUS EQUIPMENT & ACCESSORIES:

Ice makers: Unit powers up.
Boarding ladder: Stainless steel swim ladder on transom.
Transom shower: Yes.

STEERING SYSTEM

STEERING SYSTEMS:

Type: Cable pull/pull type system.
Pulleys, cables and chains: Cable is in good condition - No broken cable wires sighted and cable pulley / sheaves are well secured. Keep this cable properly lubed and inspect steering often. Idler sheaves appeared serviceable
Mounting: Twin pedestal mount is well secured to cockpit sole.
Rudder stocks: Visually sound, aluminum quadrant secure.
Upper rudder bearing supports: Support braces are well secured.
Packing glands: A new boot type water seal was recently installed.

Emergency tiller: Yes, emergency rudder sighted.

Comments: A new rudder bearing was installed prior to launching for sea trial.



RIGGING & SAIL HANDLING

MASTS / BOOMS:

Main mast:

LPU painted Ballenger Spars custom aluminum triple spreader mast appears to be in column.



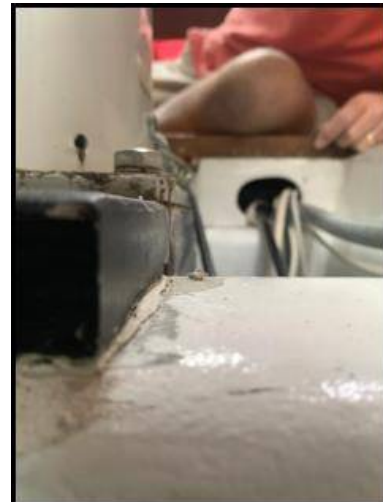
Main Spreaders

Triple set of spreaders, angles appear to be inline. The mast has been painted above the lower spreader root.



Goosenecks: How stepped:

Well secured and no signs of abnormal wear. The mast is keel stepped. The mast step was well secured.



Booms:

Forespar Leisurefurl in-boom furler. **NOTE: The inboard end of the boom and universal gear should be cleaned (salt and corrosion) and lubricated. Assure that there is no built up salt and corrosion regularly (RR).**



Mast Collar/Chocks

Secure where visible. **NOTE: A doubler has been added to the mast at the partners. It reinforces the vang bracket well.**



STANDING RIGGING:

Stays / shrouds:

Navtec Rod rigging. It is highly recommended to evaluate and service all standing rigging on a regular basis and replacement is every 12 years.



Chainplates:

The chainplate attachment are made of carbon fiber. The fixtures do show some fractures and loose coating. It is prudent to have them inspected by a qualified FRP technician (**RR**).



Ends:

Navtec - cold headed type. Due to nature of cold heading, no condition comments can be made regarding condition. It is prudent to have the rig and rigging surveyed by a qualified rigger **prior to making passage (RR)**.

Toggles:

Stainless steel, good condition -no bent or damaged toggles.

Tang ends:

Stainless steel, good condition -no bent or damaged tang ends

Turnbuckles:

Navtec style S/S closed barrel within turnbuckle covers.

RUNNING RIGGING:

Serviceable condition.

HALYARDS:

Halyards:

All halyards sighted appeared to be in good condition as sighted from deck level.

SHEETS:

Main sheeting:

Serviceable.

Sheets for head sails:

Generally good condition. Minimal wear.

WINCHES:

Type / Condition: Details per listing and observed:

- (2) Lewmar 54 Electric 1-Speed/Manual 2-Speed for halyards
- (3) Spinlock high load jammers for spinnaker and main halyards
- (7) Spinlock clutches for main furler lock, main furler, topping lift, port jib halyard, tack line, and traveler.
- (2) sheet bags with 3 pockets each
- (2) Lewmar 66 Electric 2-Speed primaries
- (2) Lewmar 54 Electric 1-Speed/Manual 2-Speed mainsheet
- (2) Lewmar 54 Manual 2-Speed backstay/runners
- (2) Lewmar clutches for furling jib/staysail furling
- (2) Spinlock high load clutches for mainsheet

Harken and Lewmar turning blocks
Spinlock clutch for backstay
Two Lewmar winches and four clutches installed on deck next to mast for use if racing, otherwise all running rigging leads to the cockpit.

