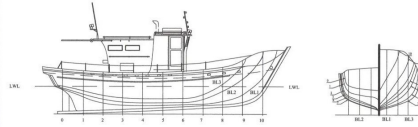


**Western Boat and Trawler**  
***www.scottheitmanmarinesurvey.com***

Scott Heitman Marine Surveyor  
(360)454-8158



**1978 90' Bering Sea Crabber**  
**"Big Blue"**



**Membership with the Society of Accredited Marine Surveyors (associate member), Navtec USSA, and the American Boat & Yacht Council**

1239 Campbell Ave apt 1  
Port Angeles, Washington 98362

(360) 454-8158  
scottheitmanmarinesurvey.com  
scottheitmanmarinesurvey@gmail.com

# **Report of Marine Survey**

**Report of Condition/Valuation of the Fishing Vessel**

**"Big Blue"**

**1978 90' Bering Sea Crabber**

**CONDUCTED BY**

**SCOTT HEITMAN, MARINE SURVEYOR #1201-H**

**WESTERN BOAT AND TRAWLER**

**PREPARED FOR**

**Tim Abena**

**November 15, 2021**

# Report of Marine Survey

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## INTRODUCTION

### PURPOSE & SCOPE

The Survey was performed for vessel condition and valuation purposes and should not be considered to be a full comprehensive Pre-Purchase Type Survey. The attending Surveyor attended aboard the 1978 Bering Sea Crabber "Big Blue", at the request of Tim Abena, beginning November 15, 2021. The out of the water survey inspection, was at The Boat Haven in Port Townsend Washington. The vessel is undergoing an extensive refit with many systems being rebuilt and reconditioned as part of an ongoing maintenance, and preventative maintenance program. 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.

# Report of Marine Survey

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## 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 performed during the Survey inspection.

### ELECTRICAL INSPECTION COMMENTS

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

### HIN (HULL IDENTIFICATION NUMBER) VERIFICATION COMMENTS

NA

### VESSEL DISCLOSURE COMMENTS

None

### 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.

### ELECTRICAL/MECHANICAL SURVEY

No ELECTRICAL/MECHANICAL SURVEYOR was onboard during the Hull Survey.

## Report of Marine Survey

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### ELECTRONICS/AUDIO/VIDEO SURVEY

None

### ULTRASONIC METAL THICKNESS AUDIO GAUGING

An Ultrasonic Metal Thickness Audio Gauging was not performed on the vessel's hull bottom below the waterline, decks, cabin and keel.

## Report of Marine Survey

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### GENERAL VESSEL INFORMATION

TYPE OF SURVEY REQUESTED:	Condition and Value/Insurance
DATE AND TIME OF SURVEY:	Monday November 15, 2021. 8a-4:30p
FILE NUMBER:	000132
VESSEL TYPE:	Steel Crabber/Combination Fishing
VESSEL BUILDER:	The vessel was built by the owner, Tim Abena and Calaska Marine in Marshall California
YEAR BUILT:	1978 per Certificate of Documentation (COD)
DOCUMENTED HAILING PORT:	Kodiak Alaska
HAILING PORT DISPLAYED:	Kodiak Alaska, across The Transom
HOME PORT:	Kodiak Alaska
U.S.C.G. DOCUMENTATION NUMBER:	601825 (current)
U.S.C.G. DOCUMENTED FOR:	FISHERY
U.S.C.G. DOCUMENTATION REGISTERED VESSEL OWNER:	F/V Big Blue LLC
ADF&G#:	37241 DISPLAYED (current).
VESSEL MATERIAL:	Steel
LENGTH OVERALL (LOA):	90' measured
REGISTERED LENGTH:	77.7'
MEASURED BEAM:	26'
REGISTERED BEAM:	25.8' (COD)
OVERHEAD CLEARANCE:	6.5'
DEPTH:	13.9' (COD)
GROSS TONNAGE:	178 Gross Registered Tons (COD)
NET TONNAGE:	119 Net Registered Tons (COD)
LOCATION OF SURVEY INSPECTION:	The Boat Haven Port Townsend, Washington
LOCATION OF BOTTOM INSPECTION:	The Boat Haven, Port Townsend, Washington
VESSEL OWNER:	Tim Abena
OWNERS CONTACT INFORMATION:	Phone #: 360 957-3200 Email: timabena@aol.com
VESSEL OWNER ADDRESS:	3103 Mill Bay Road Kodiak Alaska 99615
PERSONS IN ATTENDANCE DURING SURVEY:	Scott Heitman (surveyor) and Tim Abena (managing owner)

### RATING & VALUATION

VESSEL OVERALL RATING:	<b><u>ABOVE AVERAGE</u></b>
ESTIMATED MARKET VALUE:	<b>\$1,850,000</b>
ESTIMATED REPLACEMENT COST:	<b>\$3,000,000</b>

# Report of Marine Survey

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## VESSEL CONSTRUCTION

### *HULL ARRANGEMENT*

#### VESSEL DESCRIPTION AND LAYOUT

The Big Blue is a house forward Bering Sea Crabber/Longline boat. There is a full, aluminum shelter deck that was partially removed at the time of the survey. Safety railings are installed around the top along with tub rack storage. Tub racks are installed above and inside the shelter deck. The shelter is divided into two fully enclosed bait sheds its divided at mid deck to allow deck space for the crane to operate. When the shelter deck is removed for crabbing or for tendering salmon there is a steel wave wall to port. At the time of the survey both halves of the shelter were removed for vessel re-fit and maintainance leaving a quarter (open) shelter to port. This is also how the vessel is configured while longling black cod pots. There is a raised apitong wear deck that is flush with the hatches. The steel bulwarks on the starboard side are sheathed in stainless steel for protection against pot impact damage. The bulwarks are capped with stainless steel tie down rails. The walk-around pilot house and upper deck are a raised whale back, with the main cabin being just below. Just behind the Top House there is a weather deck surrounded with steel pipe safety rails. The pilot house side decks are also inside safety railings. There are two, fiberglass, crab tanks, provided for live crab fishing, icing ground fish, or used for tendering salmon. There is a machinery hold aft, housing two (2) IMS 32.5 ton chillers with stainless steel plumbing, just forward of, and connected to the lazaret. In the aft lazz are steering gear and a bait freezer. The engine room contains the 550 hp main engine, three (3) gensets, a tool bench, and two (2) bilge/circulation manifolds. The refrigeration manifold is located in the machinery room aft. The water tank is a forpeak crash bulkhead.

#### HULL DESIGN TYPE

Full displacment hull, double bottomed, with hard chines and a stainless steel gear shield along the starboard side sponson

#### HULL MATERIAL

5/16" welded steel plate.

#### EXTERIOR FINISH

Blue paint

#### GENERAL EXTERIOR CONDITION

The exterior of the vessel appeared to be generally well kept. Upon visual inspection of the vessels hull and superstructure, plating and welds, there was found to be only slight rust bleeds at the scuppers.

#### TRANSOM

Square Marco style transom with a stainless steel pipe, pot tie down cap rail. There is a binned cutout centerline for setting slinky pots.

#### BULKHEADS

Welded steel plate

#### STRINGERS/TRANSVERSALS

Hull stiffness was provided by steel longitudinal stringers and athwartships transversals.

#### STEM

Raked stem.

#### KEEL

Welded steel, box keel

#### BALLAST

7000 lbs of seawater kept in-between the, double hull, shell plates.

