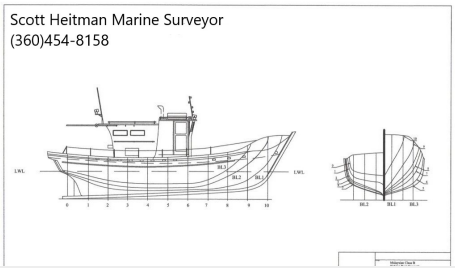
Pacific Marine Survey



1981 45' C&L Raised Pilothouse Trawler

"SHENANDOA"

1239 Campbell Ave apt 1
Port Angeles, Washington 98362

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Report of Marine Survey

Report of Condition/Valuation of the vessel

"SHENANDOA"

1981 45' C&L Raised Pilothouse Trawler

CONDUCTED BY

SCOTT HEITMAN, MASTER MARINE SURVEYOR

PACIFIC MARINE SURVEY

PREPARED FOR

YANCEY NILSON

July 1, 2020

UNITED STATES SURVEYORS ASSOCIATION (USSA), ABYC,

INTRODUCTION

PURPOSE & SCOPE

The attending Surveyor attended aboard the 1981 C&L Raised Pilothouse Trawler "SHENANDOA", at the request of YANCEY NILSON, beginning July 1, 2020. 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 Engineer be engaged. Vessel tankage was visually inspected where accessible. No obvious leakage was observed, unless otherwise noted; however, 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.

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.

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 trial run was not performed during the Survey inspection.

OUT OF WATER INSPECTION COMMENTS

An out of the water inspection of the hull's wetted surfaces and running gear was not performed during the Survey inspection.

ELECTRICAL SYSTEMS COMMENTS

AC and DC power was used to power up the electrical systems specified in this report only, unless otherwise noted.

ENGINE/MECHANICAL SURVEY

It is highly recommended and understood that all propulsion & auxiliary power systems (engines, transmissions, gears, drives, generators) be inspected by their respective Manufacturer's Certified Technician to determine their condition.

GENERAL RECOMMENDATIONS

Recommend implementing/maintaining vessel trip and machinery maintenance log books. 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.

FINDING C-1

GENERAL VESSEL INFORMATION

DATE AND TIME OF SURVEY:	8:00am Wednesday July 1, 2020
VESSEL TYPE:	Cruiser
VESSEL BUILDER:	C&L Marine Corp. of Tiwan
VESSEL DESIGNER:	Ed Monk
VESSEL INTERIOR DESIGNER:	unknown
HIN (HULL IDENTIFICATION NUMBER):	CXG455300781
MODEL YEAR:	1981 (per Hull Identification Number)
YEAR BUILT:	1981 (Federal Documentation Certificate)
HULL NUMBER:	53 (per Hull Identification Number)
VESSEL CLASSIFICATION/STANDARD:	Restrictions Operational Endorsements NO COASTWISE Recreation NO FISHERY
DOCUMENTED HAILING PORT:	Petersburg, Alaska
HAILING PORT DISPLAYED:	On The Transom
HOME PORT:	Petersburg, Alaska
U.S.C.G. DOCUMENTATION NUMBER:	689648 (current)
U.S.C.G. DOCUMENTED FOR:	Recreation
U.S.C.G. DOCUMENTATION REGISTERED VESSEL OWNER:	Robert M. Nilsen Carroll L. Nilsen
STATE REGISTRATION NUMBER:	AK-7272-AU
STATE REGISTRATION DECAL NUMBER:	46832
VESSEL MATERIAL:	FRP
LENGTH OVERALL (LOA):	Measured approximately 46' 9"
REGISTERED LENGTH:	45'
LENGTH WATERLINE (LWL):	39'8"
BEAM:	**
REGISTERED BEAM:	14.5'
OVERHEAD CLEARANCE:	Pilothouse: 6'9" Salon: 6'9" Forward cabin:7' Engine room:5'2" Lazarette:3'2"
DEPTH:	4.5'
GROSS TONNAGE:	19 GRT
NET TONNAGE:	15 NRT
LOCATION OF SURVEY INSPECTION:	Petersburg Alaska South Harbor
VESSEL OWNER:	Carroll L. Nilsen
OWNERS CONTACT INFORMATION:	Phone #:(907) 723-3014 Email:ynilsen@gci.net
VESSEL OWNER ADDRESS:	1104 Wrangell Ave PO BOX 838

	Petersburg Alaska 99833
PERSONS IN ATTENDANCE DURING SURVEY:	Scott Heitman (surveyor)
WEATHER CONDITIONS PRESENT:	Overcast

RATING & VALUATION

VESSEL OVERALL RATING:	**AVERAGE**
ESTIMATED MARKET VALUE:	**$95,000**
ESTIMATED REPLACEMENT COST:	**$550,000**

VESSEL CONSTRUCTION

HULL ARRANGEMENT

VESSEL DESCRIPTION AND LAYOUT

Twin diesel Trawler with lapstrake style full displacement GRP hull. Large flybridge over raised pilothouse. Teak decks and cockpit. Molded non skid on the flybridge deck. Teak cap rails and trim. Length overall from swim step to anchor pulpit is 46'9". Large aft salon entered through double doors from cockpit. L shaped settee with table to port, upholstered chairs to starboard. U shaped galley ahead to port with day head across on starboard. Entry forward to the raised pilothouse is starboard of center. This boat has deck access doors on both sides with a good size bench seat and table to port. The companionway stairs down forward to the cabins is located to starboard and has a curved stairway. A head with tub and shower is to starboard, a master cabin with queen is forward and a bunk cabin to port. Lots of storage and Teak throughout the boat

HULL DESIGN TYPE

Full displacement Trawler with rising sheer-line, semi-flared bow and partial keel.

HULL MATERIAL

FRP (fiber reinforced plastic).

EXTERIOR FINISH

White gelcoat, with green trim

GENERAL EXTERIOR CONDITION

The exterior of the vessel appeared to be generally well kept. There is some staining on the aft salon bulkhead that should be removed.

TRANSOM

Vented,transom with starboard transom door.

SWIM PLATFORM

Cored fiberglass swim platform.

BULKHEADS

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

STRINGERS/TRANSVERSALS

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

STEM

Raked stem.