OTHER DECK EQUIPMENT:

Roller furling gear Harken genoa and staysail furling gear.
Spinnaker pole: Stored on deck and secured.
Boom Vang: Navtec hydraulic vang.
Traveler System: Appears serviceable.
Jib Tracks: Well secured.
Deck Blocks: Secure.
Hydraulic systems: Navtec
Comments: Note that the shims for the aft sheet clutches are made of wood. **It is prudent to replace the worn wood with Starboard or FRP.**



SAILS

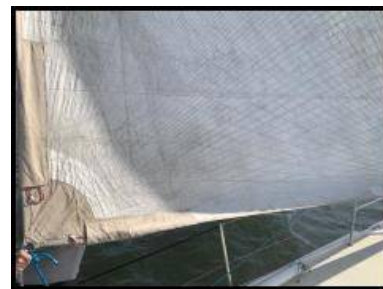
SAILS:

Sail Description / Condition: Furling in-boom mainsail, appears in good condition, no holes or split seams sighted and head, tack, clew and grommets intact.



Furling Genoa, UV panel secured to sail leech and foot appeared in fair condition, see Quantum review.

Staysail, roller furling appears in questionable condition, see Quantum review. UV panel secured to sail leech and foot.



Comments: The sails were reviewed by a sailmaker from Quantum Sails, see his report for more comprehensive information. A number of additional sails were in storage and not observed.

NOTE: My observations and comments should be considered as well as judged by the qualified sailmaker.

CABIN INTERIOR APPOINTMENTS

INTERIOR:

Style: Traditional.
Navigation station: Table with storage under top.
Headliner: Vinyl panels.
Sole: Teak & holly cabin sole installed.
Fabric & cushions: Good condition.
Light fixtures: 24 volt cabin lights throughout the vessel.
Cabin fans: DC Hella fans.
Water intrusion signs: No significant evidence sighted.
Condition: Interior is in good condition for its age. **Some cabinet latches require repair.**



ENTERTAINMENT ELECTRONICS:

Stereos: TV and stereo not proved.

GALLEY:

Stove: Force 10 two burner LPG stove and oven is gimbaled.
Refrigeration: Four drawer type Sea Frost refrigeration and freezer.
Ice maker: Powers up, produced ice but not totally proven.
Water system: Pressurized hot and cold.
Sink: Twin stainless steel deep well. drains over board or to gray water tank.
Microwave: Powers up.

HEADS:

Number of heads: Two complete heads.
Marine Sanitation Device: VacuFlush systems.
Fresh water inlet: Yes.
Sink: Stainless steel.
Showers: Handheld telephone style fixture.
Shower and sump pump: To gray water tank.

AIR CONDITIONING:

No & Type: Four zones 120 AC and one DC unit. DC unit did not proved (**RR**).
Temp Controls: Digital temperature controls.
Temp pull down: Good.
Filters Condition: Serviceable.
Thru hull strainer: Yes.
Hoses & connections: Hoses are clamped and secure on all fittings sighted.
Raw water cooling pump: Yes serviceable.
Raw water intake: Bronze seacock ball valve installed. Hoses were serviceable.

SAFETY EQUIPMENT

U.S.C.G. REQUIRED:

Visual distress signals: Most required signals were sighted, **it is prudent to assure current signals are located and accessible prior to making passage.**
Navigation lights: Operational.
Anchor light: Not visible, recommend checking function of anchor light after sunset (**R**).
USCG placards: Both USCG mandated placards (Oil & Garbage) are properly posted.
Comments: It is the captains obligation to insure all safety equipment as required by USCG is provided and aboard the vessel at all times.

LIFE JACKETS & PFD's

USCG Approved PFDs: Sighted on board vessel.
Life sling rescue system: MOM-8 Man Overboard Device, Lifesling mounted on rail.

FIRE FIGHTING EQUIPMENT:

No of USCG Approved Dry Chemical Size I: Three observed. **It is recommended by NFPA that all Fire extinguishers have a yearly certified inspection tag.**
Location / Condition: Automatic fire extinguisher, located: generator utility room. **It would be prudent to install a unit in the engine space It is recommended by NFPA that all Fire extinguishers have a yearly certified inspection tag (RR).**

BILGE PUMPS

DC BILGE PUMPS: There are four automatic bilge pumps, **I was no able to prove all pumps in the automatic function.**
COCKPIT MANUAL PUMPS: Whale manual bilge pump. **The cover plate is missing, pump appeared to be serviceable.**



GROUND TACKLE

Type: Plow type primary anchor, reportedly with 200' 3/8" chain with 150' 7/8" line.
Anchor windlass: Maxwell stainless steel windlass with deck and helm controls, Maxwell chain counter at helm Auto Anchor 700 Series.

