





1986 38 Island Packet Cutter





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Condition & Value Report of Marine Survey





1986 38 Island Packet Cutter

Conducted By

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Prepared For

Date Of Survey: 10/23/2023 & 11/29/2023 Report Submitted On: 11/30/2023

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INTRODUCTION

EXECUTIVE SUMMARY

is an early model of the very popular Island Packet 38 Cutter. She has received few upgrades and shows signs of her age. Specifically, the standing rigging and chainplates are due for a detailed inspection and possible replacement before ocean passagemaking but are satisfactory for inland and bay cruising in other than extreme weather.

The hull blisters noted in the BOTTOM section of this report are currently cosmetic in nature and pose no structural risk. They should be monitored and attended to on a future haul out to maintain the vessel's value.

In terms of valuation, the IP 38's that have sold in recent years have fallen into two classes, fully upgraded or in need of maintenance. is, in the latter case, but still a sound vessel that has great potential when the items listed in sections A and B of the attached findings are attended to.

For reference, a published letter from the President of IP Yachts concerning chainplate replacement is included in the appendix.

PURPOSE & SCOPE

The Surveyor attended aboard the 1986 Island Packet Cutter at the request of Dori McClelland on 10/23/2023 & 11/29/2023. The Survey was requested to determine the physical condition and value of the vessel for possible purchase.

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Moisture readings taken and referenced throughout the report's body were taken with an ElectroPhysics GRP33plus.

Images supplied in this report were taken with an Olympus TG-6 digital camera and/or an iPhone 12Pro and represent a true and accurate representation of the subject at the time the image was taken.

Where stated, the Hull and Deck's surface was percussion sounded with a 8oz Stanley phenolic hammer approximately every 6" to 8".

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. It is recommended and understood that a qualified Engine Surveyor should survey all DIESEL/GAS engines to determine the condition of the engines, gears and pumps, heat exchangers, coolers, etc.

All electrical and electronic equipment was tested for power up only unless specifically stated. All electrical testing was conducted with a Fluke 83 DMM and a Prova CM-01 Clamp-On DMM, as referenced below. Electrical outlets, where referenced, were tested with an Extech CT70 AC Circuit Load Tester. Stray AC current readings, where referenced, were taken with a Yokogawa 30062a or Sonel CMP-200 AC Leakage Meter.

Where stated, the batteries were tested with a Midtronics MDX-500 Battery Analyzer. The wiring was only inspected where accessible. A significant amount of the wiring could not be sighted due to the wiring looms and conduits that transit areas, which would require dismantling and removal 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 detailed electrical survey be commissioned from an ABYC Certified Electrical Technician.

Vessel tankage was visually inspected where accessible. It is always best if the tanks are inspected when full, as per my pre-inspection requests. If a more thorough assessment is desired, they should be filled and checked under full tank status or pressure tested to attest to their condition.

Sailing vessel spars & rigging were visually inspected from deck level to eye level unless a rigging aloft was requested. The sails were inspected as found: furled or bagged unless other arrangements were made. Further inspection by a qualified rigger or sailmaker is always recommended.

The vessel was surveyed without the removal of any parts, including fixed partitions, fastened panels, fittings, headliners & wallliners, bulky 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 were not inspected. The Owner/Buyer/Survey requester is advised to ensure that all such areas are accessible for further inspection. A visual inspection was conducted only on readily available structures, and no destructive testing was performed.

The specifications listed within the report are believed to be correct; however, accuracy is not guaranteed. It is recommended to obtain accurate measurements and perform calculations as desired or to verify all vessel specifications and capacities with the vessel's builder.

Naval architecture and engineering analysis were not a part of this Survey. The survey was conducted following generally accepted marine standards and criteria utilized in the maritime surveying industry. Persons or entities entitled to rely upon this report are advised that this surveyor is not an engineer, nor does he possess any specialized knowledge beyond the degree of skill commonly possessed by others in the same employment. Furthermore, no determination of stability characteristics or inherent structural integrity was made, and no opinion is expressed with respect therein. Complete compliance with, identification of, and reporting on all standards, codes, and regulations is not guaranteed.

The surveyor shall have no liability for consequential damages, personal injury damages, property loss damages, or punitive damages, all of which shall be deemed to have been knowingly and voluntarily waived upon the use of this survey report.

In no event shall the legal liability of CBW LLC exceed the fee paid for this survey report, regardless of claims or suits and whether under the theory of tort, contract, product liability, admiralty, or otherwise.

This signed report represents the Surveyor's findings and supersedes all conversations, statements, and representations, whether verbal or in writing.

This Survey Report represents the vessel's condition on 10/23/2023 & 11/29/2023. and is the unbiased opinion of the undersigned surveyor, 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 Dori McClelland and those lenders and underwriters who will finance and insure the vessel for the client and is not assignable to any other parties for any purpose.

CONDUCT OF SURVEY

The following mandatory and voluntary standards were used as guidelines in the conduct to this survey.

-The mandatory 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).

-The National Fire Protection Association 302 (NFPA 302).

-The voluntary standards and recommended practices developed by the American Boat and Yacht Council (ABYC).

DEFINITION OF TERMS

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

ABYC: The American Boat and Yacht Council is a non-profit membership organization that develops voluntary global safety standards for the design, construction, maintenance, and repair of recreational vessels

ACCESSIBLE: Capable of being reached for inspection without removal of permanent boat structures

APPEARED/APPEARS: Indicates that a very close inspection of the related item was not possible due to constraints imposed on the Surveyor (e.g. no power available, vessel's systems winterized, inability to remove panels, or requirements not to conduct destructive testing, etc)

BUC/BUCValu: BUCValu Professional is a subscription-based boat evaluation service providing accurate boat, engine & trailer market values to professionals in the marine industry.

DELAMINATION: Separation of a hull, deck, or bulkhead into its constituent layers

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

FRP: Fiberglass Reinforced Plastic, commonly called "Fiberglass" or "Fiberglas(tm)"

FUNCTIONAL: Capable of serving the purpose for which it has been designed

HIN: Hull Identification Number

IN ACCORDANCE WITH (IAW): Complies with the regulation, standard, or recommendation referenced.

NEEDS SERVICING: Requiring repair to restore to condition for service

NFPA: National Fire Protection Association is an International non-profit organization devoted to eliminating death, injury, property damage, and economic loss due to fire and electrical and related hazards

NON-OPERATIONAL: Not able to function or be used

NOT TESTED: Indicates that a comprehensive inspection of the particular system, component, or item was attempted but was not possible due to constraints imposed upon the surveyor (e.g. no power available, vessel systems winterized, inability to remove panels, requirements not to conduct destructive tests or limitations on the inspection time that were outside the Surveyor's control

OPERATIONAL: Able to function or be used

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

SERVICEABLE: Fulfilling its function adequately (usable at the time of the survey)

The Findings & Recommendations section is only one section of the **Survey** Report. If received on its own, this section should not be mistaken as this vessel's full Survey Report. PLEASE BE ADVISED THAT SOME DEFICIENCIES, OBSERVATIONS AND SUGGESTIONS MAY ALSO BE CONTAINED IN THE BODY OF THE REPORT.

Deficiencies noted under "FIRST PRIORITY/SAFETY FINDINGS" should be addressed before the vessel is next underway. These findings could represent an endangerment to personnel and/or the vessel's safe operating condition. Findings may also be in violation of U.S.C.G. Regulations, ABYC Voluntary Safety Standards & Recommended Practices or NFPA Codes & Standards.

Deficiencies noted under "SECONDARY PRIORITY/FINDINGS NEEDING TIMELY ATTENTION" should be corrected in the near future, so



as to maintain and adhere to certain codes, regulations, standards, or recommended practices, and to help the vessel retain its value.

Deficiencies noted under "SURVEYOR'S GENERAL FINDINGS, NOTES, AND OBSERVATIONS" are lower priority or cosmetic findings, which should be addressed in keeping with good marine maintenance practices and in some cases as a desired upgrade. These items are recommended by this surveyor and are not required. It is NOT the intention of the surveyor that these items be corrected for the vessel to be considered a good risk for insurance purposes.