#### STRUCTURAL FRAMES

Transverse: Welded steel angle. 4' centers.

Longitudinals: Welded steel angle. 17" centers.

## Report of Marine Survey

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### HULL PLATING

5/16" steel (reported)

### BILGES

A painted surface was used in the bilges.

### SEA CHEST AND BILGE MANIFOLD

Two bilge manifolds. The smaller 2" manifold is all stainless steel piping. There are three (3) bilge pickups from the 2" manifold, one (1) for each bilge. The 2" manifold is also plumbed for (salt water) deck wash down (reference External Equipment > Washdowns). The larger of the two manifolds is a 6" crab tank circulation system serviced with Two (2) Deming 6" x 6" 20 Hp 208 VAC electric crab pumps. The system has been entirely renewed 2021.

-Two (2) Deming 6" x 6" 20 Hp 208 VAC electric crab pumps

- two (2) Banjo 2" pumps



### SEA CHEST

Twin sea chests supply raw water to the engine raw water cooling strainers. A 2" crab tank bilge strip pickup, and the larger 6" crab tank bilge manifold.



## Report of Marine Survey

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### GENERAL BILGE CONDITION

Clean and well kept.

### BILGE LIMBER HOLES

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

### BOW SHEILD

Stainless steel

### COMMENTS

Ultra-sonic testing of the hull plating or deck was not performed during the survey inspection

## ***DECK ARRANGEMENT***

### DECK TYPE/GENERAL DESCRIPTION

Flush deck

### DECK MATERIAL

Welded steel plating. 1/4" reported

### DECKING OVERLAY

Paint

### WEAR DECK

Apitong wood raised wear deck.



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### BULWARKS

Welded Steel with a removable cut-out starboard side to accomodate a gear hauling pit roller shoot. Stainless steel cap rails.

### RUB-RAILS

Steel

### HULL-TO-DECK JOINT TYPE

Welded steel

## ***SUPERSTRUCTURE ARRANGEMENT***

### SUPERSTRUCTURE MATERIAL

1/4" steel plate appears to be serviceable

### SUPERSTRUCTURE-TO-DECK JOINT TYPE

Electrically welded joint. Appeared serviceable.

## ***BRIDGE ARRANGEMENT***

### BRIDGE MATERIAL

Steel

### BRIDGE TYPE

Enclosed top house

## ***WEATHER DECK***

### WEATHER DECK ACCESS

Aluminum pilot house wing doors

### WEATHER DECK EQUIPMENT

Mechanical stainless steel crane control extensions.

Companion access rails to the shelter deck top.

### STORAGE BOXES

NA

### WEATHER DECK SAFETY RAILS

Steel pipe

## **EXTERIOR EQUIPMENT AND COMMERCIAL FISHING MACHINERY**

### GENERAL HARDWARE CONDITION

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

### GENERAL CAULKING/SEALANT CONDITION

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

### EXTERIOR LIGHTING

Five (5) 1000 watt sodium lights forward and two (2) matching 1000 watt sodiums facing aft

Two 1500 watt quartz deck lights

## Report of Marine Survey

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### EXTERIOR WASHDOWNS

The washdowns are plumbed from the sea chest via the 2" bilge manifold piping

### CABIN VENTILATION

Provided by the windows and the exterior doors.

### HULL CLOSURES

Round steel flush hatches with raised aluminum crab scuttles open on the crab tanks. A dogged watertight door in the lazarette bulkhead that divides it between steerage space and refrigeration room. Serviceable.

### EXTERIOR DOORS

Steel and aluminum dogged heavy weather, windowed doors. The starboard side pilot house door is a double dutch and dogged door.

### WINDOWS

Tempered, fixed windows.

### WINDSHIELD

Tempered glass Pilothouse type windows in aluminum frames and 1/2" Lexan window storm covers

### SPRAY-SHIELD

Blue painted steel wraps the pilot house top and is capped with a steel pipe safety rail

### DECK RAILINGS

Stainless steel pot tie down rails with a break at the center transom

### BOW RAILING

NA

### SAFETY RAILING

Aluminum rails and ladder around the bait shed top

Steel pipe rails surround the tophouse top

Steel pipe rails surround the weather deck and pilothouse side decks

### HAND RAILS/GRAB RAILS

Hand rails were located at convenient locations of the vessel.

### DECK DRAINAGE

Scuppers and crab shoot

### CLEATS

Cleats throughout the vessel were steel horn type.

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### LINE HAWSE PIPES

Line hawse pipes were installed port, starboard, and center at the stern, also both port and starboard at the foredeck

### EXTERIOR STORAGE

Bait shed tub racks and removable totes

### WELDING AND/RAIN GEAR LOCKERS

The welding locker is in the cabin entry with two welding bottles, an acetelene torch, Miller suitcase welder and welder leads, the readily accessible life jackets and the CO<sub>2</sub> fixed fire fighting system that is plumbed to the engine room.



### DECK BOXES

Three (3) removable fish totes

### ESCAPE HATCH

NA, pilot house and cabin doors

## **MAIN AND SECONDARY HYDRAULICS**

### MAIN HYDRAULIC PUMP AND POWER TAKE-OFF

Two (2) Vickers dual 35/25 hydraulic pumps on a Marco DP26 pump drive PTO, Genset #1 port side. This system allows total hydraulic capacity to run 60 gallons of oil per minute at 2000 psi. There is an integral oil flow sensor in the pump that ramps the pumps up from a constant low 200 psi when the genset is running to full capacity when a remote flow valve is manually operated. This single flow valve will send a flow signal to either genset.



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### HYDRAULIC PUMP #2

Two (2) Vickers dual 35/25 hydraulic pumps on a Marco DP26 pump drive PTO, Genset #2 starboard side. As with pump #1, this system allows total hydraulic capacity to run 60 gallons of oil per minute at 2000 psi. There is an integral oil flow sensor in the pump that ramps the pumps up from a constant low 200 psi when the genset is running to full capacity when a remote flow valve is manually operated. This single flow valve will send a flow signal to either genset.

### HYDRAULIC TANK

Two (2) 275 gallon steel hydraulic tanks welded into the engine room wings

### HYDRAULIC VALVES

Walvoil banks

Engine room mounted oil flow splitter allows each system to service deck gear at variable flow rates



### HYDRAULIC LINES/FITTINGS

Stainless Steel Pipe above deck. Flexible lines with metal fittings below deck

## ***DECK MACHINERY***

### BAIT SHED

Fully enclosed aluminum shelter deck. To accommodate for the crane it is divided mid deck. The forward shelter top is gear storage with tub racks. The forward shelter top is equipped with a dogged aluminum access hatch for lifting out product from the fish holds. The forward shelter encloses the hauling station and processing table. The aft shelter has tub racks outboard and a centerline baiting table.

### WAVE WALL

There is a steel, raised wall, welded along the port side bulwark aft of, and integral with, the main cabin.

### HAULING PIT

Kodiak style pit. The deck helm is forward of an aluminum multi-directional haul shoot inset to the starboard bulwark. A deck level Stainless steel, three and a half foot, side roller, and an attached stainless steel Marco hook cleaner are integral with the shoot.

### PROCESSING TABLE

Aluminum table

### FISHING GEAR

Slinky pot longline gear.