AUXILIARY SAFETY EQUIPMENT

- Smoke detectors:** None sighted. NFPA 12.3 now recommends a smoke detector installed on all vessels over 26', recommend compliance with NFPA **(RR)**.
- Carbon monoxide detectors:** Carbon monoxide fume detectors were not sighted but are highly recommended by ABYC and NFPA. Install Carbon Monoxide detectors in any enclosed accommodation spaces per ABYC A-24 and NFPA 302 recommendations **(RR)**.
- Gas fume detector:** N/P assure unit is functional **(RR)**.
- Life Raft:** Viking 8-UKSL 8-person liferaft in valise, certified until 6/2024, Wichard deck padeyes and jacklines

CONDITION & VALUE REPORT SUMMARY

DECLARATION:

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

- **EXCELLENT** - Essentially as new in appearance
- **ABOVE AVERAGE** - Very good condition, extensive upgrades completed, needs only minor service or maintenance.
- **AVERAGE** - Serviceable but in need of some maintenance or repairs, updates or cleaning
- **BELOW AVERAGE** - Needs significant maintenance, repair or service

The surveyor has inspected the vessel both inside and out. Estimated fair market value is determined by cross referencing data from Soldboats.com, Yachtworld, BUC, NADA, Powerboat Guide and other brokerage listings or local dealers. The value of the vessel is based on market interest, in upgraded condition considering completion of the essential and recommended items, unless otherwise noted. Estimated replacement cost is determined using the information obtained from Yachtworld and local dealer prices using the same or similar make and model with similar equipment options. These publications, along with our database, have been considered for furnishing an unbiased, unprejudiced opinion as to the estimated values of this vessel.

- **RATING OF VESSEL CONDITION..... GOODS-AVERAGE CONDITION**
- **ESTIMATED FAIR MARKET VALUE.....\$550,000.00**
- **ESTIMATED REPLACEMENT COST.....\$3,800,000.00**
- **INTENDED USE OF VESSEL..... Pleasure**
- **SUITABILITY FOR INTENDED SERVICE: Vessel is considered fit for it's intended use
and upon correction of all listed Recommended Repairs.**

NOTE: ALL general comments and observations should be thoroughly reviewed to bring vessel up to current standards and or improve the value of the vessel.

NOTE: Time for surveying is limited. It is prudent to have performance of all equipment tested for a suitable period of time under full load to better determine condition.

NOTE: It is prudent to have estimates provided by several repairers to better determine costs.

LEGAL LIMITATION & WAIVER OF LIABILITY

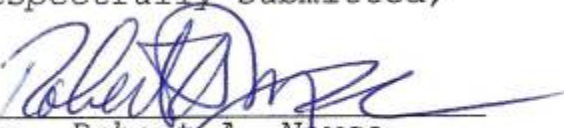
This survey represents the observations of the undersigned on the day of survey only regarding the vessel, "**FREE RANGE CHICKEN**". Reasonable care has been taken to inspect the vessel, without using destructive methods or opening up areas ordinarily concealed by the structure or fittings of the vessel. No observation is expressed regarding latent defects not readily discoverable by normal inspection of areas reasonably accessible for inspection. No observation is expressed regarding the engine.

This survey is given only to and for the benefit of the purchaser **Michael Stewart**. This survey report is not to be sold, transferred or assigned to any other party. The Purchaser and the Surveyor agree that any controversy or claim relating to the survey which cannot be resolved amicably shall be referred to arbitration, which shall be the sole and exclusive forum for the resolution or settlement of any dispute, controversy or claim between the parties. The arbitration shall be conducted in accordance with the rules of the Maritime Arbitration Association, then in force and shall be held in Annapolis, Maryland. Any arbitration award shall be final and binding upon the parties. The arbitral authority shall, in its award, fix and apportion between the parties the cost of arbitration including reasonable attorney's fees. The award of the arbitral authority may be enforced by any court having jurisdiction over the party against which the award has been rendered or where assets of the party against which the award has been rendered can be located. The parties agree that they shall comply with any such arbitral award without delay. The parties further acknowledge that neither party shall resort to any court except to compel arbitration, refer questions of law, or to confirm, vacate, or modify any such award to the extent permitted by the Rules of the Maritime Arbitration Association.

This survey is neither a warranty nor a representation of the condition of the vessel surveyed, either express or implied, nor is it in any way a guarantee of the condition or of the seaworthiness of the vessel. It is solely at the discretion of the insurance company to accept or deny underwriting the inspected vessel. **Michael Stewart** agrees to hold the Surveyor and Robert A. Noyce & Associates harmless from the consequences of any error, omission or oversight made in the survey.

