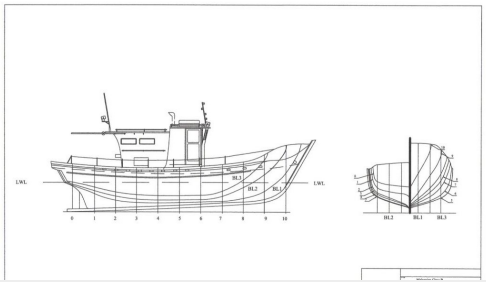
Scott Heitman Marine Survey



1977 60' Steel, Combination Fishing Vessel, Rigged for Summer Salmon Tendering.

"f/v: Demo Man's Fish Boat"

Membership with United States Marine Surveyors Association and American Boat and Yacht Council

944 33rd Ave. #9
Longview, Wa.
98632

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

Report of Marine Survey

Report of Condition/Valuation

"f/v: Demo Man's Fish Boat"

1977 60' Steel, Combination Fishing Vessel, Rigged for Summer Salmon Tendering.

CONDUCTED BY

SCOTT HEITMAN, MASTER MARINE SURVEYOR

SCOTT HEITMAN MARINE SURVEY

PREPARED FOR

Demo Man

September 22, 2019

UNITED STATES SOCIETY OF MARINE SURVEYORS, ABYC, NFPA

INTRODUCTION

PURPOSE & SCOPE

The Survey was performed for vessel condition and valuation purposes, as well as to document build progress and should not be considered to be a full comprehensive Pre-Purchase Type Survey. I will attempt to form a price list so far of all done work and material and structures and systems as pertain to the project to include machinery and gear either installed or obtained and waiting install. The attending Surveyor attended aboard the 1977 Fort Bragg 60' Steel, Combination Fishing Vessel, Rigged for Summer Salmon Tendering. "f/v: Demo Man's Fish Boat", at the request of Demo Man, beginning September 22, 2019. The Survey was requested to determine the physical condition and value of the vessel. No reference or information should be construed to indicate evaluation of the internal condition of engines, transmissions, drives or generators, nor the propulsion system's or the auxiliary power system's operating capacities. Electrical and electronic equipment was powered up and some electrical equipment may have been tested for basic and/or limited function only. The wiring was inspected where accessible and was found to be in generally serviceable condition, unless otherwise noted. A significant amount of wiring could not be observed due to the wiring looms and conduits that transit areas which would require dismantling and removals for their inspection. If a detailed report as to the condition and capacities of the wiring and electrical components is desired, it is recommended that a qualified ABYC Certified Marine Electrical Engineer be engaged. Vessel tankage was visually inspected where accessible. No obvious leakage was observed, unless otherwise noted; however, the tanks were not confirmed to be full at the time of inspection. If a more thorough assessment is desired, the tanks should be filled and checked under full tank status or pressure tested to attest to their condition.

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

CONDUCT OF SURVEY

THE MANDATORY STANDARDS PROMULGATED BY THE UNITED STATES COAST GUARD (USCG), UNDER THE AUTHORITY OF TITLE 46 UNITED STATES CODE (USC); TITLE 33 AND TITLE 46 CODE OF FEDERAL REGULATIONS (CFR), AND THE VOLUNTARY STANDARDS AND RECOMMENDED PRACTICES DEVELOPED BY THE AMERICAN BOAT AND YACHT COUNCIL (ABYC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAVE BEEN USED AS GUIDELINES IN THE CONDUCT OF THIS SURVEY.

DEFINITION OF TERMS

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

APPEARED:

Indicates that a very close inspection of the related item was not possible due to constraints imposed upon the Surveyor (e.g. no power available, inability to remove panels or requirements not to conduct destructive testing, etc.).

SERVICEABLE:

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

POWERED UP:

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

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

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

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

** Per Manufacturer's Documentation
*** Per Registration Documentation
**** Per BUC Book Data

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

SURVEYOR NOTES

TRIAL RUN COMMENTS

A trial run was not performed during the Survey inspection.

OUT OF WATER INSPECTION COMMENTS

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

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.

ULTRASONIC METAL THICKNESS AUDIO GAUGING

Audio gauging was not performed during the conduct of this survey

GENERAL RECOMMENDATIONS

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

GENERAL VESSEL INFORMATION

TYPE OF SURVEY REQUESTED:	Condition and Value/Insurance
DATE AND TIME OF SURVEY:	Sunday September 22, 2019
VESSEL TYPE:	Combination Fishing
VESSEL BUILDER:	Kelley Boat Works
VESSEL DESIGNER:	Unknown
VESSEL INTERIOR DESIGNER:	Unknown
MODEL YEAR:	1977
YEAR BUILT:	1977
VESSEL CLASSIFICATION/STANDARD:	Coastwise Fishery
DOCUMENTED HAILING PORT:	Homer, Alaska
HAILING PORT DISPLAYED:	On The Transom
HOME PORT:	Homer, Alaska
U.S.C.G. DOCUMENTATION NUMBER:	589907
U.S.C.G. DOCUMENTED FOR:	Coastwise, Fishery, Registry.
U.S.C.G. DOCUMENTATION REGISTERED VESSEL OWNER:	Sea Lanes, Inc.
ADF&G#:	(Current).33133
STATE REGISTRATION DECAL NUMBER:	seen NB38145
VESSEL MATERIAL:	Steel
LENGTH OVERALL (LOA):	60'
REGISTERED LENGTH:	52.8'
LENGTH ON DECK (LOD):	*******
LENGTH WATERLINE (LWL):	Measured 42'
BEAM:	Measured approximately 18.7 inside the bulwarks. Deck width
REGISTERED BEAM:	19'
DRAFT:	draft empty 7', draft full load of fish, half fueled, half her water aboard 10' reported
DEPTH:	9.4'
GROSS TONNAGE:	73
NET TONNAGE:	49
LOCATION OF SURVEY INSPECTION:	Wrangell Alaska, Heritage Harbor
LOCATION OF BOTTOM INSPECTION:	Superior Marine, Wrangell Alaska
VESSEL OWNER:	Some Corporation
OWNERS CONTACT INFORMATION:	Phone #: Email:
VESSEL OWNER ADDRESS:	Some where in Alaska
PERSONS IN ATTENDANCE DURING SURVEY:	Scott Heitman (surveyor)
WEATHER CONDITIONS PRESENT:	Overcast rainy