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### FISHING MACHINERY

Hansen 8x8 double action pot launcher with dogs  
Mustad hook cleaner  
Marco longline auto baiter  
24" Marco hauler  
Aluminum sorting bins  
Marco King Coiler  
22" Marco crab block and davit



### THE GEAR SETTING RIG AND ACCOUTREMENTS

Aluminum, double setting shoot.

### KNUCKLE BOOM

North American 8-ton extension deck crane with hydraulic Roltzer 2000 winch attached. The tip end and crab pot stabilizer have been recently rebuilt in stainless steel



### REFIGERATION

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

Circulated sea water (crab fishing) or Refrigerated Sea Water RSW (tendering)

## Report of Marine Survey

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### RSW AND/OR FREEZER

Two IMS chillers, 32.5 ton each with Carrier compressors. Stainless manifolds and titanium Hydro Chiller chiller tubes. R-507 gas. Each unit has two (2) control boxes, one at the wheel house helm, one in the compressor room with a 4" refrigerated seawater circulation manifold.

-Two (2) Vertiflo 4" x 4" self priming centrifugal refrigeration manifold pumps.

Two (2) 2" 208 volt condensor pumps





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### CIRCULATION MANIFOLD

The tank circulation manifold is a 6" crab tank circulation system serviced with Two (2) Deming 6" x 6" 20 Hp 208 VAC electric crab pumps that pump raw water from the sea chests. The system has been renewed and rebuilt in it's entirety during the 2021 lay-up.

### REFRIGERATION PUMPS

Condenser pumps: 208 volt Baldor 2 hp motor driving 2" pumps  
Two 4" Vertiflo RSW circulation and Tranvac assist pumps



## ***FISH HOLDS AND HATCH COVERS/PLUMBING***

### HOLDS

Two (2) centerline tanked, insulated, fiberglass fish holds with an approximate reported capacity of 120,000 lbs. bairdi crab.

### HATCH COVERS

Steel bolt-down hatch covers

## **SEINE SKIFF / AUXILIARY WATERCRAFT**

### TENDER/WATERCRAFT

Achilles 11' inflatable LSI 335

### HIN (HULL IDENTIFICATION NUMBER)

ACH00110B111

### ENGINE MODEL

Yamaha 9.9 HP Four Stroke Outboard.

## **CABIN APPOINTMENTS**

### ***INTERIOR***

#### MAIN CABIN ARRANGEMENT

The lower, main cabin is arranged whale back style. The galley and crew accommodations are here, except for two state rooms in the top house. The galley and crew accommodations are on the main deck level and extend up into the fore peak. From aft forward the arrangement is as follows. A port of center deck entry companionway leads to the galley and galley table which are starboard side of the cabin, while to port is the engine room and pilot house companionways, along with a storage closet and head. Centerline aft cabin is a laundry. Farther forward in the main cabin are two crew state rooms that are athwart each other one to port and the other starboard. Ship's stores are kept forward of the staterooms in the fore peak V.

#### GALLEY ARRANGEMENT

The U-shaped galley was located starboard aft cabin



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### DINING ARRANGEMENT

Galley table accomodates eight (8) crew with below bench storage and cabinets above



### ACCOMMODATION ARRANGEMENT

Eight (8). There are two crew state rooms in the main cabin. Each have two bunks. There is a master and a mates cabin in upper pilot house. Each of these uppeer staterooms have two stacked bunks and single vanities.



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### HEAD ARRANGEMENT

One (1) with a Microphor LF210 air flush toilet

### SHOWER ARRANGEMENT

Stall shower in the Head.

### HELM STATION (PILOT HOUSE)

The helm is in the top-house with two helm chairs and remote wing controls. Centerline is a spoked stainless steel ship's wheel forward and a chart table aft.



### INTERIOR BRIDGE SEATING

Two (2) simulated leather pedestal helm chairs

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### INTERIOR CABINETRY & TRIM

The interior Satin finished wood cabinetry and trim appeared serviceable.

### INTERIOR DOORS

Satin finished wood cabin doors.

### INTERIOR STORAGE

The cabinets, lockers, drawers and shelving appeared serviceable, where sighted. There is in the fore peak a ships store. In the entry companionway port side there is a vessel alarm/storage room





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### CEILING HEADLINERS

Headliner material was Formica.

### WALL-LINERS

Wall liner material was walnut wood paneling

### FLOORING

Vinyl in the galley

Carpeted staterooms and helm

### CABIN SOLE FOUNDATION

Steel plate

### COUNTER TOPS

Formica, serviceable

### INTERIOR MIRRORS

Some general de-silvering was observed on some of the interior mirror's reflective coatings.

### GENERAL INTERIOR & SOFTGOODS CONDITION

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

### CHART TABLE

The teak trimmed mahogany chart table is centerline, mid-pilot house, directly aft of the stainless steel spoked helm. It is comprised of four (4) chart storage drawers beneath a solid wood horizontal table



### INTERIOR JOINER WORK COMMENTS

The interior joiner work appeared serviceable.

### INTERIOR BULKHEADS

The interior bulkheads appeared serviceable, where sighted.

### WATER INTRUSION COMMENTS

None sighted.

## ***INTERIOR SYSTEMS & EQUIPMENT***

### LIGHTING

110 volt AC lighting all lights illuminated.

### CABIN HEATING SYSTEM

110 volt AC floor board heaters are installed around the entire cabin. Three (3) 110 volt AC space heaters are installed in the pilot house, at the wing ends and center, upper console. This is additional to the floor board heating found throughout the vessel.

110 volt AC 4' radiant heater in the companion entryway 'mud room' powered up

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### LAUNDRY SYSTEMS

Kenmore stackable washer/dryer

### **AUDIO/VISUAL EQUIPMENT**

#### TELEVISION SYSTEM

Polaroid

#### STEREO SYSTEM

Stereo/CD/Satellite Radio Player, with speakers.

#### SATTELITE RADIO

Sirius

### **GALLEY EQUIPMENT**

#### REFRIGERATION

Amana TR18 V2E-AC refrigerator/freezer

#### FREEZER

The aft cabin bait freezer

#### STOVE

GE 4-burner electric stove with stainless steel weather rails and integral oven



#### EXHAUST HOOD

Broan overhead exhaust hood

#### MICROWAVE OVEN

General Electric Microwave Oven.

#### TOASTER OVEN

Faberware stainless steel four (4) slot toaster

#### COFFEE MAKER

Keurig coffee maker. 110 volt AC stainless steel hot water pot

#### GALLEY SINK

Stainless Steel sink with separate basins.