Questions regarding this report should be directed to the undersigned.

October 19, 2022

Respectfully submitted,

By: Robert A. Noyce
Marine Surveyor & Appraiser



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P.O. Box 4609, Annapolis, MD 21403
410-703-5380

INSPECTION RECOMMENDATIONS SUMMARY

ESSENTIAL REPAIRS:

Considered necessary for the safe operation of the vessel.

The essential repairs noted include all repairs and corrections that pertain to immediate safety related items and are necessary to restore and maintain the original integrity of the vessel. If these items are not attended to, it may lead to further damage or deterioration affecting the condition of the vessel, and endangering those onboard or near the vessel. The attending surveyor's observations and experience and guidelines from the **CFR** (Code of Federal Regulations), the **USCG** (United States Coast Guard) requirements and also the recommended standards of **ABYC** (American Boat and Yacht Council) and **NFPA 302** (National Fire Protection Association) have been applied in determining the findings.

IMPORTANT: Due to the nature of creating lists, it is prudent to fully read the entire body of this report as not all Essential Repairs may appear in the list below.

Many **ESSENTIAL REPAIR** items require further inspection and often destructive testing to determine extent of damage and prescription for repair. The Notes below pertain to some common items whose requirements may change with time or use, and are for your consideration.

NOTE: All underwater thru-hull fittings must be double clamped. If a seacock or through-hull fitting/nipple will not accommodate two clamps, replace fitting or if not possible, install one clamp next to the other as a safety clamp but do not over-tighten.

Be sure all USCG, safety and fire-fighting equipment is boarded and installed as required.

PROPULSION SYSTEM

MAIN ENGINES:

Fuel hoses and clamps:

1. Type A1 fuel hose is installed, however there are several sections of non-conforming potable water hose used, replace with USCG "Type A SAE J1527" approved marine fuel hose as per ABYC H-24 / H-33 requirements **(ER)**.

Engine mounts and beds:

2. Resilient mounts are showing signs of wear and should be evaluated for replacement **(ER)**.

TRANSMISSIONS:

Mounts:

3. Resilient Mounts, There is some corrosion on mounts, it is prudent to replace all mounts **(ER)**.

Packing Glands:

4. Water-injected Packless shaft seal system. Service packing gland per manufacturer **(ER)**. Note: It is recommended by manufacturers that shaft seal system is serviced or replaced as required and every 5 years and checked on a regular basis.

EXHAUST SYSTEM:

Mufflers:

5. Fiberglass inline waterlift muffler appeared in serviceable condition however the hose ends at the nipples appear to be leaking (salt build up) and should be disassembled for inspection and service. That is to determine if hoses are deteriorated enough for replacement **(ER)**.

GENERATORS:

Cooling systems:

6. Fresh water cooled, raw water heat exchanger -- internal strainer installed. There is a metal cooling water pipe that is chafing on the drip pan under the generator motor. The pipe should be inspected and effort made to determine cause of water leaks, chafe material should be installed to avoid future damage. The pan should be restored (rust and waste oil). **NOTE: The strainers acrylic bowl is fractured and must be replaced (ER).**

SEA TRIAL

OBSERVATIONS:

Engine temps:

7. The vessel's gauges ranged from 75 to 100 degrees celsius. Overheating occurred at about 82 degrees celsius. See Bay Shore report regarding engine temperatures **(ER)**.

Packing Gland:

8. The PSS shaft seal leaked during seatrial, service is required **(ER)**.

Other Observations:

9. The Python Drive system should be inspected and considered for repair service or rebuilding **(ER)**.

Comments:

10. **THERE MAY BE AN ENGINE OIL LEAK THAT CANNOT BE OBSERVED, SEE BAY BHORE REPORT FOR RECOMMENDATIONS (ER).**

TANKAGE

LPG (PROPANE) TANKS:

Shut off valves:

11. LPG shut off valve at the tank top. In addition, an LPG electrical solenoid shut-off valve switch is available near the galley and is functional. **NOTE: The DC solenoid is badly rusted and should be replaced (ER).**

HULL DECK AND SUPERSTRUCTURE

HULL BOTTOM INSPECTION:

Delamination:

12. There is an area at the port side about 10 feet aft of the stem that appears to have some delamination. It may be static compression damage from blocking. **Have that area inspected by a qualified FRP technician for repair (ER).**

BELOW WATERLINE EQUIPMENT

THRUSTERS:

Bow thruster:

13. There is a drop down bow thruster that was proved. The fairing plates are loose and should be restored **(ER)**.

ELECTRICAL SYSTEMS

A.C. ELECTRICAL SYSTEMS:

Polarity Test:

14. Polarity test indicated portions of wiring are not connected properly, an OPEN GROUND may be present, service is needed **(ER)**.