HULL PLATING

Stainless steel under the anchor chain

BILGES

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

GENERAL BILGE CONDITION

Some of the bilge spaces required general cleaning/detailing. No significant water was observed collecting in the bilges.

BILGE LIMBER HOLES

None seen

VESSEL LIST

The vessel did not have any significant listing, during the Survey (a nearly straight waterline was observed).

DECK ARRANGEMENT

DECK MATERIAL

Fiberglass deck laid over wood beams bonded and tabbed to the hull.

DECKING OVERLAY

Teak aft deck, side decks and foredeck . The decking varnish is worn, weathered and due to be refinished.

BULWARKS

Molded fiberglass bulwarks (part of the deck's layup) with varnished Teak cap-rails. Port, starboard and stern doors.

RUB-RAILS

Teak

HULL-TO-DECK JOINT TYPE

Fiberglass "welded" joint. Appeared to be Sheer Clamped.

HULL-TO-DECK JOINT REINFORCEMENT

The hull-to-deck joint was fiberglass tabbed internally, where sighted.

BRIDGE ARRANGEMENT

FLY BRIDGE MATERIAL

Cored FRP (fiber reinforced plastic).

BRIDGE TYPE

The express bridge provided the helm station and crew seating area.

BRIDGE TOP

Open flybridge with helm, search light, BBQ pit

BIMINI TOP

NOTE: the Bimini Top material was not installed at the time of Survey.

RADAR ARCH

Stainless Steel Radar Arch.

COMMENTS

Original equipment of these vessels included a Teak ladder leading from the cockpit to the express bridge. Unseen.

EXTERIOR EQUIPMENT

EXTERIOR BRIDGE EQUIPMENT

BBQ

COCKPIT/WORK DECK EQUIPMENT

Stainless steel davit

EXTERIOR SEATING

Mezzanine bench seating with fabric cushions.

EXTERIOR BRIGHT WORK

Some of the exterior Teak bright work varnish was weathering, lifting and discolored.

GENERAL HARDWARE CONDITION

No significant corrosion was observed on the vessel's interior and exterior hardware with the exception of the hydraulic fittings and steering ram fittings, all serviceable and in fair to good condition. Also the roller chock fastening should be replaced.

GENERAL CAULKING/SEALANT CONDITION

No significant weathering was observed on the vessel's exterior caulking sealants.

EXTERIOR LIGHTING

(2) 8" round L.E.D.

EXTERIOR WASHDOWNS

Par-Max 81 51700-0092 (28 LPS). Outlets on the foredeck and starboard side deck.

CABIN VENTILATION

Provided by the foredeck hatch, the port and starboard bridge doors including upper doorway, the portholes and the main companionway door.

HULL CLOSURES

Opening hatches on the deck and bridge hard-top roof deck. Twin teak and hollywood hatches at the lazarette and in the salon floor accesses the tankage space from above.

FINDING C-2

PORTHOLES/PORTLIGHTS

Fixed and opening portholes were located on the hull sides.

EXTERIOR DOORS

Varnished Teak sliders in the pilot house ,express bridge half door, french doors aft salon bulkhead

WINDOWS

Tinted & tempered, fixed and opening windows.

WINDSHIELD

Tempered glass windshield with three (3) windshield wipers/washers. Hurricane defrosters.

SPRAY-SHIELD

Tinted flybridge spray-shield.

DECK RAILINGS

Teak capped stainless steel railings ran from amidships around the forward perimeter of the vessel.

BOW RAILING

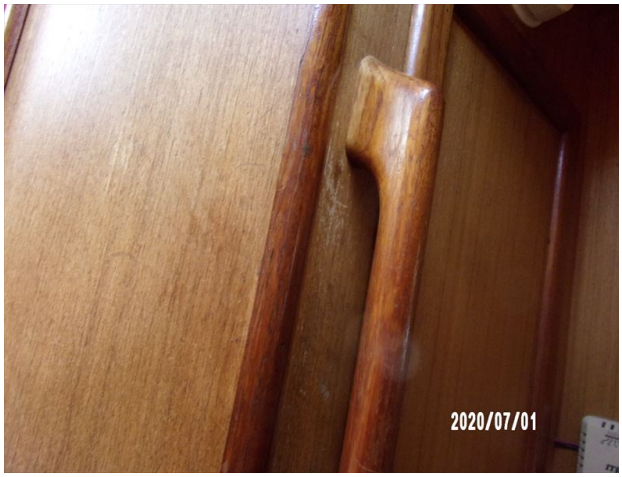
Stainless steel bow railings integrated into the deck railing.

SAFETY RAILING

Stainless steel railings at the aft flybridge deck area.

HAND RAILS/GRAB RAILS

Varnished Teak handrails were located at convenient locations of the vessel. Teak rails were seen around the perimeter of the cabin



DAVIT/CRANE

Stainless steel

DECK DRAINAGE

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

CLEATS

(2) bronze on the fore deck, horn type
Stainless steel midship
Stainless steel integrated into the hawsers stern quarter
Aluminum horn type aft cockpit corner

LINE HAWSE PIPES

Line hawse pipes were installed port & starboard at the stern, fore & aft side decks and at the bow.

ANCHOR PLATFORM

Stainless steel with stainless steel plating under the anchor chain

EXTERIOR COVERS

Vinyl covers over the flybridge helm controls and Canvas covers the exterior bench seating, green matches the trim

FENDERS

Seven (7) fenders were observed onboard.

MOORING LINES

(3) 1/2" Samson double braid

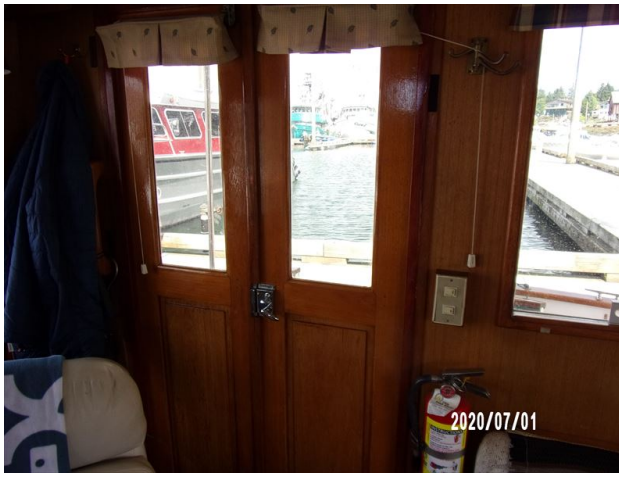
ESCAPE HATCH

(2) one above each stateroom opening to the foredeck

FINDING C-3

DOORS

Sliding forward, double doors aft, All the doors are Teak



CABIN APPOINTMENTS

INTERIOR

SALON ARRANGEMENT

Salon sofa to port, with two (2) arm chairs to starboard.