Deficiencies will be listed under the appropriate headings:

- A. FIRST PRIORITY/SAFETY FINDINGS
- B. SECOND PRIORITY/FINDINGS NEEDING TIMELY ATTENTION
- C. SURVEYOR'S GENERAL FINDINGS, NOTES AND OBSERVATIONS

HIN (HULL IDENTIFICATION NUMBER) VERIFICATION COMMENTS

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

TYPE OF SURVEY REQUESTED DATE OF SURVEY INSPECTION DATE REPORT DELIVERED VESSEL TYPE VESSEL BUILDER VESSEL DESIGNER VESSEL MATERIAL LENGTH OVERALL (LOA) BEAM DRAFT DISPLACEMENT HIN (HULL IDENTIFICATION NUMBER) MODEL YEAR YEAR BUILT HULL NUMBER DOCUMENTED HAILING PORT U.S.C.G. DOCUMENTATION NUMBER **GROSS TONNAGE NET TONNAGE U.S.C.G. DOCUMENTED FOR REGISTERED LENGTH REGISTERED BREADTH REGISTERED DEPTH** LOCATION OF SURVEY INSPECTION LOCATION OF BOTTOM INSPECTION **VESSEL OWNER** PERSONS IN ATTENDANCE WEATHER CONDITIONS PRESENT

GENERAL VESSEL INFORMATION

Pre-Purchase Condition & Valuation 10/23/2023 & 11/29/2023 11/30/2023 Cutter rigged full keel cruising sailboat Island Packet Yachts **Bob Johnson** Fiber Reinforced Plastic (Fiber Glass) 38', as reported by BUCValuPro™ 12.8', per SailboatData 5', as reported by BUCValuPro™ 21,000# as reported by BUCValuPro™ 1986 1986 Warwick RI 15 14 Recreation 38' 12.7' 6.5' Buyer, Surveyor Windy, cool, clear sky **RATING & VALUATION** FAIR

ESTIMATED MARKET VALUE

VESSEL OVERALL RATING

\$74,000

ESTIMATED REPLACEMENT COST

\$573,000 per BUCValuPro™

VESSEL DOCUMENTATION DATA

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

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



DOCUMENTATION COMPLIANCE (46 CFR 67)

The vessel's USCG Document was aboard, and the official number matched the one in the USCG database for the vessel's HIN, but it was not found marked aboard.

FINDING A-1

STATE REGISTRATION COMPLIANCE (33 CFR 173)

The vessel's onboard State Registration decal was expired and the decal was not displayed.



VESSEL CONSTRUCTION

EXTERIOR FINISH

Off-white Awlgrip[®] reportedly applied in 2010 with red bootstripe

HULL ARRANGEMENT

VESSEL DESCRIPTION AND LAYOUT

Aft cockpit full-keel displacement cutter-rigged cruising sailboat

HULL MATERIAL

Reportedly solid FRP hull and foam-cored sandwich deck. The hull and deck were percussion sounded every 6" and no anomalies were observed

KEEL

Ballast keel (reportedly 8,200 lbs.) molded into hull's layup schedule.

TRANSOM

Reportedly solid FRP layup

STRINGERS/TRANSVERSALS

Hull stiffness was reportedly provided by cored fiberglass longitudinal stringers and athwartships transversals.

BULKHEADS

Athwartships reinforcement enhanced by bulkheads, bonded/tabbed to the hull with FRP (fiber reinforced plastic).

GENERAL EXTERIOR CONDITION

The exterior of the vessel required general cleaning.

BILGES

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

FINDING C-1

GENERAL BILGE CONDITION

Some of the bilge spaces required general cleaning/detailing.

CHAIN LOCKER DRAINAGE

The drain appeared clear and serviceable where sighted.

BILGE LIMBER HOLES

The limber holes appeared to be appropriately sized and clear, where sighted.

BOARDING SWIM LADDER

A six (6) step folding stainless steel boarding ladder was installed at the swim platform. The ladder was tested for normal use and was found in serviceable condition and IAW ABYC H-41.10.5:

"The top surface of the lowest step of a reboarding ladder, if installed to meet the requirement of H-41.10.1, shall be at least 22in (560mm) below the waterline with the boat in the static floating position."





MOISTURE COMMENTS

Readings were taken with an ElectroPhysics GRPplus. A baseline of .4-.6 was established and considered dry. There did not appear to be any significantly elevated conductivity readings (possible moisture intrusion or other conductive material) around the hull, deck and superstructure penetrations, when tested.

DECK ARRANGEMENT

DECK MATERIAL

Reportedly, Closed Cell PVC Foam cored FRP (fiber reinforced plastic) with off-white gelcoat and diamond textured non-skid.

BULWARKS

Molded fiberglass bulwarks (part of the deck's layup).

TOE-RAILS

Unvarnished teak toe-rail; some teak glue up has failed, some bungs are missing, and some bronze fasteners have been replaced with stainless steel. Stainless steel isn't appropriate for use where it can not receive oxygen and is subject to moisture buildup. This is a cosmetic issue and goes to maintaining value and is not considered structural or safety related.



Crack in cap rail and teak toe rail





FINDING C-2

RUB-RAILS

Molded wood faced compression rails with stainless steel striker strips. Rub rails are in serviceable condition but in need of cleaning

HULL-TO-DECK JOINT TYPE

The hull-to-deck joint is an overlapped flange-type joint with elastomeric marine sealant between the hull and the deck joint. The joint is fastened on approximately every 6" with stainless steel machine screws and lock nuts. Where sighted it was sound and serviceable.

BRIDGE ARRANGEMENT

BIMINI TOP

1" SS Bows for Bimini Top and Cockpit Dodger were mounted. NOTE: the Bimini Top was not installed at the time of the Survey.



EXTERIOR EQUIPMENT

EXTERIOR SEATING

Facing cockpit seats over lockers and teak covered helm seat aft in serviceable condition

EXTERIOR BRIGHT WORK

The exterior Teak bright work varnish was weathered.

GENERAL HARDWARE CONDITION

No significant corrosion was observed on the vessel's hardware.

GENERAL CAULKING/SEALANT CONDITION

No significant weathering was observed on the vessel's exterior caulking sealants except as noted. Specifically, the chainplate covers show a loss of elasticity; this can lead to chain plate failure, a known issue with pre-1996 Island Packets. See notes under chain plates.



Chain plate cover sealant failure



Close up of sealant failure at chain plate cover; others are similar

EXTERIOR WASHDOWNS

A washdown pump was located in the AFT cabin under the sole; it did not appear to be commissioned and the area was in need of significant cleaning.

FINDING C-3

EXTERIOR SHOWER

Fresh water (cold only) shower located in the cockpit aft to PORT

CABIN VENTILATION

Cabin ventilation was provided by four (4) Lewmar deck hatches, twelve (12) opening porthole windows, and the salon entry door. All were in serviceable condition and no recent signs of water ingress were sighted.

EXTERIOR DOORS

White polyethylene doors with windows and teak hatch boards in serviceable condition

DECK DRAINAGE

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

CLEATS

Cleats throughout the vessel were 8" stainless steel horn type. There were well secured with ss fastenings and in serviceable condition.

ANCHOR PLATFORM

Molded fiberglass bow pulpit with stainless steel fairlead anchor roller chute.

PULPIT

1" Stainless steel pulpit; several of the mounting feet are bent, dislodged, and missing fasteners







Bent pulpit tubing

FINDING B-1

PUSHPIT (STERN PULPIT)

1" Stainless stern pushpit in serviceable condition

STANCHIONS

1" Stainless steel stanchions in serviceable condition except as noted in the findings.

LIFELINES

Vinyl-coated SS lifelines; monitor closely for corrosion under the covers.

EXTERIOR STORAGE

Various exterior lockers and storage areas appeared serviceable, where sighted.

FENDERS

Various fenders were observed onboard (amount included unknown).

MOORING LINES

Dock/mooring lines were observed onboard and at the vessel's mooring (amount included unknown).

