

Western Boat & Trawler Marine Survey

1987 58' Alacraft Purse Seiner/Tender

"Pacific Predator"



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Report of Marine Survey

Report of Condition/Valuation of the Fishing Vessel

"Pacific Predator"

1987 58' Alacraft Purse Seiner/Tender

Conducted By

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Prepared For

Marine Lenders Services LLC

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Date Of Survey: Hull Inspection September 1-2, 2023

Out of the Water Inspection September 8, 2023

Report Submitted On: September 15th, 2023

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1 INTRODUCTION

1.1 PURPOSE & SCOPE

The Survey was performed for vessel condition and valuation purposes. The attending Surveyor attended aboard the 1987 Alacraft Purse Seiner/Tender Pacific Predator, at the request of Marine Lenders Services LLC. 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 generally serviceable 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 determine 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. The 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.

1.2 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.

1.3 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 the previous survey(s).

** Per Manufacturer's Documentation or other documents seen in the ship's papers.

*** 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. Where a previous survey is referenced the designated vessel representative vouches for the accuracy of the data.

1.4 Surveyor Notes

1.4.1 TRIAL RUN COMMENTS

A trial run was not performed during the Survey inspection.

1.4.2 OUT OF WATER INSPECTION COMMENTS

An out of the water inspection of the hull's wetted surfaces and running gear was performed during the Survey inspection.

1.4.3 HIN (HULL IDENTIFICATION NUMBER) VERIFICATION COMMENTS

The vessel's HIN (Hull Identification Number) was not verified during the Survey inspection.

1.4.4 VESSEL DISCLOSURE COMMENTS

The vessel had undergone a major catastrophic failure of the main engine during its last trip.

1.4.5 ENGINE/MECHANICAL SURVEY

There was no Mechanical/Engine Surveyor onboard during the 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.

1.4.6 ULTRASONIC METAL THICKNESS AUDIO GAUGING

An Ultrasonic Metal Thickness Audio Gauging was performed on the vessel's hull bottom below the waterline, decks, cabin, and keel, using a Cygnus IV Ultrasonic Thickness Meter. All readings obtained, verified the aluminum plating thicknesses to be of their original milled thickness in the areas measured. No recommendations have been made to perform any service to the vessel's aluminum structures.

1.4.7 AREAS INSPECTED

The following areas were closely inspected in accordance with American Boat & Yacht Council standards, USCG regulations, and the doctrine of the Society of Accredited Marine Surveyors, including:

- A. Visual inspection of accessible portions of the hull.
- b. Visual inspection and tests of accessible portions of the electrical systems.
- c. Hull sides where accessible at the dock, weather decks, and cabin sides/top.
- d. Safety rails, ladders, grab rails, and hatches.
- e. Water-tight doors, their dogs, and door seals
- f. Internally, in the accessible areas for fractures, defects, and bilges.
- g. Through-hull fittings and valves.
- h. Engines, fan belts, motor mounts, leaks, hoses, and electrical.
- i. Visual inspection of accessible AC/DC wiring.
- j. AC ground and polarity test while on generator/shore power
- k. USCG safety equipment checks and tests

2 GENERAL VESSEL INFORMATION

2.1 TYPE OF SURVEY REQUESTED	Condition and Value
2.2 DATE OF SURVEY AND THE SURVEY REPORT	September 1, 2023
2.3 VESSEL TYPE	Canadian-built aluminum seiner.
2.4 VESSEL BUILDER	**Alacraft Ltd. AKA alli-Craft
2.5 HIN (HULL IDENTIFICATION NUMBER)	** ORZMM631A787 (not verified)
2.6 YEAR BUILT	***1987 (per Hull Identification Number)
2.7 HAILING PORT DISPLAYED	No
2.8 HOME PORT	Sitka Alaska
2.9 OFFICIAL NUMBER	Canadian Official number from 2001 Registry of Ships Canada 809727
2.10 STATE REGISTRATION NUMBER	AK-3565-AN
2.11 STATE REGISTRATION DECAL NUMBER	AB41786 (current)
2.12 STATE REGISTERED VESSEL OWNER	Brian and Dana Howey
2.13 VESSEL MATERIAL	Aluminum
2.14 LENGTH OVERALL (LOA)	Reportedly, 57' 11". LOA Length on deck as per the stability report 58'. Measured approximately 60' LOA.
2.15 REGISTERED LENGTH	Reportedly 58'
2.16 LENGTH WATERLINE (LWL)	54' (stability report)
2.17 DRAFT	Reportedly, approximately 8-12' (stability report)
2.18 DISPLACEMENT	The full load displacement reported on the stability letter is 121 LT (converts to 242,000 pounds). The vessel weighed 202,000 lbs. in the travel lift sling scales. (Note the weight of water ballast in the forward freshwater tank or the tank itself is not included in that stability report)

2.19	GROSS TONNAGE	76 gross tons (per Canada Certificate of Registry)
2.20	NET TONNAGE	30 Net Registered Tons (per Canada Certificate of Registry)
2.21	LOCATION OF SURVEY INSPECTION	Wrangell Alaska
2.22	LOCATION OF BOTTOM INSPECTION	Wrangell Alaska
2.23	VESSEL OWNER	Bryan Howey and Dana Howey
2.24	VESSEL OWNER ADDRESS	410 Marine Street #4 Sitka Alaska 99835
2.25	PERSONS IN ATTENDANCE DURING SURVEY	Scott Heitman (surveyor) Ron Opheim (vessel watchman)
2.26	<i>Rating & Valuation</i>	
2.26.1	VESSEL OVERALL RATING	FAIR
2.26.2	ESTIMATED MARKET VALUE	1,000,000.00
2.26.3	ESTIMATED REPLACEMENT COST	2,000,000.00

3 VESSEL CONSTRUCTION

3.1 *Hull Arrangement*

3.1.1 **VESSEL DESCRIPTION AND LAYOUT**

Canadian-built aluminum fish tender/seiner with four (4) aluminum RSW holds and a whaleback bow with a tophouse.

3.1.2 **HULL DESIGN TYPE**

Full displacement Trawler type with rising sheer-line, semi-flared bow, and a full-length partial keel. Hard chined with box keel coolers and a hydraulic bow thruster.

3.1.3 **HULL MATERIAL**

Aluminum plate

3.1.4 **EXTERIOR FINISH**

Blue and gold trim

3.1.5 **GENERAL EXTERIOR CONDITION**

The exterior of the vessel appeared to be generally well kept.

3.1.6 **TRANSOM**

Aluminum, square Canadian seiner-type stern. The retracting, stern net ramp, has been welded to the bulwarks and is now a continuous, static, bulwark stern

3.1.7 **BULKHEADS**

Electrically welded aluminum

3.1.8 **STRINGERS/TRANSVERSALS**

Hull stiffness was provided by aluminum longitudinal stringers and athwartships transversal frames

3.1.9 **STEM**

Raked stem.

3.1.10 **KEEL**

3/8" aluminum bar stock

3.1.11 BALLAST

** Stability report. Two tons of glassed-in lead are reportedly port and starboard in the forward engine room. Lead ingot ballast is seen aft of the engine room forward bulkhead, centerline above the bilge. On the stability report a fore peak ballast void space is seen but not reported in the notes. The 1999 Suitability Report states that this forepeak crash bulkhead void is a 1000-gallon freshwater tank. This 1000-gallon freshwater (or ballast) is not taken into account in the stability report. see notes.

3.1.12 HULL PLATING

Hull shell plates measure 1/4" aluminum above the waterline. The bottom and hull sides below the wetted surfaces were found to be 3/8" aluminum plate

3.1.13 BILGES

Two (2) bilge spaces an engine room/shaft alley bilge and a lazarette bilge. The lazarette bilge space was not inspected.

3.1.14 BILGE MANIFOLD

1.25" galvanized pipe

3.1.15 SEA CHESTS

8" Aluminum pipe, integral, and operated via butterfly valve. The sea chest is closed. The butterfly valve was not opened/tested.

3.1.16 GENERAL BILGE CONDITION

The bilge spaces required general cleaning/detailing. Fouled with waste oil and fish hold slime.

Finding B-1

The bilges required cleaning. Each vessel must comply with the oil pollution prevention requirements of 33 CFR parts 151 and 155.

Recommendation

Clean bilges, as necessary in order that stray oil not migrate to the bilge pumps.