## Report of Marine Survey

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### PROPULSION & MACHINERY SPACE

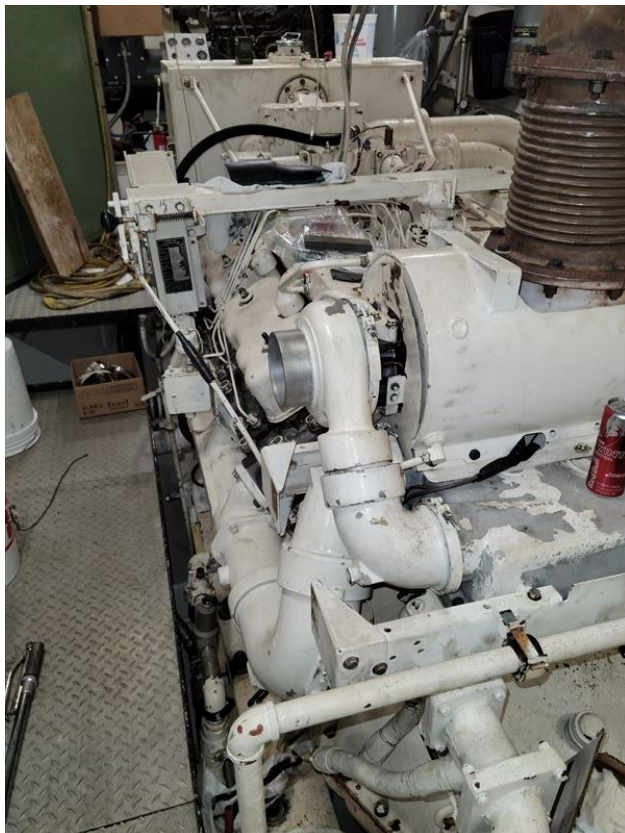
#### *PROPULSION SYSTEM*

##### ENGINE SPACE ACCESS AND LAYOUT

In the portside cabin is a companionway to a vertical entry down expanded metal steps to a diamond plate mezzanine. Centerline is the single main propulsion engine. The bilge manifolds are aft at the bulkhead. The gensets are port and starboard on the wing tanks. The main AC box and transfer switch are starboard side forward. The fresh water systems are port forward. Centerline forward is a third genset below the ship's Quincy air compressors. Back over to port is a work bench and tool chest

##### ENGINE MODEL

Caterpillar D379



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### MANUFACTURE DATE

Placed in service in 1978 rebuilt 2007 and again in 2021

### ENGINE HORSEPOWER

565 horsepower reported

### NUMBER OF CYLINDERS

Eight (8) in a V configuration.

### ENGINE STARTER VOLTAGE RATING

Air start

### ENGINE HOURS

0.0 SMOH

### ENGINE SERIAL NUMBERS

69B1941

### ENGINE INSTRUMENTATION

Main engine instrument gauges were installed at the helm and in the engine room.



### ENGINE ALARM SYSTEM

Audible/visual engine alarms at the helms.

### ENGINE EXHAUST SYSTEM

Steel exhaust to the muffler, insulated in blankets

### ENGINE COOLING SYSTEM TYPE

Raw Water Cooled. The heat exchangers have been newly reconditioned by Seattle Radiators and were being reinstalled during the survey.



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### ENGINE DRIVE BELTS

New

### THROTTLE & SHIFT CONTROLS

System Engineering single lever throttle and gear control

### ENGINE BED MOTOR MOUNTS

Steel longitudinal engine bed stringers with adjustable motor mounts.

### MAIN ENGINE OIL LEVEL

NA (rebuilding)

### MAIN ENGINE COOLANT LEVEL

NA

### SHIFT PULLEYS AND CABLES

Serviceable

### ENGINE BLOCK HEATERS

The engine block heater powered up when tested.

### ENGINE NOTES

There is an after market oil bypass filtration system installed on each engine



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### COMMENTS

The main engine was rebuilt 1991. Currently being rebuilt, 2021

### ***MACHINERY & BILGE SPACE EQUIPMENT***

#### ENGINE SPACE VENTILATION

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

#### ENGINE ROOM AIR BLOWERS

110 volt AC 2000 cfm blower

#### SEACOCKS/SEA-VALVES

None, seachest bilge manifold and butterfly valves.

#### RAW WATER STRAINERS

Y-strainers.

#### HOSES

New

#### HOSE CLAMPS

Stainless steel marine clamps

#### LUBE TRANSFER SYSTEM

208 volt AC oil transfer pump



#### LUBE OIL TANKAGE

Reportedly, 250 gallon Lube Oil Tank.

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### ENGINE OIL PRE-LUBER SYSTEM

NA

### OIL CENTRIFUGE

Oil bypass system with 1 micron filters are installed on all four engines

### WASTE OIL TANKAGE

300 Gallon steel

### SHIP'S AIR COMPRESSOR

Two (2) 208 Volt 2hp Quincy 310 two stage compressors with 80 gallon volume tanks.



### MACHINERY SPACE WATER SUPPLY

Fresh water engine room wash down connection

### TOOL BOX

Craftsman Tool Box installed in the engine room, along with a work bench and vice

## ***TRANSMISSIONS / GEARS / DRIVES***

### DRIVE SYSTEM TYPE

Direct Drive.

### TRANSMISSIONS/GEARS

Caterpillar 7251

### GEAR RATIO

3.95:1

### GEAR SERIAL NUMBERS

074E02199

### GEAR CONTROLS

Systems Engineering

### TRANSMISSION INSTRUMENTATION

Transmission gauges were installed at the helm.

### GEAR COOLERS/HEAT EXCHANGERS

Raw water heat exchangers.

### GEAR FLUID LEVEL

Normal levels were observed on the transmission dipsticks.

### PROPELLER SHAFTS

Two (2) intermediate shafts. Size: 5". Material: Steel.

## Report of Marine Survey

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### SHAFT BEARINGS AND GREASE PIPES

Three bearings with heat monitoring and stainless steel grease tubes

### SHAFT BRAKE

GM Goodrich expanding 20-1/4" x 7" drum

### PROPELLER SHAFT PACKING GLANDS

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

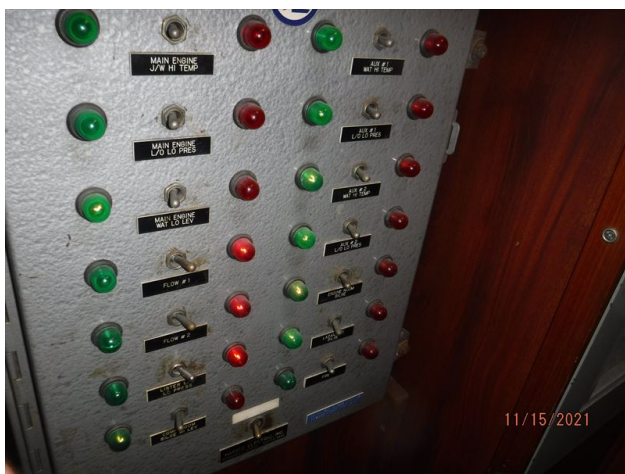
### GEAR NOTES

rebuilt 1991, forward gear/shaft/clutches rebuilt 2021

## ***VESSEL ALARMS LIST***

### GENERAL ALARM PANEL

The general alarm panel boxes are in the companionway vessel alarm closet. There are repeater panels at the pilot house helm.



### HIGH WATER

Engine space and compressor room high water alarms, demonstrated

### HIGH HEAT (STOVE OR MACHINERY)

NA

### GENERAL ALARM

Yes

### CARBON MONOXIDE ALARM

No

## Report of Marine Survey

---

### SMOKE ALARM

Yes

### FIRE ALARM

Three (3). Two (2) engine room, one (1) in the galley

### TANK ALARM

NA

### SHAFT BEARING HIGH TEMP. ALARM

Computerized bearing temperature alarm with digital temperature monitoring displays at the helm



### LOW OIL ALARMS (MACHINERY)

Hydraulic oil level alarm, machinery lube oil alarms (all), transmission low oil/high heat

### LOW WATER/HIGH TEMP (MACHINERY)

Yes

### PUMP ALARMS

The 6" crab pumps have discharge alarms

No flow alarm on the 4" Vertriflo RSW pumps

## FUEL SYSTEMS

### FUEL SYSTEM TYPE

Diesel.