RATING & VALUATION

VESSEL OVERALL RATING:	**AVERAGE**
ESTIMATED MARKET VALUE:	**$630,000**

ESTIMATED REPLACEMENT COST: **$3,000,000**

VESSEL CONSTRUCTION

HULL ARRANGEMENT

VESSEL DESCRIPTION AND LAYOUT

The Predator is a deep draft, steel combination fishing vessel with house forward, a whale backed bow, and raked stem. The bridge is fastened atop the house and is protected by a bow deck mounted wave wall and accessed by a short weather deck and exterior ladder. An aluminum doghouse is mated to the aft bridge bulkhead containing the master's state room with two (2) bunks

HULL DESIGN TYPE

Full displacement hull, hard chine bottom with roll chocks (long hull length on the port and short 4' on the starboard), raked stem, full keel

HULL MATERIAL

Welded steel with welded steel deck and transverse framing

EXTERIOR FINISH

Black hull, white house with grey/black trim

GENERAL EXTERIOR CONDITION

The exterior of the vessel appeared to be well kept, but required a bit of general rust and rust stain removal/detailing.

TRANSOM

Steel bulwark capped with stainless grab rails

BULKHEADS

Steel, serviceable where seen

STRINGERS/TRANSVERSALS

Steel

STEM

Raked stem.

KEEL

Ballast keel, welded into hull's layup schedule.

BALLAST

10 ton of concrete and concreted I beam keel

STRUCTURAL FRAMES

Welded steel bar. See audio sounding report for thicknesses. Most hull stiffness provided by lateral framing

HULL PLATING

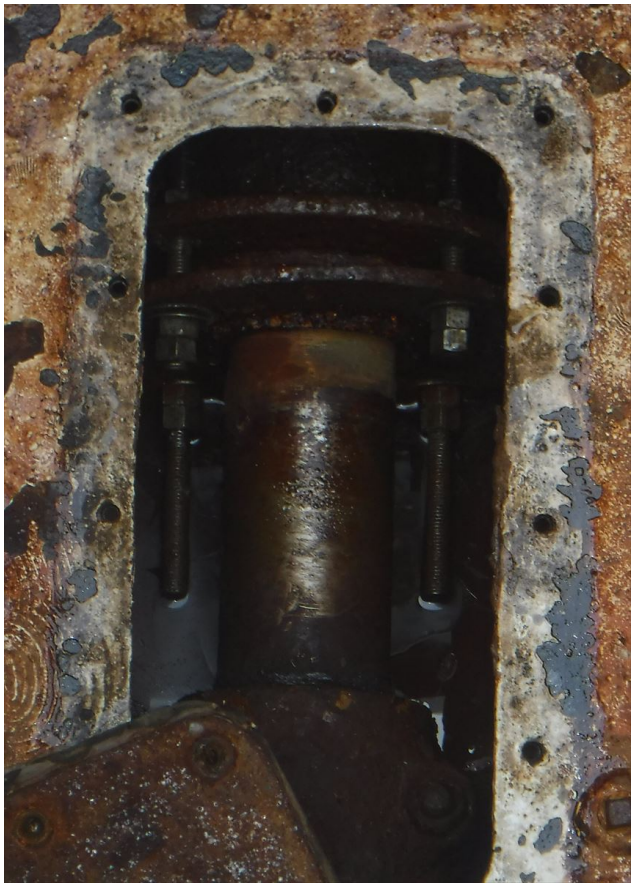
Steel

BILGES

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

GENERAL BILGE CONDITION

Some of the bilge spaces required general cleaning/detailing and some of the bilges were due for paint refinishing. Water collecting in the bilges was approximately 5 gallons



BILGE LIMBER HOLES

None seen

VESSEL LIST

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

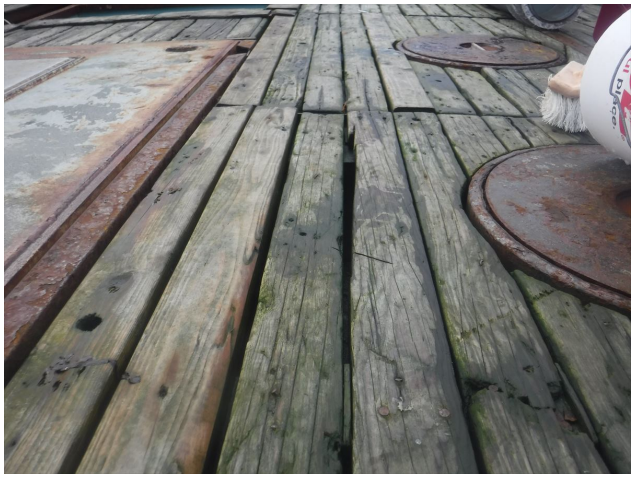
DECK ARRANGEMENT

DECK MATERIAL

Welded steel plating.