3.1.17 BILGE LIMBER HOLES

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

3.1.18 VESSEL LIST

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

3.2 Deck Arrangement**3.2.1 DECK TYPE/GENERAL DESCRIPTION**

Flush deck

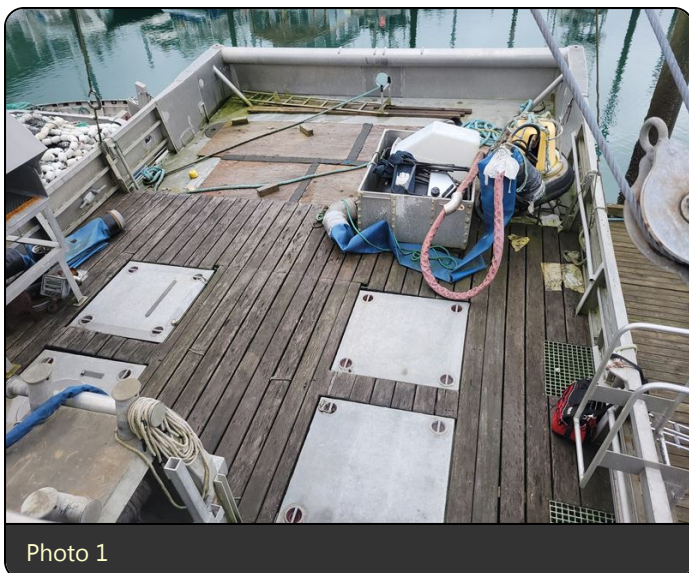


Photo 1

3.2.2 DECK MATERIAL

Welded aluminum plating.

3.2.3 DECKING OVERLAY

Marine plywood cockpit overlay

3.2.4 FALSE DECK

Raised wear deck, 2x6 Apitong high-density decking wood some exceptions

Finding C-1

The wear deck is worn, weathered

Recommendation

Investigate further and repair or replace the worn sections or planking

3.2.5 BULWARKS

Electrically welded aluminum bulwarks.

3.2.6 RUB-RAILS

Aluminum half pipe

3.3 Superstructure Arrangement**3.3.1 SUPERSTRUCTURE MATERIAL**

1/4" Electrically welded aluminum. Measured with the Cygnus IV

3.3.2 SUPERSTRUCTURE-TO-DECK JOINT TYPE

Electrically welded joint. Appeared serviceable.

3.4 Bridge Arrangement**3.4.1 BRIDGE MATERIAL**

Measured 3/16" Electrically welded aluminum.

3.4.2 BRIDGE TYPE

Enclosed top house with full electronics and controls.

3.4.3 MAST

Aluminum Mast, crows nest platform.

3.4.4 MAST SPREADERS

Antenna mount spreader arms

3.4.5 MAIN BOOM

Twin Aluminum Booms



Photo 2: Twin main booms (tender vessel rig)

3.4.6 TOPPING LIFT

Pullmaster model H8 and PL 4.

3.4.7 VANGING WINCHES

Pullmaster vang winch

3.4.8 GENERAL PURPOSE WINCHES

PL model H8 slider and PL 5 general-purpose winches. PL 2 tip winch.

3.5 Weather Deck**3.5.1 WEATHER DECK SAFETY RAILS**

Aluminum pipe railings

3.5.2 STORAGE BOXES

Totes and an aluminum foot locker

3.5.3 WEATHER DECK EQUIPMENT

Operator's Console. Winch, rigging, and deck gear controls.

**3.6 Fish Holds and Hatch Covers****3.6.1 HOLDS**

Four (4) insulated crab tanks, 55 tons reported, plumbed for RSW

3.6.2 HATCH COVERS

Aluminum

3.6.3 SEAWATER CIRCULATION AND PIPING SYSTEMS

The circulation system and sumps are behind stainless steel strainers and grates in the crab tanks

4 EXTERIOR EQUIPMENT AND COMMERCIAL FISHING MACHINERY

4.1 EXTERIOR BRIDGE (WEATHER DECK) EQUIPMENT

Chest freezer and storage totes.

4.2 GENERAL HARDWARE CONDITION

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

4.3 GENERAL CAULKING/SEALANT CONDITION

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

4.4 HULL SHELL PROTECTION

Aluminum overplate

4.5 EXTERIOR LIGHTING

Squid lights are both port and starboard. WideLight 1000-watt sodium forward flood light. 400-watt metal halide (quartz or halogen) deck and docking lights. LED forward flood light. All lights power up.

4.6 EXTERIOR WASHDOWNS

110-volt Gould raw water wash down. (disconnected).

A freshwater, anchor/chain, washdown is found at the bow.

Finding C-2

The raw water wash down pump is disconnected from the outlet deck spud.

Recommendation

Investigate and reconnect the deck hose.

4.7 CABIN VENTILATION

Opening cabin and head ceiling vents

4.8 WATERTIGHT HULL CLOSURES

The watertight shaft alley companionway door is dogged and seized closed. The Lazrette hatch cover has been caulked closed and is seized

Finding B-2

The shaft alley watertight door is seized as is the lazarette hatch. This prevented an inspection of the door/hatch seals and dogs, as well as access to the lazarette for inspection of the steering gear aft fuel tanks and the freshwater tank

Recommendation

Investigate further, free up the door and hatch cover, and inspect and test the door seals, dogs, and the hatch for water tightness and integrity. Service or replace.

4.9 PORTHOLES/PORTLIGHTS

Whale back cabin portlights. Monitor frequently for signs of leakage.

4.10 EXTERIOR DOORS

Aluminum non-dogged non-weather-tight door

4.11 WINDOWS

Tempered, fixed and opening windows.

4.12 WINDSHIELD

Five (5) Tempered glass Pilothouse-type windows in aluminum frames

4.13 DECK RAILINGS

Aluminum bulwarks

4.14 BOW RAILING

Aluminum bow railing integrated into the deck railing.

4.15 SAFETY RAILING

Aluminum pipe rails at the crow's nest, cabin side decks, and weather decks

4.16 HAND RAILS/GRAB RAILS

Integral hand rails were built into the sides of the superstructure outboard on the top house side decks.

4.17 BOARDING STAIRS/BOARDING LADDER

Aluminum boarding ladder

4.18 DECK DRAINAGE

Scuppers

4.19 CLEATS

Cleats throughout the vessel were aluminum horn type.

4.20 LINE CHOCKS

Aluminum guide line chocks on the bow

4.21 LINE HAWSE PIPES

Line hawse pipes installed in the deck and transom bulwarks.

4.22 ANCHOR PLATFORM

Aluminum integral fairlead anchor chute

4.23 EXTERIOR STORAGE

Rain gear and smalls storage in the weather deck fidley.

4.24 DECK BOXES

Removable, bow deck, tote

4.25 FENDERS

Several fenders were observed at the vessel's mooring.

4.26 MOORING LINES

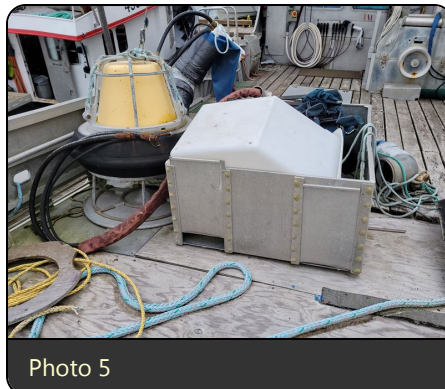
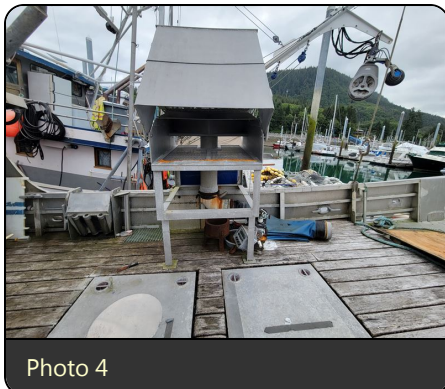
1" Blue Steel dock/mooring lines were observed at the vessel's mooring (amount included unknown).

4.27 ESCAPE HATCH

An escape hatch was observed on the foredeck.

4.28 Deck Machinery and Structures**4.28.1 COMMERCIAL FISHING DECK MACHINERY**

Marco 12" Herring pump, Sqid lights. Pilkington deck winch. (probable estop button is seen at the aft cabin)



5 CABIN APPOINTMENTS

5.1 Interior

5.1.1 MAIN CABIN ARRANGEMENT

Whaleback cabin with crew accommodations and master stateroom forward, galley, and crew mess aft.

5.1.2 GALLEY ARRANGEMENT

U shaped galley

5.1.3 DINING ARRANGEMENT

The galley mess table accommodates eight (8) crew with below bench storage and cabinets above



Photo 7

5.1.4 ACCOMMODATION ARRANGEMENT

Starboard master cabin with bunk beds and a desk. Forward crew cabin with four (4) bunks

5.1.5 HEAD ARRANGEMENT

Jabsco 12 volt Head.