### FUEL TANK MATERIAL

Steel.

### NUMBER OF FUEL TANKS

Eight (8)

### FUEL TANKAGE CAPACITY

14,000 gallons

### FUEL LEVEL MONITORING

The fuel is metered and logged

### FUEL TANKAGE SECURING

Electrically welded to the hull.

### FUEL TANKAGE LOCATION

Port & starboard, outboard along the midship hull sides. The day tank is a 700 gallon tank in the engine room port side. There is a 550 gallon auxiliary wing tank in the starboard aft engine room



## Report of Marine Survey

---

### FUEL FILL LOCATION

Port & starboard amidships side decks, marked for diesel.

### FUEL TANK VENTILATION

Steel pipe goosenecked at the fills

### FUEL FILL HOSE/PIPE

Steel pipe

### FUEL LINES/HOSES

USCG Approved Type A1 fuel lines, where sighted.

### FUEL SHUT-OFF VALVES

Ball valves at the Primary Fuel Filters.

### FUEL MANIFOLD VALVES

Ball or gate valves.



### MAIN ENGINE PRIMARY FUEL FILTERS

Luberfiner LF2000C

### MAIN ENGINE SECONDARY FUEL FILTERS

Engine mounted Secondary Fuel Filters.

Filtration Solution Worldwide purification filters

### GENERATOR PRIMARY FUEL FILTERS

Luberfiner LF200C

### GENERATOR SECONDARY FUEL FILTERS

Engine mounted, spin-on canister type Secondary Fuel Filter.

### FUEL FILTER CONDITION

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

### GENERATOR FUEL FILTER CONDITION

Minimal sediment was observed on the generator Primary fuel filter's sight bowl diffusers. Monitor and service often.

### FUEL COOLERS/HEAT EXCHANGERS

Engine mounted heat exchanger/cooler.

### FUEL TRANSFER SYSTEM

Worthington 208 volt AC fuel transfer pump

## Report of Marine Survey

---



### FUEL POLISHING SYSTEM

LubriFiner LP970-250 prefilter. West Falia fuel centrifuge OTB 2-00-66, demonstrated, rebuilt 1998.



## ELECTRICAL SYSTEMS

### DC ELECTRICAL SYSTEMS

#### DC SYSTEMS VOLTAGE

12 Volt systems. There are three (3) 12 volt genset start batteries and separate chargers for each. There is also a separate 12 volt DC system with one (1) battery that powers the navigation electronics in the wheel house. It is charged with a third constavolt charger.

#### BATTERIES

Four (4) 8D 12 volt Flooded Lead Acid Batteries

#### MAIN DC BREAKERS

NA

#### DC ELECTRICAL PANEL BREAKERS/FUSES

Pilot house electric cabinet

## Report of Marine Survey



### DC ELECTRICAL SYSTEM MONITORS

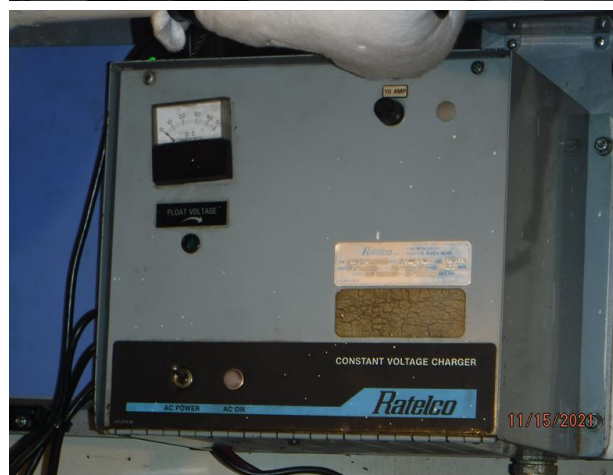
In the constavolts

### BATTERY CHARGERS

One (1) Ratelco 12 volt 30 amp Constavolt Charger, input 120 volt AC

One (1) McCarron 12 volt 40amp constant volt charger

Two (2) Quality Marine VMI 12 volt 35 amp charger, input volts 120/208/220/240



### DC SYSTEM WIRING TYPE

Appeared serviceable for intended use, where sighted.



## Report of Marine Survey

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### **AC ELECTRICAL SYSTEMS**

#### AC SHORE POWER SYSTEM VOLTAGE

208 Volt (Three Phase).

#### AC SHORE POWER INLETS

100 amp. 208 Volt

#### AC SHORE POWER CORDS

100 amp shore power cords

#### AC SOURCES

Shore/gensets

#### AC ELECTRICAL SOURCE SELECTOR SWITCHING

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

#### MAIN AC SHORE POWER BREAKERS

The main AC breaker, transfer switches, AC source selector and breakers were installed in the main electrical panel.



#### AC ELECTRICAL PANEL BREAKERS

AC branch breakers in the main cabin AC electrical subpanel, the Master stateroom sub panel, and under the dash subpanel.





## Report of Marine Survey

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### 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 SHORE POWER PHASE RATING

Three Phase.

### AC SYSTEM WIRING TYPE

Appeared serviceable for intended use, where sighted.

## GENERATORS/AUXILIARY POWER

### *AUXILLIARY ENGINE/GENSET #1*

#### ENGINE MODEL

PORT WING: Caterpillar 3306 4 stroke diesel

#### GENERATOR MODEL

135 Prime Power SR-4

## Report of Marine Survey

---



### ENGINE FUEL TYPE

Diesel.

### NUMBER OF CYLINDERS

Six (6) in-line configuration.

### GENERATOR KILOWATT RATING

135 KW

### GENERATOR ENGINE RPM RATING

1,800 RPM.

### GENERATOR VOLTAGE RATING

245/480

### GENERATOR PHASE RATING

Three Phase.

### ENGINE STARTER VOLTAGE RATING

12 Volt.

### GENERATOR HOURS

83 hours observed on the generator mounted hour meter. SMOH

### GENERATOR SERIAL NUMBERS

Engine #66D23566 (ships papers)

Generator ( Unknown the data tag was removed).

### GENERATOR INSTRUMENTATION GAUGES

Generator instrument panel installed at the generator.

### GENERATOR ALARM SYSTEM

Generator audible/visual alarms. Integral Automatic shutdowns

## Report of Marine Survey

---

### GENERATOR DRIVE BELT

None

### GENERATOR LUBRICATION SYSTEM

Engine mounted mechanical oil pump with spin-on type filter.  
1 micron oil bypass filters

### GENERATOR OIL LEVEL

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

### GENERATOR COOLING SYSTEM TYPE

Dry exhaust/keel cooled

### GENERATOR COOLANT LEVEL

Both the generator's Coolant Recovery Expansion Tanks appeared empty.

### GENERATOR FUEL SYSTEM

Engine mounted fuel pump.

### GENERATOR EXHAUST SYSTEM

Dry exhaust wrapped in blankets

### GENERATOR SPACE VENTILATION

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

### GENERATOR POWER TAKE OFF ATTACHMENT

Marco DP26

### GENERATOR COMMENTS

Port wing: rebuilt 2021

## ***AUXILLIARY ENGINE/GENSET #2***

### ENGINE MODEL

STARBOARD WING: Caterpillar 3306 4 stroke diesel

### GENERATOR MODEL

135 Prime Power SR-4

## Report of Marine Survey

---



### GENERATOR FUEL TYPE

diesel

### NUMBER OF CYLINDERS

Six (6) in-line configuration.

