1998 52' / 15.8m Viking Princess Flybridge Sport Cruiser

"Santasha"

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Stuart , FL 34997

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Report of Marine Survey

Of the Vessel

"Santasha"

1998 52' / 15.8m Viking Princess Flybridge Sport Cruiser

Conducted By

Tim J. Brown, SAMS Accredited Marine Surveyor # 1395, ABYC Master Technician, USCG Master NC 1600 GT

Prepared For

James Garner

Date Of Survey: 06/15/2026

Report Submitted On: 06.16.2026

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INTRODUCTION

PURPOSE & SCOPE

The attending Surveyor attended aboard the 1998 Viking Princess Santasha, at the request of James Garner, beginning 06/15/2026. The Survey was requested to determine the physical condition and value of the vessel. No reference or information should be construed to indicate evaluation of the internal condition of engines, transmissions, drives or generators, nor the propulsion system's or the auxiliary power system's operating capacities. Electrical and electronic equipment was powered up and some electrical equipment may have been tested for basic and/or limited function only. The wiring was inspected where accessible and was found to be in generally serviceable condition, unless otherwise noted. A significant amount of wiring could not be observed due to the wiring looms and conduits that transit areas which would require dismantling and removals for their inspection. If a detailed report as to the condition and capacities of the wiring and electrical components is desired, it is recommended that a qualified ABYC Certified Marine Electrical technician be engaged. Vessel tankage exteriors were visually inspected where accessible. Evidence of fuel Leakage was observed in the bilge however the location of the leak was NOT located, the tanks were not confirmed to be full at the time of inspection. If a more thorough assessment is desired, the tanks should be filled and checked under full tank status or pressure tested to attest to their condition.

The vessel was Surveyed without the removal of any parts, including fixed partitions, fastened panels, fittings, headliners & wall-liners, heavy furniture, tacked carpeting or other fixed flooring material, appliances, electrical equipment or electronics, instruments, anchors line & chain, spare parts, personal gear, clothing, miscellaneous items in the bilges, cabinets, lockers or other storage spaces, or other fixed or semi-fixed items. Only installed items were inspected, including but not limited to enclosures, covers and tops. Locked compartments or otherwise inaccessible areas would also preclude inspection. Survey requester is advised to open up all such areas for further inspection. A visual inspection was conducted only on accessible structures and no destructive testing was performed. Naval architecture and engineering analysis were not a part of this Survey. Furthermore, no determination of stability characteristics or inherent structural integrity has been made, and no opinion is expressed with respect thereto. Complete compliance with, identification of, and reporting on all standards, codes and regulations is not guaranteed. This signed report represents the findings of the Survey and supersedes any and all conversations, statements and representations, whether verbal or in writing. This Survey Report represents the condition of the vessel on the above date or dates and is the unbiased opinion of the undersigned, but it is not to be considered an inventory, warranty or guarantee, either specified or implied. The Survey Report is for the exclusive use of the client and those lenders and underwriters that will finance and insure the vessel for this client only, and is not assignable to any other parties for any purpose.

The vessel is NOT considered a good marine risk in it's present condition. See "A" findings in this report for deficient issues requiring repair for the safe operation of this vessel.

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 AS THEY APPLY TO A VESSEL OF THIS CLASS AND SIZE OPERATED ON INLAND, COASTAL AND OFFSHORE WATERS OF THE USA. The vessel was observed in the water at the vessels berth at Four Fish Marina- Jensen Beach, FL , underway in the intercoastal waters between Jensen Beach and Stuart, FL and out of the water on a travel lift at Sailfish Marina, Stuart, FL.

DEFINITION OF TERMS

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

APPEARED:

Indicates that a very close inspection of the related 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 testing, etc.).

SERVICEABLE:

Fulfilling its function adequately (usable at the time of Survey).

POWERED UP:

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

USE OF "A", "B" or "C":

Use of the letters "A", "B" or "C" in the body of this report will indicate that a finding will be listed in the ''Findings and Recommendations'' Section pertaining to the lettered item. PLEASE BE ADVISED THAT SOME DEFICIENCIES, OBSERVATIONS AND SUGGESTIONS MAY ALSO BE CONTAINED IN THE BODY OF THE REPORT.

The number of asterisks in this General Information section refers to the source of related information as follows:

** Per Manufacturer's Documentation

*** Per Registration Documentation

**** Per BUC Book Data

Unless specifically noted otherwise, there were no measurements or calculations performed during the Survey. The specifications listed within the report are believed to be correct; however, accuracy is not guaranteed. Recommend obtaining accurate measurements and performing calculations as desired, or verifying all vessel specifications and capacities with the vessel's builder.

SURVEYOR NOTES

TRIAL RUN COMMENTS

A one and a half hour trial run WAS performed during the Survey inspection on 08/15/2022 during which Charley Purvis from Smith and Wick preformed the bulk of the engine survey and TB Marine performed inspection of the navigation equipment , steering , deck and nav. lighting, VHF radios , emergency shut downs and auto pilot among other various tasks detailed in this report.

OUT OF WATER INSPECTION COMMENTS

An out of the water inspection of the hull's wetted surfaces and running gear was performed on 08/15/2022. The hull was sounded with phenolic hammer and no indication of delamination or high moisture content was detected below the waterline.

Additionally the hull sides above the water line and the exterior decks were also sounded with a phenolic hammer and analyzed with a Skipper Moisture Meter. See results of those inspections are detailed throughout the report under their respective headings.

The through - hull fittings below the water line were also inspected and show significant signs of galvanic and or electrolytic corrosion. Additional details on the through-hull fittings and vessels bonding system are detailed in this report.

ELECTRICAL INSPECTION COMMENTS

AC and DC power was used to power up the electrical systems specified in this report . The surveyor did not perform a complete electrical survey however the wiring, wiring connections , fuses and breaker panels, switches and AC and DC outlets were inspected to determine the overall condition of the vessels electrical system. The AC & DC circuits and components were inspected according to ABYC standards and USCG regulations for a vessel of this size and class. There are several ABYC standards developed and used as industry safety guidelines since this vessel was built and a complete list of those standards an be found in a link to ABYC Standards E-11 provided with this report. The surveyor used common industry standard electrical diagnostic tools to analyze the circuits onboard this vessel such as the Ideal Sure Test model 61-164 circuit analyzer, Fluke 323 True RMS Amp. Clamp Meter, The Ideal 61-327 Multi-Meter , Ideal SLT Infrared Thermometer # 61-827 and the Ansul BST500 Battery System Tester. Additional details and findings of these tests are found in the Electrical Section of this report.

HIN (HULL IDENTIFICATION NUMBER) VERIFICATION COMMENTS

The vessel's HIN (Hull Identification Number) was verified during the Survey inspection. (VSC52028A898)

VESSEL DISCLOSURE COMMENTS

The generator was reported to be an unreliable source of AC power by the owner and was not tested. See Engine Surveyors Report for further details.

ENGINE/MECHANICAL SURVEY

A Mechanical/Engine Surveyor was conducted by Charley @ Smith & Wick Marine Diesel.

ELECTRICAL/MECHANICAL SURVEY

A complete electrical survey was not preformed; however all circuits were energized for component operation and the wiring was closely inspected for any signs of high resistance, chafing, poor termination & or non-conformity to USCG and ABYC standards.

The seller disclosed prior to inspection that the generator was running but not operating normally. See "A" findings that require repairs prior to safe operation of this vessel.

HVAC/REFRIGERATION SURVEY

It is recommended that the vessels HVAC be inspected by ABYC certified Marine Air and Heating specialist.

GENERAL RECOMMENDATIONS

If not already onboard, the vessel's owner/operator manuals and equipment operating manuals should be sourced and carefully studied. Any missing equipment manuals can typically be obtained by the manufacturer, sourced online or by other third party resources. Recommend implementing/maintaining vessel trip and machinery maintenance log books.

GENERAL VESSEL INFORMATION

TYPE OF SURVEY REQUESTED	Pre-Purchase for Buyer
DATE AND TIME OF SURVEY	08/15/2022 @ 0900
VESSEL TYPE	Sport Cruiser (Recreational)
VESSEL BUILDER	*** Viking Sport Cruisers Inc - Built @ Plymouth Devon, UK
HIN (HULL IDENTIFICATION NUMBER)	*** VSC52028A898
YEAR BUILT	1998
OFFICIAL NUMBER	*** 1070420
STATE REGISTRATION NUMBER	DO1070420
STATE REGISTRATION DECAL NUMBER	06889089
STATE REGISTERED VESSEL OWNER	Duane Richard Raab
VESSEL MATERIAL	Fiberglass Reinforced Plastic
LENGTH OVERALL (LOA)	** 51'-06"
BEAM	** 15.0'
DISPLACEMENT	42,300 lbs. measured by travel lift operator at Sailfish Marina haul out.
DEPTH	7'-02" per USCG Doc.
GROSS TONNAGE	37 per USCG
NET TONNAGE	29 per USCG
LOCATION OF SURVEY INSPECTION	4 Fish Marina - Jensen Beach, FL
LOCATION OF BOTTOM INSPECTION	Sailfish Marina - Port Salerno, FL
VESSEL OWNER	Duane R. Rabb
VESSEL OWNER ADDRESS	22 Simara St. Stuart, FL 34996
PERSONS IN ATTENDANCE DURING SURVEY	(Surveyor) Tim J. Brown - Mr. James Gardner (Buyer) - Tyler James (Broker) - Steve Ash (Assoc. Surveyor) Charley from Smith& Wick (Engine Surveyor) Capt. DJ from HWAC (Captain)

COMMENTS	Value of vessel estimated in US Dollars
	
	HIN # breakdown VSC52028A898
	VSC = Viking Sport Cruisers Inc
	52028 = Boat Serial Number
	A8 = Manufactured January 1998
	98 = Model year 1998

RATING & VALUATION

VESSEL OVERALL RATING

****FAIR

ESTIMATED MARKET VALUE

190,000

Current BUCNET Retail Price Range Adjusted for FAIR condition in SE FL region ($200,000 - $220,000 USD)

ESTIMATED REPLACEMENT COST

2,270,000

RATING/VALUATION COMMENTS

See Summary of Valuation for details on resources, valuation method & current condition. Use the Google Link provided her to view resources for valuation and addition pictures supporting findings and condition of vessel.