5.1.6 SHOWER ARRANGEMENT

Stall shower in the Head.

5.1.7 HELM STATION (PILOT HOUSE)

Closed tophouse type helm

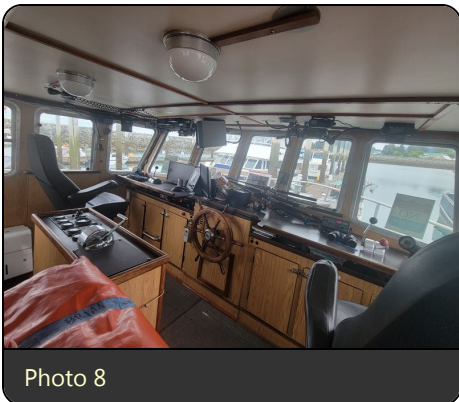


Photo 8

5.1.8 INTERIOR BRIDGE SEATING

Two (2) Elite helm chairs with simulated leather cushions and matching bridge bench seating. Did not power up.

5.1.9 INTERIOR CABINETRY & TRIM

The interior Satin finished Teak cabinetry and trim appeared serviceable.

5.1.10 INTERIOR DOORS

Satin finished Teak cabin doors.

5.1.11 INTERIOR STORAGE

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

5.1.12 CEILING HEADLINERS

High density panels battened to the ceiling

5.1.13 WALL-LINERS

Teak paneling

5.1.14 FLOORING

Simulated Teak vinyl plank snap lock waterproof flooring

5.1.15 CABIN SOLE FOUNDATION

Aluminum

5.1.16 GENERAL INTERIOR & SOFTGOODS CONDITION

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

5.1.17 INTERIOR JOINER WORK COMMENTS

The interior joiner work appeared serviceable.

5.1.18 INTERIOR BULKHEADS

The interior bulkheads appeared serviceable, where sighted.

5.1.19 WATER INTRUSION COMMENTS

Some signs of water intrusion in the galley mess, were reportedly fixed.

5.2 Interior Systems & Equipment**5.2.1 LIGHTING**

110 Volt AC lighting fixtures. All lights illuminated.

5.2.2 CABIN HEATING SYSTEM

Unknown

5.2.3 LAUNDRY SYSTEMS

Splendide Comb-O-Matic 6100 Clothes Washer/Dryer.

5.3 Audio/Visual Equipment**5.3.1 TELEVISION SYSTEM**

Television with DVD Player in the cabin crew mess. Television in the Master Stateroom.

5.3.2 CREW ENTERTAINMENT

X-box

5.4 Galley Equipment**5.4.1 REFRIGERATION**

Whirlpool Signature series

5.4.2 STOVE

General Electric Profile four (4) burner Stove with Touch Control.

5.4.3 MICROWAVE OVEN

LG stainless steel microwave oven

5.4.4 COFFEE MAKER

Cuisinart Stainless Steel Coffee Maker.

6 PROPULSION & MACHINERY SPACE

6.1 Propulsion System

6.1.1 ENGINE MODEL

Volvo-Penta TAMD-121-C,. Turbocharged.



Photo 9

6.1.2 MANUFACTURE DATE

* reported, 1987

6.1.3 ENGINE HORSEPOWER

**360 HP

6.1.4 NUMBER OF CYLINDERS

Six (6) in-line configuration.

6.1.5 ENGINE STARTER VOLTAGE RATING

24 Volt.

6.1.6 ENGINE HOURS

99,999 hours, observed on the engine's analog hour meter.

6.1.7 ENGINE FAMILY NUMBERS

Unknown (data tag was painted over and illegible).

6.1.8 ENGINE INSTRUMENTATION

Main engine instrument gauges were installed at the helm.

6.1.9 ENGINE ALARM SYSTEM

Volvo-Penta audible and visual alarms. Powered up

6.1.10 ENGINE EXHAUST SYSTEM

Dry exhaust in blankets. Some exceptions, see notes

Finding B-3

Exhaust blankets are soot-blackened. Possible exhaust leak.

Recommendation

Remove the exhaust blankets and inspect for exhaust leaks

6.1.11 ENGINE COOLING SYSTEM TYPE

Closed water jacket cooling, keel cooled.

6.1.12 ENGINE DRIVE BELTS

Belt & pulley condition was serviceable

6.1.13 THROTTLE & SHIFT CONTROLS

Hynautic Hydraulic Throttle & Shift Controls. Full reservoir.

6.1.14 ENGINE BED MOTOR MOUNTS

Adjustable motor mounts on aluminum engine bed bilge stringers

6.1.15 MAIN ENGINE OIL LEVEL

Level indication appeared to be lower than normal.

Finding B-4

The engine's oil sump level showed below the low level marking.

Recommendation

Fill the engine oil sump to the proper level, monitor and service as necessary.

6.1.16 MAIN ENGINE COOLANT LEVEL

Drained for storage

6.2 Machinery & Bilge Space Equipment**6.2.1 ENGINE SPACE VENTILATION**

Natural air flow ventilation was provided by the bow snorkel boxes.

6.2.2 SEACOCKS/SEA-VALVES

Two (2) Stainless steel ball valve-type seacocks are seen in the forward engine room starboard side. The forward valve is capped. The aft valve (starboard side engine room) is undetermined and has attached an unterminated bilge hose. There are two unterminated bilge lines starboard side. These lead under the engine room mezzanine and may drain out below the hull's wetted surface. Alternatively, the hoses may be genset coolant lines plumbed to the box keel that serves as the keel cooler. A third seacock is located in the aft engine room bilge is toilet supply, and is plumbed to the closed seachest (tested).

Finding B-5

The bilge seacock starboard side has an un terminated hose. There are two unterminated bilge lines leading under the starboard side engine room mezzanine. It was not determined but suspected that the both lead to unseen seacocks

Recommendation

Properly cap off the seacock for safety, as necessary. Investigate further and trace the unterminated bilge lines, address as found necessary by removing, capping, or reattaching the lines.

6.2.3 HOSES

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

6.2.4 HOSE CLAMPS

Banded non-slotted marine hose clamps doubled up where seen

6.2.5 RAW WATER STRAINERS

Groco bronze alloy with sight glass

6.2.6 LUBE OIL TANKAGE

60 gallon aluminum lube oil tank

6.2.7 LUBE TRANSFER SYSTEM

An oil transfer/drain hose was observed under the engine oil sump.

6.2.8 WASTE OIL TANKAGE

5 Gallon buckets

6.2.9 SHIP'S AIR COMPRESSOR

Jun-Air Ship's Air Compressor.

6.2.10 MACHINERY SPACE INSULATION

Aluminized Mylar faced foam, thermal & acoustical insulation was installed in the engine room. Spray on textured plywood over foam insulation installed under the cabin sole.

6.2.11 ENGINE ATTACHMENTS (MECHANICAL PTO'S OR BELTS)

Load sensing stacked hydraulic pumps, 24-volt alternator

6.2.12 HYDRAULIC STEERING PUMP

Vickers V20 13 gallon pump

6.2.13 SHAFT ALLEY

The shaft alley companionway leads aft between the crab tanks giving access to the aft lazarette. The Furuno Sonar Hull unit is mounted in the space. The storm windows are stored port side and the deck hose pump is mounted starboard in the space. The lazarette is entered through a watertight door in the bulkhead. The door handle and dogs are seized closed. Must be water pressure tested or opened and chalk test the seals to prove that it is still watertight. See notes.

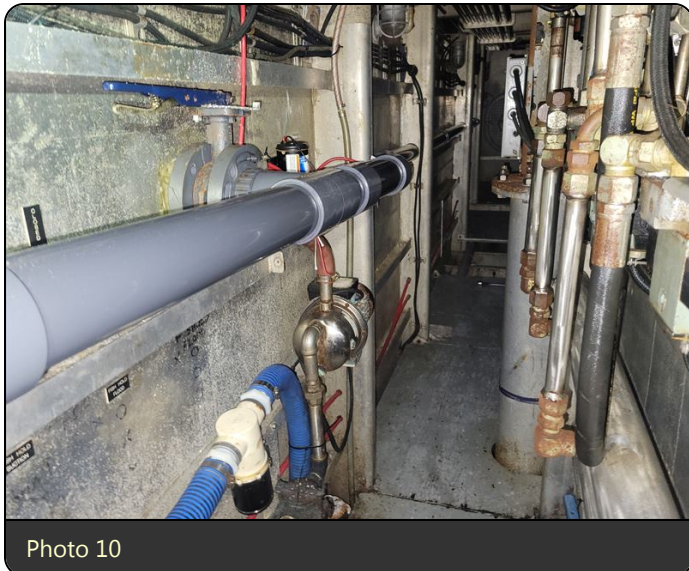


Photo 10

6.2.14 TOOL BOX

U.S General and Craftsman tool boxes installed in the engine room

6.3 Hydraulics**6.3.1 HYDRAULIC TANK**

350 Gallon aluminum

6.3.2 HYDRAULIC PUMPS

Danfoss 4 Cu and a Cessna 4Cu. (Load sensing pumps.)