### GENERATOR KILOWATT RATING

135 KW

### GENERATOR RPM RATING

1,800 rpm

### GENERATOR VOLTAGE RATING

120/240 Volts AC.

### GENERATOR PHASE

Three phase

### GENERATOR STARTING VOLTS

12 Volt

### GENERATOR HOURS

13428 hours SMOH on the generator mounted hour meter

### GENERATOR SERIAL NUMBERS

Engine #66D23795

Generator #M4581 3009

### GENERATOR INSTRUMENTS

Installed at the generator

### GENERATOR ALARM SYSTEM

Generator audible/visual alarms. Integral Automatic shutdowns

## Report of Marine Survey

---

### GENERATOR DRIVE BELT

None

### GENERATOR LUBRICATION SYSTEM

Engine mounted mechanical oil pump with spin-on type filter. 1 micron oil bypass filters installed

### GENERATOR OIL LEVEL

Normal levels observed on generator oil sump dip stick

### GENERATOR COOLING SYSTEM

Keel cooled through membranes integral with the keel

### GENERATOR FUEL SYSTEM

Engine mounted fuel pump.

### GENERATOR EXHAUST SYSTEM

Dry exhaust wrapped in blankets

### GENERATOR POWER TAKE OFF ATTACHMENT

Marco DP26

### COMMENTS

The starboard wing was rebuilt in 2003

## **AUXILLIARY GENSET #3**

### ENGINE MODEL

Centerline forward engine room: Isuzu/Lima A4JGI engine

### GENERATOR MODEL

Marathon MagnaPlus model 284PSL1508 Synchronous AC generator.



### NUMBER OF CYLINDERS

Four (4) cylinder

### NUMBER OF CYLINDERS

Diesel

### GENERATOR KILOWATT RATING

35 KW

### GENERATOR ENGINE RPM RATING

1800 rpm

### GENERATOR VOLTAGE RATING

120/208 volts AC

## Report of Marine Survey

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### GENERATOR PHASE RATING

Three phase

### GENERATOR STARTING VOLTS

12 volt

### GENERATOR SERIAL NUMBERS

LM-403734-0505

### GENERATOR HOURS

8697 hours on the generator's engine control box hour meter

### GENERATOR INSTRUMENTS

At the generator

### GENERATOR ALARM SYSTEM

Generator audible/visual alarms. Integral Automatic shutdowns

### GENERATOR DRIVE BELT

Servicable

### GENERATOR LUBRICATION SYSTEM

Spin on style canister with a 1 micron oil bypass filtration system

### GENERATOR OIL LEVEL

Oil levels normal on the stick

### GENERATOR COOLENT LEVEL

Normal in the radiator

### GENERATOR COOLING SYSTEM

Air cooled (generator mounted radiator)

### GENERATOR FUEL SYSTEM

Engine mounted fuel pump

### GENERATOR EXHAUST SYSTEM

Dry

### COMMENTS

Forward centerline: installed 2005

## WATER SYSTEMS

### ***FRESHWATER SYSTEM***

#### WATER TANKAGE MATERIAL

Steel (crash bulkhead)

#### NUMBER OF FRESHWATER TANKS

One (1).

#### WATER TANKAGE CAPACITY

1500 gallon

#### WATER TANKAGE SECURING

Welded crash bulkhead

#### WATER TANKAGE LOCATION

Forepeak

#### WATER FILL LOCATION

Fore deck

#### FRESHWATER PUMPS

Jacuzzi 110 volt AC

## Report of Marine Survey

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FRESHWATER ACCUMULATOR TANK  
Groco Accumulator Tank.

### ***HOT WATER SYSTEM***

WATER HEATER  
Rheem.

WATER HEATER TYPE  
240 Volt AC electric.

WATER HEATER CAPACITY  
40 Gallons.

### ***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  
Steel 250 gallon

BLACKWATER SYSTEM DISCHARGE  
1.5" discharge sludge pump

#### **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***

HEAD SINKS  
One (1) Porcelain sink was installed in the Head.



## Report of Marine Survey

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### STEERING SYSTEMS

#### STEERING SYSTEM TYPE

Vickers/Eaton Hydraulic Power Steering



#### STEERING SYSTEM MANUFACTURER

Wagner Engineering Inc helm pump and ram. Vickers/Eaton power steering manifold. Hough of Seattle, resevoirs.

#### NUMBER OF STEERING STATIONS

Two (2) pilot house wing helm stations and one (1) deck helm station, with various Wagner and Jastrom jog levers

#### STEERING HOSES/LINES

Reinforced flexible hoses with metallic fittings.

#### STEERING SYSTEM ACTUATORS

Wagner model T15 t-rams, rebuilt 2021

#### RUDDER STOCKS

Stainless Steel Rudder Stocks.

#### RUDDER LOG PACKING GLANDS

Flange & bolt type 4" split box packing glands appeared serviceable. Monitor frequently.

#### RUDDER POSITION INDICATOR

Electro-mechanical type with Simrad rudder dials.



## Report of Marine Survey

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### RUDDER INDICATOR DIAL

Simrad dials

### EMERGENCY STEERING SYSTEM

Yes. Stainless steel tiller arm

### COMMENTS

Ram rebuilt 2021

## GROUND TACKLE

### ANCHORS

1000 Pound Navy anchor

### ANCHOR RODE TYPE

Steel anchor chain and galvanized cable

### ANCHOR WINDLASS

Rowe hydraulic anchor winch

## ELECTRONICS & NAVIGATION EQUIPMENT

### RADIO TRANSCEIVERS

Icom IC-M324 VHF Radio.  
Handheld VHF

### LOUD HAILER

Standard Horizon VLH-3000 Loud Hailer

### SINGLE SIDEBAND RADIO

SEA 222 Single SideBand Radio. Powered up.

### COMPASSES

Ritchie 9" magnetic compass

## Report of Marine Survey

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### MONITORS

NEC 17" monitor  
two (2) 24" ViewSonic  
Septre 15"

### AIS (AUTO IDENTIFICATION SYSTEM)

JCR JHS 182, powered up.

### CCTV CAMERA SYSTEM

Two (2) , interfaced with the monitors.

### NAVIGATION COMPUTER

Simrad depth sounder computer  
OLEX Bottom Mapping computer  
AZZA desk top electronic charts computer

### AUTOPILOT

Simrad AP50 Autopilot. Powered up.

### MARINE RADAR

Furuno 1760 24-mile with closed array antenna. Powered up.  
Furuno 1932 Mark-2 48-mile with open array antenna. Powered up.

### GPS (GLOBAL POSITIONING SYSTEM)

Furuno GP31 GPS WAAS/Navigator, powered up.  
Furuno GP30 GPS Navigator, powered up.  
Furuno Satellite Compass SC50

### COLOR FISH FINDER

Simrad ES 80. Powered up.  
Furuno FCV1100L color video sounder. Powered up.

### SATELLITE TELEPHONE

Iridium satellite phone  
Tracphone (satellite phone and dispatch)  
Inreach system

### VESSEL MONITORING SYSTEM

Skymate VMS, powered up.

### BAROMETER

Veraderlich barometer

### SHIP'S CLOCK

Wempe Clock.

## Report of Marine Survey

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### ANTENNAS

The antennas appeared to be well mounted where sighted.