FALSE DECK

Raised wear deck, 2x4 Apitong high-density decking wood well worn and in fair condition.



BULWARKS

36" steel

TOE-RAILS

None

RUB-RAILS

Steel

HULL-TO-DECK JOINT TYPE

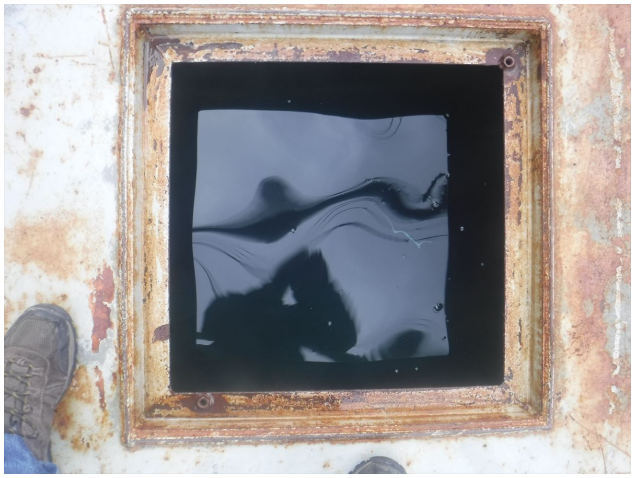
Welded steel

HULL-TO-DECK JOINT REINFORCEMENT

None seen due to limited access

PRODUCT HOLD(S)

2 insulated, tanked, refrigerated 80,000 lbs. front hold; 25,000 lbs. rear, reported. The front hold was pressed up (full of water).




GEAR STOWAGE

Totes on the weather deck. Single tote on the work deck

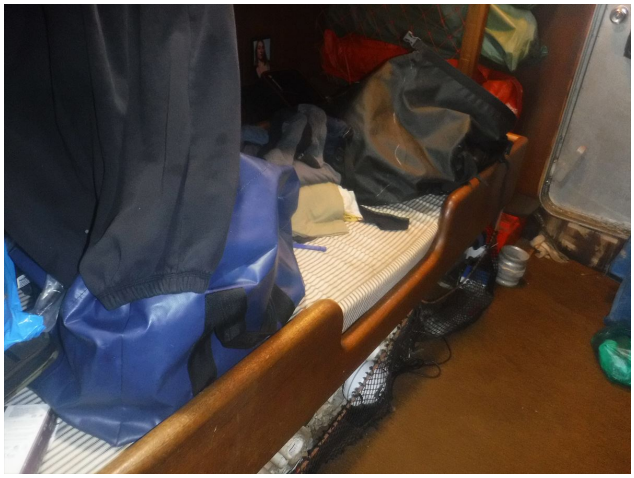
BRIDGE ARRANGEMENT

BRIDGE MATERIAL

Steel w/ aluminum dog house

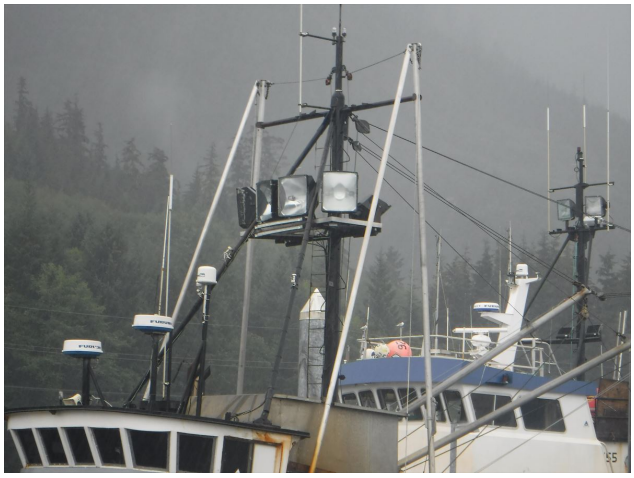
BRIDGE TYPE

Enclosed, pilothouse bridge mounted atop the cabin. Enclosed bridge provided the helm station, chart table, navigation electronics, stateroom, with aft weather deck access surrounded by safety railings

MAST

Stepped Steel painted black a-frame style



EXTERIOR EQUIPMENT

EXTERIOR BRIDGE EQUIPMENT

Stabilizer fish. Davit and hand winch. Refrigeration unit, life raft, and freezer.

GENERAL HARDWARE CONDITION

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

GENERAL CAULKING/SEALANT CONDITION

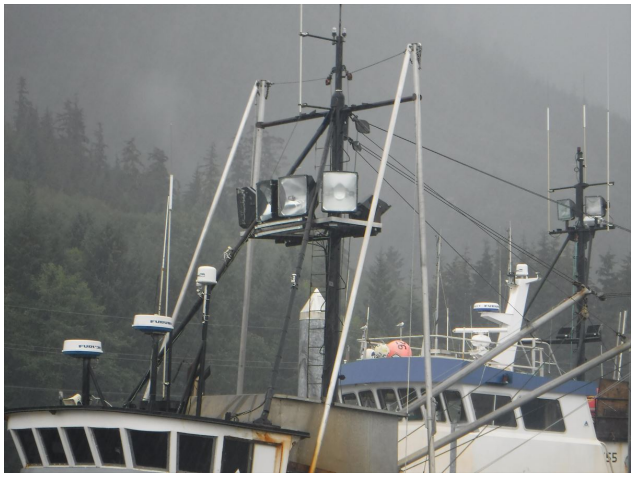
No significant weathering was observed on the vessel's exterior caulking sealants.