COCKPIT CANVAS

No canvas was mounted during the survey; owner reports dodger and bimini off the boat that will convey

HAND RAILS/GRAB RAILS

Unvarnished teak handrails on molded FRP supports the length of the coachroof PORT and STB in serviceable condition

CABIN APPOINTMENTS

INTERIOR

SALON ARRANGEMENT

Quarter Berth aft to PORT, head forward of the Quarter Berth, facing Sittees to PORT and STB, Pullman Berth Forward, with Basin/Shower area in the peak. L-shaped galley AFT to STB, followed by the Nav Station. A Folding Bulkhead Table reveals glass and beverage storage when deployed.





Double berth aft (cushion to right fills mid section



Pullman to STB and wash area FWD

GALLEY ARRANGEMENT

The Gallery is to PORT aft at the companionway; Fridge and Freezer athwartship, inline gimbaled range, sink, and counter space.

DINING ARRANGEMENT

A Dining Set was arranged in the forward Salon.

ACCOMMODATION ARRANGEMENT

Large double aft and double pullman to STB forward

HEAD ARRANGEMENT

Manually operated head aft; 'wet head' showers forward and aft



Galley



Saloon with folding dinette table





INTERIOR CABINETRY & TRIM

The interior Satin finished Teak cabinetry and trim appeared serviceable.

INTERIOR DOORS

Satin finished Teak cabin doors.

INTERIOR STORAGE

The cabinets, lockers, drawers and shelving appeared serviceable, where sighted.

HEADLINERS

The headliner material was simulated leather with no visible stains or tears

CEILINGS

Teak and Gel-coated FRP ceilings in serviceable condition

FLOORING

Teak & Holly cabin sole in serviceable condition

CABIN SOLE FOUNDATION

Fiberglass cabin liner with white gelcoated finish.

COUNTER TOPS

Counter tops were in serviceable condition but in need of cleaning

GENERAL INTERIOR & SOFTGOODS CONDITION

The general maintenance of the vessel's interior appeared serviceable but in need of cleaning.

INTERIOR BULKHEADS

The interior bulkheads appeared serviceable, where sighted.

WATER INTRUSION COMMENTS

There were signs of previous water intrusion at the mast partners and the chainplates. While the mast area was dry there are signs of some migration below the chainplate covers where it can be sighted. See findings under chainplate section

INTERIOR ODOR COMMENTS

A slight mildew odor was observed inside the vessel.



COMMENTS

The interior shows signs of neglect and is in need of a full cleaning

INTERIOR SYSTEMS & EQUIPMENT

LIGHTING

12 volt DC lighting fixtures.

HVAC/AIR CONDITIONING SYSTEM

One Dometic 16K BTU with digital controls. I was powered on and produced cool air and is considered serviceable.

CABIN HEATING SYSTEM

The Dometic unit was fitted with a reversing valve for heat.

EVIDENCE OF INSECTS

No evidence of insects was observed

EVIDENCE OF RODENTS

No evidence of rodents or their dung was observed

AUDIO/VISUAL EQUIPMENT

ONBOARD WIFI SYSTEM

Ubiquiti® "Bullet" system mounted on the pulpit but not tested

GALLEY EQUIPMENT

REFRIGERATION

Adler Barbour Cold Machine; powered up



Fridge evaporator and control



FREEZER

Bin evaporator in fridge is the freezer compartment



OVEN



Princess Stove, burner ignition was missing; burners were operational when lit with lighter but oven was not tested.

FINDING C-4

MICROWAVE OVEN

Whirlpool Microwave Oven. Powered up

GALLEY SINK

Stainless Steel sink.

PROPULSION & MACHINERY SPACE

PROPULSION SYSTEM

ENGINE OVERVIEW

Single Yanmar diesel auxiliary in serviceable condition; the fuel system is in need of service, see Trial Run findings.

ENGINE MODEL

Yanmar 4JHE

ENGINE HORSEPOWER

44hp@3600RPM

NUMBER OF CYLINDERS

4

ENGINE STARTER VOLTAGE RATING

12 volt.

ENGINE HOURS

1881.7 hours, observed on the engine's analog hour meter. NOTE: As a 2014 survey records hours at 1881.4 it is believed that the engine hour meter is not operatonal

ENGINE SERIAL NUMBERS 01352

ENGINE INSTRUMENTATION

Main engine instrument gauges were installed at the helm.



EMERGENCY ENGINE SHUT-DOWN

Engine shutdown button at the helm inoperble

ENGINE EXHAUST SYSTEM

Raw water cooled with cast iron exhaust mixing riser and fiberglass muffler.

ENGINE COOLING SYSTEM TYPE

Closed reservoir type cooling with raw water cooled exhaust.

ENGINE DRIVE BELTS

Serpentine belt condition appeared serviceable.

THROTTLE & SHIFT CONTROLS

Single lever shifter to STB of helm

FINDING B-2

ENGINE BED MOTOR MOUNTS

Adjustable motor mounts on cored fiberglass longitudinal engine bed stringers. Some of the mounts appear to be recently replaced.

MAIN ENGINE OIL LEVEL

Normal levels were observed on the port and starboard engine sump dipsticks.

MAIN ENGINE COOLANT LEVEL

Normal levels were observed in the Heat Exchanger's Header Tanks.

ENGINE NOTES

Some exceptions were observed (see Findings Appendix).

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

The single-lever control sticks in reverse and doesn't easily move from reverse to neutral. See finding B2

STEERING TEST

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

ENGINE PERFORMANCE

The engine was operated from idle to 2800rpm where the speed was measured by GPS at 7kts.

The engine operated smoothly but died frequently. Fuel filters were changed often during the trial run and subsequent delivery from Tantallon to Deale. It is suspected that all engine issues were fuel-related. The tank should be emptied and the fuel tank and system cleaned.

FINDING A-2

VESSEL LOADS

Half tanks and 3 people aboard



ENGINE SPACE COMBUSTION AIR VOLUME

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

MACHINERY & BILGE SPACE EQUIPMENT

ENGINE ROOM AIR BLOWERS

Powered up.

SEACOCKS/SEA-VALVES

Raw water seacocks were bronze alloy ball valve type. Lubricate, exercise and monitor frequently. Recommend performing maintenance on all seacocks & sea-strainers annually (disassemble, inspect, clean and lubricate). It is also recommended that all below the waterline and near the waterline thru-hulls have a proper sized wooden plug attached to function as an emergency plugging device.

RAW WATER STRAINERS

Perko bronze alloy with sight glass securely mounted in serviceable condition

HOSES

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

HOSE CLAMPS

Hose clamps were in good condition where sighted and appear to provide intended service.

MACHINERY SPACE INSULATION

Aluminized Mylar-faced-fiberglass thermal & acoustic insulation were installed in the engine room. Where sighted, the insulation is in serviceable condition.

TRANSMISSIONS / GEARS / DRIVES

TRANSMISSION OVERVIEW

Kanzaki KBW 50 direct drive in serviceable condition.

GEAR RATIO

2.85:1

GEAR COOLERS/HEAT EXCHANGERS

Raw water heat exchangers. Check Zinc Anodes or bonding often.

PROPELLER SHAFT PACKING GLANDS

Hex nut stuffing box type packing glands. Monitor frequently.

TRIAL RUN CONDITIONS

A run was made on the Potomac River in calm waters.

FUEL SYSTEMS

FUEL SYSTEM

Single fuel tank reportedly 5052 Aluminum under the saloon sole. Where sighted it was well secured and in serviceable condition

FUEL TANKAGE CAPACITY

Manufacturer reports 57 gallons

FUEL LEVEL MONITORING

The analog fuel gauge at the panel read full, confirm that is operational as tank level changes.

FUEL TANK MANUFACTURER LABELING

None sighted, due to access.

FUEL FILL LOCATION

Port aft side deck, marked for diesel.

FUEL TANK VENTILATION Port hull side.

FUEL TANKAGE & FUEL FILL GROUNDING

The fuel tank was grounded to the fill plate measuring <10hm IAW ABYC H-33.15.1

FUEL FILL HOSE/PIPE

Type A2 USCG Approved Fuel Hoses, where sighted in serviceable condition

FUEL LINES/HOSES

USCG Approved Type A1 fuel lines, where sighted in serviceable condition

FUEL SHUT-OFF VALVES

Ball valves at the fuel tank.