Https://drive.google.com/drive/folders/1GG3F4rLyXiptBuyBj8p4ZOqIem2oEu3h?usp=sharing

VESSEL DOCUMENTATION

HIN (HULL IDENTIFICATION NUMBER) COMPLIANCE (33 CFR 181)

The vessel's HIN (Hull Identification Number) displayed on the starboard transom DID match the HIN recorded with U.S.C.G. Documentation. (VSC52028A898)

DOCUMENTATION COMPLIANCE (46 CFR 67)

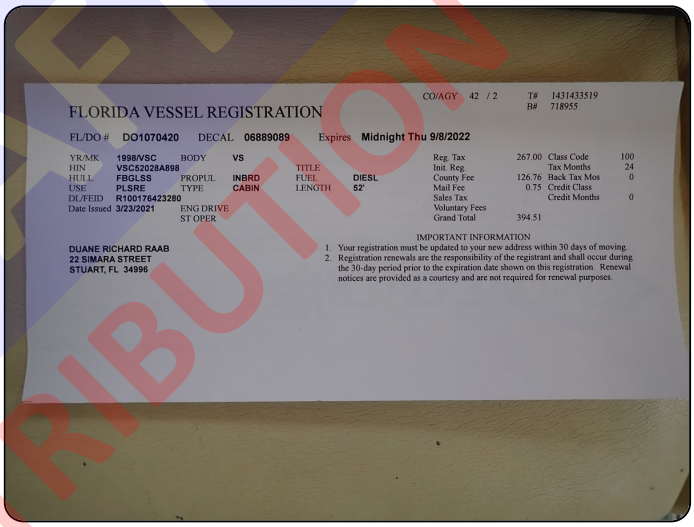
The vessel's U.S.C.G. Documentation was listed as current in the U.S.C.G. Documentation Online Database. The USCG Official Number 1070420 WAS NOT permanently displayed.


UNITED STATES OF AMERICA
DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD
NATIONAL VESSEL DOCUMENTATION CENTER
CERTIFICATE OF DOCUMENTATION

FINDING B-1

STATE REGISTRATION COMPLIANCE (33 CFR 173)

The vessel's State Registration was valid. State registration sticker was displayed on the port side.


FLORIDA VESSEL REGISTRATION

CO/AGY 42 / 2 T# 1431433519 B# 718955

FL/DO # DO1070420 DECAL 06889089 Expires Midnight Thu 9/8/2022

YR/MK 1998/VSC BODY VS
HIN VSC52028A898
HULL FBGLSS PROPUL INBRD TITLE FUEL DIESL
USE PLSRE TYPE CABIN LENGTH 52'
DL/FEID R100176423280
Date Issued 3/23/2021 ENG DRIVE ST OPER

Reg Tax 267.00 Class Code 100
Init Reg Tax Months 24
County Fee 126.76 Back Tax Mos 0
Mail Fee 0.75 Credit Class
Sales Tax Credit Months 0
Voluntary Fees
Grand Total 394.51

DUANE RICHARD RAAB
22 SIMARA STREET
STUART, FL 34996

IMPORTANT INFORMATION
1. Your registration must be updated to your new address within 30 days of moving.
2. Registration renewals are the responsibility of the registrant and shall occur during the 30-day period prior to the expiration date shown on this registration. Renewal notices are provided as a courtesy and are not required for renewal purposes.

UNDERWATER EQUIPMENT & HULL INSPECTION

PROPELLERS

Two (2) bronze alloy, four bladed 24'' x 17" pitch propellers with Prop Cap nut. Props had minor deformities when measured. Recommend prop tuning to improve efficiency.

PROPELLER SHAFT LOGS

Shaft logs were bronze, mounted to the hull. The shaft log bonding connections need cleaning. The Shaft log bearings were considerably worn.

FINDING B-2

PROPELLER SHAFT STRUTS

Two (2) cast Bronze I-Beam type propeller shaft struts. No significant wear or corrosion.

SHAFT STAVE BEARINGS (CUTLESS BEARINGS)

The shaft strut's Cutless Bearings had some significant wear/play.

FINDING B-3

RUDDER MOUNTING

Mounted in dripless rudder seal carrier bearings. Some internal & external corrosion. The steering compartment had significant water from undetermined source but most likely the rudder
shaft seals are leaking.

FINDING B-4

TRIM TAB SYSTEM

Replace the zinc anodes and anti fouling coatings at the next haul out. The port Trim tab did not operate. Starboard trim tab flexible reinforced hydraulic hoses have regraded connections at the pump.

FINDING B-5

THRUSTERS

Demonstrated. Requires new zinc anode.

HULL SEA-STRAINERS

The hull was equipped with raw water strainer screens and scoops. Monitor/clean often. Some minor marine growth sighted.

DRAINAGE THROUGH-HULLS

Bronze and stainless steel hull discharge/drainage through-hulls. Several of the above and below waterline through-hulls have developed significant galvanic corrosion. All through-hulls require service or replacement.

HULL TRANSDUCERS

The internal bilge mounted transducer, appeared serviceable.

HULL GROUNDING PLATES/EARTHING PLATES

Painted over with serval coats of bottom paint.

FINDING B-6

SACRIFICIAL ANODES

All underwater Zinc Anodes were significantly depleted and not effective. Recommend all internal bonding circuits of the exposed underwater hull metal components be serviced. There are several through hulls with no bonding connection or corroded terminal connections.

FINDING B-7

ANTIFOULING PAINT

The antifouling bottom paint appeared to be at the end of its serviceable life and was flaking off/failing in several areas. The anti-fouling paints were failing rapidly due to insufficient
bonding of the metal through hull fittings. Anti fouling paints are conductive. It appears there are several coats of anti fouling paint build up. It appears the hull bottom may not have been properly
prepped for additional coats of anti-fouling paint.
Recommend complete Hull bottom paint removal prior to new barrier coat and anti fouling paint application.

FINDING B-8

OSMOTIC HULL BLISTERS

No osmotic laminate blisters were sighted.

HULL SURFACE COMMENTS

No delaminated areas were identified on the hull's wetted surfaces, where accessible.

HULL INSPECTION COMMENTS

Inspection of the hull's wetted surface was partially hindered, due to the vessel's position on the travel-lift straps and the presence of antifouling paint/coatings covering the hull's wetted surface. Unexposed areas precluded inspection. A percussion hammer sounding was performed on the hull's accessible wetted surfaces. The hull is constructed of various weights and types of fiberglass cloths and plastic resin. The construction appears to be in accordance with accepted boat building practice for the age, size and class of vessel. There is no readily detectable evidence of significant prior repairs. Random percussion soundings revealed no other areas of delaminating or deterioration of the hull composite. Random percussion soundings indicated no significantly elevated moisture content. Hull sides are white.

The hull sides appear to be in good condition.

VESSEL CONSTRUCTION

HULL ARRANGEMENT

HULL DESIGN TYPE

Modified-V, planing type, with flared bow, hard chines.

HULL MATERIAL

Reportedly, solid FRP (fiber reinforced plastic) , with composite sandwich core FRP above the waterline. Core material unknown.

EXTERIOR FINISH

White gelcoat.

GENERAL EXTERIOR CONDITION

The exterior of the vessel appeared to be in Average Condition . There is minor UV damage to the exposed gel coat & painted hull surfaces. Some surface corrosion and pitting was observed on exposed metals.

FINDING C-1

TRANSOM

Reportedly, cored transom with port transom door. The transom was accessed through the steering compartment. Sounding with phenolic hammer indicted no elevated moisture or delamination. No high stress sighted.

SWIM PLATFORM

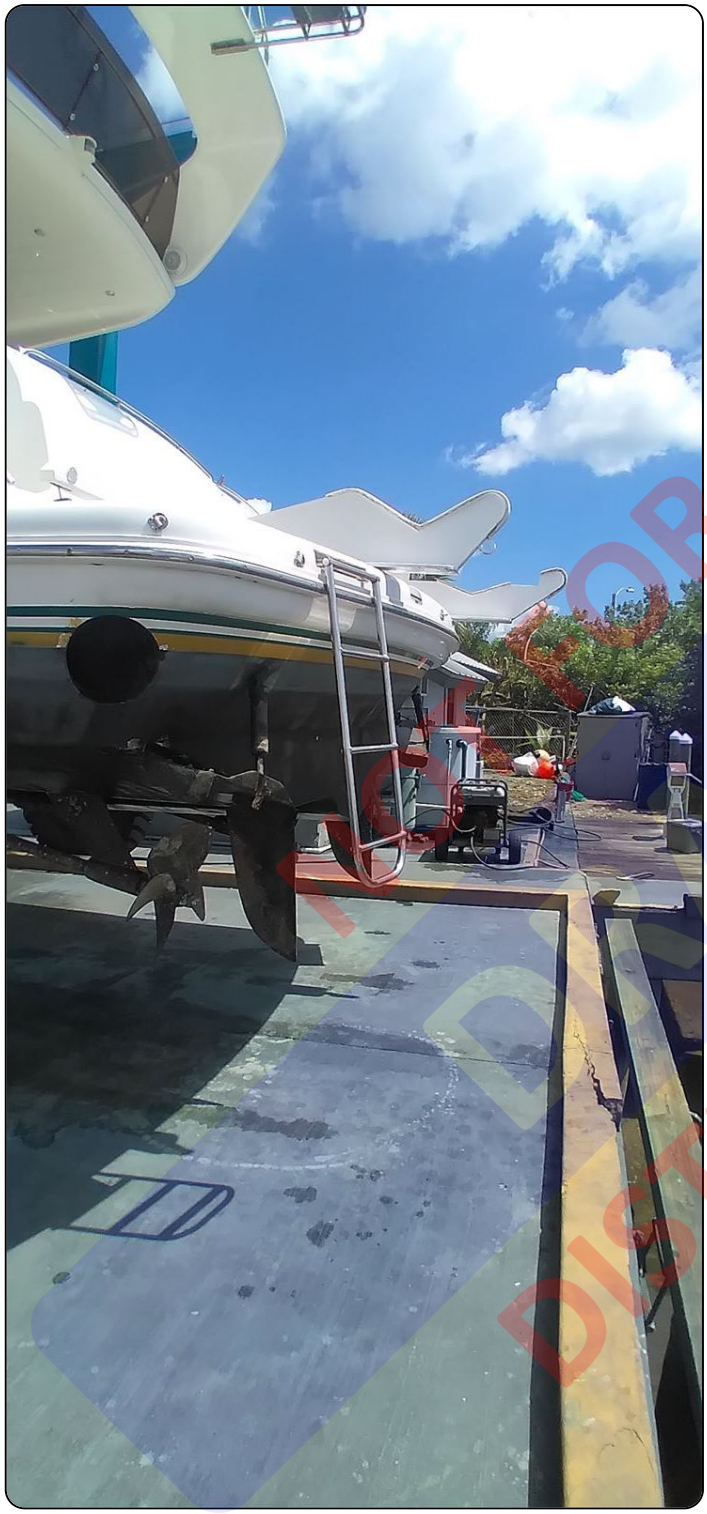
Cored fiberglass swim platform with teak laminated surface, with tender chocks installed. The teak laminate surface is starting to de laminate and is worn thin from UV exposure and cleaning chemicals.