6.3.3 SECONDARY HYDRAULIC PUMPS

Port side Aux: Three (3) Vickers 40-gallon vane pumps that are direct drive, all are activated through an electric solenoid manifold.

6.3.4 HYDRAULIC LINES/FITTINGS

Various size Parker Tough Cover flexible reinforced line and extensive use of stainless steel tubing throughout.

6.4 Refrigeration System

6.4.1 PRODUCT REFRIGERATION (ICE,RSW,PLATES,BLAST)

Refrigerated Sea Water (RSW)

6.4.2 SYSTEM: COMPRESSOR, PUMPS, AND PIPING

Appears to be a custom fitted 30-ton system with a titanium Sirsa Refrigeration Industrial chiller

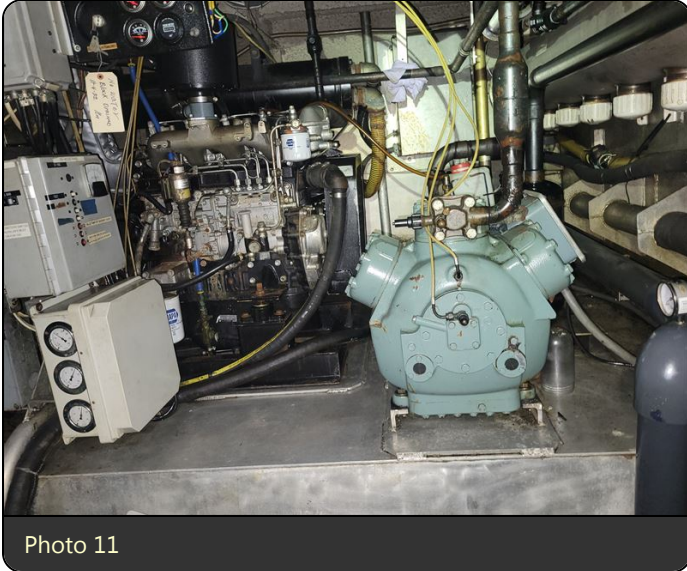


Photo 11

6.4.3 CIRCULATING SEAWATER MANIFOLD

The RSW manifold is 4" PVC crab tank plumbing. 2" PVC pipe for the condenser plumbing with a blue TigerFlex intake line. All the PVC seen is schedule 80 pipes.

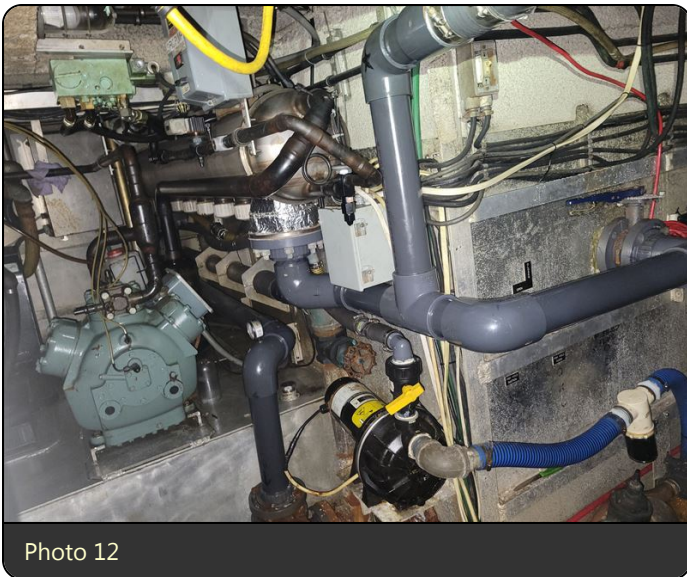


Photo 12

6.4.4 CRAB AND RSW CONDENSER PUMPS

4" Monarch crab pump on 208-volt Baldor motor. The condenser pump is a 2" Pacer on a 110-vac single-phase motor.

6.5 *Transmissions / Gears / Drives*

6.5.1 **DRIVE SYSTEM TYPE**

Direct Drive.

6.5.2 **TRANSMISSIONS/GEARS**

Twin Disc MG-514C

6.5.3 **GEAR RATIO**

Data tags stated, 4.13 : 1 ratio.

6.5.4 **GEAR SERIAL NUMBERS**

Unknown (data tag was partially illegible).

6.5.5 **GEAR CONTROLS**

Hydraulic Hydraulic gear controls.

6.5.6 **TRANSMISSION INSTRUMENTATION**

Transmission gauges were installed at the helm.

6.5.7 **GEAR COOLERS/HEAT EXCHANGERS**

Closed cooling heat exchangers.

6.5.8 **GEAR FLUID LEVEL**

Normal levels were observed on the transmission dipsticks.

6.5.9 **PROPELLER SHAFTS**

Size: 3 1/2". Material: Stainless Steel. Sleeved to 4 1/2"

6.5.10 **SHAFT BEARINGS AND GREASE PIPES**

Intermediates with copper grease tubes

6.5.11 **PROPELLER SHAFT PACKING GLANDS**

Flange & bolt stuffing box type packing glands. Monitor frequently.

6.6 *Vessel Alarms List*

6.6.1 **GENERAL ALARM PANEL**

custom

6.6.2 **GENERAL ALARM**

yes, activated

6.6.3 **HIGH WATER**

unknown

6.6.4 **LOW OIL ALARMS (MACHINERY)**

Machinery lube oil alarms

6.6.5 **LOW WATER (MACHINERY)**

High temperature engine alarms

7 FUEL SYSTEMS

7.1 FUEL SYSTEM TYPE

Diesel.

7.2 FUEL TANK MATERIAL

Aluminum.

7.3 NUMBER OF FUEL TANKS

Four (4).

7.4 FUEL TANKAGE CAPACITY

*1999 Suitability Report, 3200 gallons total

7.5 FUEL LEVEL MONITORING

Stick

7.6 FUEL TANKAGE SECURING

Electrically welded to the hull.

7.7 FUEL TANKAGE LOCATION

Port & starboard, outboard in the engine room. Port & starboard, outboard in the lazarette (could not access or inspect).

7.8 FUEL FILL LOCATION

Port & starboard amidships side decks. Port & starboard aft side decks.

7.9 FUEL FILL MARKING

The aft deck fuel fill fittings were clearly marked as to fuel type. The forward fuel tank fills were unmarked.

Finding B-6

The fuel fill fittings were not marked for diesel.

Recommendation

Label fuel fills to identify them as diesel fuel fills.

7.10 FUEL FILL HOSE/PIPE

Aluminum stand pipes

7.11 FUEL LINES/HOSES

USCG Approved Type A1 fuel lines, where sighted.

7.12 FUEL SHUT-OFF VALVES

Ball valves at the tanks, with emergency fuel shut-off valves activated in the cabin.

7.13 MAIN ENGINE PRIMARY FUEL FILTERS

Racor 1000FG Primary fuel filter/water separator. Dahl 100 filter.

7.14 MAIN ENGINE SECONDARY FUEL FILTERS

Engine mounted Secondary Fuel Filters.

7.15 GENERATOR PRIMARY FUEL FILTERS

Racor 500-MA fuel filter/water separator.

7.16 FUEL FILTER CONDITION

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

7.17 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.

7.18 FUEL COOLERS/HEAT EXCHANGERS

Engine mounted heat exchangers/coolers.

7.19 FUEL POLISHING SYSTEM

Fuel settling tank in the aft engine bilge

8 ELECTRICAL SYSTEMS

8.1 DC Electrical Systems

8.1.1 DC SYSTEMS VOLTAGE

24/12 Volt systems.

8.1.2 BATTERIES

Three (3) 4D 12 volt Flooded Lead Acid Batteries. Six (6) Group 31, 12 volt "Maintenance Free" Batteries

Finding B-7

Many of the batteries were not well secured. Wing nuts were utilized to fasten Cable conductors to their terminals (not recommended for cables over 6 AWG or 13.3 mm diameter). Some of the batteries were not installed in acid-proof trays. Aluminum has excellent corrosion resistance and will only corrode in highly acidic solutions with at least 12% concentration (Battery acid usually falls within this range). In seawater, hydrogen-fluoride can form, which corrodes aluminum. The positive battery terminals did not have protective insulation covers installed.