WAVE WALL

Welded athwart the bow deck forward of the pilot house and windlass. This breakwater protects the bridge from green water impact.

EXTERIOR LIGHTING

2 Forward Facing L.E.D. light bars L.E.D. docking lights port and starboard. 2 Forward sodiums and 2 fore quarter sodiums. Aft deck lights are 1 sodium and one square L.E.D



EXTERIOR WASHDOWNS

208 3- phase (2) 1 HP 2"

CABIN VENTILATION

It is highly recommended that all emergency escape/egress openings be kept operational & clear of obstructions in case of an emergency evacuation. Provided by the hatches, portholes and companionway doors.

HULL CLOSURES

Lazarette hatch gasket appeared new.

PORTHOLES/PORTLIGHTS

Stainless Steel Fixed portholes were located on the cabin sides. Monitor frequently for signs of leakage. Exterior is showing some rust bleeding from the fastenings. Rectangular portlight under the step leading to the fore deck also some rust bleeds


EXTERIOR DOORS

Aluminum double dutch and dogged door fitted into the aft cabin bulkhead port of center with a single window. Dog house weather deck entrance, aluminum dogged door fitted into the aft aluminum bulkhead


WINDOWS

Lexan cabin windows except the aft cabin bulkhead and door are glass. The cabin windows of the galley are glazed

WINDSHIELD

Scratch resistant lexan

DECK RAILINGS

Stainless steel railings ran from amidships around the aft perimeter of the vessel.

BOW RAILING

Steel railings ran around the whale- back from the bow wave wall forward to the bow roller.

SAFETY RAILING

Steel railings encompassed the aft flybridge weather deck area. Stainless Steel railings ran along the work deck gunwales.

FINDING B-1

HAND RAILS/GRAB RAILS

Hand rails were located at convenient locations of the vessel.

SHELTER DECK

In storage

BAIT SHED

In storage

DAVIT/CRANE

Manually operated, starboard weather deck. (see photo bridge equipment). Primary function is to lift the life raft over the side

DECK DRAINAGE

Adequate deck drainage

CLEATS

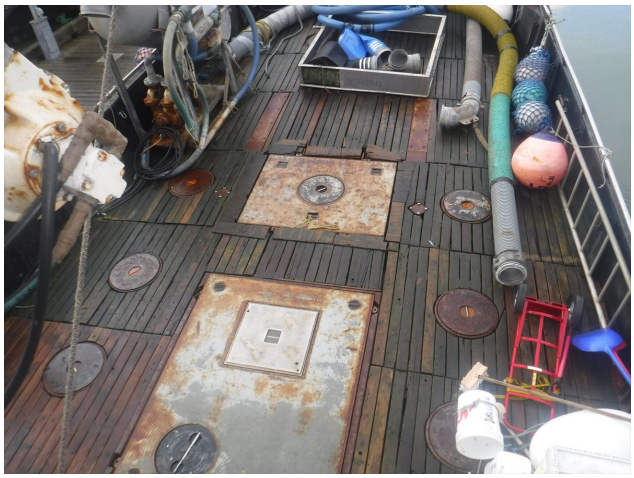
Cleats throughout the vessel were steel horn type.


ANCHOR PLATFORM

Steel

FISH HOLD HATCH COVERS

Round hatches and square main access, all steel.



DECK BOXES

Plastic tote

FENDERS

Various fenders were observed onboard (amount included unknown).

ESCAPE HATCH

Alternate escape route from the berthing quarters forward leads up the companionway stairs through the pilot house. This secondary egress rout leads away from the galley and is behind the fore galley bulkhead interior door leading directly from the berths to the outside via the upper stateroom.

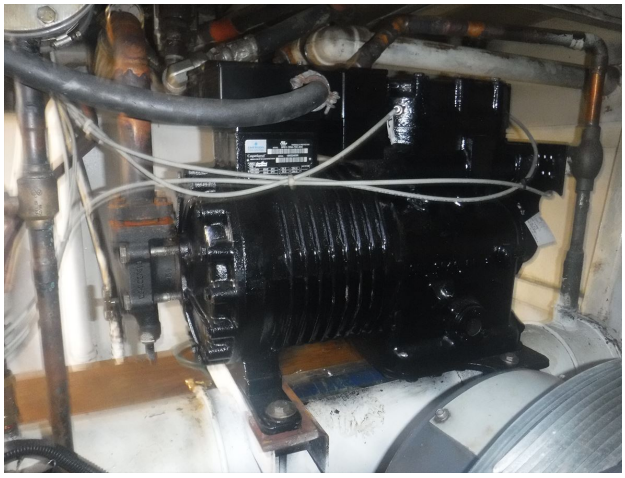
FISHING EQUIPMENT

FISHING EQUIPMENT

Marcomatic mini-Circlematic auto baiter, SS bulwark side roller, hydraulic bait chopper, 10" Ryan herring pump. Longline pot drum. 50 skates longline gear. Pot launcher 16" hauler and auto coiler in storage. Marco crab block. All the afore mentioned listed gear is in storage.