MAIN ENGINE PRIMARY FUEL FILTERS

Racor 500MA in serviceable condition



Racor with bowl and heat protector below bowl IAW ABYC recommendations

MAIN ENGINE SECONDARY FUEL FILTERS

Engine mounted Secondary Fuel Filters.

FUEL FILTER CONDITION

Sediment & algae was observed in the Primary fuel filter's sight bowls and on their diffusers. Monitor/service often.

FUEL ODOR COMMENTS No diesel odors were observed

No diesel odors were observe

COMMENTS

As noted in the findings, the fuel system requires serivce

ELECTRICAL SYSTEMS DC ELECTRICAL SYSTEMS

DC SYSTEMS VOLTAGE

12-volt system with two battery banks.

BATTERIES

One (1) Lifeline[®] GPL 2700 AGM Starting Battery and four (4) Lifeline GPL-4CT 6v "golf cart" batteries in parallel and series configuration. Batteries are labeled installed 4/26/19. The starting battery started the engine in at 65 degrees F but tests at 68% capacity and should be replaced. The house bank was not tested but appeared operational. NOTE: Deep cycle battery testing requires a 20-hour test and can not be accurately performed by a load or conductance tester.





BATTERY SWITCHES

One (1) Perko rotary switch installed at the main panel in serviceable condition

DC ELECTRICAL PANEL BREAKERS/FUSES

DC branch breakers in the main Salon electrical panel; labeled and serviceable

DC ELECTRICAL SYSTEM MONITORS

Xantrex Link 20 Monitor at the nav station

BATTERY CHARGERS

Xantrex ProSine 2 Inverter/Charger with digital controls at the nav station. There were controls for a Raritan battery charger at the nav station, but no charger was found, and the switches seemed inoperational.

FINDING C-6

MAIN ENGINE ALTERNATORS

Balmar alternator reportedly 90a with external Balmar regulator. Where sighted the alternator and charge controller were in serviceable condition and operated during the trial run and delivery.

DC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

Appeared to be well supported and secured, where sighted. Always recommend installing chafe gear at all key friction points where wires/cables and hoses transit the vessel against sharp edges. Also recommend waterproofing all wiring connections that may be exposed to moisture.



AC ELECTRICAL SYSTEMS

AC SHORE POWER SYSTEM

The vessel was equipped with a 120-volt, single-phase AC system with (2) 30 amp shore power inputs. One was dedicated to the main panel and one to a sub-panel serving the air conditioner.

AC SHORE POWER PHASE RATING

Single Phase.

MAIN AC SHORE POWER BREAKERS

The AC panel and equipment appeared to be in generally good condition and serviceable.





AC ELECTRICAL PANEL BREAKERS

AC branch breakers in the main cabin AC electrical panel.

AC ELECTRICAL SYSTEM MONITORS

There was an AC Voltmeter installed in the HVAC Sub-panel. The Xantrex monitor acted as a voltage and current monitor for the main panel.

GALVANIC ISOLATION SYSTEM (ABYC A-28)

Non-sighted. Highly recommended if not installed.

FINDING C-7



AC ELECTRICAL POWER OUTLETS

AC outlets sighted throughout vessel. No GFCI outlets were located in the galley area and head.

FINDING A-4

AC ELECTRICAL OUTLET POLARITY

AC electrical outlet polarity was checked and found to be wired correctly.

AC SYSTEM WIRING TYPE

Appeared serviceable for intended use, where sighted.

AC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

Some exceptions were observed (see Findings Appendix).

GENERATORS/AUXILIARY POWER

INVERTERS & OTHER AUXILIARY POWER

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

Xantrex ProSine 2.0 2000-watt Inverter Charger with Digital Display



WATER SYSTEMS

FRESHWATER SYSTEM

FRESH WATER SYSTEM

One (1) aluminum talk under the cabin sole is reported to hold 187 gallons. The vessel was winterized so no operational tests could be made.

WATER FILL LOCATION

Starboard amidships side deck, marked for water.

FRESHWATER PUMPS

ShurFlo pump, powered up but no further testing as vessel was winterized.

FRESHWATER FILTRATION

Inline strainers at the freshwater pumps. Monitor & clean often.



FRESHWATER PIPE/HOSE PLUMBING

Reinforced rubber hoses.

FINDING C-8

WATER LEVEL MONITORING

Analog monitor at the nav station; read full. Should be tested as the tank is used.

FINDING C-9

COMMENTS

When the vessel is commissioned the water system should be flushed and fully tested for leaks and operation. Recommend periodically sanitizing the vessel's water tankage and water delivery systems.

HOT WATER SYSTEM

WATER HEATER

Seaward Products reportedly 11-gallon located aft. Powered up.

WATER HEATER PRESSURE RELIEF VALVE

Relief valve at the tank; drains into bilge.

WATER HEATER HEAT EXCHANGER SYSTEM

Engine-mounted heat exchanger. Hoses are serviceable where sighted

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). The MSD is plumbed to a holding tank. The tank is plumbed to a Y-valve leading to either overboard discharge or deck mounted pump out location.

BLACKWATER TANKAGE

Polyethylene Blackwater (sewage) holding tank labeled 20 gallons

BLACKWATER SYSTEM DISCHARGE

Deck plate labeled WASTE and optional overboard discharge where permissible by law.

HEAD/BLACKWATER SYSTEM COMMENTS

Some of the hoses in the blackwater system have been replaced; some appear much older. Monitor and replace if odors become noticable.

GREYWATER SYSTEM

GREYWATER DISCHARGE SYSTEM

Galley and head sinks drain overboard; showers and ice box have dedicated sump pumps; powered up where possible but not further tested as the vessel was winterized..

STEERING SYSTEMS

STEERING SYSTEM TYPE

Edson Rack & Pinion Steering system in serviceable condition. There is an externally mounted wheel break system.

UPPER RUDDER BEARINGS & RUDDER SUPPORT

Nylon upper rudder bearings on fiberglass pedestal tubes.

RUDDER STOCKS

2" stainless Steel Rudder Stock in serviceable condition.

RUDDER LOG SEALS

Dripless Rudder Stock Seals (no leakage observed). Monitor frequently.

DRIVE POSITION INDICATOR

Autopilot display at the helm station

EMERGENCY STEERING SYSTEM

Direct tiller through deck plate at the helm; emergency tiller aboard but not fitted during survey.

STEERING SYSTEM COMMENTS

The steering was smooth throughout it's travel and is considered serviceable

GROUND TACKLE

ANCHORS

One Rockna 25kg primary and one 35lb CQR were mounted at the bow. They are considered adequate for coastal and extended cruising in most situations.





ANCHOR RODE TYPE

The ROCKNA anchor is attached to an indeterminate length of 3/8" galvanized BBB Chain. The CQR to an indeterminate length of Proof Coil chain painted white and a length of 1/2" nylon rode.

ANCHOR WINDLASS

Simpson Lawrence 555 Two Speed manual windlass appears in serviceable condition.

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COMMENTS

Test the anchor windlass with both chain sizes to confirm that will operate when needed.

ELECTRONICS & NAVIGATION EQUIPMENT

VHF RADIOS

Icom IC-M502 VHF Radio. A successful radio check was made on ch. 16. No MMSI was programmed into the radio. No Station license was found aboard. Register & program the VHF unit with a MMSI Number (Maritime Mobile Service Identity Number) and integrate with the vessel's GPS, to utilize the Digital Selective Calling feature as necessary.

FINDING B-3

COMPASSES

Richie 5" Powerdamp compass at the binnacle in serviceable condition. Recommend having the compass swung, providing a current deviation card. Condition.

FINDING C-10

MULTI-FUNCTIONAL NAVIGATION DISPLAYS

Raytheon RL70 Pathfinder Radar at the helm was operational when tested

AUTOPILOT

Raytheon ST7000+ with linear drive; powered up

MARINE RADAR

RL70 powered up and painted targets

GPS CHARTPLOTTER

Raytheon RC530 Chartplotter at the nav station; powered up and displayed charts.

DEPTH DISPLAY

Raymarine ST60 Digital Depth Display.

SPEED DISPLAY

Raytheon ST60 Digital Speed Gauge.