MAIN CABIN ARRANGEMENT

Walk around queen bed, closets port and starboard, below bunk cabinets. Raised pilothouse and aft salon. Upper cabin head. Stateroom head. Carpeted curved stairs leadingdown to the lower cabin state rooms. Teak interior companionway leads up to the fly bridge Teak half door.

GALLEY ARRANGEMENT

Amidships in the forward Salon.

DINING ARRANGEMENT

A Dining Set was arranged in the aft Salon.

ACCOMMODATION ARRANGEMENT

Master Stateroom Berth with Ensuite Head. Port Guest Stateroom (2) Bunk Berths, desk, closet.

HEAD ARRANGEMENT

(2) heads. One in the forward state room,full vanity with stainless steel basin and marble counter top, electric. One in the salon, manual

SHOWER ARRANGEMENT

Stall shower in the Head.

BATHTUB ARRANGEMENT

One (1) Yacht Tub with integral heat exchanger in the Master Head.

INTERIOR BRIDGE EQUIPMENT

The captains bunk is movable

INTERIOR BRIDGE SEATING

Captain's (day)bunk, chair mount, grab rail pole mount

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.

CEILING HEADLINERS

Headliner material was Teak trimmed, textured cream color, vinyl over foam.

WALL-LINERS

Teak paneling

WINDOW TREATMENTS

Pleated shades in the Salon. Demonstrated.

FLOORING

Teak & Holly in the Galley, Dinette and Heads. Teak companionway steps which are removable

CABIN SOLE FOUNDATION

Plywood cabin sole foundation.

COUNTER TOPS

Formica in the galley, teak plywood salon, marble in the master head.

INTERIOR MIRRORS

No significant de-silvering was observed on the interior mirror's reflective coatings.

GENERAL INTERIOR & SOFTGOODS CONDITION

The general maintenance of the vessel's interior appeared serviceable.

GENERAL INTERIOR FURNISHINGS & SOFT-GOODS CONDITION

The general maintenance of the interior soft-goods appeared serviceable.

INTERIOR JOINER WORK COMMENTS

The interior joiner work appeared serviceable.

INTERIOR BULKHEADS

The interior bulkheads appeared serviceable, where sighted.

WATER INTRUSION COMMENTS

No significant signs of water intrusion were observed at the vessel's interior, except where noted.

FINDING C-4

INTERIOR ODOR COMMENTS

None

COMMENTS

Dining table folds into a coffee table when not in use. Interior hardware is stainless steel .

INTERIOR SYSTEMS & EQUIPMENT

LIGHTING

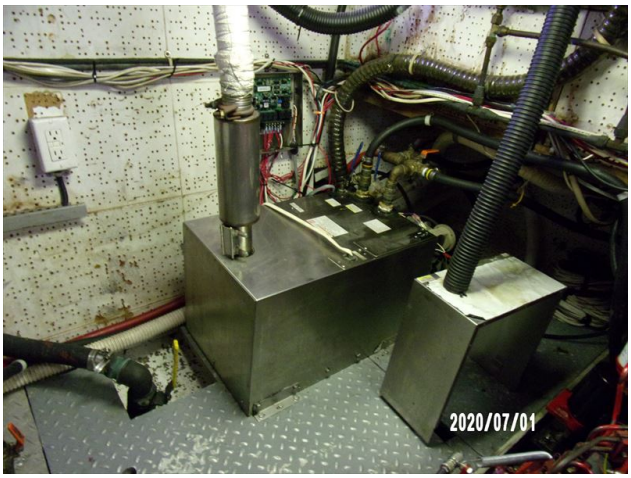
All lights illuminated, except where noted.