REFRIGERATION SYSTEM(S)

Circulating Seawater Chiller System. Thermal Tec 15 ton. Coplematic compressor, Weinman crab pumps

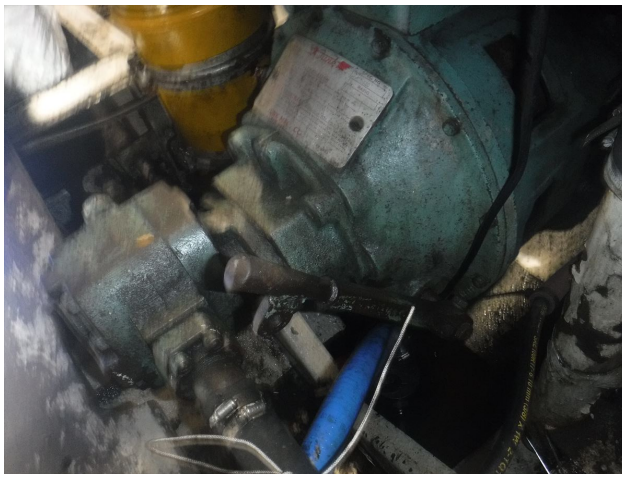


HYDRAULIC FITTINGS/VALVES

Commercial Shearing 55 gallon pump, direct drive on a Funk PTO to the main

Vickers 24 gallon direct drive on Funk PTO to the auxillary.

Fittings and valves appear serviceable. The fittings where seen were all encased in protective petro (Denzo) tape. The tape appears worn and dry. The fittings are due for retaping.



FINDING C-1

WASH DOWNS

2"Teel 1 HP 208 volt (stacked)

MISCELLANEOUS FISHING EQUIPMENT

Transvac and various transvac suction/discharge lines.

COMMENTS

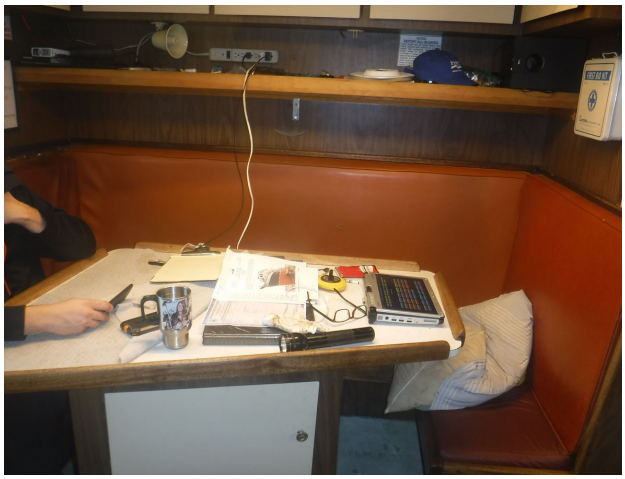
Behind the deck house is a fresh water and fueling station for tendering to smaller catcher vessels

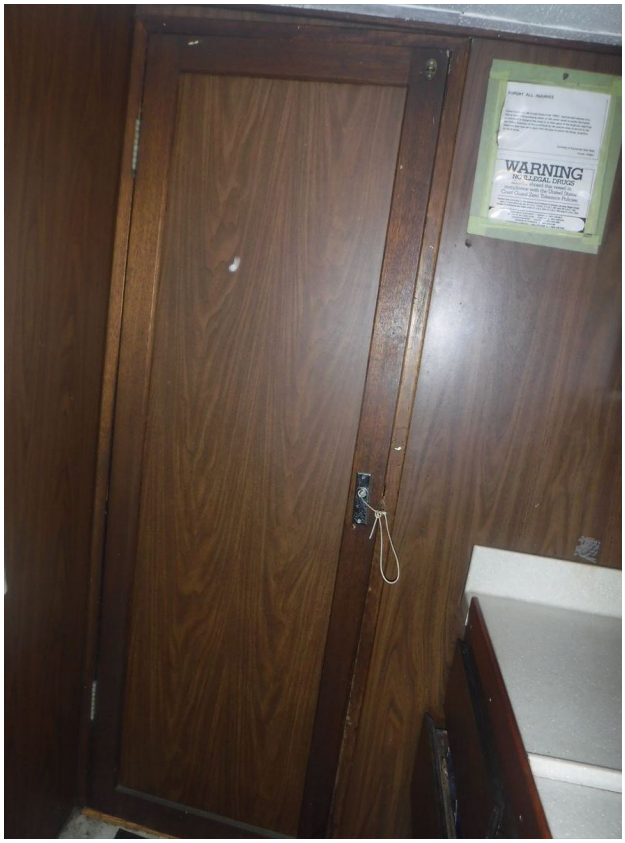
CABIN APPOINTMENTS

INTERIOR

MAIN CABIN ARRANGEMENT

Entering the cabin from the work deck is a galley with refrigerator and pantry immediately to port. Ahead is a galley table. Turning to starboard is the cooks station with stove, counter spaces wrapping around the bulwarks, a double sink, more counter space with overhang coffee pot. Beyond the galley is a bulkhead door leading to the berths, head, and companion way staircase that leads up to the bridge.