Recommendation

Install acid-proof trays to contain accidental electrolyte spillage, as necessary. Install properly sized hex nuts to secure battery cable conductors to their terminals (on battery cables over 6 AWG of 13.3 mm in diameter) to comply with ABYC Standards. Cover the terminals with nonconductive rubber or provide full battery boxes

8.1.3 MAIN DC BREAKERS

The main DC breaker was installed in the main DC breaker panel.

8.1.4 DC ELECTRICAL PANEL BREAKERS/FUSES

DC branch breakers in the engine room electrical panel, and at the helm.

8.1.5 BATTERY CHARGERS

Lewco Marine Charger 24 volt 40 amp charger. Newmar Heavy Duty battery charger converter. ProMariner ProNautic 1250 c3 - 12 volt / 50 amp. Battery Charger.

8.1.6 MAIN ENGINE ALTERNATORS

24 volt alternator

8.1.7 GENERATOR ALTERNATORS

12 Volt alternators

8.1.8 DC SYSTEM WIRING TYPE

Stranded copper Appeared serviceable for intended use, where sighted.

8.2 AC Electrical Systems

8.2.1 AC SHORE POWER SYSTEM VOLTAGE

120/240 Volt @ 60Hz.

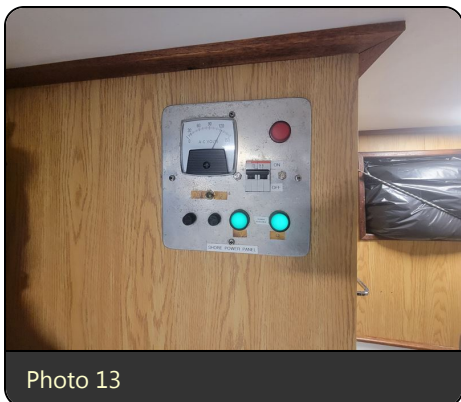


Photo 13

8.2.2 AC SHORE POWER INLETS

50 Amp. 120/240-volt shore power inlet.

8.2.3 AC SHORE POWER CORDS

30 Amp. vinyl shore power cord. 50 Amp. vinyl shore power cord.

8.2.4 AC SOURCES

Shore/genset/inverter

8.2.5 AC ELECTRICAL SOURCE SELECTOR SWITCHING

Manual slide type located in the main engine room electric panel.

8.2.6 MAIN AC SHORE POWER BREAKERS

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

8.2.7 AC ELECTRICAL PANEL BREAKERS

AC branch breakers in the main engine room AC electrical panel.

8.2.8 AC ELECTRICAL POWER OUTLETS

The AC outlets were tested using a UL Listed Circuit Tester. No GFCI outlets were seen.

Finding B-8

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).

8.2.9 AC ELECTRICAL OUTLET POLARITY

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

8.2.10 AC ELECTRICAL SYSTEM MONITORS

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

8.2.11 AC SYSTEM WIRING TYPE

Appeared serviceable for intended use where sighted, except where noted.

8.2.12 AC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

Some exceptions were observed (see Findings Appendix). Recommend thorough inspection and maintenance of the vessel's AC & DC wiring, by checking the security of all electrical conductor terminations (destructive testing), cleaning any corrosion off of the electrical conductors, and applying a corrosion inhibitor where appropriate.

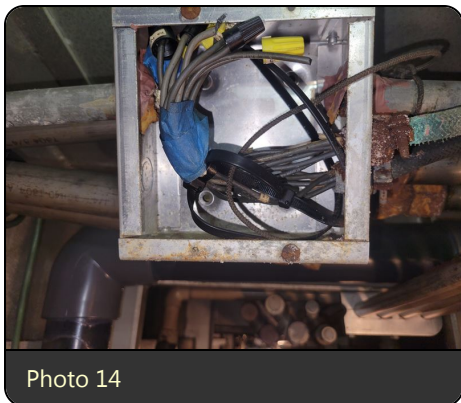


Photo 14

Finding A-1

The backside of an AC switch box in the below deck lazarette/engine room companionway did not have a protective insulation terminal cover installed. Wire nuts were utilized to terminate wiring. In the above photo, a wire has apparently pulled loose from a wire nut labeled '2' in the photo.

Recommendation

Install protective insulating terminal covers, where appropriate. Replace wire nut connections with Marine Grade insulated butt connections (wire nuts are approved for solid household-type wiring only).

9 GENERATORS/AUXILIARY POWER

9.1 *Clausen, Starboard Side Genset 1*

9.1.1 **ENGINE MODEL**

Isuzu 4BG1 62 HP diesel

9.1.2 **GENERATOR END**

Stamford Newage

9.1.3 **ENGINE FUEL TYPE**

Diesel.

9.1.4 **NUMBER OF CYLINDERS**

Four (4) in-line configuration

9.1.5 **GENERATOR KILOWATT RATING**

40.0 KW.

9.1.6 **GENERATOR ENGINE RPM RATING**

1,800 RPM.

9.1.7 **GENERATOR VOLTAGE RATING**

208 Volt

9.1.8 **GENERATOR PHASE RATING**

Three Phase.

9.1.9 **ENGINE STARTER VOLTAGE RATING**

12 Volt.

9.1.10 **GENERATOR HOURS**

24,785 hours observed on the generator mounted hour meter.

9.1.11 **GENERATOR INSTRUMENTATION GAUGES**

Generator instrument panel installed at the generator.

9.1.12 **GENERATOR DRIVE BELT**

Serviceable

9.1.13 **GENERATOR LUBRICATION SYSTEM**

Engine mounted mechanical oil pump with spin-on type filter.

9.1.14 **GENERATOR OIL LEVEL**

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

9.1.15 **GENERATOR COOLING SYSTEM TYPE**

Dry exhaust/keel cooled

9.1.16 **GENERATOR COOLANT LEVEL**

Drained for storage

9.1.17 **GENERATOR FUEL SYSTEM**

Engine mounted fuel pump.

9.1.18 GENERATOR EXHAUST SYSTEM

Keel cooled

9.1.19 GENERATOR SPACE VENTILATION

Natural air ventilation for the generator space was provided by a hull side vent.

9.1.20 GENERATOR LOAD TEST INFORMATION

The gensets were winterized for long-term storage and drained of fuel

9.2 Auxilliary Engine/Genset #2**9.2.1 ENGINE MODEL**

Cummins 6BTA Turbo and after cooled

**9.2.2 GENERATOR END**

The port side aux is a hydraulics only engine.

9.2.3 GENERATOR ATTACHMENT (PTO)

Three (3) Direct drive Vickers vane pumps

9.2.4 GENERATOR FUEL TYPE

Diesel

9.2.5 NUMBER OF CYLINDERS

Six (6) in-line configuration.

9.2.6 GENERATOR RPM RATING

1,800 Rpm

9.2.7 GENERATOR STARTING VOLTS

12 Volt

9.2.8 GENERATOR HOURS

2915 hours on the generator mounted hour meter

9.2.9 GENERATOR INSTRUMENTS

Installed at the generator

9.2.10 GENERATOR LUBRICATION SYSTEM

Engine mounted mechanical oil pump with spin-on type filter.

9.2.11 GENERATOR OIL LEVEL

Normal levels observed on generator oil sump dip stick

9.2.12 GENERATOR COOLING SYSTEM

Keel cooled

9.2.13 GENERATOR COOLENT LEVEL

Drained for storage

9.2.14 GENERATOR FUEL SYSTEM

Engine mounted fuel pump.

9.2.15 GENERATOR EXHAUST SYSTEM

Dry exhaust

9.3 Inverters & Other Auxiliary Power**9.3.1 INVERTER SYSTEMS (ABYC E-11, A-31)**

The inverter was not found

10 WATER SYSTEMS**10.1 Freshwater System****10.1.1 WATER TANKAGE MATERIAL**

Aluminum.

10.1.2 NUMBER OF FRESHWATER TANKS

Two (2).

10.1.3 WATER TANKAGE CAPACITY

*1999 Suitability Report, 1400 gallon. (note: this will invalidate the most current stability report onboard that was conducted in 1989 which was based on a single 400-gallon freshwater tank in the lazarett. see notes

10.1.4 WATER TANKAGE SECURING

The water tankage was well secured where sighted. The water tankage was well secured where sighted.

10.1.5 WATER TANKAGE LOCATION

Forepeak centerline crash bulkhead. Centerline in the aft lazarette.