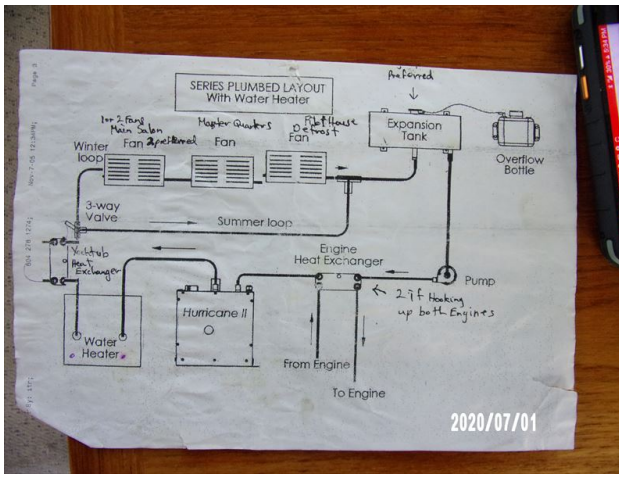
CABIN HEATING SYSTEM

Hurricane ll diesel/electric furnace

(3) Real heat exchange/fan blower seen both 4" and 3" reported and or seen

112v wall mounted space heater forward cabin



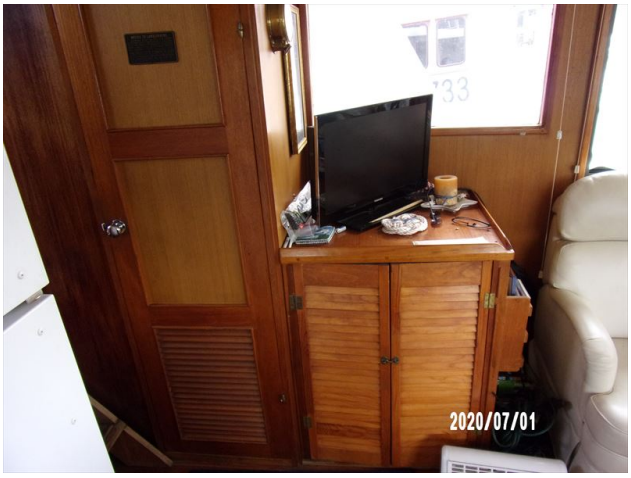


CABIN VENTILATION FANS

12 Volt DC electric ventilation fans were installed in the galley

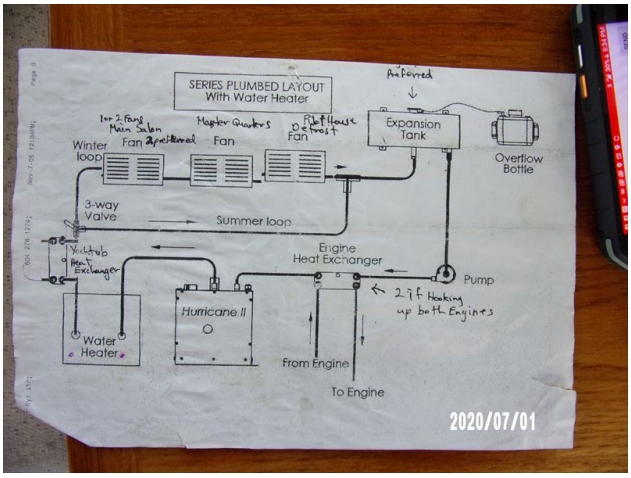
LAUNDRY SYSTEMS

Splendide 2100 Clothes Washer/Dryer Combo.



COMMENTS

There were various portable space heaters aboard. The Hurricane furnace heating system has been diagrammed, The document is kept onboard



AUDIO/VISUAL EQUIPMENT

TELEVISION SYSTEM

Television in the Salon.

STEREO SYSTEM

Stereo/CD/Satellite Radio Player, with speakers.

Audio sound system

SATTELITE RADIO

Sirius XM receiver

GALLEY EQUIPMENT

REFRIGERATION

Crossley Shelvadore refrigerator/freezer

OVEN

Magic Chef gas

STOVE

Magic Cheff 4 burner gas stove/oven

EXHAUST HOOD

Built into the cabinetry

MICROWAVE OVEN

General Electric Profile Microwave

TOASTER OVEN

Toaster

COFFEE MAKER

Mr. Coffee, Coffee Maker.

GALLEY SINK

Stainless Steel sink with separate basins.

COMMENTS
Soap dispenser

PROPULSION & MACHINERY SPACE

PROPULSION SYSTEM

ENGINE MODEL
Twin Ford/Leman 2715E 6.2 liter

MANUFACTURE DATE
1979

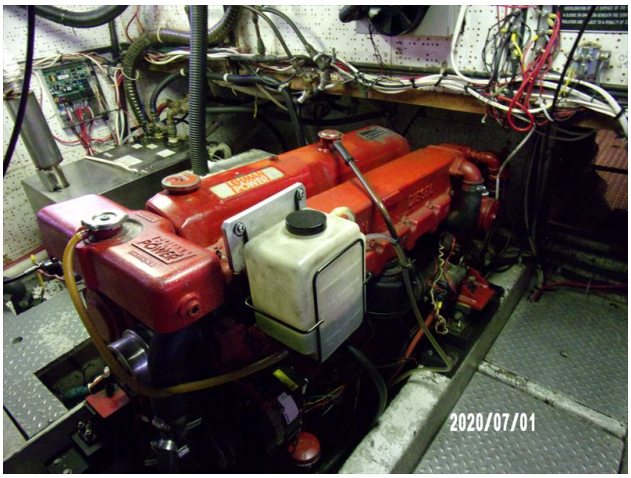
ENGINE HORSEPOWER
120 @ 2500rpmreported

NUMBER OF CYLINDERS
Six (6) in-line configuration.

ENGINE STARTER VOLTAGE RATING
12 Volt.

ENGINE HOURS
5,000 hours reported

ENGINE SERIAL NUMBERS
Port:168998 Starboard:169006



ENGINE INSTRUMENTATION

Main engine instrument gauges were installed at the helms.

ENGINE ALARM SYSTEM

Audible/visual engine alarms at the helm. Tested. Powered up and working as intended.

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.

ENGINE COOLING SYSTEM TYPE

Raw Water Cooled.

ENGINE DRIVE BELTS

Some belts appeared fine, couple on each engine appeared worn (particularly the inside closest to the block belts on both engines)

FINDING C-5

THROTTLE & SHIFT CONTROLS

ZF Mathers MicroCommander Electronic Throttle & Shift Controls.

ENGINE BED MOTOR MOUNTS

Adjustable motor mounts on cored fiberglass longitudinal engine bed stringers.

MAIN ENGINE OIL LEVEL

Normal levels were observed on the engine sump dipsticks.

ENGINE BLOCK HEATERS

None seen

MACHINERY & BILGE SPACE EQUIPMENT

ENGINE SPACE VENTILATION

Ventilator fan starboard side, natural air flow ventilation was provided by the hull side vents, port side

ENGINE ROOM AIR BLOWERS

12 volt blower fan starboard side

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.

FINDING B-1

RAW WATER STRAINERS

Recommend monitoring and cleaning the sea-strainers frequently.

HOSES

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

HOSE CLAMPS

Double clamped where sighted.

LUBE TRANSFER SYSTEM

Jabsco 12 volt Lubrication Transfer System (oil change)

LUBE OIL TANKAGE

5 Gallon buckets or one gallon bottles

WASTE OIL TANKAGE

5 Gallon buckets

MACHINERY SPACE INSULATION

Thermal & acoustical sound deadening insulation, built into the engine room ceiling and bulkheads.

TOOL BOX

Large six drawer chest

HYDRAULIC FLUID RESERVOIR TANK

1 gallon

COMMENTS

Vickers belt driven pump on an electric clutch

TRANSMISSIONS / GEARS / DRIVES

DRIVE SYSTEM TYPE

Direct Drive.

TRANSMISSIONS/GEARS

Twin Disc Twin Disc. MG 5011-SC

GEAR RATIO

Unknown (data tags were illegible).

GEAR SERIAL NUMBERS

Unknown (data tags were removed or painted).

GEAR CONTROLS

ZF Mathers MicroCommander Electronic Controls.

TROLLING VALVES

Twin Disc Trolling Valves.