The starboard side of the swim platform had delaminated teak and water saturated surface structure. This condition (if not already) will eventually affect the integrity of the fiberglass hull structure below the delaminated teak where water is collecting.

FINDING B-9

BOARDING SWIM LADDER

Telescoping stainless steel boarding ladder installed at the swim platform. Solid mounting. Weight tested. No significant corrosion or wear.



STRINGERS/TRANSVERSALS

Hull stiffness is provided by cored fiberglass longitudinal stringers and athwartships transversals. No indication of high stress, delamination where accessible for inspection. Stringers were sounded with phenolic hammer where accessible for proper sounding. Those areas sounded solid and it's the surveyors opinion that the vessel requires a more through interior structure inspection beyond the scope of this survey to determine source of salt water in the bilges. Hull interior and bilges require cleaning and painting.

STRUCTURAL FRAMES

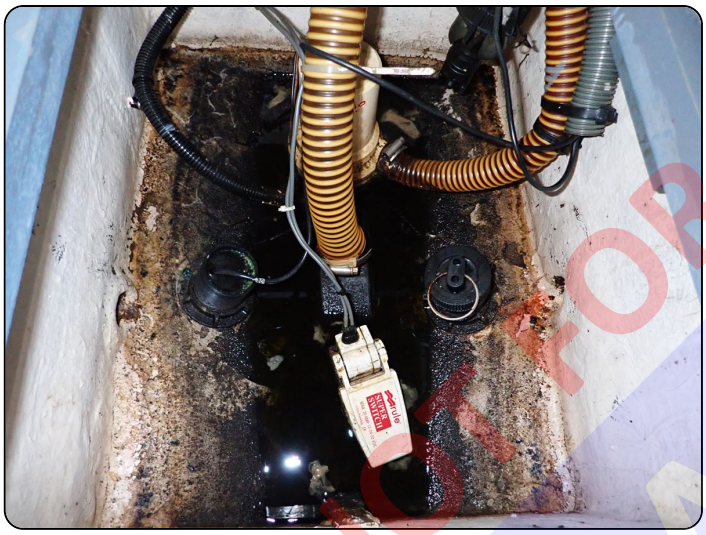
Cored fiberglass frames. No indication of high stress where accessible for inspection. The bilges did contain some significant salt water which precluded an electronic conductance moisture meter test.

BILGES

A painted surface was used in the bilges. Recommend keeping the bilges clean & dry.

GENERAL BILGE CONDITION

There was considerable debris and oil in the bilges. Oil discharged with bilge water can lead to serious Federal fines. This condition can foul the bilge pumps.



FINDING A-1

DECK ARRANGEMENT

DECK MATERIAL

Reportedly, cored FRP (fiber reinforced plastic) with white gelcoat and textured non-skid. Aft. deck and swim platform have teak laminated surfaces that are at the end of their serviceable life due to UV exposure and strong cleaning chemicals.

FINDING B-10

RUB-RAILS

Plastic composite compression rail with stainless steel striker strip. No significant abrasion or high impact areas sighted.

HULL-TO-DECK JOINT TYPE

Appeared to be an overlapping flange type joint. Stainless steel fasteners on 6" intervals no significant corrosion sighted where accessible for inspection.

HULL-TO-DECK JOINT BEDDING COMPOUND

Appeared to be well established Elastomeric Polyurethane compound.

SUPERSTRUCTURE ARRANGEMENT

SUPERSTRUCTURE-TO-DECK JOINT TYPE

The deck house and deck were molded seamlessly with no joint.

BRIDGE ARRANGEMENT

BRIDGE MATERIAL

Reportedly, cored FRP (fiber reinforced plastic).

BIMINI TOP

The Bimini Top was removed for cleaning. Not inspected.

COCKPIT SHADE

Removed for cleaning not sighted.

EXTERIOR EQUIPMENT

GENERAL EXTERIOR SOFT-GOODS CONDITION

The vessel's exterior soft-goods appeared serviceable with no significant weathering.

GENERAL HARDWARE CONDITION

Some surface corrosion and pitting was observed on the vessel's exterior hardware.

GENERAL CAULKING/SEALANT CONDITION

General weathering has developed on some of the vessel's exterior caulking sealants, including the window seals.

FINDING B-11

EXTERIOR LIGHTING

All illuminated when tested. Some lights were removed from the aft. deck due to brightness in the salon.

CABIN VENTILATION

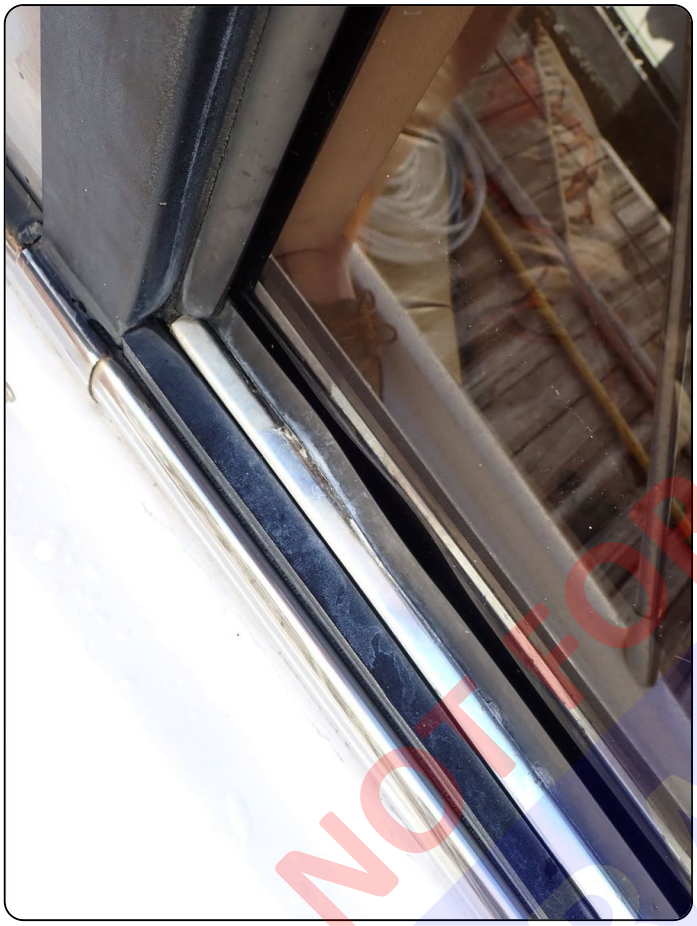
Provided by the 21" X 21" Bomar foredeck hatch and the main entry door from the aft. stern deck.

PORTHOLES/PORTLIGHTS

Fixed and opening portholes were located on the hull sides. Monitor frequently for signs of leakage. No signs of leakage at time of survey.

WINDSHIELD

Tempered glass windshield with three (3) windshield wipers/washers. The wipers did not power up. The wiper blades were depleted due to UV exposure. The seals around the perimeter of the windshield glass had UV damage and separation from the windshield frame.



FINDING B-12

BOW RAILING

Stainless steel bow railings solid secure stainless steel hardware mounted. No Exceptions.

SAFETY RAILING

Stainless steel railings installed around the boat-deck. All solid mounting no exceptions.

DAVIT/CRANE

Dinghy davit on the swim platform was operated/demonstrated. The tender rack/chocks have extensive surface corrosion & flaking paint.

DECK DRAINAGE

Self bailing deck drains at the port & starboard aft cockpit corners. Free and clear.

CLEATS

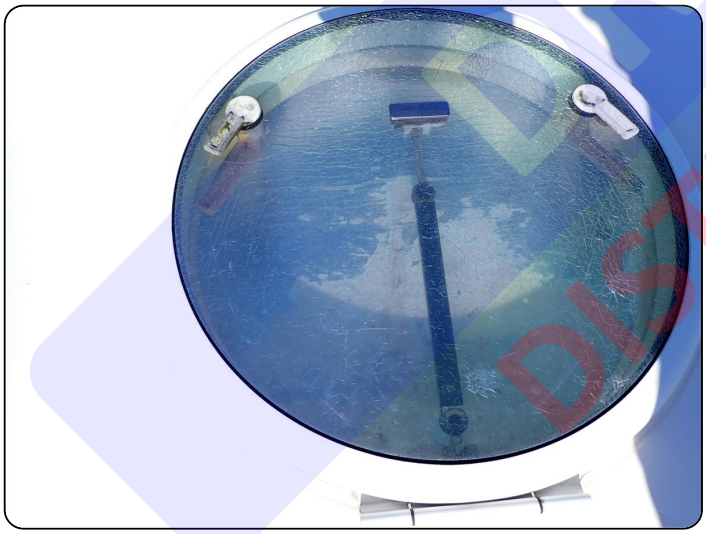
Cleats throughout the vessel were stainless steel horn type. Well secured and well placed.