10.1.6 WATER FILL TYPE AND LOCATION

The fills are not marked. There is a white capped fill Aft cabin bulkhead above the fuel fill and a blue capped fill on the starboard fore deck. It appears that the blue capped fill is afresh water fill and the white cap may be a waste pump out. see notes.

10.1.7 WATER FILL MARKING

The water fill was not properly marked.

Finding B-9

The water tank fill's fitting was not labeled as "water".

Recommendation

Properly label the water fill fitting, as necessary.

10.1.8 FRESHWATER TANKAGE VENTILATION

none seen

10.1.9 FRESHWATER PUMPS

SeaFlo Professional grade pump 110 volt AC

10.1.10 FRESHWATER FILTRATION

No filters were installed

10.1.11 FRESHWATER ACCUMULATOR TANK

Painted steel Accumulator Tank.

10.1.12 FRESHWATER PIPE/HOSE PLUMBING

PEX type (Cross-linked Polyethylene) tubing and copper tubing.

10.1.13 WATER LEVEL MONITORING

None installed. Highly recommended.

10.1.14 CITY WATER/DOCKSIDE INLET CONNECTION

no

10.2 Hot Water System**10.2.1 WATER HEATER**

Reliance 606.

10.2.2 WATER HEATER TYPE

120 Volt AC electric.

10.2.3 WATER HEATER CAPACITY

30 Gallons.

10.2.4 WATER HEATER PRESSURE RELIEF VALVE

Relief valve built into the tank.

10.2.5 WATER HEATER HEAT EXCHANGER SYSTEM

Integral with the water heater

10.3 Blackwater System**10.3.1 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).

10.3.2 BLACKWATER TANKAGE

Polyethylene Blackwater (sewage) holding tank with reportedly 49 gallon capacity.

11 STEERING SYSTEMS**11.1 STEERING SYSTEM TYPE**

Hydraulic Power Steering.

11.2 STEERING SYSTEM MANUFACTURER

Wagner Engineering Inc.

11.3 NUMBER OF STEERING STATIONS

Two (2) pilothouse helm wing stations with Wagner jog levers

11.4 STEERING HOSES/LINES

Stainless steel tubing where seen

11.5 RUDDER INDICATOR DIAL

Three (3) Comnav rudder dials

11.6 THRUSTERS

Custom manufactured hydraulic bow thruster

11.7 STEERING SYSTEM COMMENTS

The lazarette was not accessible, therefore the steering system was not inspected

12 GROUND TACKLE

12.1 ANCHORS

500 pound Navy anchor

12.2 ANCHOR RODE TYPE

1" boom chain.

12.3 ANCHOR WINDLASS

Pilkington's hydraulic drum winch

13 ELECTRONICS & NAVIGATION EQUIPMENT

13.1 RADIO TRANSCEIVERS

Icom IC-M424 VHF Radio. Icom F5121D 2-meter VHF. Kenwood TKM 507 VHF radio. Two (2) Icom 2300H 2 meter VHF. Icom IC-5121D. Simrad RD-68 VHF Radio. ICOM V-100. All the radios were tested for power up.

13.2 LOUD HAILER

Standard Horizon VLH-3000 Loud Hailer

13.3 COMPASSES

Wagner compass with deviation card

13.4 MONITORS

Two (2) HP monitors

13.5 AIS (AUTO IDENTIFICATION SYSTEM)

Nauticast Class B Transponder, powered up

13.6 NAVIGATION COMPUTER

HP desk top computer with Noble tec chart program, powered up

13.7 AUTOPILOT

COMNAV 1001 with remotes

13.8 MARINE RADAR

Furuno FR 7062 powered up

13.9 GPS (GLOBAL POSITIONING SYSTEM)

Furuno GP-37 GPS/WAAS Navigator. Furuno GP-31 GPS Navigator. Both tested for power up

13.10 COLOR FISH FINDER

Furuno FCV-1100L Color Video Sounder. powered up

13.11 SATELLITE TELEPHONE

MSAT satellite phone

13.12 BAROMETER

Howard Miller Barometer.

13.13 SHIP'S CLOCK

Howard Miller Clock.

13.14 ANTENNAS

The antennas appeared to be well mounted where sighted.

13.15 ELECTRONIC CHART SYSTEM

Nobletec electronic charts

13.16 WATCH ALARM

Watch Clock

14 SAFETY EQUIPMENT

14.1 U.S.C.G. Requirements For Commercial Fishing Industry Vessels. 46 CFR part 28

14.1.1 DOCKSIDE SAFETY EXAM (BIG 8) 46 USC 4502

Current. Marked undocumented, cold water, <50NM, expiry Nov 2023 #264949

14.1.2 WEARABLE PERSONAL FLOATATION DEVICES (BIG 8) 46 CFR 28.110

Five (5) Immersion suit (46 CFR 28.110-25) did not inspect

14.1.3 THROWABLE PERSONAL FLOTATION DEVICES (BIG 8) 46 CFR 28.115 & 25.25

Two (2) Type IV - U.S.C.G. Approved Throwable Device (ring). Properly marked with Vessel Name, Type II retro-reflective material and tied into a 60' painter

14.1.4 LIFE RAFTS 46 CFR 28.120 (BIG 8)

Guardian 6 person SOLAS B pack. Expiry 8/2022. Expired.

14.1.5 ESCAPE ROUTES 46 CFR 25.26-50 (BIG 8)

Clear

14.1.6 VISUAL DISTRESS SIGNALS (BIG 8)

3 Parachute flares (160.136 or

160.036) current

6 hand flares (160.121 or 160.021) current

3 smoke signals

(160.122,160.022 or 160.037) current

Kit expiry 2024

14.1.7 SOUND PRODUCING DEVICES (33 CFR 83)

Single trumpet air horn with compressor, did not test

14.1.8 E.P.I.R.B. (BIG 8)

Two (2) ACR Electronics Satellite2 406 EPIRB.

The EPIRB was tested. Yes

Battery Expiration Date: 2021

Hydrostatic Release Expiration Date: illegible

Registration Expiration Date: 1/11/2022 expired

Beacon Registration #: ADCD0 20B09 44801

Finding B-10

The E.P.I.R.B.'s battery inspection, registration, and hydro-static release were expired.

Recommendation

Renew battery and hydro-static release, register, test and mark for inspection, as necessary.

14.1.9 FIRE EXTINGUISHERS 46 CFR 25 (BIG 8)

Six (6) 3-A 40-B:C. (USCG Type A size II, Type B:C Size I) No current annual inspection tags were observed.

Finding B-11

The hand-held fire extinguishers did not have current annual inspection tags.

Recommendation

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

14.1.10 NAVIGATION LIGHTS (33 CFR 83)

The Navigation Lights illuminated, except where noted.

Finding B-12

The Navigation Masthead Fishing at Night Red Light did not illuminate when tested.

Recommendation

Repair or replace the Night Fishing Light to comply with USCG Regulations.

14.1.11 INJURY PLACARD 46 CFR 28.165

Posted

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

Found properly displayed.

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

Found properly displayed.

14.1.14 "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.

Finding C-3

A vessel Owner/Captain written "Waste Management Plan" was not observed onboard.

Recommendation

Provide proper written "Waste Management Plan" to comply with the Marpol Annex V and 33 CFR 151.57, as necessary. Fine for non-compliance.

14.1.15 MSD 33 CFR PART 159.7

Provided; see section water subsection black water

14.1.16 VESSEL REGISTRATION 46 CFR 67-69

A tonnage certificate is required to be on board foreign-built comfish vessels at all times. The Certificate was not found.

Finding A-2

This Canadian-built vessel did not have an admeasure certificate seen on board. Her Canadian registry document reports 30 net registered tons. The 1999 Suitability letter reports 77 GRT and 25 NRT.

Recommendation

Supply an admeasure document proving the vessel is < 6 net tons and carry on board a current state registration certificate with state numbers and decals. This is the Jones Act Requirement for Commercial Fishing in U.S. waters.

14.1.17 DRUG/ALCOHAL TESTS 46 CFR PARTS 4 & 16

none seen

Finding A-3

No alchohal test is seen, required.

Recommendation

Provide current dated test strips before next leaving the dock and/or before any crew boards the vessel

14.1.18 28.225 NAVIGATIONAL INFORMATION.