### ELECTRONIC CHART SYSTEM

ECC Globe computerized navigation charts

Nobletec electronic charts

Paper charts

### WATCH ALARM

Helms Alert



### TRANSDUCERS

Simrad 36-2622

Airmar

## SAFETY EQUIPMENT

### ***46CFR28 APPLICABILITY***

#### VESSEL SIZE, # OF PEOPLE AND AREA FISHED

Commercial fishing

77.7'.

Cold waters.

Coastal waters - 100 miles of the boundary line.

8 people.

### ***U.S.C.G. REQUIREMENTS FOR COMMERCIAL FISHING INDUSTRY VESSELS. 46 CFR PART 28***

#### DOCKSIDE SAFETY EXAM

CURRENT

#### WEARABLE PERSONAL FLOATATION DEVICES (33 CFR 175)

Four (4) Type I U.S.C.G. Approved PFD's.

Seven (6) Immersion suits (46 CFR 28.110-25)

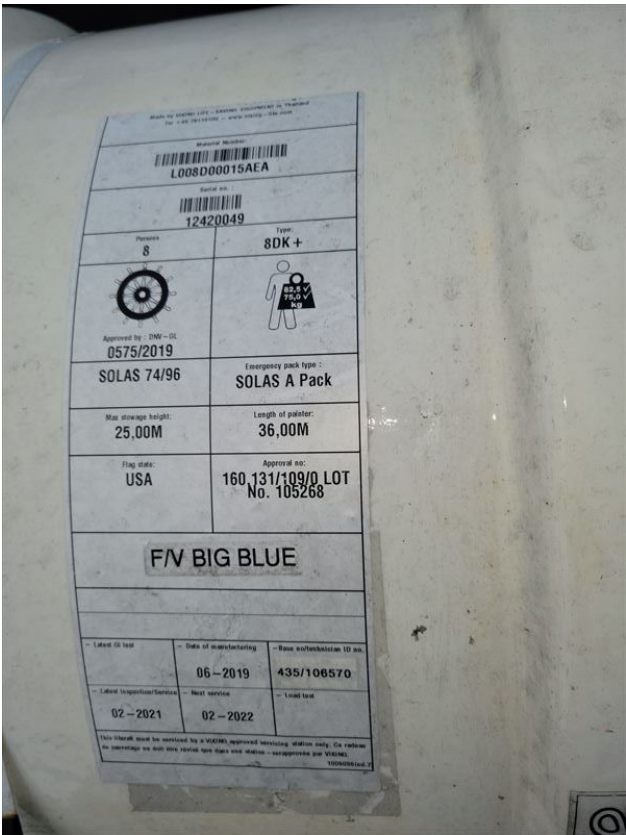
The above devices were checked for proper retroreflective tape, the proper markings, whistles and lights, current dated batteries, zipper operation and orientation

Report of Marine Survey



THROWABLE PERSONAL FLOTATION DEVICES (33 CFR 175)  
Four (4) Type IV - U.S.C.G. Approved Throwable Devices (rings).

LIFE RAFTS 46 CFR 28.120  
Viking Life Saving Equipment 8 Person Life Raft. SOLAS A pack. Inspection due: Feb 2022 HRU expiration: 2023





## Report of Marine Survey

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ESCAPE ROUTES 46 CFR 25.26-50

Clear

VISUAL DISTRESS SIGNALS (33 CFR 175.101)

12 Gauge Day/Night Visual Distress Signals, Hand-Held Flares, parachute flares and Smoke Signals.

SOUND PRODUCING DEVICES (33 CFR 83)

Kahlenbrg Dual Trumpet Air Horn. Powered up.

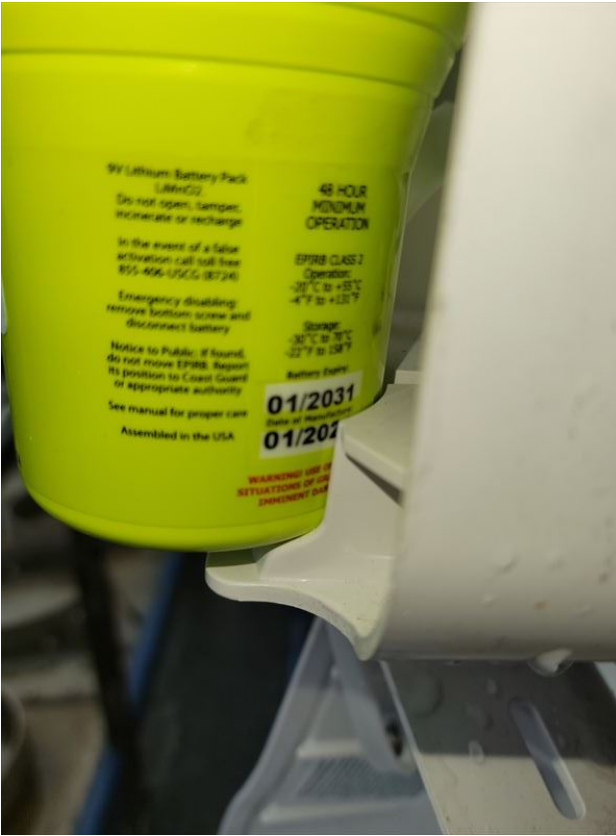
Ship's Bell.

E.P.I.R.B.

ACR Electronics Satellite-2 406 EPIRB (tested). Hydrostatic Release Expiration Date Feb 2023: Registration Expiration Date: 04/01/2023 Battery Expiration Date: 01/2031



Report of Marine Survey



## Report of Marine Survey

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### FIRE EXTINGUISHERS (46 CFR 25)

Ten (10) total. Six (6) A1 B:C II dry chemical and four (4) Halon B:C with current inspection tags

-Pilot house: two (2) dry chemical 5 LB ABC. One (1) 13 LB Halon 1211 ABC

-Main Cabin four (4) dry chemical 4-5 lb. ABC size 1 and II; One (1) 13 LB Halon 1211 ABC size 1

-Engine room two (2) 5 lb Halon size 1

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

Yes

### NAVIGATION LIGHTS (33 CFR 83)

All Navigation Lights illuminated when tested.

### INJURY PLACARD

Provided

### "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"

Found properly displayed in the Galley.

### MSD 33 CFR PART 159.7

Provided; see section water subsection black water

### VESSEL REGISTRATION 46 CFR 67-69

Provided; see section General Information and/or Vessel Documentation section(s)

### DRUG/ALCOHAL TESTS 46 CFR PARTS 4 & 16

Provided

### NAVIGATION

Electronic charts

paper charts. Currently corrected charts of appropriate scale for

safe navigation; and

Currently corrected copy, or applicable extract, of:

U.S. Coast Pilot,

Coast Guard Light List,

Tide Tables,

Tidal Current Tables.

Yes to all

### COMPASS 46 CFR 28.230

Provided, see the section Navigation of this report

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

Provided,

### VHF AND FCC RADIO TELEPHONE LISCENCE 47 CFR PART 80

A FCC radio telephone liscence was found on board the vessel

### EMERGENCY BATTERY

Provided

### BILGE HIGH WATER ALARMS

Three (3) Bilge High Water Alarms. One in each watertight below deck compartment. One in the engine room and two in the lazarette. Each powered up.