ANCHOR PLATFORM

Dual anchor upper and lower stainless steel fairlead anchor roller chute with stainless steel bow/stem striker plate. Operated.

EXTERIOR DECK ACCESS HATCHES

Access Hatch over Master Berth Plexiglass has extensive UV crazing & severely UV damaged hatch dogging handles. Deck hatch over the fly bridge stair case has extensive UV damage, appears to be seriously weakened. Hatch Support struts throughout vessel are weak and do not support the weight of the hatches.



FINDING A-2

CABIN APPOINTMENTS

INTERIOR

SALON ARRANGEMENT

Salon sectional sofa to starboard, with coffee table. Entertainment enclosure for TV and electronics to port in main salon. Upper level salon dining to port and lower helm to starboard.

Galley forward lower to port with guest head to starboard. Crew double berth to starboard aft of guest shower head. Master berth V-Berth forward with ensuite shower & head.

Some interior wood laminates have UV damage and wood veneer surface cracking in the galley area and starboard side of the salon.

FINDING C-2

GALLEY ARRANGEMENT

DINING ARRANGEMENT

A Dining Set was arranged in the forward Salon to port.

ACCOMMODATION ARRANGEMENT

Master Stateroom Berth with Ensuite Head. Reading light on port side of Master berth out.

FINDING C-3

HEAD ARRANGEMENT

Demonstrated. Vacuflush 12 volt Heads.

SHOWER ARRANGEMENT

Stall shower in the Heads. The guest shower stall enclosure door jumped off the roller track when opened and closed.

FINDING B-13

CEILING HEADLINERS

The headliner in the salon above the helm was damaged by water intrusion or moisture.

FINDING C-4

FLOORING

Carpeting with protective canvas covers in the Salon and cabins. Above average condition.

COUNTER TOPS

The counter tops through out were in above average condition.

GENERAL INTERIOR & SOFTGOODS CONDITION

No significant wear & tear was observed on the interior soft-goods.

INTERIOR ODOR COMMENTS

A slight mildew odor was observed inside the vessel.

FINDING C-5

INTERIOR SYSTEMS & EQUIPMENT

LIGHTING

24 Volt DC and 110 volt AC lighting fixtures. All lights illuminated.

HVAC/AIR CONDITIONING SYSTEM

Four (4) Cruisair Marine Air units. (2) 16,000 BTU & (2) 12,000 BTU with digital controls. The Temperature Pull-Down appeared to be satisfactory. The #4 AC unit breaker would trip on shore power.

FINDING B-14

LAUNDRY SYSTEMS

The washer and dryer powered up on shore power but were not fully tested. Some wet clothes were sighted in the washer. The dryer did heat up when tested on shore power.

VACUUM SYSTEM

Central Vacuum System with hose and attachments. Demonstrated.

AUDIO/VISUAL EQUIPMENT

TELEVISION SYSTEM

The salon Sony TV powers up but did not receive input from exterior TV Antenna or Sat. input. Sat. Service input was not active.

STEREO SYSTEM

Stereo/CD Player, with speakers. Demonstrated.

GALLEY EQUIPMENT

REFRIGERATION

Reported to be recently replaced 06/2021. 24" X 48" Nova Kool Refrigerator/Freezer. Demonstrated. Reefer and freezer temps appeared adequate.

ICE MACHINE

The Ice machine did not produce ice.

FINDING C-6

STOVE

Neff 4 burner glass top stove. Powers up.

MICROWAVE OVEN

Microwave oven in the galley powered up.

GALLEY SINK

Stainless Steel sink. Good Condition.

PROPULSION & MACHINERY SPACE

PROPULSION SYSTEM

ENGINE MODEL

Twin, Caterpillar Marine Power 3196-T. Turbocharged. See engine survey for complete details on engines, generator and associated mechanical systems.

ENGINE INSTRUMENTATION

Main engine instrument gauges were installed at the helm. The upper helm engine gauge LCD screens were very difficult to read due to prolonged UV exposure.

FINDING B-15

ENGINE ALARM SYSTEM

No alarms sounded during sea trial. See Engine survey report for high operating temps observed.

ENGINE EXHAUST SYSTEM

Raw water cooled with raw water/exhaust gas mixing risers, and flexible hoses to fiberglass surge pipes & mufflers, exiting through transom mounted discharges. The transom exhaust exits have surface cracking of faring compound around the perimeter of the opening.

FINDING B-16

THROTTLE & SHIFT CONTROLS

Operates smooth and through full range. No Exceptions.

EMERGENCY ENGINE SHUT-DOWN

Engine shut-down buttons on each engine's control box at the helms. Operated properly upper and lower helm.

ENGINE BED MOTOR MOUNTS

Adjustable motor mounts on cored fiberglass longitudinal engine bed stringers, reportedly with embedded steel reinforcement. Some surface corrosion sighted.

FINDING A-3

COMMENTS

The Engines did not develop Full RPM according to Manufactures rating. See results of the Engine survey.

TRIAL RUN INFORMATION

ENGINE STARTUP

The engines started without excessive cranking or excessive exhaust smoke.

VIBRATION COMMENTS

No significant hull or running gear vibrations were observed while underway.

ENGINE BACKDOWN TEST

The engine motor mounts were observed while the engines were placed in forward & reverse gear several times under load without exception.

ENGINE CONTROL STATION OPERATION

Engine controls were operated at the helm station without exception.

STEERING TEST

The steering components were observed while the steering wheel was turned hard over several times without exception.

ENGINE PERFORMANCE

Engine RPM and Average Speed:
6.1 knots @ 1,000 RPM
8.0 knots @ 1,500 RPM.
10.0 knots @ 1,700 RPM.
14.7 knots @ 1,950 RPM.
17.8 knots @ 2,150 RPM.
22.6 knots @ wide open throttle (port: 2,330 RPM, starboard: 2,332 RPM).
See additional details on engine performance in the Engine Survey provided by Charlie from Smith & Wick.

TRIAL RUN CONDITIONS

An inshore trial run was performed in calm conditions.

ENGINE SPACE COMBUSTION AIR VOLUME

The engines appeared to have adequate air flow and combustion during the trial run.

COMMENTS

Starboard engine ran hot @ 10 degrees over mfg recommended operating temps. Oil pressure within normal operating range.

MACHINERY & BILGE SPACE EQUIPMENT

ENGINE SPACE VENTILATION

Natural air flow ventilation was provided by the hull side vents.

SEACOCKS/SEA-VALVES

Seacocks throughout the vessel were very stiff to operate (open/close). Recommend performing maintenance on all seacocks & sea-strainers annually (disassemble, inspect, clean and lubricate).

FINDING A-4

HOSES

Appeared serviceable, where sighted. Monitor frequently for dry cracking, degradation, damage or chafing.

HOSE CLAMPS

Double clamped fuel lines and through-hull connections. Some significant corrosion sighted on the through-hull hose clamps and the exhaust system connections. Always recommend installing corrosion resistant marine grade stainless steel T-bolt type hose clamps and/or solid banded (non-open slotted) hose clamps where appropriate.

FINDING B-17

TRANSMISSIONS / GEARS / DRIVES

DRIVE SYSTEM TYPE

Twin Disc Drive system operated during sea trial with no exceptions. See Engine surveyors report on drive shaft connections and oil levels in the transmissions.

PROPELLER SHAFT SEALS

Dripless Shaft Seal Systems. Some noticeable leaking (approx. 2 drips per sec.) on the Port shaft seal. Monitor frequently and service as needed.

FINDING B-18

FUEL SYSTEMS

FUEL SYSTEM TYPE

Diesel. Reported to be 485 gals total capacity. Port & Starboard outboard saddle tanks with limited access for inspection. Review service records for the fuel tanks. Recommend pressure test @ full tank & cleaning due to the age of the vessel.

FINDING B-19

FUEL TANK MATERIAL

Welded Aluminum.

NUMBER OF FUEL TANKS

Two (2).

FUEL LEVEL MONITORING

Fuel gauge installed at the helm stations appeared accurate.

FUEL TANK MANUFACTURER LABELING

None sighted, due to access.

FUEL FILL MARKING

The deck fuel fill fittings were clearly marked as to fuel type.

FUEL TANK VENTILATION

Port & starboard hull sides, below the fuel fills.

FUEL TANKAGE & FUEL FILL GROUNDING

Unknown due to access. Recommend verifying grounding.

FINDING A-5

FUEL LINES/HOSES

USCG Approved Type A1 fuel lines, where sighted with double stainless steel hose clamps per ABYC standards. Fuel line hose clamps show some signs corrosion.

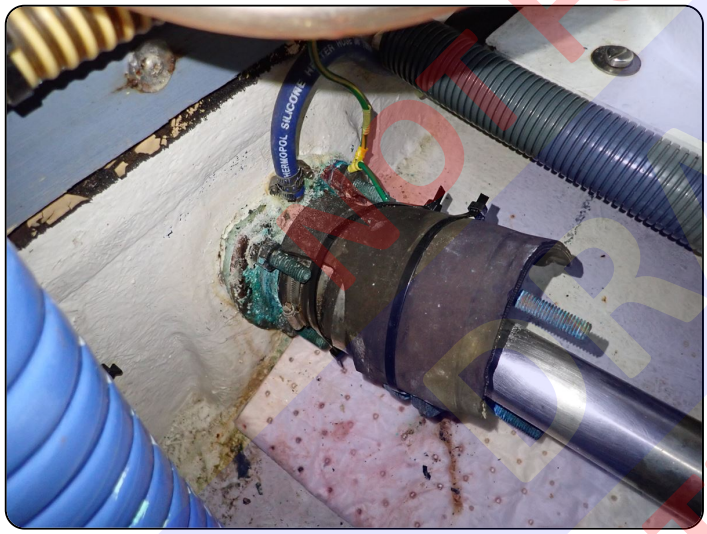
FINDING A-6

FUEL SHUT-OFF VALVES

Ball valves at the fuel tanks and the Primary Fuel Filters. Open / Close without much resistance.