GFCI protection:

15. Burnt outlet sighted at galley area replace as required **(ER)**.

A.C. wiring secured:

16. An open ground was indicated, have a qualified marine electrician inspect and correct **(ER)**.

RECOMMENDED REGULATION COMPLIANCE REPAIRS:

The findings in the recommended compliance or repairs are derived from areas of the vessel that may not have been built to or may not conform with current principles and practices found in the guidelines from the **CFR** (Code of Federal Regulations) and the **USCG** (United States Coast Guard) requirements; also **good boat building practices** and the recommended standards of **ABYC** (American Boat and Yacht Council) and **NFPA 302** (National Fire Protection Association). Recommendations represent changes that may affect normal safety functions and/or areas of the vessel that if not attended to may become higher priority or could lead to reduced market value. The vessel's intended usage is considered in making these determinations. Implementing these suggestions is **recommended** to assure safety of the vessel and persons onboard or nearby the vessel and also as part of a practical ongoing maintenance program.

NOTE: Bilges should be flushed and cleaned on a regular basis. (Do not flush into restricted waters).

Be sure all tanks, fills, vents, supply and return lines are satisfactory when filled to capacity. Be sure to comply with ABYC 33.16-16.3.4 (Fuel Systems Labeling).

When using bedding compounds or marine sealants, be certain to purchase the proper marine product for the task. For instance, basic silicone is not recommended as a bedding compound for active hardware such as stanchion bases, cleats. Use 3M 4200, 3M 5200 or Boatlife Lifecaulk.

ABYC information may be obtained by phoning 410-990-4460.

PROPULSION SYSTEM

MAIN ENGINES:

Fuel filters/water separators:

1. Twin remote Racors are installed with vacuum pressure gauge. No fire bowl located under filter assembly as per ABYC 33.5.6: Glass or clear sight bowl under filter or plastic filter assemblies do not comply with a 2-½ minute burn exposure, install proper fire bowl assembly or move filter outside of engine space (**RR**). There are also two Goldenrod fuel filters that appeared to be part of a polishing system, they are also non-conforming (No fire bowl located under filter assembly as per ABYC 33.5.6 (**RR**)).

Belts and pulleys:

2. Evaluate and service belts as needed (see Bay Shore report) (**RR**).

Cooling systems:

3. Freshwater cooled heat exchanger cooled. The end caps on the heat exchanger are corroded this is an indication of leakage, recommend servicing (**RR**).

Starter/Alternator

4. There are two 24 volt and one 12 volt alternator. Assure that the positive terminals are cleaned and protected from contact (**RR**). The alternator brackets may need some service, adjustment or repair.

Insulation:

5. Yes some loose or deteriorated insulation (**RR**).

Raw water intake - engine:

6. The ball valves and hoses appeared to be in serviceable condition and double hose clamps are installed, however they all require regular maintenance and close inspection. Assure that the hoses (especial the enda at barbs or nipples) are isn required condition (**RR**).

GENERATORS:

Fuel filters/water separators:

7. A remote Racor is installed. No fire bowl located under filter assembly as per ABYC 33.5.6: Glass or clear sight bowl under filter or plastic filter assemblies do not comply with a 2-½ minute burn exposure, install proper fire bowl assembly or move filter outside of engine space (**RR**).

Raw water intake - generator:

8. Bronze seacock ball valve installed, it is prudent to inspect the hoses for replacement **(RR)**.

SEA TRIAL

OBSERVATIONS:

Transmissions:

9. The transmissions operated normally/smoothly. The back-down test was satisfactory. Engine mounts secure & no unusual movement of the engines was sighted. **NOTE: The propeller failed to feather when under sail. See propeller information (RR).**

TANKAGE

HOLDING TANKS - BLACK WATER:

Comments:

10. Assure that the gray PVC tailpiece on the discharge thruhull is rated for underwater use **(RR)**.

WATER MAKING SYSTEM:

Manufacturer:

11. Spectra Newport 400 **NOTE:** The water make was inspected, found to be in good physical condition but not operated. It is prudent to have the watermaker proved by a technician prior to making passage **(RR)**.