Electronic charts

14.1.19 COMPASS 46 CFR 28.230

Provided with deviation card, see the section Navigation of this report

14.1.20 COMMUNICATION 46 CFR 28.245, 28.375 33 CFR 26.03 47 CFR 80

Provided,

14.1.21 EMERGENCY BATTERY

yes in the top house

14.1.22 BILGE HIGH WATER ALARMS (BIG 8) 46 CFR 28.250

unknown

14.1.23 GENERAL ALARM SYSTEM AND PLACARD 46 CFR 28.240

Yes

14.1.24 EMERGENCY INSTRUCTIONS 46 CFR 28.265

Posted

14.1.25 STABILITY INSTRUCTIONS

Found, a stability booklet in the ship's papers as well as a Suitability Report to tend for Canadian Herring. see notes:

Finding A-4

The stability book found on board the vessel is no longer valid as (at least) the following major conversions of the vessel have occurred since the last incline test and a stability report was issued.

- The reported 28" hatch combings have been cut down to 2"
- The ballast has been changed and a 1000 gallon freshwater tank has been added.

Recommendation

The stability book found onboard should be marked as no longer valid and removed from the vessel.

14.1.26 DRILLS AN INSTRUCTION 46 CFR 28.270 (BIG 8)

No evidence of Drills

14.1.27 SAFETY ORIENTATION LOG 46 CFR 28.270 (BIG 8)

Safety Drill and instruction logs were not found in the ship's papers

14.1.28 FIRST AID SUPPLIES 46 CFR 28.210

A First Aid kit was observed onboard.

14.1.29 BOARDING (JACOBS) LADDER 50 CFR PART 600, SECTIONS 730

Yes

14.2 Auxiliary Safety Equipment Recommended by the ABYC, and or Some Insurance Carriers and Pools.**14.2.1 MAN OVERBOARD SYSTEM (MOB)**

Lifesling M.O.B. Rescue Sling.

14.2.2 REBOARDING LADDER

Yes

14.2.3 SEARCH LIGHT

yes

14.2.4 CARBON MONOXIDE DETECTORS (ABYC A-24)

yes

14.2.5 SMOKE DETECTORS (NFPA 302)

yes

14.3 Bilge Pumping Systems**14.3.1 EMERGENCY BILGE PUMPING SYSTEMS**

2" Hydraulic Pacer

14.3.2 INCIDENTAL WATER 12 OR 110 VOLT AUTOMATIC BILGE PUMPS

Two (2) Rule 2000, 12 volt Bilge Pumps. Powered up.

Finding A-5

One of the bilge pumps in the engine room was not hooked up to a discharge hose.

Recommendation

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

15 UNDERWATER EQUIPMENT & HULL INSPECTION**15.1 HULL INSPECTION COMMENTS**

20 Random Audio-gauge readings were taken 10/side

15.2 PROPELLERS

Stainless steel three blade propeller

15.3 PROPELLER SHAFTS

Stainless Steel, 4" inch diameter (see entry on page 18 under prop shaft), sleaved to 4 1/2".

15.4 SHAFT STAVE BEARINGS (CUTLESS BEARINGS)

FRP cutlass appeared worn

Finding B-13

The shaft Cutless Bearing appeared worn.

Recommendation

Investigate further, Replace the bearing, as necessary.

15.5 RUDDER MATERIAL

Aluminum.

15.6 RUDDER MOUNTING

Skeg mounted.

15.7 THRUSTERS

Two bladed Bow Thruster propeller.

15.8 HULL SEA-STRAINERS

The hull was equipped with raw water strainer screens and scoops. Monitor/clean often.

15.9 KEEL COOLER

Box style aluminum Keel Coolers appeared serviceable

15.10 DRAINAGE THROUGH-HULLS

Aluminum hull discharge/drainage through-hulls.

15.11 HULL TRANSDUCERS

The transducers appeared serviceable, where sighted.

15.12 SACRIFICIAL ANODES

The underwater Zinc Anodes were wasting or wasted. Monitor frequently.

Finding C-4

The underwater Zinc Anodes were wasting or wasted.

Recommendation

Replace the wasted (aluminum specific) Anodes to ensure proper electrolytic corrosion protection.

15.13 HULL SKEGS

Aluminum bar skeg

15.14 PROPELLER PROTECTION

Aluminum Beaver tail.

15.15 ANTIFOULING PAINT

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

Finding B-14

The antifouling bottom paint appeared to be nearing the end of its serviceable life.

Recommendation

Clean, prepare and repaint, as necessary.

16 RIGGING**16.1 Standing Rigging****16.1.1 SHROUDS/STAYS/TERMINAL ENDS**

Pilkington's Vanging Boom Stays

16.1.2 RIGGING CLEVIS PINS & COTTER PINS

SS wire seized clevis pins, appeared serviceable

17 VESSEL DOCUMENTATION**17.1 HIN COMPLIANCE**

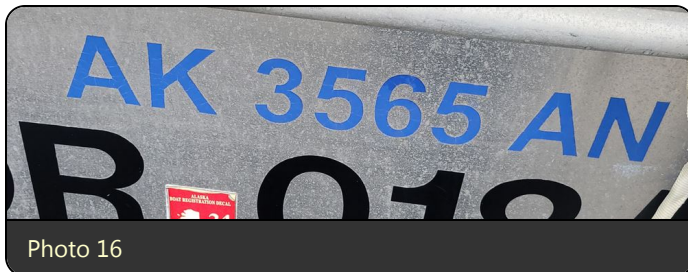
The Surveyor was unable to locate a vessel HIN (Hull Identification Number) on the starboard aft section of the vessel, nor at a hidden area of the vessel.

17.2 POSTED USCG DOCUMENTS

All safety/instructional/warning documents required in 46 CFR 28 HAVE BEEN PROPERLY DISPLAYED

17.3 STATE REGISTRATION DOCUMENTATION

All state (registration numbers and decals) are displayed. No registration paperwork was found. see notes

**17.4 FOREIGN BUILT FV DOCUMENTATION COMPLIANCE. JONES ACT.**

U.S. Tonnage Certificate and State Registration were not found see notes

17.5 STABILITY LETTER

A stability letter was found on board the vessel. see notes

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: FIRST PRIORITY / SAFETY AND COMPLIANCE DEFICIENCIES

Finding A-1 AC Electrical/Wiring Comments (ABYC E-11)

The backside of an AC switch box in the below deck lazarette/engine room companionway did not have a protective insulation terminal cover installed. Wire nuts were utilized to terminate wiring. In the above photo, a wire has apparently pulled loose from a wire nut labeled '2' in the photo.

Recommendation

Install protective insulating terminal covers, where appropriate. Replace wire nut connections with Marine Grade insulated butt connections (wire nuts are approved for solid household-type wiring only).

Finding A-2 Vessel Registration 46 CFR 67-69

This Canadian-built vessel did not have an admeasure certificate seen on board. Her Canadian registry document reports 30 net registered tons. The 1999 Suitability letter reports 77 GRT and 25 NRT.

Recommendation

Supply an admeasure document proving the vessel is < 6 net tons and carry on board a current state registration certificate with state numbers and decals. This is the Jones Act Requirement for Commercial Fishing in U.S. waters.

Finding A-3 Drug/Alcohol Tests 46 CFR Parts 4 & 16

No alcohol test is seen, required.

Recommendation

Provide current dated test strips before next leaving the dock and/or before any crew boards the vessel.

Finding A-4 Stability Instructions

The stability book found on board the vessel is no longer valid as (at least) the following major conversions of the vessel have occurred since the last incline test and a stability report was issued.

- The reported 28" hatch combings have been cut down to 2"
- The ballast has been changed and a 1000 gallon freshwater tank has been added.

Recommendation

The stability book found onboard should be marked as no longer valid and removed from the vessel.

Finding A-5 Incidental Water 12 or 110 Volt Automatic Bilge Pumps

One of the bilge pumps in the engine room was not hooked up to a discharge hose.

Recommendation

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

B: SECONDARY PRIORITY / FINDINGS NEEDING TIMELY ATTENTION**Finding B-1 General Bilge Condition**

The bilges required cleaning. Each vessel must comply with the oil pollution prevention requirements of 33 CFR parts 151 and 155.

Recommendation

Clean bilges, as necessary in order that stray oil not migrate to the bilge pumps.

Finding B-2 Watertight Hull Closures

The shaft alley watertight door is seized as is the lazarette hatch. This prevented an inspection of the door/hatch seals and dogs, as well as access to the lazarette for inspection of the steering gear aft fuel tanks and the freshwater tank

Recommendation

Investigate further, free up the door and hatch cover, and inspect and test the door seals, dogs, and the hatch for water tightness and integrity. Service or replace.

Finding B-3 Engine Exhaust System

Exhaust blankets are soot-blackened. Possible exhaust leak.

Recommendation

Remove the exhaust blankets and inspect for exhaust leaks

Finding B-4 Main Engine Oil Level

The engine's oil sump level showed below the low level marking.

Recommendation

Fill the engine oil sump to the proper level, monitor and service as necessary.