COMMENTS

There was some fuel leakage found in the bilge in various places mainly on the starboard side of the machinery space.



FINDING A-7

ELECTRICAL SYSTEMS

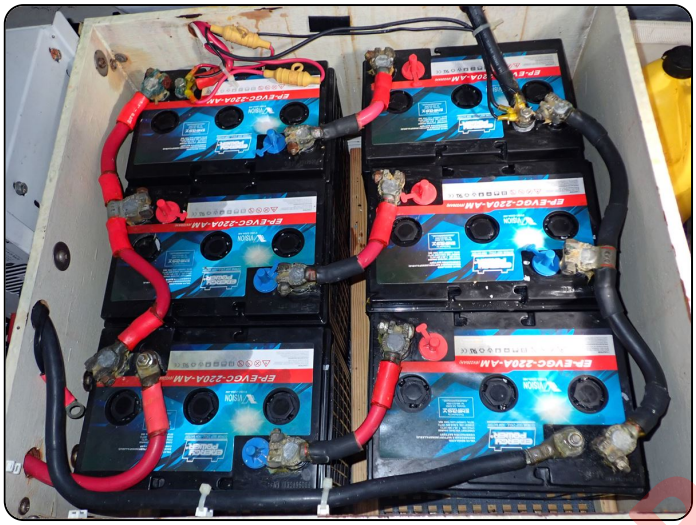
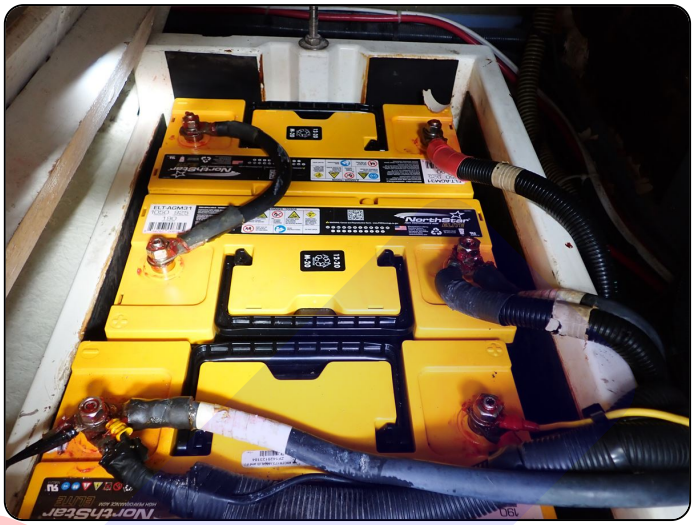
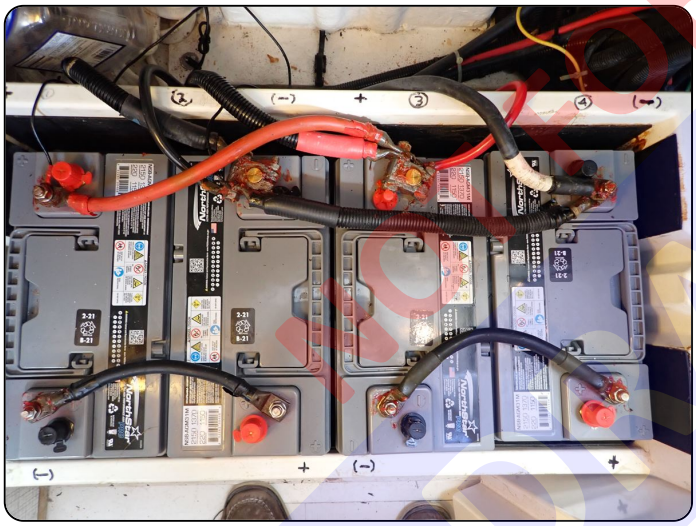
DC ELECTRICAL SYSTEMS

DC SYSTEMS VOLTAGE

24/12 Volt systems.

BATTERIES

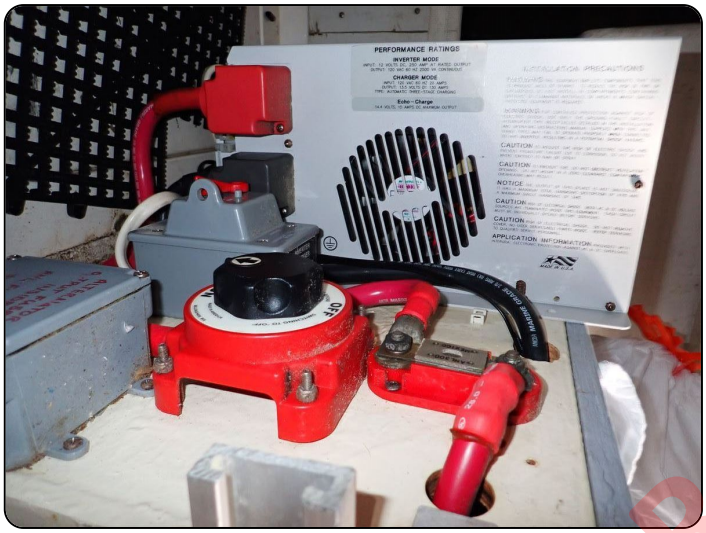
Adequate ventilation For 24 volt engine starting & 24/12 volt house systems. Exposed battery terminals require insulation or approved ABYC battery box covers. Some terminal connections need cleaning. Batteries well secured.
Batteries not labeled for operation. Battery installation dates not sighted. See maintenance records for battery installation dates.


FINDING A-8

BATTERY SWITCHES

The battery switches were located in the engine space. Not considered readily accessible by current ABYC standards E-11. In the advent of a short or electrical malfunction in the engine space access to the battery switches could be dangerous safety hazard.



FINDING B-20

BATTERY PARALLEL SWITCHING

Battery Parallel Switch installed at the helm station. Tested.

MAIN DC BREAKERS

The main DC breaker was installed in the engine compartment above the house battery banks. Not considered readily accessible by today's ABYC standards.

DC ELECTRICAL PANEL BREAKERS/FUSES

DC branch breakers in the main Salon electrical panel & in the engine room. There was physical separation between the AC & DC main breaker panels per ABYC standards.

BATTERY CHARGERS

Victron Energy Centaur - 24 volt / 40 amp. Battery Charger. Powers up. The output at the battery terminals was tested at +.7 Volts with Ideal Multi meter.

BONDING SYSTEM (ABYC E-2 & E-11)

Recommend investigating and completing the vessel's bonding system, to help minimize electrolytic corrosion from galvanic current & A/C stray current and enhance lightning protection. Recommend thorough inspection and maintenance of the vessel's bonding system, by checking the security of all bonding conductor terminations (destructive testing), cleaning any corrosion of the bonding conductors and applying a corrosion inhibitor to all terminal connections.

FINDING B-21

DC SYSTEM WIRING TYPE

14 AWG marine grade stranded wire with thermoplastic 140F rated insulation on most main DC circuits.

AC ELECTRICAL SYSTEMS

AC SHORE POWER SYSTEM VOLTAGE

120/240 Volt @ 60Hz. Line voltage tested with Ideal Sure Test Circuit tester Model 61-164 @ 119 VAC . Within acceptable limit

AC SHORE POWER INLETS

50 Amp. 120/240 volt shore power inlets with Glendinning Cablemaster. Cablemaster demonstrated no exceptions.

AC SHORE POWER CORDS

(2) 30 Amp. split input vinyl shore power cord. Like new. The plug connect terminals did not show high resistance or heat marks at male shore side connection. The strain relief ring was missing on the cord plug shore side.

FINDING B-22

MAIN AC SHORE POWER BREAKERS

The main AC breakers were installed at the shore power cord input panel located in the engine space starboard side aft.

AC ELECTRICAL PANEL BREAKERS

AC branch breakers in the main cabin AC electrical panel.

AC ELECTRICAL SYSTEM MONITORS

AC voltage & amperage gauges in the main AC electric panel.

AC ELECTRICAL SOURCE SELECTOR SWITCHING

Manual slide type for shore or ship power with transfer switch.

GALVANIC ISOLATION SYSTEM (ABYC A-28)

Not located during survey. Highly recommended if not installed.

AC ELECTRICAL POWER OUTLETS

The AC outlets were tested using a UL Listed Circuit Tester. All GFCI protected outlets tripped at their test buttons, where sighted.

AC ELECTRICAL OUTLET POLARITY

Various AC electrical outlets polarity was checked with a UL Listed CE Circuit Tester and found to be wired correctly.

AC SYSTEM WIRING TYPE

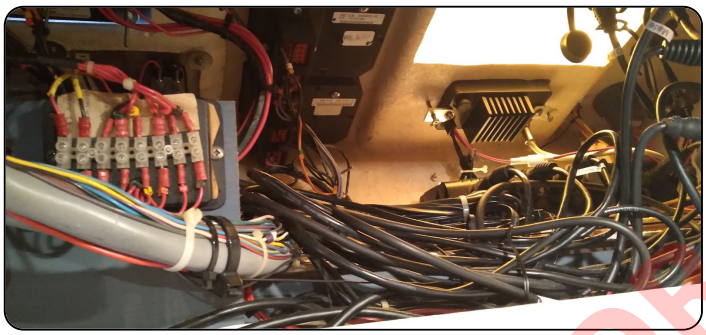
Marine grade stranded wire min. size sighted was 16 AWG .

AC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

Recommend thorough inspection and maintenance of the vessel's AC & DC wiring, (starting with the Anchor windlass power supply wiring and terminal connections) by checking the security of all electrical conductor terminations (destructive testing), cleaning any corrosion off of the electrical conductors and applying a corrosion inhibitor where appropriate.