TRANSMISSION INSTRUMENTATION
None seen

GEAR COOLERS/HEAT EXCHANGERS
Raw water heat exchangers. Check Zinc Anodes or bonding often.

GEAR FLUID LEVEL
Normal levels were observed on the transmission dipsticks.

PROPELLER SHAFTS
Size: 1 3/4''. Material: Stainless Steel.

SHAFT BONDING BRUSHES
Shaft bonding brushes were installed at each shaft. Monitor for effective contact often.

PROPELLER SHAFT SEALS
Dripless Shaft Seal Systems. Monitor frequently.

COMMENTS
Troll valve hooked up with red Morse cable port side only

FUEL SYSTEMS

FUEL SYSTEM TYPE
Diesel.

FUEL TANK MATERIAL
Aluminum.

NUMBER OF FUEL TANKS
(6) six

FUEL TANKAGE CAPACITY
125 gallons per tank (total 750 gallons)

FUEL TANKAGE SECURING
The tanks were framed in where sighted.

FUEL TANKAGE LOCATION
Port & starboard, aft in the tankage space

FUEL FILL LOCATION
Port & starboard aft side decks, marked for diesel.

FUEL FILL MARKING
Sight gauges @ the tanks

FUEL TANK VENTILATION

Port & starboard cabin sides.

FUEL TANKAGE & FUEL FILL GROUNDING

Yes

FUEL FILL HOSE/PIPE

Type A2 USCG Approved Fuel Hoses, where sighted. Unknown, due to access. Recommend verifying fuel fill hose type. Fills flush at deck

FUEL LINES/HOSES

USCG Approved Type A1 fuel lines, where sighted.

FUEL SHUT-OFF VALVES

Ball valve at the Primary Fuel Filter. Gate valves at the tanks.

FUEL MANIFOLD VALVES

Ball or gate valves.

MAIN ENGINE PRIMARY FUEL FILTERS

Two (2) Racor 755900MAX-MAX Primary fuel filter/water separators. (Dual Racor set).

MAIN ENGINE SECONDARY FUEL FILTERS

Engine mounted Secondary Fuel Filters.

GENERATOR PRIMARY FUEL FILTERS

Single racor there appears to be two filters in line. A small r12s and a larger Parker/Racor R20T

FUEL FILTER CONDITION

No significant sediment was observed in the Primary fuel filter's sight bowls. Monitor/service often.

GENERATOR FUEL FILTER CONDITION

No significant sediment was observed in the generator Primary fuel filter's sight bowl or on its diffuser. Monitor and service often.

FUEL COOLERS/HEAT EXCHANGERS

Raw water cooled.

FUEL TRANSFER SYSTEM

none seen

ELECTRICAL SYSTEMS

DC ELECTRICAL SYSTEMS

DC SYSTEMS VOLTAGE

12 Volt systems.

BATTERIES

(1) d8 starting, (6) 6 volt deep cycle batteries house bank

BATTERY SWITCHES

Six (6) Blue Sea rotary switches. 5 bilge, 1 engine room port hull (generator cut-off)
One (1) Cole Hearse rotary switch. Bilge
One (1) guest bank switch at the helm

BATTERY PARALLEL SWITCHING

Blue Sea Systems Marine Parallel Switches.
*Need a Marine electrical engineer to test/prove

MAIN DC BREAKERS

The main DC breakers were installed in the engine room. Rotary switch

DC ELECTRICAL PANEL BREAKERS/FUSES

DC breakers at the helm.

DC ELECTRICAL SYSTEM MONITORS

Digital DC voltage & amperage gauges in the main electric panel. Energy Monitor II

BATTERY CHARGERS

See inverters

Next Step 12P voltage regulator for dual alternators

CTEK D250S

MAIN ENGINE ALTERNATORS

two engine mounted regulated via Ample Power Next Step 12p

DC POWER OUTLETS

None seen

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

Recommend investigating and completing the vessel's bonding system, to help minimize electrolytic corrosion from 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 off of the bonding conductors and applying a corrosion inhibitor.

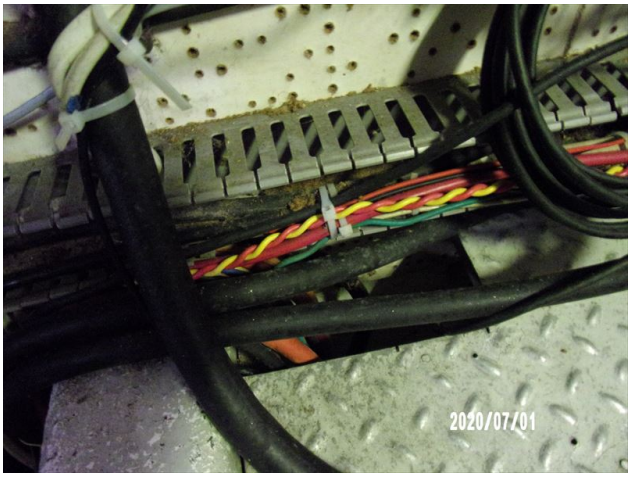
FINDING C-6

DC SYSTEM WIRING TYPE

Appeared serviceable for intended use, where sighted.

DC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

Appeared to be well supported and secured, where sighted



AC ELECTRICAL SYSTEMS

AC SHORE POWER SYSTEM VOLTAGE

120 Volt @ 60Hz.

AC SHORE POWER INLETS

30 Amp/125 volt shore power inlet, phone cable inlet

AC SHORE POWER CORDS

30 Amp. vinyl shore power cord. Marinco hooked up to the dock pedestal. Spare was in the tankage space.

AC SOURCES

Shore/genset/inverter

AC ELECTRICAL SOURCE SELECTOR SWITCHING

Manual rotary type selector switch for shore or ship power.

MAIN AC SHORE POWER BREAKERS

The main AC breaker was installed in the main electrical panel.

AC ELECTRICAL PANEL BREAKERS

AC branch breakers in the pilothouse's main AC electrical panel.