WIND INSTRUMENT

Raymarine ST60+ True/Apparent Wind Speed & Direction Display.



BAROMETER

Howard Miller Barometer.

SHIP'S CLOCK

Howard Miller Clock.

ANTENNAS

The antennas appeared to be well mounted where sighted.

ELECTRONICS COMMENTS

The electronics were operational but old and charts very dated.

FINDING C-11

SAFETY EQUIPMENT

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

FIRE EXTINGUISHERS (33 CFR 175.310)

There were two (2) handheld fire extinguishers aboard; neither had current annual inspection tags and one was over 12 years old. While ABYC no longer requires annual inspections it is considered best practice by the NFPA. In addition, all hand-held fire extinguishers must be replaced every 12 years.



WEARABLE PERSONAL FLOTATION DEVICES (33 CFR 175)

Four (4) USCG Type II PFD's were aboard

THROWABLE PERSONAL FLOTATION DEVICES (33 CFR 175)

Two (2) Type IV USCG Approve Throwable Devices (Horseshoe Ring) were sighted at the stern in serviceable condition.

MAN OVERBOARD SYSTEM (MOB)

Lifesling M.O.B. Rescue Sling.

VISUAL DISTRESS SIGNALS (33 CFR 175.101)

Expired.

FINDING A-6

SOUND PRODUCING DEVICES (33 CFR 83)

12 volt DC Electric Air Horn. Powered up.

NAVIGATION LIGHTS (33 CFR 83)

The Navigation Lights illuminated, except where noted.

FINDING A-7

"NO OIL DISCHARGE" PLACARD (33 CFR 151/155) Found properly displayed.

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

Found properly displayed in the Galley.

"WASTE MANAGEMENT" PLAN (33 CFR 151) VESSELS OVER 39'4" Not required on vessels under 39'4"

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

Recommended but not required. 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).



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

Powered up.

AUXILIARY SAFETY EQUIPMENT

BILGE HIGH WATER ALARMS

None sighted. Highly recommended.

FINDING B-4

FIRST AID SUPPLIES

None sighted. Highly recommend a full Medical Kit and the periodic renewal of any outdated medical supplies.

CARBON MONOXIDE DETECTORS (ABYC A-24)

None sighted. Highly recommend installing Carbon Monoxide Detectors inside all of the accommodation spaces.

FINDING A-8

SMOKE DETECTORS (NFPA 302)

Located in each cabin; did not alarm when tested.

FINDING A-9

BILGE PUMPING SYSTEMS

ELECTRIC BILGE PUMPING SYSTEMS

One (1) Rule 2000, 12 volt Bilge Pump with floatswitch. Powered up. Highly recommend installing at least one additional backup bilge pump.

MANUAL BILGE PUMPING SYSTEMS

A manually operated hand bilge pump was located at the helm; the hoses, body, and bellows were sound where sighted, but there was not sufficient water in the bilge to test the operation of the pump.

UNDERWATER EQUIPMENT & HULL INSPECTION

PROPELLERS

One (1) 16" x 17" pitch bronze three (3) blade propeller. Note that the propeller and nuts are badly fouled and should be cleaned and the prop nuts and cotter pin examined.

FINDING B-5

PROPELLER SHAFTS

Reportedly, Aquamet 22 Stainless Steel, 1 1/4" inch diameter in serviceable condition

PROPELLER SHAFT LOGS

Shaft log was reportedly bronze, mounted to the hull.

PROPELLER SHAFT STRUTS

None, propeller mounted behind shaft log

SHAFT STAVE BEARINGS (CUTLESS BEARINGS)

The Cutless Bearings showed no signs of significant wear.

RUDDER MATERIAL

Closed Cell PVC Foam cored fiberglass.

RUDDER MOUNTING

Mounted in dripless rudder seal carrier bearings.



DRAINAGE THROUGH-HULLS

Fiberglass or bronze hull side discharge through-hulls were installed above the waterline.

HULL TRANSDUCERS

The transducers appeared serviceable, where sighted.

SACRIFICIAL ANODES

The underwater Zinc Anodes were wasting or wasted. Monitor frequently. Recommend Anode replacement once Anode reaches 50% depletion. The use of Zinc as an Anode is only recommended for saltwater applications. If the vessel is to be kept primarily in brackish water the Anodes should be changed to Aluminum; Magnesium if the vessel is kept in freshwater.

FINDING B-6

ANTIFOULING PAINT

The antifouling bottom paint appeared to be nearing the end of its serviceable life and was flaking off/failing in several areas, with slight marine growth also observed along the hull's wetted surfaces.

OSMOTIC HULL BLISTERS

Surface blistering was observed along some areas of the hull's wetted surfaces. 50-75 blisters were sighted; most the size of a dime, the largest the size of a penny. They are not structural and require no immediate action. However, as the hull was reportedly laid-up with a vinylester resin that is considered blister resistant, at some time in the next five years the hull should be cleaned, blisters repaired, and an epoxy barrier coat applied to maintain the value of the vessel.

FINDING C-12

HULL SURFACE COMMENTS

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

HULL INSPECTION COMMENTS

Electronic Moisture Testing was limited during the bottom inspection. Antifouling bottom paints retain moisture and the antifouling bottom paint's metal oxide content triggers a false positive for high conductivity on the Electronic FM Wave or Capacitive Type Moisture Meters. Further, boat builders utilize various construction materials, fasteners, coatings and composites, many of which will trigger a false positive for moisture. In order to perform an Electronic Moisture Test on a hull's wetted surfaces, the vessel must be dry docked for a minimum of 48 hours and the vessel's antifouling bottom paint & all coatings must be completely removed in the areas to be tested for moisture. It must be understood that Moisture Meters are designed to detect the "conductivity" of substrates; including moisture, among various other conductive materials, and their ability to detect conductivity can be limited by many factors, such as the depth of the conductive material, air space present in between the laminate and the conductive material, etc. If a more thorough assessment of possible moisture content in the vessel's laminates is desired, it is recommended that a non-destructive Thermal Imaging Survey be performed to the "Infraspection Institute's Standards for the Inspection of Recreational Yachts & Small Craft Constructed of Fiberglass Reinforced Plastic and Composite Materials". Destructive testing may also be considered if a more definitive conclusion regarding possible moisture content is desired.

THROUGH HULLS BELOW WATERLINE

All thru hull fittings were sound and serviceable where sighted

TENDER / AUXILIARY WATERCRAFT

TENDER/WATERCRAFT

Achilles Corporation rigid fiberglass bottom inflatable RIB.

MODEL YEAR 2019

HIN (HULL IDENTIFICATION NUMBER)





ENGINE MODEL

Tohatsu

6 HP Four Stroke Outboard. Mounted on the stern rail, not tested.

ENGINE SERIAL NUMBER

014766AE



AUXILIARY GAS SYSTEMS

GAS TYPE

LPG (Liquified Petroleum Gas/Propane).

GAS TANKAGE LOCATION

Two (2) tank locker on AFT PORT deck

GAS TANKAGE SPACE VENTILATION

The drain at the base of the tankage locker appeared adequate.

GAS SHUT-OFFS

Valves at the tanks with electric gas shut-off solenoid in the Galley.

GAS TANKAGE MOUNTING

The tanks were properly secured.

GAS LINES & FITTINGS

Reinforced rubber LP Gas lines appeared serviceable.



GAS REGULATOR

A Gas Regulator was installed inline.

GAS PRESSURE GAUGE

A gas pressure gauge was installed at the tank.

GAS SYSTEM COMMENTS (ABYC A-1)

The LPG installation, where sighted, was IAW ABYC A-1

RIGGING & SAILS

STANDING RIGGING

STANDING RIGGING COMMENTS

Some exceptions were observed (see Findings Appendix).

MAST

Anodized Aluminum Mast.

MAST SPREADERS

Single spreader rig (aluminum).

MAST STEP

Keel stepped on fiberglass block.

BOOM

Aluminum Boom.