Finding B-5 Seacocks/Sea-Valves

The bilge seacock starboard side has an un terminated hose. There are two unterminated bilge lines leading under the starboard side engine room mezzanine. It was not determined but suspected that the both lead to unseen seacocks

Recommendation

Properly cap off the seacock for safety, as necessary. Investigate further and trace the unterminated bilge lines, address as found necessary by removing, capping, or reattaching the lines.

Finding B-6 Fuel Fill Marking

The fuel fill fittings were not marked for diesel.

Recommendation

Label fuel fills to identify them as diesel fuel fills.

Finding B-7 Batteries

Many of the batteries were not well secured. Wing nuts were utilized to fasten Cable conductors to their terminals (not recommended for cables over 6 AWG or 13.3 mm diameter). Some of the batteries were not installed in acid-proof trays. Aluminum has excellent corrosion resistance and will only corrode in highly acidic solutions with at least 12% concentration (Battery acid usually falls within this range). In seawater, hydrogen-fluoride can form, which corrodes aluminum. The positive battery terminals did not have protective insulation covers installed.

Recommendation

Install acid-proof trays to contain accidental electrolyte spillage, as necessary. Install properly sized hex nuts to secure battery cable conductors to their terminals (on battery cables over 6 AWG of 13.3 mm in diameter) to comply with ABYC Standards. Cover the terminals with nonconductive rubber or provide full battery boxes

Finding B-8 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 B-9 Water Fill Marking

The water tank fill's fitting was not labeled as "water".

Recommendation

Properly label the water fill fitting, as necessary.

Finding B-10 E.P.I.R.B. (BIG 8)

The E.P.I.R.B.'s battery inspection, registration, and hydro-static release were expired.

Recommendation

Renew battery and hydro-static release, register, test and mark for inspection, as necessary.

Finding B-11 Fire Extinguishers 46 CFR 25 (BIG 8)

The hand-held fire extinguishers did not have current annual inspection tags.

Recommendation

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

Finding B-12 Navigation Lights (33 CFR 83)

The Navigation Masthead Fishing at Night Red Light did not illuminate when tested.

Recommendation

Repair or replace the Night Fishing Light to comply with USCG Regulations.

Finding B-13 Shaft Stave Bearings (Cutless Bearings)

The shaft Cutless Bearing appeared worn.

Recommendation

Investigate further, Replace the bearing, as necessary.

Finding B-14 Antifouling Paint

The antifouling bottom paint appeared to be nearing the end of its serviceable life.

Recommendation

Clean, prepare and repaint, as necessary.

C: SURVEYOR'S GENERAL FINDINGS, NOTES AND OBSERVATIONS**Finding C-1 False Deck**

The wear deck is worn, weathered

Recommendation

Investigate further and repair or replace the worn sections or planking

Finding C-2 Exterior Washdowns

The raw water wash down pump is disconnected from the outlet deck spud.

Recommendation

Investigate and reconnect the deck hose.

Finding C-3 "Waste Management" Plan (33 CFR 151) vessels over 39'4"

A vessel Owner/Captain written "Waste Management Plan" was not observed onboard.

Recommendation

Provide proper written "Waste Management Plan" to comply with the Marpol Annex V and 33 CFR 151.57, as necessary. Fine for non-compliance.

Finding C-4 Sacrificial Anodes

The underwater Zinc Anodes were wasting or wasted.

Recommendation

Replace the wasted (aluminum specific) Anodes to ensure proper electrolytic corrosion protection.

18 SUMMARY

18.1 VESSEL CONDITION

The Surveyor's experience develops an opinion of the OVERALL VESSEL RATING OF CONDITION, after the Survey has been completed and the findings have been organized logically.

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 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

18.2 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, and other online sales listings or dealers. 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 the condition of the vessel, it is the Surveyor's opinion that the "FAIR MARKET VALUE" of the subject vessel is:

1,000,000.00

One Million

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:

2,000,000.00

Two Million

18.3 SUMMARY

In accordance with the request for a Marine Survey of the [Pacific Predator](#), 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 Hull Inspection September 1-2, 2023

Out of the Water Inspection September 8, 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.

18.4 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 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



Signed and submitted on: September 15th, 2023



Photo 17



Photo 18



Photo 19: Port Boom



Photo 20: Starboard Boom



Photo 21: Port Boom



Photo 22



Photo 23



Photo 24



Photo 25



Photo 26



Photo 27



Photo 28: Galley



Photo 29: 110 VAC Freshwater System



Photo 30

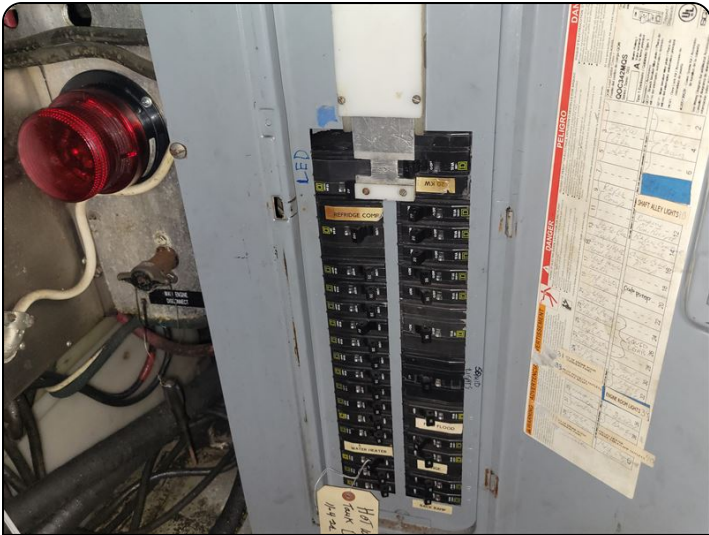


Photo 31

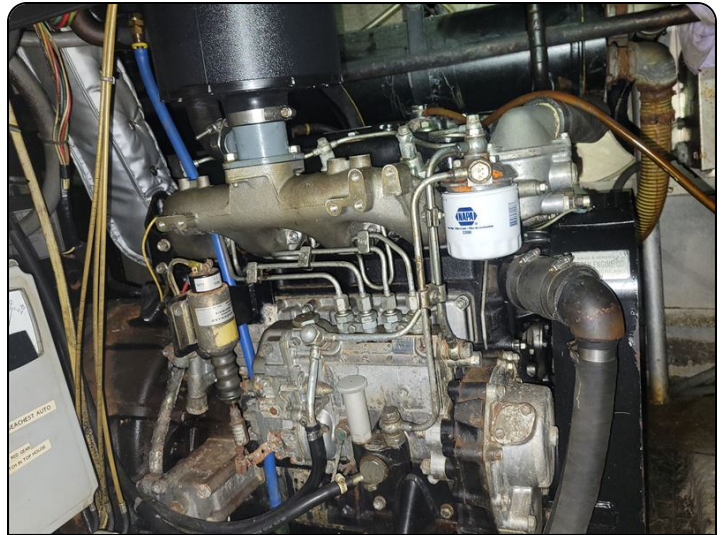


Photo 32: Aux #1



Photo 33: RSW compressor



Photo 34: Captain's cabin stacked bunks



Photo 35: Focsle



Photo 36: Pilothouse port wing with day bunk



Photo 37

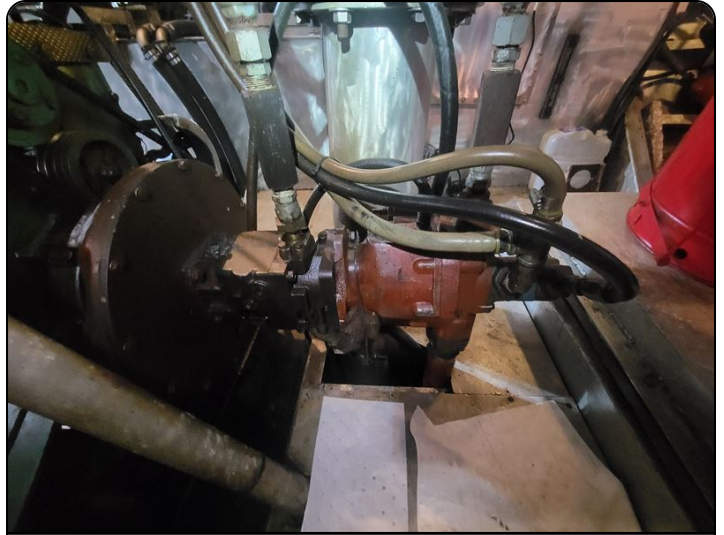


Photo 38: Hydraulic pump off the main engine