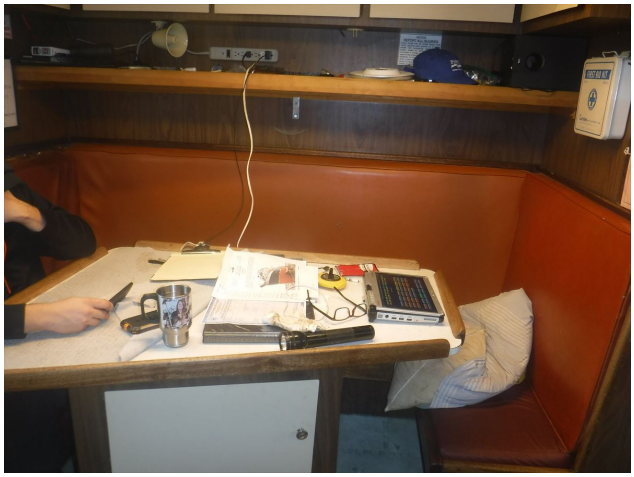


GALLEY ARRANGEMENT

The Galley was located in the aft cabin

DINING ARRANGEMENT

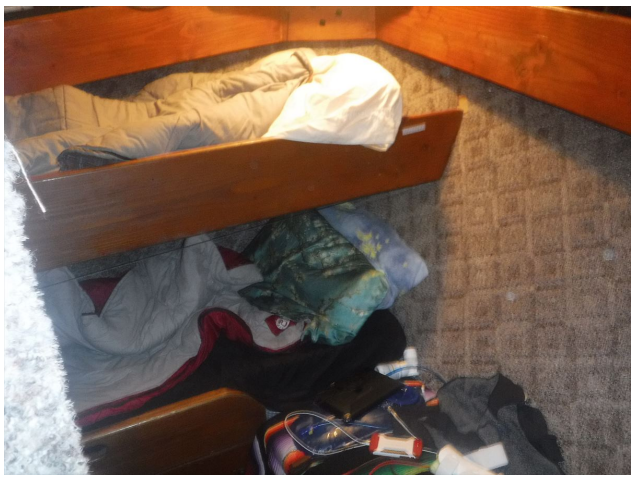
a table is located along the fore galley bulkhead with seating for (8) around the benches and one more on the galley stool



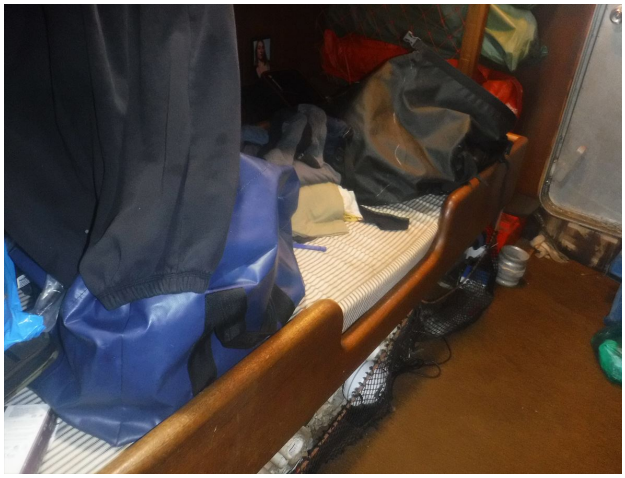

ACCOMMODATION ARRANGEMENT

4 bunks Port & starboard Guest Stateroom Berths with Head. Master stateroom with two(2) bunks. (3) Forepeak crew v-bunks









HEAD ARRANGEMENT

Jabsco 24 volt Head.

SHOWER ARRANGEMENT

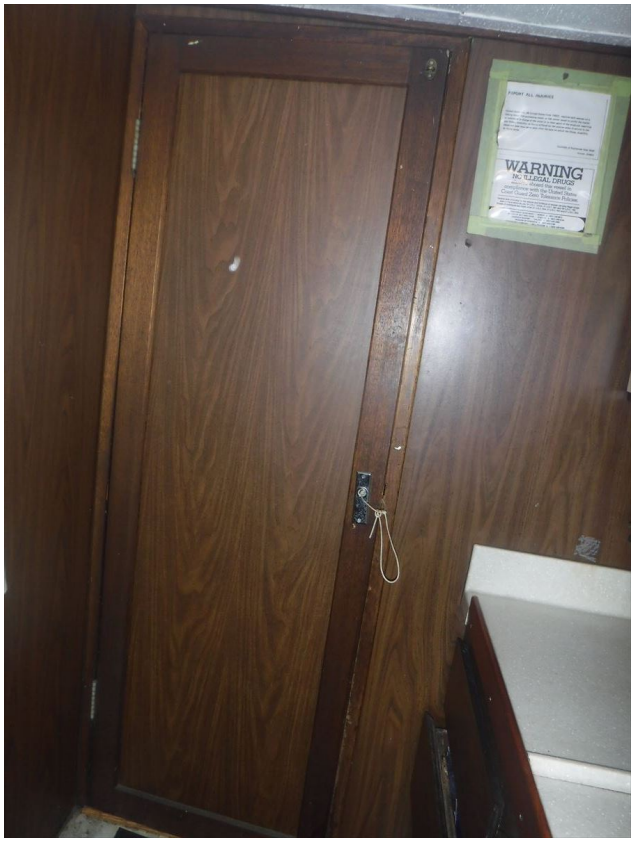
Stall shower in the Head.