HULL DECK AND SUPERSTRUCTURE

HULL BOTTOM INSPECTION:

Keel Root:

12. The keel root has some moisture behind the fairing and should be repaired when hauled next for bottom painting **(RR)**.

Rudders:

13. The composite spade rudder has been removed to have the rudder bearing replaced, all components appeared to be in new condition. Assure that the rudder angle indicator installation is not compromised **(RR)**.

BELOW WATERLINE EQUIPMENT

PROPELLERS:

Number and type of blades:

14. Maxprop, three blade feathering type. **NOTE: The MAXPROP did not feather while on seatrial (RR)**.

PROPELLER SHAFTS:

Comments:

15. There is a Python Drive system (constant velocity drive shaft system) that may require service (rusty) **(RR)**. Shafts cannot be inspected within cutless bearings, stuffing boxes, couplings and prop hubs. The shaft and propeller were coated with PropSpeed, it is in poor condition, **prep and reapply when painting bottom.**

RIGGING & SAIL HANDLING

MASTS / BOOMS:

Booms:

16. Forespar Leisurefurl in-boom furler. **NOTE: The inboard end of the boom and universal gear should be cleaned (salt and corrosion) and lubricated. Assure that there is no built up salt and corrosion regularly (RR).**

STANDING RIGGING:

Chainplates:

17. The chainplate attachment are made of carbon fiber. The fixtures do show some fractures and loose coating. It is prudent to have them inspected by a qualified FRP technician **(RR)**.

Ends:

18. Navtec - cold headed type. Due to nature of cold heading, no condition comments can be made regarding condition. It is prudent to have the rig and rigging surveyed by a qualified rigger **prior to making passage (RR)**.

CABIN INTERIOR APPOINTMENTS**AIR CONDITIONING:****No & Type:**

19. Four zones 120 AC and one DC unit. DC unit did not proved **(RR)**.

SAFETY EQUIPMENT**FIRE FIGHTING EQUIPMENT:****Location / Condition:**

20. Automatic fire extinguisher, located: generator utility room. **It would be prudent to install a unit in the engine space It is recommended by NFPA that all Fire extinguishers have a yearly certified inspection tag (RR)**.

AUXILIARY SAFETY EQUIPMENT**Smoke detectors:**

21. None sighted. NFPA 12.3 now recommends a smoke detector installed on all vessels over 26', recommend compliance with NFPA **(RR)**.

Carbon monoxide detectors:

22. Carbon monoxide fume detectors were not sighted but are highly recommended by ABYC and NFPA. Install Carbon Monoxide detectors in any enclosed accommodation spaces per ABYC A-24 and NFPA 302 recommendations **(RR)**.

NOTE: It is prudent to anticipate some investment in fuel polishing, battery replacement, rigging adjustments and systems upgrading for a vessel that has been stored for any length of time. Even when a vessel has been commissioned not all requirements may have been fulfilled. Before making passage, all systems must be proved under full load or use for a greater period of time than allowed in a normal survey. Be sure to follow all good seamanship and prudent cruising habits.

Repairs of boats and marine equipment often exceed expectations and estimates. It is advisable to obtain several estimates from qualified repairers.

RECOMMENDED SERVICE:

These findings are maintenance items that are not deemed to be immediately safety related. Some of these areas may affect normal operation or systems of the vessel. If these observations are not addressed they could lead to more important priority issues and/or could lead to a reduced vessel market value. Implementing these suggestions is recommended as part of a practical ongoing maintenance program.

PROPULSION SYSTEM

MAIN ENGINES:

Air intake filter:

1. Signs of deterioration, service filter **(R)**.

GENERATORS:

Insulation:

2. Loose, service as needed **(R)**.

TANKAGE

HOLDING TANKS - BLACK WATER:

Lines:

3. Sanitation hose. It is prudent to upgrade the hoses as use increases **(R)**.

HULL DECK AND SUPERSTRUCTURE

HULL BOTTOM INSPECTION:

Bottom paint:

4. The anti-fouling bottom paint is in need of refreshing, some of the paint is "stretching" and come loose **(R)**.

BRIDGE DECK / COCKPIT:

Cockpit Equipment:

5. Twin pedestals, teak table. There is a hard dodger with the mainsheet traveler attached. **NOTE: Minor fractures at the side supports at the bases (R)**.

SAFETY EQUIPMENT

U.S.C.G. REQUIRED:

Anchor light:

6. Masthead tricolor and anchor lights not visible, recommend checking function of anchor light after sunset **(R)**.