Shore power Tested with Ideal Circuit tester during survey found Acceptable Ground conductor and line voltage @ 119 VAC, Neutral to ground leakage on Shore power acceptable @ .9 VAC , AC frequency good @ 60HZ , GFCI trip points good @ 30.0 mA.

AC & DC wiring found to be unorganized, unsupported and unmarked in many locations.



COMMENTS

Due to the normal construction method of this vessel, there are sections of the vessel's wiring which are concealed within wire looms, chases and conduits. Further, some wiring transits areas which would require disassembly and/or removals for inspection. As a result, a significant amount of wiring could not be observed during the course of this survey.

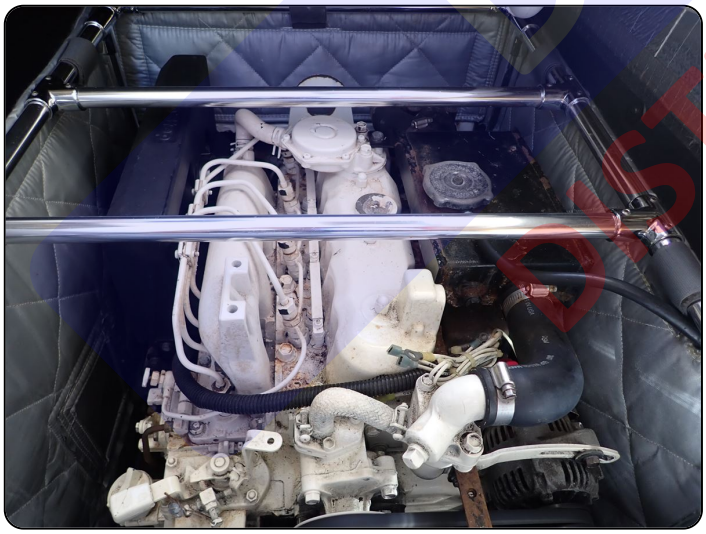
If a detailed report to the condition and capacities of the vessel's wiring is desired, it is recommended that a qualified marine electrical engineer be engaged.

GENERATORS/AUXILIARY POWER

GENERATORS

GENERATOR MODEL

Not Tested. Reported to be Onan 15KW generator. See engine survey for complete details on the generator. Generator reported to be in unreliable condition by the Engine Surveyor.



FINDING B-23

INVERTERS & OTHER AUXILIARY POWER

INVERTER SYSTEMS (ABYC E-11, A-31)

Not installed.

WATER SYSTEMS

FRESHWATER SYSTEM

WATER TANKAGE MATERIAL

2 X Aluminum @ 114 gals each. No Tank spec labels sighted.

FINDING B-24

WATER TANKAGE SECURING

The water tankage was well secured (bolted down) where sighted.

WATER TANKAGE LOCATION

Centerline in the amidships bilge.

WATER FILL LOCATION

Port amidships side deck, marked for water.

WATER FILL MARKING

Properly marked for water.

FRESHWATER TANKAGE VENTILATION

Port hull side, below the fill pipe.

WATER LEVEL MONITORING

The water level gauge at the Main electric panel appeared accurate.

HOT WATER SYSTEM

WATER HEATER

Isotherm. Fiberglass 20 gal tank. Powers up. Water temp @ 120F

WATER HEATER PRESSURE RELIEF VALVE

Relief valve built into the tank.

BLACKWATER SYSTEM

MSD (MARINE SANITATION DEVICE) SYSTEM (33 CFR 159)

Type III MSD Waste System (utilizes a holding tank or similar device that prevents the overboard discharge of treated or untreated sewage). Utilizes Y valve & key locked pump control switch to prevent accidental overboard discharge in protected marine environment. Discharge pump powers up but not tested for overboard pumping.

BLACKWATER TANKAGE

Polyethylene Blackwater (sewage) holding tank. Appears recently serviced and clean. See service records on Holding tank. No tank spec. labels sighted.

BLACKWATER TANKAGE VENTILATION

The Blackwater tank's vent fitting was undetermined . It appears the MSD vent pipe maybe disconnected from the hull fitting. Found unterminated pipe in location of the MSD hull side vent.

FINDING A-9

BLACKWATER SYSTEM DISCHARGE

24 Volt overboard discharge pump with well marked deck pump-out fitting.

GREYWATER SYSTEM

GREYWATER DISCHARGE SYSTEM

Greywater Sump Pumps, and automatic discharge. Powers up. Always check with local regulations on overboard discharge of Greywater.

STEERING SYSTEMS

STEERING SYSTEM TYPE

Hydraulic Power Steering. Reservoir air press low.

FINDING A-10

STEERING SYSTEM MANUFACTURER

Hynautic H-50 Steering System.

NUMBER OF STEERING STATIONS

Two (2) lower bridge helm and upper tower station helm.

STEERING HOSES/LINES

Reinforced flexible hoses with metallic fittings. Appear to be well secured and routed . No chafing sighted.

RUDDER LOG PACKING GLANDS

Bronze hex nut type packing glands. Some significant water observed in the steering compartment. Monitor frequently. Bonding circuit connections to rudder shaft logs were Not connected.

FINDING B-25

RUDDER POSITION INDICATOR

Electro-mechanical type with helm gauge. Gauge off to port.

FINDING B-26

THRUSTERS

Sleipner Side Power 24 volt Bow Thruster. Demonstrated during sea trial. The thruster prop requires new Zinc anodes.

FINDING B-27

STEERING SYSTEM COMMENTS

The steering ram mounting bracket/plate has significant surface corrosion. Steering connecting rod fasteners have excessive corrosion.

FINDING A-11

GROUND TACKLE

ANCHORS

55 lb. Delta Galvanized Plow Anchor with approx. 40 ft galvanized chain, 200 ft 7/8" 3 strand nylon line & Fortress FX-37 Danforth aluminum anchor with 20 ft. galvanized chain & 200ft 7/8" 3 strand nylon line. 24 vdc Lewmar Winch operated from handheld remote controls at bow. Anchor control at the lower helm operated. The anchor winches friction brake pad was perished. Anchor would free fall if released.

ANCHOR RODE TYPE

10Mm Galvanized chain. Chain corrosion appears excessive.

FINDING A-12

ANCHOR WINDLASS

Lewmar 24-volt Windlass. Motor has bad electrical connections (significant corrosion) on Positive wire.

FINDING A-13

ELECTRONICS & NAVIGATION EQUIPMENT

VHF RADIOS

West Marine DSC 600 upper helm, Standard Horizon Explorer lower helm. Radios checks on VHF ch. 16 and 13 ok. Both Radio exposed coax wiring to antennas not UV protected.

FINDING B-28

MULTI-FUNCTIONAL NAVIGATION DISPLAYS

Lower helm Garmin Map 7608 powers up and operates in all modes. Upper helm Garmin 7212 powers up and operates in all modes. Access to Nav. electronics serial numbers very limited.

AUTOPILOT

AutoHelm ST6000 operated during sea trial. No exceptions.

COMPASSES

Azimuth 1000 digital compass upper helm appears accurate. Plastimo 4" black compass lower helm appears accurate. No compass dial lights sighted.

ANTENNAS

6ft Dual VHF Antennas port, single antenna stb. The antennas appeared to be well mounted on adjustable bases where sighted.

STEREO SYSTEM

Salon stereo Powered up with fm radio input. All speakers were audible.

SPEED DISPLAY

Garmin MFD GPS speed accurate. AutoHelm Display did not power up.

DEPTH DISPLAY

AutoHelm depth display at lower helm & Flybridge helm powers up. Appears accurate.

MARINE RADAR

Garmin 24 Mile Marine Radar, with Closed Array Radar Antenna. Powers up, display appears accurate and radar controls Range / Bearing appear accurate.

SAFETY EQUIPMENT

SAFETY EQUIPMENT (U.S.C.G.)

WEARABLE PERSONAL FLOTATION DEVICES (33 CFR 175)

8 adult USCG Type II life jackets. Like new. Determine if safety gear is included with the sale.

THROWABLE PERSONAL FLOTATION DEVICES (33 CFR 175)

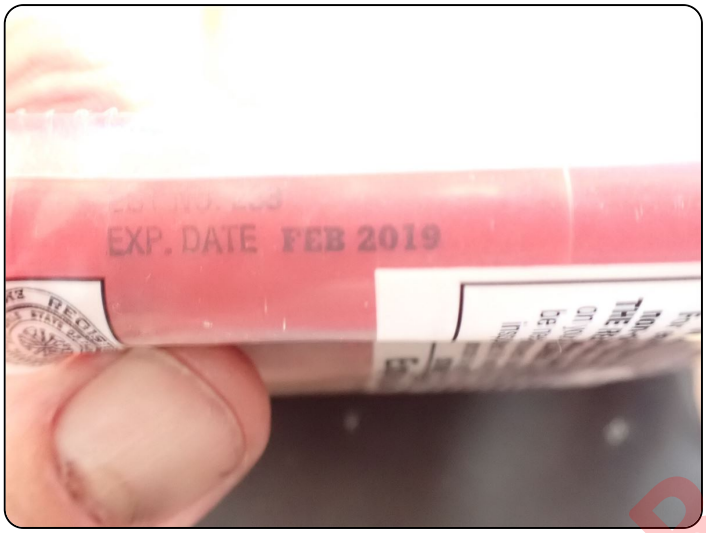
Two (2) Type IV - U.S.C.G. Approved Throwable Devices (cushions).

FIRE EXTINGUISHERS (33 CFR 175.310)

Current annual inspection tags were not observed. All fire extinguishers onboard should be inspected/serviced annually by qualified service personnel and securely mounted in prominent locations. observed.

VISUAL DISTRESS SIGNALS (33 CFR 175.101)

Expired.



FINDING A-14

SOUND PRODUCING DEVICES (33 CFR 83)

Dual Trumpet 24 volt DC Electric Air Horn. Did not power up.

FINDING A-15

NAVIGATION LIGHTS (33 CFR 83)

All Navigation Lights illuminated when tested however the Nav. Light Lens appear to be severely UV degraded.