### GENERAL ALARM SYSTEM AND PLACARD

Yes

## Report of Marine Survey

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### EMERGENCY INSTRUCTIONS 46 CFR 28.265

Posted

### DRILLS AND INSTRUCTION 46 CFR 28.270

Up to date drill logs in the ship's papers were found

### SAFETY ORIENTATION LOG 46 CFR 28.270

Safety Drill and instruction logs were found in the ship's papers

### FIRST AID SUPPLIES 46 CFR 28.210

A First Aid kit was observed onboard.



### ELECTRIC BILGE PUMPING SYSTEMS

Two (2) Banjo 208 volt pumps in the engine room, demonstrated

Jabsco 110 volt portable sump pump, stored in the welding locker

Two (2) 6" 208 volt Demming with a bilge pickup in the engine room

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

Yes

### FISHING AGREEMENT 46 USC 10601

Blank copies are found in the ship's papers:

### COMMENTS

VISIT THE [FISHSAFEWEST.COM](http://FISHSAFEWEST.COM) WEB PAGE for complete information describing the commercial fishing industry vessel safety rules and regulations as well as a downloadable customized 'checklist' for your vessel and the pamphlet 'Federal Requirements for Commercial Fishing Industry Vessels'

## AUXILIARY SAFETY EQUIPMENT

### FIXED FIRE SUPPRESSION SYSTEM

Co2

### MAN OVERBOARD SYSTEM (MOB)

Lifesling M.O.B. Rescue Sling.

### SEARCH LIGHT

Crab Lights

### CARBON MONOXIDE DETECTORS (ABYC A-24)

NA

### SMOKE DETECTORS (NFPA 302)

Fire alarm system

## Report of Marine Survey

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### VESSEL FIRE ALARM SYSTEM

Yes

### COMMENTS

PLEASE VISIT THE [FISHSAFEWEST.COM](http://FISHSAFEWEST.COM) WEB PAGE

## ***BILGE PUMPING SYSTEMS***

### EMERGENCY BILGE PUMPING SYSTEMS

FloMax 2.5" 208 volt AC

The bilge manifolds

110 volt AC submersible pump

The water manifolds, both the 6" and 2", are plumbed and valved to pump the bilges overboard

## UNDERWATER EQUIPMENT & HULL INSPECTION

### PROPELLERS

72" X 57" Coolidge 3-blade bronze, right hand

### PROPELLER TAIL SHAFTS

Aquamet 22 Stainless Steel, 5" inch diameter.

### PROPELLER SHAFT LOGS

Steel shaft log

### SHAFT STAVE BEARINGS (CUTLESS BEARINGS)

Duramax bronze encased rubber, newly installed 2021



### RUDDER MATERIAL

Steel



## Report of Marine Survey

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### RUDDER MOUNTING

Skeg mounted.

### HULL SEA-STRAINERS

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







### KEEL COOLER

The genset keel coolers are integral with, and inside, the keel

## Report of Marine Survey

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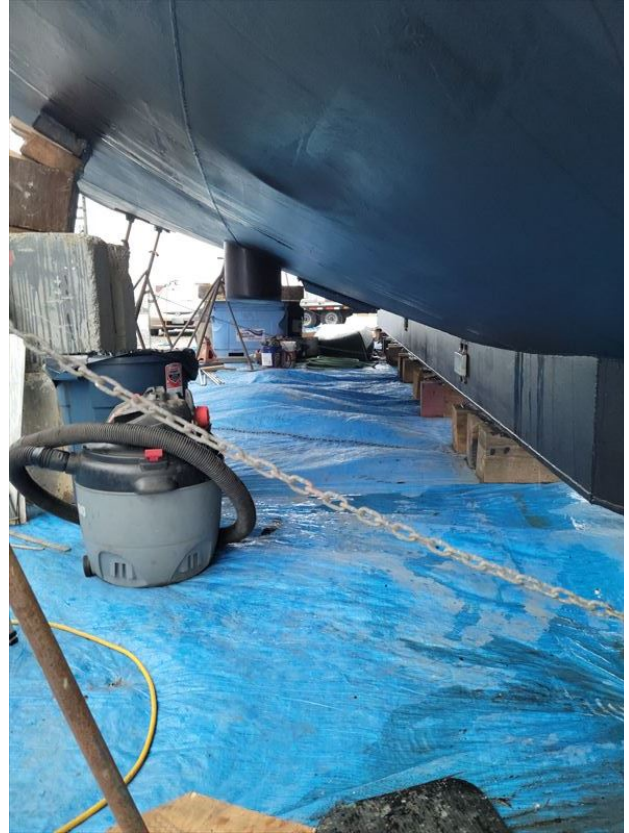


### HULL TRANSDUCERS

The transducers appeared serviceable, where sighted.

## Report of Marine Survey

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### SACRIFICIAL ANODES

540 pounds new zinc annodes twenty seven (27) total

## Report of Marine Survey

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### HULL SKEGS

Steel box skeg

### ANTIFOULING PAINT

Newly applied PPG Amercoat 214 hard paint



## Report of Marine Survey

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### RIGGING & SAILS

#### ***STANDING RIGGING***

##### MAST

Steel A-frame with expanded metal cat-walk. There is a light platform above the catwalk with sodium lights mounted. Aft facing deck lights and picking lights are mounted at the catwalk. The radio antennas are mounted on small auxilliary steel mast mounting poles across the lighting platform



##### MAIN BOOM

Painted steel

#### ***RUNNING RIGGING***



# Report of Marine Survey

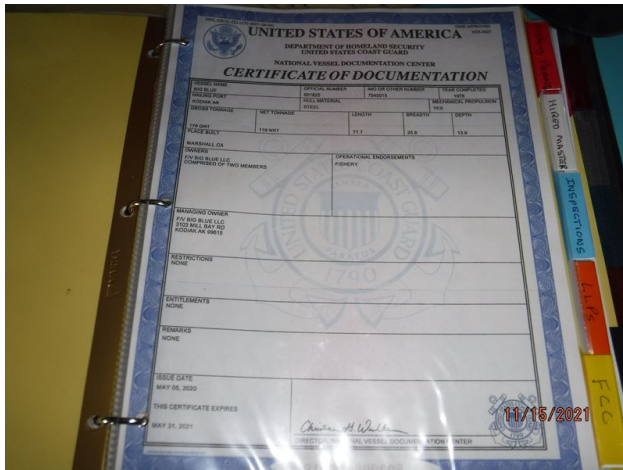
WINCHES

Rotzler 2200 lb.

## VESSEL DOCUMENTATION

DOCUMENTATION COMPLIANCE (46 CFR 67)

HULL NUMBER SIGHTED AND MACHED FED. DOC.



## POSTED USCG DOCUMENTS

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



## Report of Marine Survey

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ADF&G #

37241 current decal

VOLUNTARY DOCKSIDE EXAM DECAL (USCG)

A current dockside exam decal was sighted

## Report Summary

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### 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:

**ABOVE AVERAGE**

## Report Summary

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### 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 Commercial Fishing 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 online sources. I also know many of the brokers and we are on first name basis. 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:

**\$1,850,000**

*One Million, Eight Hundred Fifty 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:

**\$3,000,000**

*Three Million US Dollars*

## Report Summary

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### SUMMARY

In accordance with the request for a Marine Survey of the "Big Blue", 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 November 15, 2021. 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



November 16, 2021

Navtec USSA #h-1201 member, SAM's Member, USCG Third Party Examiner, ABYC Certified Standards Advisor