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

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

AC ELECTRICAL SYSTEM MONITORS

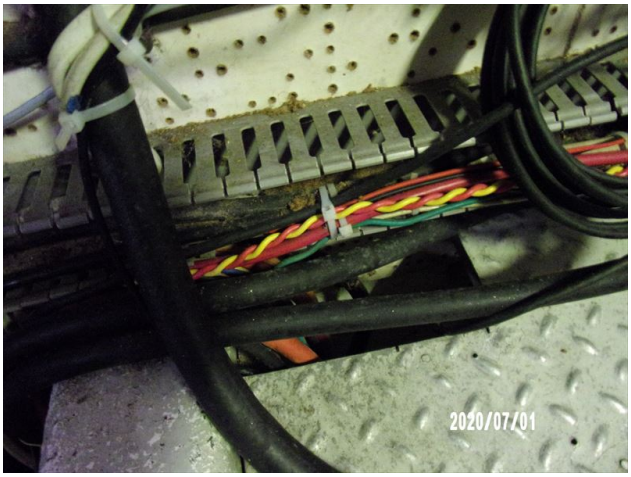
AC voltage & amperage gauges in the main AC electric panel.

AC SYSTEM WIRING TYPE

Appeared serviceable for intended use, where sighted.

AC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

Recommend covering the wiring behind a kick plate at the engine room companionway



GALVANIC ISOLATION SYSTEM (ABYC A-28)
Professional Mariner Zinc Saver II 30 amp. Galvanic Isolator.

COMMENTS
Next Step Ample power regulator

GENERATORS/AUXILIARY POWER

GENERATORS

GENERATOR MODEL
Next Generation. UCM 1-3.5

GENERATOR SPEC
Unknown (the data tag was inaccessible).

GENERATOR FUEL TYPE
Diesel.

NUMBER OF CYLINDERS
One (1).

GENERATOR KILOWATT RATING
3.5Kw

GENERATOR VOLTAGE RATING
120 Volts AC.

GENERATOR PHASE RATING
Single Phase.

GENERATOR STARTER VOLTAGE RATING
12 Volt.

GENERATOR HOURS
Data tags state year built 2017

GENERATOR SERIAL NUMBERS
Unknown (the data tag was inaccessible).

GENERATOR INSTRUMENTATION GAUGES
Generator instrument panel installed in the companion way

GENERATOR ALARM SYSTEM
Generator audible alarms.

GENERATOR DRIVE BELT
Serviceable

GENERATOR LUBRICATION SYSTEM
Engine mounted mechanical oil pump.

GENERATOR OIL LEVEL
Oil level was normal on the generator's oil sump dipstick.

GENERATOR COOLING SYSTEM TYPE
Raw water, wet exhaust type.

GENERATOR COOLANT LEVEL
The generator Coolant Recovery Expansion Tank's level was normal.

GENERATOR FUEL SYSTEM
Engine mounted mechanical fuel pump.

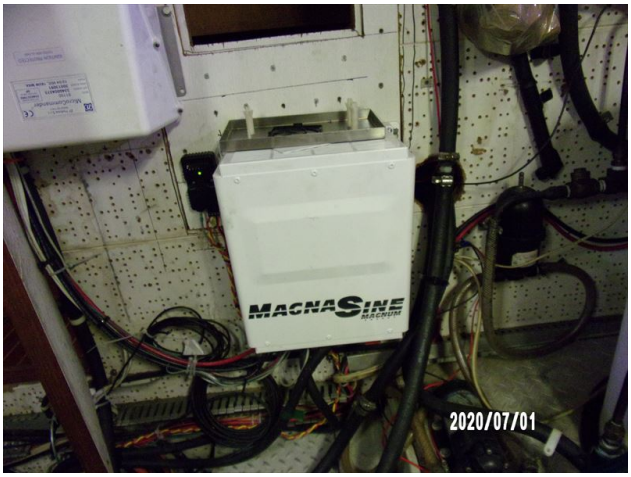
GENERATOR EXHAUST SYSTEM
Raw water cooled with fiberglass Water-Lift type muffler.

GENERATOR SPACE VENTILATION
12volt Ventilator fan

COMMENTS
Did not demonstrate

INVERTERS & OTHER AUXILIARY POWER

INVERTER SYSTEMS (ABYC E-11, A-31)
Magnum MS2812 pure sine with remote control



INVERTER SYSTEM LOCATION & VENTILATION
Starboard of centerline forward engine room bulkhead, adequate ventilation

WATER SYSTEMS

FRESHWATER SYSTEM

WATER TANKAGE MATERIAL
Stainless Steel.

NUMBER OF FRESHWATER TANKS
Three (3).

WATER TANKAGE CAPACITY
Estimated, 150 gallons each

WATER TANKAGE SECURING
The water tankage was well secured where sighted.

WATER TANKAGE LOCATION
Athwartships in the amidships bilge.

WATER FILL LOCATION
Aft deck

WATER FILL MARKING
Properly marked for water.

FRESHWATER PUMPS
Jabsco (or Johnson)12 volt Demand type Freshwater Pump.

FRESHWATER FILTRATION
Water treatment system, reported

FRESHWATER ACCUMULATOR TANK
Painted steel Accumulator Tank.

COMMENTS
Recommend periodically sanitizing the vessel's water tankage and water delivery systems.

HOT WATER SYSTEM

WATER HEATER

Raritan 1700 series Marine Systems.

Everhot 4-GV domestic hot water heat exchanger (on demand hot water), reported.

WATER HEATER TYPE

Marine Grade 120 volt.

WATER HEATER CAPACITY

20 gallon

On demand

WATER HEATER PRESSURE RELIEF VALVE

Relief valve built into the tank.

WATER HEATER HEAT EXCHANGER SYSTEM

Integral with the water heater

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).

BLACKWATER TANKAGE

Fiberglass blackwater (sewage) holding tank. Estimated 30 gallon capacity

BLACKWATER TANKAGE VENTILATION

The Blackwater tank's vent fitting was plumbed overboard at the starboard hull side.

BLACKWATER SYSTEM DISCHARGE

Johnson Pump 12 volt

COMMENTS

The vessel's operator is responsible for determining what type of MSDs (marine sanitation devices) are prohibited & permitted by law in the location of the vessel's intended use.

GREYWATER SYSTEM

GREYWATER TANKAGE

Fiberglass greywater sump tank.

GREYWATER DISCHARGE SYSTEM

Unseen due to access

COMMENTS

The sump was full and the pump is submerged. The vessel's operator is responsible for determining whether direct greywater overboard discharge is prohibited or permitted by law in the location of the vessel's intended use.