FINDING A-16

"NO OIL DISCHARGE" PLACARD (33 CFR 151/155)

Found properly displayed.

"TRASH DISPOSAL" PLACARD (33 CFR 151/155)

Found properly displayed.

"WASTE MANAGEMENT" PLAN (33 CFR 151) VESSELS OVER 39'4"

None sighted. Required in U.S. waters. Vessels over 39'4 are required to have a written Waste Management Plan onboard.

U.S.C.G. NAVIGATION RULE BOOK (33 CFR 83) VESSELS OVER 39'4"

The U.S.C.G. International and Inland Navigation Rule Handbook was NOT observed onboard. This official government rulebook is required on all vessels over 39'4" in length. Also known as Nav-Rules CG169, contains the International Regulations for Preventing Collisions at Sea, 1972 (72 COLREGS).

Also required is a record of Updating the NAV Rules Book per Notice to Mariners issued by the USCG.

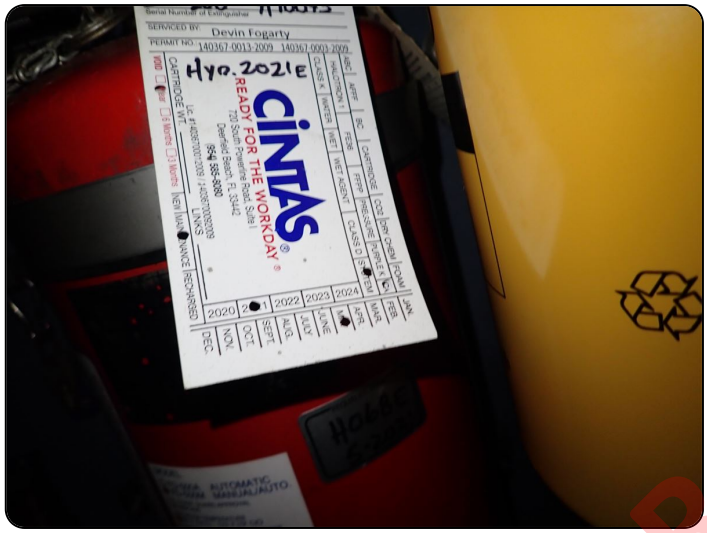
GASOLINE ENGINE SPACE VENTILATION (33 CFR 175/183, 46 CFR 25)

The engine/machinery space appeared to have adequate ventilation as built.

AUXILIARY SAFETY EQUIPMENT

FIXED FIRE SUPPRESSION SYSTEM

Inspection tags were observed. Exp. May 2022



FINDING A-17

BILGE HIGH WATER ALARMS

None sighted. Highly recommended.

FINDING A-18

E.P.I.R.B.

None sighted. Highly recommended.

CARBON MONOXIDE DETECTORS (ABYC A-24)

Fireboy Xintex Carbon Monoxide Detector. Test sounded.

SMOKE DETECTORS (NFPA 302)

Two (2) Smoke Detectors. Test sounded.

VESSEL FIRE ALARM SYSTEM

The Fire Boy Fire Alarm System should be inspected by an Authorized Fire Equipment Technician.

SEARCH LIGHT

ACR Electronics URC-100 remote controlled Search Light. Did not power up.

FINDING B-29

BILGE PUMPING SYSTEMS

ELECTRIC BILGE PUMPING SYSTEMS

Four (4) Rule 2000, 24 volt Bilge Pumps with floatswitches. (2) Fore and Aft. Engine space bilges pumps power up on Float switches and manual switch at helm. The Mid Ship Bilge pump in the water tanks and holding tank space did not power up. The bilge pump located in the bow thruster compartment powers up from the manual switch and the float switch. The hose clamps and discharge plumbing on the bilge pumps appeared unobstructed. Access to the overboard discharge fitting connection was limited for inspection. The 3 operational pumps observed pumped water overboard from an above the waterline through hull. Further inspection required to determine the Midship pump overboard discharge is connected properly.

FINDING A-19

EMERGENCY BILGE PUMPING SYSTEMS

None sighted.

COMMENTS

Highly recommend weekly testing of bilge pump operation, adequate dewatering ability and removal of any bilge pump debris.

A: FIRST PRIORITY / SAFETY AND COMPLIANCE DEFICIENCIES

FINDING A-1 **GENERAL BILGE CONDITION**

The bilges required cleaning. Debris can clog bilge pumps and limber holes.

RECOMMENDATION

Clean bilges, as necessary.

FINDING A-2 **EXTERIOR DECK ACCESS HATCHES**

UV crazing on plexiglass hatch over Master suite and the hatch over the flybridge stair case. These Plexiglas Access hatches are weaken due to prolonged UV exposure and are serious safety hazards. Machinery spaces have weak support struts.

RECOMMENDATION

Replace the Access hatch over Master suite and the deck hatch over the flybridge stair case. Replace hatch support struts.

FINDING A-3 **ENGINE BED MOTOR MOUNTS**

Engine mounts have some Significant corrosion.

RECOMMENDATION

Investigate further, and service/address as necessary.

FINDING A-4 **SEACOCKS/SEA-VALVES**

Several of the intake or discharge seacock valves where either excessively stiff or possibly seized when surveyor attempted to operate On/Off.

RECOMMENDATION

Service/Rebuild & lubricate the seacocks to ensure emergency operation, as necessary.

FINDING A-5 **FUEL TANKAGE & FUEL FILL GROUNDING**

Unknown due to very limited access to the fuel tank.

RECOMMENDATION

Verify fuel tank and tank fill grounding, to comply with ABYC Standards as necessary (ABYC H-33.15.1 Diesel Fuel System).

FINDING A-6 **FUEL LINES/HOSES**

Fuel hoses appear original. Some corrosion on fuel hose clamps.

RECOMMENDATION

Investigate further, and replace any fuel hoses and clamps which are past their serviceable life expectancy as necessary.

FINDING A-7 **COMMENTS**

Various signs of fuel leakage in the bilge from undetermined sources.

RECOMMENDATION

Investigate further, and service, repair sources of fuel leakage.

FINDING A-8 **BATTERIES**

Battery terminals not insulated. Batteries not labeled for sys. operation. Some battery cable terminals require cleaning.

RECOMMENDATION

Install protective terminal insulation covers to prevent accidental shorting or sparking, as necessary.
Label batteries for the source of power they supply. Keep battery terminals clean to improve battery life and reduce resistance/heat in circuits. Determine the installation dates. Recommend a full comprehensive AC / DC electrical survey.

FINDING A-9 **BLACKWATER TANKAGE VENTILATION**

Possible MSD Tank vent pipe unconnected to the overboard hull fitting.

RECOMMENDATION

Investigate further unterminated hose pipe.

FINDING A-10 **STEERING SYSTEM TYPE**

Low steering system pressure.

RECOMMENDATION

Adjust to manufactures recommended pressure.

FINDING A-11 **STEERING SYSTEM COMMENTS**

The steering ram Mounting plate has significant corrosion. The steering connecting rods have corroded fasteners.

RECOMMENDATION

Recommend complete steering system inspection by manufactures certified technicians.

FINDING A-12 **ANCHOR RODE TYPE**

Some of the anchor chain links have developed general rust/corrosion.

RECOMMENDATION

Service/inspect or replace the chain, as necessary.

FINDING A-13 **ANCHOR WINDLASS**

Serious Safety Hazard. Windlass electrical connections are seriously corroded. The windlass power supply cables show signs of very high resistance and insulation degrading due to high heat.

RECOMMENDATION

Tag Out the anchor windlass. Have the Anchor windlass serviced by a certified Marine Electrician.

FINDING A-14 **VISUAL DISTRESS SIGNALS (33 CFR 175.101)**

Expired.

RECOMMENDATION

Provide current dated Visual Distress Signals to comply with USCG Regulations.

FINDING A-15 **SOUND PRODUCING DEVICES (33 CFR 83)**

There was no emergency sound signaling device observed onboard. Installed Horn did not operate.

RECOMMENDATION

Service, repair or replace the horn to comply with USCG regulations for Sound Devices.

FINDING A-16 **NAVIGATION LIGHTS (33 CFR 83)**

The Navigation Light lenses were UV/heat crazed which may hinder adequate night time illumination.

RECOMMENDATION

Replace the lenses, as necessary.

FINDING A-17 **FIXED FIRE SUPPRESSION SYSTEM**

The Fixed Fire Suppression System did not have a current annual inspection tag.

RECOMMENDATION

Have the system inspected and re-certified to comply with ABYC and NFPA recommended standards for fire protection.

FINDING A-18 **BILGE HIGH WATER ALARMS**

No audible alarm.

RECOMMENDATION

ABYC required for all vessels with accommodations. Investigate further, and service, repair or replace as necessary.

FINDING A-19 **ELECTRIC BILGE PUMPING SYSTEMS**

Mid-Ship Bilge pump located in the water tank space did not power up manually or by the float switch.

RECOMMENDATION

Replace or service the bilge pump, as necessary.

B: SECONDARY PRIORITY / FINDINGS NEEDING TIMELY ATTENTION

FINDING B-1 **DOCUMENTATION COMPLIANCE (46 CFR 67)**

The vessel's U.S.C.G. Documentation Number was not permanently displayed.

RECOMMENDATION

The vessel must have the official documentation number permanently affixed in block-type Arabic numerals of not less than 3 inches in height, preceded by the letters "NO ." on some clearly visible interior integral structural part of the vessel. The number must be permanently affixed so that alteration, removal or replacement would be obvious and cause some scarring or damage to the surrounding hull area.

FINDING B-2 **PROPELLER SHAFT LOGS**

Propeller shaft logs incomplete bonding. Shaft log bearings appear considerably worn. See service records for details on last service dates.

RECOMMENDATION

Investigate further, and repair in accordance with good marine practice as necessary.

FINDING B-3 **SHAFT STAVE BEARINGS (CUTLESS BEARINGS)**

The shaft strut's Cutless Bearings had some significant wear.

RECOMMENDATION

Check for proper running gear alignment and replace the bearings, as necessary.