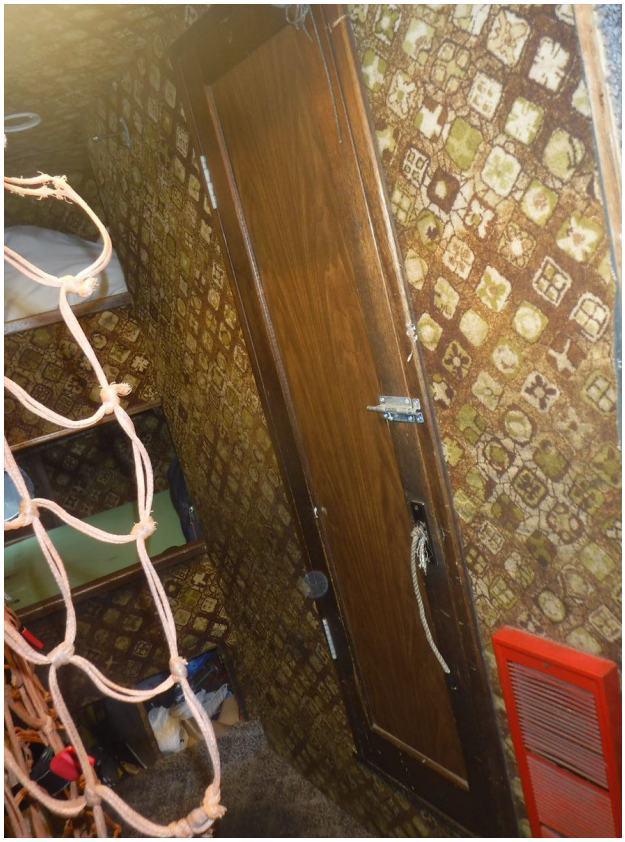
INTERIOR BRIDGE SEATING

Bench seat port side. Pilot chair starboard


INTERIOR DOORS

Gloss finished Cherry veneered cabin doors.





INTERIOR STORAGE

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

CEILING HEADLINERS

Sound proofing panels 2 pound foam insulated

WALL-LINERS

Wall liner was wood paneling

CABIN SOLE FOUNDATION

Steel

COUNTER TOPS

Appeared new


GENERAL INTERIOR & SOFTGOODS CONDITION

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

GENERAL INTERIOR FURNISHINGS & SOFT-GOODS CONDITION

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

INTERIOR JOINER WORK COMMENTS

The interior joiner work appeared serviceable.

INTERIOR BULKHEADS

The interior bulkheads appeared serviceable, where sighted.

WATER INTRUSION COMMENTS

None sighted.

INTERIOR SYSTEMS & EQUIPMENT

LIGHTING

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

CABIN HEATING SYSTEM

110 volt electric heat in the main cabin (5 heaters), hot water base boards in the bridge provided by the Espar. (see hot water exchange section)


AUDIO/VISUAL EQUIPMENT

TELEVISION SYSTEM

Television in the cabin. Sanyo

STEREO SYSTEM
Stereo/CD/Satellite Radio Player, with speakers.

SATTELITE RADIO
XM

CELL BOOSTER
None

GALLEY EQUIPMENT

REFRIGERATION
Refrigerator/Freezer. Hot point. Powered up.

FREEZER
Chest Freezer. 15 cu

STOVE
Whirlpool Gold four (4) burner Stove with Ceramic Glass Cooktop.

MICROWAVE OVEN
Galanz

TOASTER OVEN

Proctor Silex Toaster

COFFEE MAKER

Powered up. Demonstrated.

GALLEY SINK

Stainless Steel sink with separate basins.

GALLEY ACCESSORIES
Crockpot, toaster

PROPULSION & MACHINERY SPACE

PROPULSION SYSTEM

ENGINE MODEL
Detroit 12V-71N

MANUFACTURE DATE
1977 rebuilt 2012

ENGINE HORSEPOWER
375 @ 1500

NUMBER OF CYLINDERS
12

ENGINE STARTER VOLTAGE RATING
24 Volt.

ENGINE HOURS
Total hours on meter: . Reportedly 15000 SMOH (since major overhaul).

ENGINE INSTRUMENTATION
Main engine instrument gauges were installed at the helm.

ENGINE ALARM SYSTEM

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

ENGINE EXHAUST SYSTEM

Steel exhaust to the muffler, insulated in blankets and clear of all woodwork

ENGINE COOLING SYSTEM TYPE

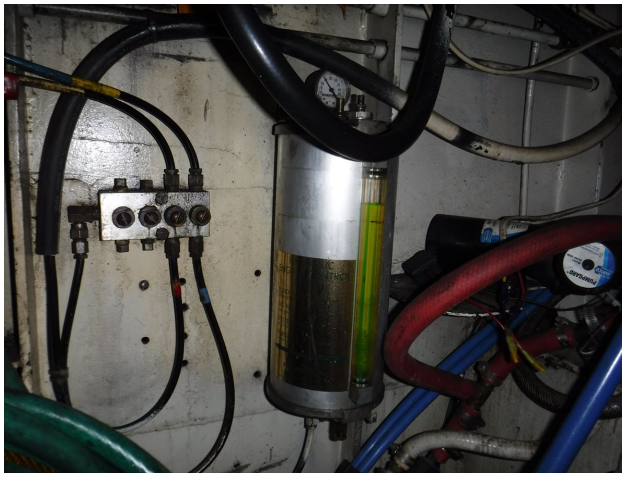
Closed water jacket cooling

ENGINE DRIVE BELTS

Belt & pulley condition was hindered due to poor access. Belt guards hindered access

THROTTLE & SHIFT CONTROLS

Hynautic Hydraulic Throttle & Shift Controls. Full reservoir.



EMERGENCY ENGINE SHUT-DOWN

Demonstrated. 3 shutdown methods. air , governor, or fuel cut-offs.

ENGINE BED MOTOR MOUNTS

Steel longitudinal engine bed stringers with adjustable motor mounts.

MAIN ENGINE OIL LEVEL

Normal levels were observed on the engine sump dipsticks.