STEERING SYSTEMS

STEERING SYSTEM TYPE

Hydraulic Power Steering.

STEERING SYSTEM MANUFACTURER

Accu-Steer pump. Sea-Star/Capilano, by Teleflex.

NUMBER OF STEERING STATIONS

Two (2) pilothouse helm and flybridge helm.

STEERING HOSES/LINES

Copper pipe & reinforced flexible hose with metallic fittings.

RUDDER STOCKS

Stainless Steel Rudder Stocks.

RUDDER LOG SEALS

Unknown, due to access.

RUDDER LOG PACKING GLANDS

Unseen due to access

GROUND TACKLE

ANCHORS

45 lbs, stainless steel Suncor Plowmaster plow

ANCHOR RODE TYPE

Stainless steel chain, rode fiber and length and condition unknown (winch is full)

ANCHOR WINDLASS

Stainless steel hydraulic

COMMENTS

Highly recommend at least one additional spare anchor and rode for emergencies and added anchoring options.

ELECTRONICS & NAVIGATION EQUIPMENT

VHF RADIOS

Icom IC-M504 VHF Radio.

COMPASSES

Danforth Constellation 6" Compass.

Suunto 3"

MULTI-FUNCTIONAL NAVIGATION DISPLAYS

Furuno NAVnet vx2 Multi-Functional Navigation Display, with Mile Marine Radar, GPS Chartplotter and Network Sounder.

NAVIGATION COMPUTER

Dell desk top, Acer 28" monitor with Nobeltec and Rose point electronic charts

AUTOPILOT

COMNAV ADMIRAL P3 with one remote jog lever in the pilot house and a jog stick at the express bridge helm

GPS (GLOBAL POSITIONING SYSTEM)

Garmin GPSmap 192 C.

BAROMETER

H.Y.E matches the clock

SHIP'S CLOCK
H.Y.E. Ship's Clock

DEPTH SOUNDER
Interphase 20/20

SAFETY EQUIPMENT

THE FOLLOWING IS A LIST OF POSSIBLE EQIPMENT THAT YOU MAY WANT TO LOOK ATSAFETY EQUIPMENT (U.S.C.G.)

THROWABLE PERSONAL FLOTATION DEVICES (33 CFR 175)
One (1) Type IV - U.S.C.G. Approved Throwable Device (ring).

FINDING B-2

FIRE EXTINGUISHERS (46 CFR 25)
Four (4) Type ABC 5 lb. Dry Chemical. 3-A 40-B,C

VISUAL DISTRESS SIGNALS (33 CFR 175.101)
12 Gauge Day/Night Visual Distress Signals and Hand Held Flares. Orin kit and orange smoke hand held

SOUND PRODUCING DEVICES (33 CFR 83)
Single Trumpet 12 volt DC Electric Air Horn. Compressor powered up. Horn did not sound.

FINDING B-3

NAVIGATION LIGHTS (33 CFR 83)
The Navigation Lights illuminated, except where noted.

FINDING B-4

"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"
Yes

AUXILIARY SAFETY EQUIPMENT

BILGE HIGH WATER ALARMS
None sighted. Highly recommended.

MAN OVERBOARD SYSTEM (MOB)
Lifesling M.O.B. Rescue Sling.

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)
Tankage space, First Alert carbon monoxide detector
Cabin and accommodations spaces (3). All failed to power up

FINDING A-1 **FINDING C-7**

SMOKE DETECTORS (NFPA 302)
Four (4) Smoke Detectors. Tested inoperable

FINDING A-2

SEARCH LIGHT
Sealed beam with pilot house remote

BILGE PUMPING SYSTEMS

ELECTRIC BILGE PUMPING SYSTEMS
(2)Rule 3700 Gph and (2)1500 gph

MANUAL BILGE PUMPING SYSTEMS
None seen

EMERGENCY BILGE PUMPING SYSTEMS
None seen

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

AUXILIARY GAS SYSTEMS

GAS TYPE
LPG (Liquified Petroleum Gas/Propane).

GAS TANKAGE LOCATION
One (1) tank in the port flybridge bench seat locker.

GAS TANKAGE SPACE VENTILATION
Appeared adequate.

GAS SHUT-OFFS
Valves at the tanks and Xintex electric LPG Controller/Gas Detector solenoid in the companionway.

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.

LPG GAS FUME DETECTORS

None

VESSEL DOCUMENTATION

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

The vessel's HIN (Hull Identification Number) was not displayed on the starboard upper transom corner, nor was it found at a hidden area of the vessel. All boats manufactured or imported on or after November 1, 1972 must bear a HIN. The primary HIN must be permanently affixed (so that it can be seen from outside the boat) to the starboard side of the transom within two inches of the top of the transom, gunwale or hull/deck joint, whichever is lowest.

FINDING C-8

DOCUMENTATION COMPLIANCE (46 CFR 67)

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.

STATE REGISTRATION COMPLIANCE (33 CFR 173)

The vessel's State Registration Numbers were not displayed according to U.S.C.G. Standards. The state registration card displays an incorrect HIN.

FINDING C-9

VOLUNTARY DOCKSIDE EXAM DECAL (USCG)

A current dockside exam decal was not sighted

The Findings & Recommendations section is only one section of the "SHENANDOA" Survey Report. If received on its own, this section should not be mistaken as this vessel's full Survey Report.

Deficiencies noted under ''FIRST PRIORITY/SAFETY AND COMPLIANCE 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 REQUIRING 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 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 AND COMPLIANCE FINDINGS

B. SECOND PRIORITY/FINDINGS REQUIRING TIMELY ATTENTION

C. SURVEYOR'S GENERAL FINDINGS AND OBSERVATIONS

A: SAFETY DEFICIENCIES

CARBON MONOXIDE DETECTORS (ABYC A-24)

Tankage space, First Alert carbon monoxide detector

Cabin and accommodations spaces (3). All failed to power up

FINDING A-1

The Carbon Monoxide Detectors did not power up/sound.

RECOMMENDATION

Replace the Carbon Monoxide Detector if it is past its manufacturer's serviceable expiration. Replace the Carbon Monoxide Detector battery and test/prove as necessary.