BOOM VANG

Garhauer Solid Boom with two (2) part tackle

RIGGING CHAIN PLATES

Internal chain plates bolted to bulkhead or knees, where sighted. Island Packets prior to 1996 are prone to chain plate failure. See the appendix for comments from Island Packet. Given the apparent failure of the sealant at the chain plate covers it is strongly recommended that the chainplates be examined and replaced if necessary.

FINDING B-7

SHROUDS/STAYS/TERMINAL ENDS

1 X 19, 316 Stainless Steel cable. Utilized Swage-type fittings in serviceable condition

RIGGING TANG ENDS

Appeared serviceable, where sighted. Observed from deck level.

RIGGING TURNBUCKLES

Open Stainless Steel turnbuckles.

RIGGING TOGGLES

Stainless Steel toggles.

RUNNING RIGGING

MAIN SHEET TRAVELER

Garhaurer traveler with windward sheeting car

REEFING SYSTEM

Sails were not bent of for the survey; there are reefing lines in the boom for slab reefing



TOPPING LIFT

The Boom's Topping Lift appeared serviceable.

ROLLER FURLING GEAR

Pro-Furl Furling Gear on both Genoa and Inner Foresail

HALYARDS

Halyards were braided and color coded with no wire splices.

SHEETS

The Sail Sheets appeared serviceable, where sighted.

SNAP SHACKLES

Stainless Steel Snap Shackles.

TRACKS & CARS

Schaefer Marine Tracks & Cars.

TURNING BLOCKS

Two (2) Turning Blocks for the Genoa in serviceable le condition

LINE CLUTCHES

Lewmar line clutches mounted on the coachroof were weathered but operational.

WINCHES

Two (2) Lewmar #43 ST Winches in the cockpit for the Genoa. One (1) Lewmar #7 on the PORT Coach top and one (1) Lewmar #32 on the STB Coach top.

SAILS

SAILS COMMENTS

No sails were bent on during the survey. A sail inspection by a surveyor is strongly recommended.

FINDINGS LEAD-IN

The Findings & Recommendations section is only one section of the Survey Report. If received on its own, this section should not be mistaken as this vessel's full Survey Report. PLEASE BE ADVISED THAT SOME DEFICIENCIES, OBSERVATIONS AND SUGGESTIONS MAY ALSO BE CONTAINED IN THE BODY OF THE REPORT.

Deficiencies noted under "FIRST PRIORITY/SAFETY FINDINGS" should be addressed before the vessel is next underway. These findings could represent an endangerment to personnel and/or the vessel's safe operating condition. Findings may also be in violation of U.S.C.G. Regulations, ABYC Voluntary Safety Standards & Recommended Practices or NFPA Codes & Standards.

Deficiencies noted under "SECONDARY PRIORITY/FINDINGS NEEDING TIMELY ATTENTION" should be corrected in the near future, so as to maintain and adhere to certain codes, regulations, standards or recommended practices (and safety in some cases) and to help the vessel to retain its value.

Deficiencies noted under "SURVEYOR'S GENERAL FINDINGS, NOTES AND OBSERVATIONS" are lower priority or cosmetic findings, which should be addressed in keeping with good marine maintenance practices and in some cases as a desired upgrade.

Deficiencies will be listed under the appropriate heading:

- A. FIRST PRIORITY/SAFETY FINDINGS
- B. SECOND PRIORITY/FINDINGS NEEDING TIMELY ATTENTION
- C. SURVEYOR'S GENERAL FINDINGS, NOTES AND OBSERVATIONS

A: FIRST PRIORITY / SAFETY AND COMPLIANCE DEFICIENCIES

FINDING A-1 DOCUMENTATION COMPLIANCE (46 CFR 67)

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

RECOMMENDATION

Properly display U.S.C.G. Documentation number for compliance. 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 A-2 ENGINE PERFORMANCE

RPM's dropped and engine died during the trial and delivery

RECOMMENDATION

Have a mechanic empty and clean the fuel tank and confirm the system is operating correctly with clean fuel.

FINDING A-3 BATTERIES

The batteries were not well secured. The positive battery terminals did not have protective insulation covers installed.

RECOMMENDATION

Properly secure batteries, and install protective terminal insulation covers to prevent accidental shorting, as necessary.

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FINDING A-4 AC ELECTRICAL POWER OUTLETS

There were no GFCI protected AC outlets observed onboard.

RECOMMENDATION

Install GFCI protected outlets in all moisture prone areas, as necessary. ABYC E-13.3.5, If installed in a head, galley, machinery space or on a weather deck, receptacles shall be protected by a Type A (nominal 5 milliamperes) Ground Fault Circuit Interrupter (GFCI).

FINDING A-5 FIRE EXTINGUISHERS (33 CFR 175.310)

There were not enough current fire extinguishers onboard for a vessel of this size. The hand-held fire extinguisher did not have a current annual inspection tag.

RECOMMENDATION

Provide at least two (2) current 5-B hand-held fire extinguishers IAW 46 CFR § 175.320(a)(1)

FINDING A-6 VISUAL DISTRESS SIGNALS (33 CFR 175.101)

The Visual Distress Signals were expired.

RECOMMENDATION

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

FINDING A-7 NAVIGATION LIGHTS (33 CFR 83)

The Navigation Masthead/Steaming Light did not illuminate when tested.



RECOMMENDATION

Repair or replace the Navigation Running Lights to comply with USCG Regulations.



FINDING A-8 CARBON MONOXIDE DETECTORS (ABYC A-24)

Carbon Monoxide Detectors were not observed onboard the vessel.

RECOMMENDATION

(ABYC A-24.7) A carbon monoxide detection system shall be installed on all boats with enclosed accommodation compartment(s). Carbon monoxide is a toxic, odorless, colorless, tasteless gas produced by the burning of carbon-based fuels. Carbon monoxide in high concentrations can be fatal in a matter of minutes. Unless the symptoms are severe, carbon monoxide poisoning is often misdiagnosed as seasickness; however, lower concentrations must not be ignored because the effects of exposure to carbon monoxide are cumulative and can be just as lethal.

FINDING A-9 SMOKE DETECTORS (NFPA 302)

The Smoke Detector did not power up/test sound.

RECOMMENDATION

Smoke Detectors are very important safety equipment. Install Smoke Detectors in all accommodation spaces, as necessary. NFPA 302 CHAPTER 12 SECTION 12.3. All vessels 26' or more in length with accommodation spaces intended for sleeping shall be equipped with a single station smoke alarm that is listed to UL 217 Standard for Single and Multiple Station Smoke Alarms for recreational vehicles and is to be installed and maintained according to the device manufacturer's instructions.

B: SECONDARY PRIORITY / FINDINGS NEEDING TIMELY ATTENTION

FINDING B-1 PULPIT

The bow pulpit is bent, and some of the feet are bent and missing fasteners

RECOMMENDATION

Have a qualified technician correct the bent pulpit, level the mounting feet, and resecure IAW marine practice

FINDING B-2 THROTTLE & SHIFT CONTROLS

The engine's gear shifter control was stiff to operate. It could be moved into forward but would not move to neutral or reverse without significant effort.

RECOMMENDATION

Investigate further and service as necessary prior to operation



FINDING B-3 VHF RADIOS

No MMSI was programmed into the radio. The radio should be properly programmed and connected to a GPS for proper DSC emergency operation. No FCC license was found aboard; not required in US waters but required for a planned trip to the Bahamas.

RECOMMENDATION

Obtain an MMSI and Ship's Station License from the FCC and program the radio. Confirm that the GPS input is correctly wired.

FINDING B-4 BILGE HIGH WATER ALARMS

The vessel did not appear to have bilge high water alarm(s) installed.

RECOMMENDATION

Install the appropriate recommended alarm(s), as necessary. On boats with an enclosed accommodation compartment, an audible alarm shall be installed indicating that bilge water is approaching the maximum bilge water level (ABYC H-22.7.3). Maximum bilge water level: the level above which electrical or mechanical systems will be adversely affected by bilge water, with the vessel in the static floating position or underway (ABYC H-22.4.7).

FINDING B-5 PROPELLERS

The propeller and mounting nuts are fouled and difficult to inspect

RECOMMENDATION

Investigate further, and service/clear debris as necessary.



FINDING B-6 SACRIFICIAL ANODES

The underwater Zinc Anodes were wasting or wasted.