FINDING B-4 **RUDDER MOUNTING**

Some play was observed in the rudder stock's rudder log bearings. Water was observed in the steering compartment.

RECOMMENDATION

Investigate further, and repair in accordance with good marine practice as necessary.

FINDING B-5 **TRIM TAB SYSTEM**

Trim tab antifouling paint and zincs were significantly depleted. Port Trim Tab not operating. Trim Tab Hydraulic hose connections appear degraded.

RECOMMENDATION

Port trim tab service. Replace trim tab Zincs. Investigate Hydraulic hose integrity & connections at the pumps.

FINDING B-6 **HULL GROUNDING PLATES/EARTHING PLATES**

The grounding plate was painted over.

RECOMMENDATION

Remove the paint from the grounding plate, as necessary.

FINDING B-7 **SACRIFICIAL ANODES**

All underwater Zinc Anodes were completely depleted.

RECOMMENDATION

Investigate further, to determine the cause of the accelerated waste and address as necessary.

FINDING B-8 **ANTIFOULING PAINT**

The antifouling bottom paint appeared to be nearing the end of its serviceable life. Seriously affected in some areas around the through-hulls induced by stray current corrosion.

RECOMMENDATION

Consider removing the previous layers of paint, preparing and repainting in accordance with good marine practice.

FINDING B-9 **SWIM PLATFORM**

Starboard side of swim platform has delaminated teak and has allowed water to collect under the delaminated area. Water saturation over time will degrade unprotected fiberglass structure of the swim platform. Recommend core sample of affected area to determine extent of water saturation.

RECOMMENDATION

Repair in accordance with good marine practice, as necessary.

FINDING B-10 **DECK MATERIAL**

Teak laminated decks are delaminating and in some areas collecting / absorbing / holding water

RECOMMENDATION

Repair, refinish or replace, as necessary.

FINDING B-11 **GENERAL CAULKING/SEALANT CONDITION**

General weathering, lifting or separation has developed on some of the vessel's exterior caulking sealants and window seals.

RECOMMENDATION

Reef out and renew the caulking sealants, as necessary.

FINDING B-12 **WINDSHIELD**

The windshield washers did not power up. The windshield seals around the glass and frames were UV damaged and requires repair to stop future water intrusion. The fwd. bow hatch over the Master Suite had significant UV crazing.

RECOMMENDATION

Repair windshield washers and seals around the glass and windshield frames. Replace the hatch cover over the master suite.

FINDING B-13 **SHOWER ARRANGEMENT**

Shower stall door not well adjusted. Jumps off track.

RECOMMENDATION

Service, repair or replace as necessary.

FINDING B-14 **HVAC/AIR CONDITIONING SYSTEM**

#4 AC unit would not power up on Shore power. Breaker would trip at the main AC breaker panel.

RECOMMENDATION

Recommend complete HVAC system service.

FINDING B-15 **ENGINE INSTRUMENTATION**

Upper helm engine gauges UV damaged.

RECOMMENDATION

Service or replace gauges.

FINDING B-16 **ENGINE EXHAUST SYSTEM**

Both of the engine exhaust's lower transom discharge exit have cracking of faring compound. This can lead to hull structure moisture saturation.

RECOMMENDATION

Investigate further and repair exhaust system according to best marine hull repair practices.

FINDING B-17 **HOSE CLAMPS**

Several of the vessel's below deck/bilge hose clamps have developed general rust. Exhaust system hose clamps have general rust.

RECOMMENDATION

Inspect all hose clamps and clean or replace with doubled Marine Grade Stainless Steel clamps where appropriate, as necessary.

FINDING B-18 **PROPELLER SHAFT SEALS**

The port propeller shaft's dripless shaft seal leaked while the vessel was moored & underway.

RECOMMENDATION

Investigate further, and adjust, refit, or replace the seals as necessary.

FINDING B-19 **FUEL SYSTEM TYPE**

No ABYC recommended fuel tank labels sighted due to access. Fuel tank exteriors not accessible for inspection in the normal scope of this marine survey. The seller disclosed Fuel tank repair invoices to the Port fuel tank. No service record for the starboard tank was sighted.

RECOMMENDATION

Recommend full tank pressure test & inspection, cleaning by qualified marine fuel tank technician.

FINDING B-20 **BATTERY SWITCHES**

Not readily accessible by today's ABYC standards.

RECOMMENDATION

Complete Electrical survey to determine deficiencies.

FINDING B-21 **BONDING SYSTEM (ABYC E-2 & E-11)**

Poor or unterminated bonding connections. Evidence of electrolytic action was observed at some of the vessel's underwater metals (some bottom paint "blasting" was observed). Recommend complete bonding system testing, replace all zinc anodes.
A/C shore power was tested negative for excessive stray current at time of survey, however; the Generator power was not tested due to Gen. out of service at time of survey.

RECOMMENDATION

Properly connect all metals exposed to seawater contact or flow to the vessel's bonding system to help minimize electrolytic corrosion from stray current and/or enhance lightning protection, as necessary (ABYC E-2 & E-11). Properly refit the bonding conductors, as necessary.

FINDING B-22 **AC SHORE POWER CORDS**

Missing strain relief and connection security ring missing on shore connection plug.

RECOMMENDATION

Replace the screw on shore power connection security ring.

FINDING B-23 **GENERATOR MODEL**

Reported to be in unreliable condition.

RECOMMENDATION

Investigate further, and service as necessary.

FINDING B-24 **WATER TANKAGE MATERIAL**

Some general pitting/corrosion has developed on the freshwater tank tops.

RECOMMENDATION

Recommend cleaning the tanks and coating the surfaces with paint/sealant or a corrosion inhibitor.

FINDING B-25 **RUDDER LOG PACKING GLANDS**

The rudder logs bonding connections were disconnected.

RECOMMENDATION

Investigate the bonding circuit connections to all exposed metal thru hull components. service, repair or replace, as necessary.

FINDING B-26 **RUDDER POSITION INDICATOR**

The rudder angle gauge was inaccurate.

RECOMMENDATION

Service, repair or replace as necessary.

FINDING B-27 **THRUSTERS**

Thruster prop Zincs are severely depleted

RECOMMENDATION

Replace thruster prop Zincs.

FINDING B-28 **VHF RADIOS**

Coax wire to antennas have significant insulation UV damage.

RECOMMENDATION

Install UV protective loom on all exterior UV exposed electrical wiring. Replace both radio antenna coax as necessary.

FINDING B-29 **SEARCH LIGHT**

The search light did not power up when tested.

RECOMMENDATION

Service, repair or replace as necessary.

C: SURVEYOR'S GENERAL FINDINGS, NOTES AND OBSERVATIONS

FINDING C-1 **GENERAL EXTERIOR CONDITION**

Some of the vessel's exterior surfaces were oxidized from UV exposure.

RECOMMENDATION

Polish/detail the oxidized surfaces with buffing and waxing, as necessary.

FINDING C-2 **SALON ARRANGEMENT**

Wood surfaces have UV damage, wood veneer surfaces cracking in the galley area.

RECOMMENDATION

Consider interior cosmetic repairs as needed.

FINDING C-3 **ACCOMMODATION ARRANGEMENT**

Reading light out port side of Master berth.

RECOMMENDATION

Replace light.

FINDING C-4 **CEILING HEADLINERS**

Some high humidity mildew stains were observed on the headliner.

RECOMMENDATION

Refit or replace the headliner, as necessary.

FINDING C-5 **INTERIOR ODOR COMMENTS**

A slight mildew odor was observed inside the vessel.

RECOMMENDATION

Investigate further/trace, and mitigate as necessary.

FINDING C-6 **ICE MACHINE**

The Salon's Clear Ice Machine powered up, did not cool and did produce ice cubes over a 5 hour period.

RECOMMENDATION

Service, repair or replace as necessary.

SUMMARY

VESSEL 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.

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 the Survey, as shown in the REPORT OF MARINE SURVEY & FINDINGS AND RECOMMENDATIONS sections of this report and by virtue of my experience, my opinion is:

FAIR

STATEMENT OF VALUATION

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

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

a. Buyer and seller are typically motivated.

b. Both parties are well informed or well advised, and each acting in what they consider their own best interest.

c. A reasonable time is allowed for exposure in the open market.

d. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and

e. The price represents a normal consideration for the vessel sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

My strategy to determine value utilized three separate and distinct services which included BUC Value Pro, Soldboats.com, and existing current listings of like and similar boats.

Therefore, after consideration of the reliability of the data, the extent of the necessary adjustments and condition of the vessel, it is

the Surveyor's opinion that the ''FAIR MARKET VALUE'' of the subject vessel is:
Based on recent sales of 5 similar 52 ft Viking Princess on Soldboats.com (Avg. sale price $263,200 USD) and 7 current Market listings on Boattrader.com & Yachtworld.com (Avg. sale listing price $269,000 USD)
Also considered were BucValuePro Adjusted price range for "FAIR" condition in SE Atlantic region @ ($200,000 to $220,000). Additionaly the Martin Scale of depreciation values
for recreational vessels @ 10% 1st year and 5% each additional year. The overall condition of this vessel was determined at this survey be "FAIR" According to the BUC Value Pro Definition.
There are several significant safety related "A" findings detailed in this report that need to be addressed prior to the next voyage.
It is the opinion of this surveyor that this vessel IS NOT a good marine risk in it's present condition.
The service records indicated major engine service was recently performed on the Caterpillar engines.
See engine survey for details on engine condition and performance data.
See link here for additional info and resources used for valuation;

See link provided with this report to view soldboats.com and current market listings info.

SUMMARY

In accordance with the request for a Marine Survey of the Santasha, 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 06/15/2026. Subject to correction of deficiencies listed in sections A and B, the vessel is considered to be reasonably suitable for its intended use. Other deficiencies listed should be attended to in keeping with good maintenance practices or as upgrades.

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 stipulated 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.

Tim J. Brown, SAMS Accredited Marine Surveyor # 1395, ABYC Master Technician, USCG Master NC 1600 GT Survey Signed & Delivered 08/17/2022