SMOKE DETECTORS (NFPA 302)

Four (4) Smoke Detectors. Tested inoperable

FINDING A-2

The Smoke Detector did not power up/test sound. The Smoke Detector's battery was not installed.

RECOMMENDATION

Investigate further, and address as necessary (Smoke Detectors may require new batteries).

B: OTHER DEFICIENCIES REQUIRING ATTENTION

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.

FINDING B-1

Two (engine strainor inlets) of the intake seacock valves appeared to be either excessively stiff or possibly seized.

RECOMMENDATION

Investigate further, and service/lubricate/free-up or rebuild/replace the seacocks as necessary.

THROWABLE PERSONAL FLOTATION DEVICES (33 CFR 175)

One (1) Type IV - U.S.C.G. Approved Throwable Device (ring).

FINDING B-2

No painter line attached to the life ring

RECOMMENDATION

Attach 60' painter permanently to the ring as per CFRs 33 and 46

SOUND PRODUCING DEVICES (33 CFR 83)

Single Trumpet 12 volt DC Electric Air Horn. Compressor powered up. Horn did not sound.

FINDING B-3

The electric horn did not power up when tested.

RECOMMENDATION

Provide an Approved Sound Signaling Device to comply with USCG regulations for Sound Devices.

NAVIGATION LIGHTS (33 CFR 83)

The Navigation Lights illuminated, except where noted.

FINDING B-4

The starboard Navigation Running Light did not illuminate when tested.

RECOMMENDATION

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

C: SURVEYOR'S NOTES & OBSERVATIONS

GENERAL RECOMMENDATIONS

Recommend implementing/maintaining vessel trip and machinery maintenance log books. 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.

FINDING C-1

I found onboard a wealth of pertinent manuals and documents that were sourced in the conduct of this vessel survey

RECOMMENDATION

[No Content]

HULL CLOSURES

Opening hatches on the deck and bridge hard-top roof deck. Twin teak and hollywood hatches at the lazarette and in the salon floor accesses the tankage space from above.

FINDING C-2

Lazarette hatches were found weathered and deteriorating

RECOMMENDATION

Investigate further, and repair or replace the hatches as necessary.

ESCAPE HATCH

(2) one above each stateroom opening to the foredeck

FINDING C-3

Hatch securing bolts utilized standard hex nuts that need specific wrenches to operate.

RECOMMENDATION

Replace the standard hex nuts with wingnuts for tool-less operation

WATER INTRUSION COMMENTS

No significant signs of water intrusion were observed at the vessel's interior, except where noted.

FINDING C-4

Interior Bridge upper cabinet appeared to be leaking at the wire run to the fly bridge.

RECOMMENDATION

Investigate further/trace, and address/refinish as necessary.

ENGINE DRIVE BELTS

Some belts appeared fine, couple on each engine appeared worn (particularly the inside closest to the block belts on both engines)

FINDING C-5

Some of the engine's drive belts were worn, grooved.

RECOMMENDATION

Replace belt, as necessary. Properly tighten belt adjustment.

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

Recommend investigating and completing the vessel's bonding system, to help minimize electrolytic corrosion from 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 off of the bonding conductors and applying a corrosion inhibitor.

FINDING C-6

Bonding wire in the aft bilge (port side under the floor boards) corroded off
Bonding wire at the forward engine port side disconnected

RECOMMENDATION

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

CARBON MONOXIDE DETECTORS (ABYC A-24)

Tankage space, First Alert carbon monoxide detector
Cabin and accommodations spaces (3). All failed to power up

FINDING C-7

All of the smoke and CO alarms are disabled

RECOMMENDATION

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

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

The vessel's HIN (Hull Identification Number) was not displayed on the starboard upper transom corner, nor was it found at a hidden area of the vessel. All boats manufactured or imported on or after November 1, 1972 must bear a HIN. The primary HIN must be permanently affixed (so that it can be seen from outside the boat) to the starboard side of the transom within two inches of the top of the transom, gunwale or hull/deck joint, whichever is lowest.

FINDING C-8

The Surveyor was unable to locate the vessel's HIN (Hull Identification Number) on the starboard aft section of the vessel, nor at a hidden area of the vessel. Further, the HIN recorded with the U.S.C.G. Documentation did not conform to the HIN on the state's registration document

RECOMMENDATION

Investigate further, and display properly formatted HINs as required for compliance.

STATE REGISTRATION COMPLIANCE (33 CFR 173)

The vessel's State Registration Numbers were not displayed according to U.S.C.G. Standards. The state registration card displays an incorrect HIN.

FINDING C-9

Hull number listed on the state registration displays an incorrect HIN as well as an incorrect Make of the vessel. The numbers and decals were not displayed per USCG

RECOMMENDATION

Properly display State Registration Number for compliance. Numbers must be painted or permanently attached to each side of the forward half of the vessel. The numbers must be read from left to right, and of a color that is contrasting with the background color. The validation sticker must be affixed within six inches of the registration number. No other letters or numbers may be displayed. Nearby lettering must be in plain, vertical block characters of not less than 3 inches in height. Spaces or hyphens between letter and number groupings must be equal to the width of a letter other than "I" or a number other than "1".
Also report the correct HIN and manufacturer of the vessel to the state.

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:

AVERAGE

STATEMENT OF VALUATION

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

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

a. Buyer and seller are typically motivated.

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

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

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

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

Estimated Fair Market Value is determined using a cross reference of data from Soldboats.com, BUC Used Boat Pricing Guides, NADA, Yachtworld.com, other online sales listings or dealers, most notably brokers dealing in Alaskan or pacific northwest fishing vessels i.e. Dockstreet Brokers, Alaska Boats and Permits, and GSI Boats. I lean most heavily on the last four online sources. Next I rely on my personal knowledge of recent sales. Adjustments are made for condition and related equipment. The Estimated Market Value is for the vessel in its condition on the date or dates of the Survey, prior to any repairs or maintenance.

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:

$95,000

Ninety-Five Thousand US Dollars

Estimated Replacement Cost is determined using a cross reference of data obtained from Boat Dealers and other online resources.

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

$550,000

Five Hundred Fifty Thousand US Dollars

Report Summary

SUMMARY

In accordance with the request for a Marine Survey of the "SHENANDOA", 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 July 1, 2020. 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 Heitman, Marine Surveyor