RECOMMENDATION

Replace the wasted Anodes with the correct material for your cruising grounds in order to ensure proper electrolytic corrosion protection

FINDING B-7 RIGGING CHAIN PLATES

Given the age of the vessel and the age of the chainplates it is strongly recommended that a rigger examine them for replacement

RECOMMENDATION

Investigate further, and service, repair or replace as necessary.





C: SURVEYOR'S GENERAL FINDINGS, NOTES AND OBSERVATIONS

FINDING C-1 BILGES

Slight water and/or oil was observed collecting in some of the bilges.

RECOMMENDATION

Investigate further/monitor, trace all sources of water & oily fluids and address as necessary. Clean the bilges (large fine for oily discharge).

FINDING C-2 TOE-RAILS

Some of the teak shows signs of glue failure and some fasteners have been replaced with SS oval head screws and not flat head bronze fasteners

RECOMMENDATION

Re-secure the toe rail and fasten with silicon bronze fasteners and re-bung IAW good marine practice as necessary

FINDING C-3 EXTERIOR WASHDOWNS

The wash-down pump and it's locker were in poor repair and in need of cleaning



RECOMMENDATION

Clean the locker under the Aft cabin sole and commission the pump. Investigate further/trace, and service, repair, or replace as necessary.



FINDING C-4 OVEN

Burner igntion button was missing

RECOMMENDATION

Service, repair or replace as necessary.

FINDING C-5 BATTERIES

The starting battery tested at 68% state of life on a Midtronix 500; batteries tested at less than 80% are considered past useful life.

RECOMMENDATION

Replace the battery if any difficulty in starting is noticed or before a major trip



FINDING C-6 BATTERY CHARGERS

There is a panel for an old Raritan battery charger but no charger was sighted and a newer Inverter Charger was installed



RECOMMENDATION

Remove the old control panel and its associated wiring.

FINDING C-7 GALVANIC ISOLATION SYSTEM (ABYC A-28)

No galvanic isolator was sighted.

RECOMMENDATION

Consider installing a galvanic isolator to help prevent stray current corrosion when attached to dock power.

FINDING C-8 FRESHWATER PIPE/HOSE PLUMBING

The hoses are older, show some discoloration, and should be monitored.

RECOMMENDATION

Investigate further, and service, repair or replace as necessary.

FINDING C-9 WATER LEVEL MONITORING

The water tank's level gauge is considered either inoperable or inaccurate.

RECOMMENDATION

Investigate further, and service, repair or replace as necessary.

FINDING C-10 COMPASSES

No current compass deviation card was found aboard.

RECOMMENDATION

Have the compass properly swung and adjusted before planned offshore sailing.

FINDING C-11 ELECTRONICS COMMENTS

Charts are dated

RECOMMENDATION

Update cartography prior to extended cruising

FINDING C-12 OSMOTIC HULL BLISTERS

Some small osmotic surface blisters were observed along areas on the hull's wetted surface.

RECOMMENDATION

Investigate further, and repair in accordance with good marine practice as necessary. Repair the blisters, as necessary. Also recommend applying an Epoxy based Barrier Coating System.





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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

The "FAIR MARKET VALUE" is the most probable price in terms of money that 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 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.

APPRAISAL METHODOLOGY

The following method of valuation was used to obtain the FAIR MARKET VALUE of the vessel:

Similarly equipped, same or similar model vessels are shown as sold on broker listing sites, including YATCO (Yacht and Boat & Sales), Soldboat (from Yachtworld listings), and IYBA (International Yacht Brokers Association) in recent years. These values were adjusted for the model year, date of sale, and location and averaged. A ratio was established between the listed and sold prices.

That ratio was applied to existing listings similarly adjusted for age, location, and, where discernible, condition. Listings of more than 1 standard deviation (an accepted statistical measure of how far any single item in a list varies from the list's average) from the average



value were carefully evaluated for condition, days on the market, and location, and discounted if not applicable to the value of the vessel being valued.

The adjusted average of sold boats and of current listings were adjusted for Boat Underwriters' Counsel(BUC) condition. That number is considered with the values listed by BUCValuPro[™] for vessels in the same condition and location. When there are so few sales of similar vessels it is important to consider the condition and location of comparable vessels to ensure that outliers do not positively or negatively reflect upon the subject vessels' market value.

The Boat Underwriters Council[®] states that the adjustment for FAIR condition vessels is 10-20% from vessels in AVERAGE condition. In the case of **Control** the need for possible rig and chain plate replacement and the engine and fuel issues discovered during the trial run and delivery put her in the 20% adjustment range.

SIMILAR VESSELS RECENTLY: I found 10 sales of US-based 1986 - 1988 Island Packet 38 Cutters meeting my criteria from Florida to Michigan.

These fell into two categories: those fully restored with new rigging, chain plates, hardware, and electronics, and those in need of upgrading.

Model	Sold Date	Days	Sold	Asked
Year		MK		
1986	3-Aug-23	101	\$85,500.00	\$110,000.00
1987	12-Sep-23	88	\$39,999.00	\$39,999.00
1987	13-Aug-23	465	\$70,000.00	\$99,900.00
1987	20-Jun-22	32	\$135,000.00	\$145,000.00
1987	28-Dec-21	16	\$135,000.00	\$149,000.00
1987	17-Jul-21	23	\$89,000.00	\$89,000.00
1988	15-May-22	116	\$90,000.00	\$115,000.00
1988	27-Apr-22	22	\$124,000.00	\$129,000.00
1988	10-Aug-21	27	\$115,000.00	\$119,000.00
1988	20-Jul-21	243	\$70,000.00	\$79,900.00

Clearly, upgraded vessels in better condition spent much less time on the market and sold at much higher prices.

The average listed price was \$107,580, and the average sold price was \$95,350. The ratio between sold and listed was 89% However, (in both condition and equipment) are comparable to those selling for \$70,000 and not those with new chainplates, rigging, and recent paint jobs.

An adjusted "Sold Boat" Price would be \$76,279

I found 9 current listings on Yachtworld, Boat Trader, and Sailboat Listings for 1986-1990 IP 38 models in the US & PR and several foreign listings (foreign listings were not considered)

Source Year		Listing Price Location			
YW	1987	\$112,500.00	MD		
YW	1988	\$116,000.00	VA		
YW	1988	\$119,000.00	VA		
B.C	1990	\$69,000.00	PR		
SL	1988	\$149,000.00	FL		
SL	1988	\$138,000.00	MD		
SL	1988	\$136,000.00	FL		
SL	1989	\$89 <i>,</i> 500.00	ТΧ		

The average listing price was \$116,125; adjusted by the 89% listing-to-sales ratio results in a projected sales price of \$103,351.

An Adjusted Listing price for would be \$82,681

The Boat Underwriters Counsel BUCValuPro[™] Retail Price Range for in fair condition is \$68,700 to \$75,500.

ADJUSTED ESTIMATES

The surveyor has chosen to consider the average adjusted comparative sales, the adjusted listing values, and the BUCValuPro[™] Fair Market Value adjusted for condition and equipment.

Given the lack of upgrades and overall condition of consider her to have a Fair Market Value of \$74,000 and a Replacement Value of \$573,000 per BucValuPro



SUMMARY

In accordance with the request for a Marine Survey of the **sectors** 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. 10/23/2023 & 11/29/2023. 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.

Scott Richard Berg Principal Surveyor



























Mixing Elbow (monitor often)









Upgraded alternator and 1/2" belt





Island-Packet-Ancestry



AUG. 24, 2022

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Island Packet Chainplates - Do They Need to be Replaced?

March 2022

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SHARE

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Over the course of the past four plus years administering Island Packet Ancestry, plus a 29 year history of working at the IP factory, I have distilled and tabulated what I feel is the definitive "treatise" on Island Packet chainplates. Some of this information has been previously released, but here are the highlights; please feel free to share:

- Chainplates prior to the 1996 model year were constructed of 304 grade stainless steel. These, to date, are the only ones that have failed (to the best of my knowledge).
- During the 1996 model year (that's roughly September 1995 to August 1996) the transition was made to 304L, an alloy with better corrosion resistance than 304. This was a "running change" and there is no hull-number-specific documentation on what boat first received the 304L. I can only say that the 1996 model year was a "transition" year. No 304L chainplates have failed to the best of my knowledge. (Note: the 304L alloy was not as strong as 304 and the thickness of many of the chainplates had to increase to compensate. It may be possible to identify your chainplates by the thickness.)
- So, while it may be safe to say boats built late in the 1996 model year are likely to have 304L, I feel it is also safe to say that *all* 1997 model year boats and newer have 304L stainless chainplates (until 1999).
- GE Silpruf 2000 sealant (a superior bedding compound to 3M's 5200 which had been used earlier) was also introduced along with the 304L.
- As the 1999 model year boats were being built (summer/fall 1998), Island Packet transitioned first to 316, and then 316L stainless, an even more corrosion resistant alloy. No failures have been reported with 316 or 316L to the best of my knowledge.
- An annealing step was added as one further way to fight corrosion at the chainplate welds sometime during late 2000 or early 2001; no failures have been reported on the new annealed 316L chainplates either.

Keep in mind, however, that the failure rate of even the oldest chainplates is still very low (less than 2%) so an immediate call for replacement may be unnecessary for well-maintained, lightly sailed vessels. But if you are headed off in an older model for blue water adventures, new chainplates are cheap insurance.

Hope this helps!



Bill Bolin, President

Island Packet Ancestry, Inc.



February 15, 2022

NEWS from BoatUS Boat Owners Association of The United States 5323 Port Royal Rd, Springfield, VA 22151 BoatUS News Room at

FOR IMMEDIATE RELEASE Press Contact: D. Scott Croft, Vice President Public Affairs, 703-461-2864, SCroft@BoatUS.com

BoatUS: New U.S. Coast Guard Fire Extinguisher Regulation Effective April 20

12 year expiration for disposables and different carriage requirements for older, newer model year vessels



A new U.S. Coast Guard regulation for disposable fire extinguishers mandates a 12year expiration date from the date of manufacture. <u>Download hi-res photo</u> (https://www.boatus.com/newsroom//Images/Releases/Found Disposable Fire Extinguisher 12 Years Expiry and class changes PHOTO 1.2.17.22.jpg)



A new U.S. Coast Guard regulation aims to increase use of a newer class of disposable fire extinguishers. A "5-B:C" class is shown here. Download hi-res photo (https://www.boatus.com/newsroom//Images/Releases/Found Disposable Fire Extinguisher 12 Years Expiry and class changes PHOTO 2 2_17_22.PNG) ANNAPOLIS, Md., Feb. 15, 2022 – A rite of passage for every boater is the annual spring commissioning. Newly added to the boat owners todo list this spring will be to check all disposable (non-rechargeable) fire extinguisher dates of manufacture, as well as the label for their U.S. Coast Guard classification.

That's because a <u>new U.S. Coast Guard regulation</u> beginning April 20

(https://www.federalregister.gov/documents/2021/10/22/2021-22578/fire-protection-for-recreational-vessels#sectno-reference-<u>175.320</u>) for disposable fire extinguishers mandates a 12-year expiration date from the date of manufacture. Boaters can find the manufacture date stamped into the bottom of the bottle or near the UL label. This may be two or four digits — if it is two, as in 08, that means 2008. Additionally, while the new regulation does not change the type (U.S. Coast Guard-rated) or quantity or requirement for USCG approved fire extinguishers aboard, it does specify the minimum Underwriter Laboratory (UL) classification of extinguishers to be

This is the result of phasing out older "B-I" and "B-II" labels for newer "5-B" "10-B" and "20-B" extinguisher classifications. The number in this new rating refers to the size in square feet of the potential fire the device is suitable to extinguish and not the exact weight of the dry chemical inside the bottle.

Vessels on the water today that are less than 26 feet and model year 2017 or older may continue to carry older, dated or undated "B-I" or "B-II" disposable extinguishers. However, when they are no longer serviceable or have reached 12 years of age since manufacture, they must be replaced with newer class "5-B" or greater extinguishers. Boats less than 26 feet and 2018 model year or newer must carry unexpired "5-B" "10-B" or "20-B" fire extinguishers. Having older "B-I" and "B-I" types do not meet the new carriage requirements.

Many retailers today offer "10-B" class fire extinguishers, which may be a good choice as they exceed U.S. Coast Guard minimum carriage requirements for boats under 26 feet, while at the same time giving boaters more extinguishing coverage. For boats 26 feet or greater, however, having one "10-B" aboard does not equal two 5-Bs. Only a "20-B" classification meets the requirement to carry two "5-

carried aboard certain vessels - depending on the boat's model year.

B" extinguishers. For a look at how many and what type of fire extinguishers are ne to <u>BoatUS.org/Fire-Extinguishers (https://www.boatus.org/fire-extinguishers/)</u>.

BoatUS strongly recommends going beyond the regulation's minimum requirements. <u>The results from a Foundation-sponsored boat</u> <u>burn showed (https://www.youtube.com/watch?v=XCEIL8sF8Bo)</u> that one extinguisher may give very little time to make an emergency call or potentially prepare to abandon your vessel.

BoatUS also notes that most U.S. Coast Guard disposables on the market today carry at least a dual B:C rating, able to douse both liquids and electrical fires, and some boat owners wisely prefer triple rated A:B:C extinguishers, adding a third protection for combustible fires.

To be serviceable, a portable extinguisher must have a pressure gauge indicating an operable range, lock pin firmly installed, clean discharge nozzle, and no significant corrosion or damage. Some more recently manufactured portable fire extinguishers aboard boats today may carry both old and new labeling, for example, having simultaneous "B-I" and "5-B" classifications.

There are no changes to rechargeable or fixed-mount (i.e., engine room) extinguisher regulations. They continue to require regular maintenance and servicing, typically done annually by a technician.

"This new U.S. Coast Guard expiration date regulation aligns with the 12-years recommended by the National Fire Protection Association," said BoatUS Foundation Assistant Director of Boating Safety Ted Sensenbrenner. "We expect that the U.S. Coast Guard Auxiliary and United States Power Squadrons <u>vessel safety check (http://cgaux.org/vsc/)</u> program will soon include this new regulation as part of their free, no-penalty vessel exams. Because this change affects a critical piece of safety equipment aboard your boat, we also expect the U.S. Coast Guard will initially focus on education. You may want to start checking extinguishers now while your boat may be ashore this winter."

Sensenbrenner adds, "Also take a look now to ensure your fire extinguishers are readily accessible. You can <u>buy only the bracket</u> (<u>https://www.westmarine.com/buy/kidde--replacement-mariner-fire-extinguisher-mounting-bracket-fits-mariners-5-10-110-181891?recordNum=28</u>) if you don't have one and mount your extinguishers where they need to be — at points of egress, at the helm, and near the engine and fuel supply. Burying them in the bottom of a compartment ensures they will be hard to reach when you need them the most. Familiarizing yourself with the <u>PASS method (https://www.boatus.org/fire-extinguishers/how-to/</u>) (Pull, Aim, Squeeze, and Sweep) will prepare you for fighting a small fire aboard."

For more information on the new requirement, as well as frequently asked questions and an infographic, go to <u>www.uscgboating.org</u> (<u>http://www.uscgboating.org</u>).

###

Suggested social media post:

BoatUS: New U.S. Coast Guard fire extinguisher regulation effective April 20, 2022. Are the ones on your boat in compliance? <u>https://bit.ly/3Bs5lYf (https://bit.ly/3Bs5lYf (https://bit.ly/3Bs/3Js7))))</u>

About the BoatUS Foundation for Boating Safety and Clean Water:

The BoatUS Foundation for Boating Safety and Clean Water is a national leader promoting safe, clean and responsible boating. Funded primarily by donations from the more than 800,000 members of Boat Owners Association of The United States (BoatUS), the nonprofit provides innovative educational outreach directly to boaters and anglers with the aim of reducing accidents and fatalities, increasing stewardship of America's waterways and keeping boating safe for all. A range of safe and clean boating courses – including the nation's largest free online boating safety course – can be found at BoatUS.org/Courses.

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