MAIN ENGINE COOLANT LEVEL

Normal levels were observed in the Coolant Recovery Expansion tanks.

ENGINE BLOCK HEATERS

Furnace/boiler heated water

COMMENTS

I recommend keeping a maintenance log.

TRIAL RUN INFORMATION

ENGINE CONTROL STATION OPERATION

Engine controls were operated at both helm stations without exception.

COMMENTS

A trial run was not performed. The engine was fired up and idled to check the engine alarm system

MACHINERY & BILGE SPACE EQUIPMENT

ENGINE SPACE VENTILATION

Natural air flow ventilation was provided by the outboard bridge wing's side vents.

SEACOCKS/SEA-VALVES

Sea chests, all demonstrated and working freely. Redundant valving.

HOSES

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

HOSE CLAMPS

I always recommend installing corrosion resistant marine grade stainless steel T-bolt type hose clamps and/or solid banded (non-open slotted) hose clamps where appropriate.

LUBE TRANSFER SYSTEM

Powered up. Manual barrel pump for waste oil transfer

LUBE OIL TANKAGE

Reportedly, 55 gallon Lube Oil Tank.

WASTE OIL TANKAGE

Steel 150 gallon

SHIP'S AIR COMPRESSOR

Speedaire 2HP

MACHINERY SPACE WATER SUPPLY

A freshwater hose connection was located in the forward engine room.

MACHINERY SPACE INSULATION

White perforated vinyl faced foam, thermal & acoustical insulation was installed in the cabin

TOOL BOX

WaterL tool box installed in the engine room.

HYDRAULIC FLUID RESERVOIR TANK
steel 150 gallon, reported

COMMENTS
Lincoln AC/DC arc welder

TRANSMISSIONS / GEARS / DRIVES

DRIVE SYSTEM TYPE
Direct Drive.

TRANSMISSIONS/GEARS
Twin Disc MG-514

GEAR RATIO
4.5:1, reported

GEAR CONTROLS
Hynautic Hydraulic gear controls.

TRANSMISSION INSTRUMENTATION
Transmission gauges were integrated into the main engine instrumentation displays. Also engine mounted.

GEAR FLUID LEVEL
Normal levels were observed on the transmission dipsticks. But not checked while idled in neutral. Oil looked, smelled fresh.

PROPELLER SHAFTS

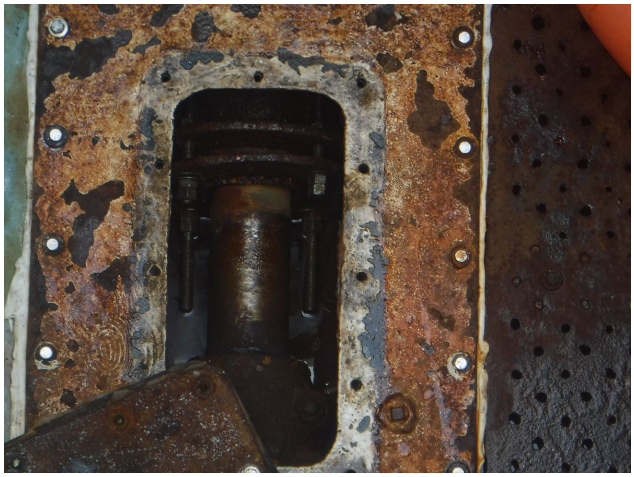
Tail shaft: Size 4''. Material: Stainless Steel
Itermediate shaft: size 4" steel
2 intermediate bearings

PROPELLER SHAFT SEALS

glands and packing

PROPELLER SHAFT PACKING GLANDS

Flange & bolt stuffing box type packing glands. Due to the amount of bilge water I could not check the drip rate. Monitor frequently.



FUEL SYSTEMS

FUEL SYSTEM TYPE

Diesel.

FUEL TANK MATERIAL

Steel.

NUMBER OF FUEL TANKS

Three (3). Unseen in the lazarette

FUEL TANKAGE CAPACITY

Reported, 4800 gallons

FUEL TANKAGE SECURING

Unseen

FUEL TANKAGE LOCATION

Port & starboard, outboard in the engine room. Outboard on center in the lazarette.

FUEL FILL LOCATION

starboard aft side decks

FUEL FILL MARKING

The deck fuel fill fittings were not clearly marked as to fuel type.

FINDING B-2

FUEL TANK VENTILATION

Port & starboard cabin sides.

FUEL FILL HOSE/PIPE

Unseen, fills flush at deck

FUEL LINES/HOSES

USCG Approved Type A1 fuel lines, where sighted.

FUEL SHUT-OFF VALVES

Ball valves at the fuel tanks and the Primary Fuel Filters.

FUEL MANIFOLD VALVES

Ball or gate valves.

MAIN ENGINE PRIMARY FUEL FILTERS

Remote & engine mounted, (spin-on and) canister type filter/water separators.

MAIN ENGINE SECONDARY FUEL FILTERS

Engine mounted Secondary Fuel Filters.

GENERATOR PRIMARY FUEL FILTERS

Canister

FUEL TRANSFER SYSTEM

Tuthill #700A

FUEL PRIMING SYSTEM

Manual fuel priming at the engine's secondary fuel filters.

FUEL POLISHING SYSTEM

Manual utilizing buckets

FUEL SYSTEM ACCESSORIES

Demonstrated. FS 2500 oil bypass filter

ELECTRICAL SYSTEMS

DC ELECTRICAL SYSTEMS

DC SYSTEMS VOLTAGE

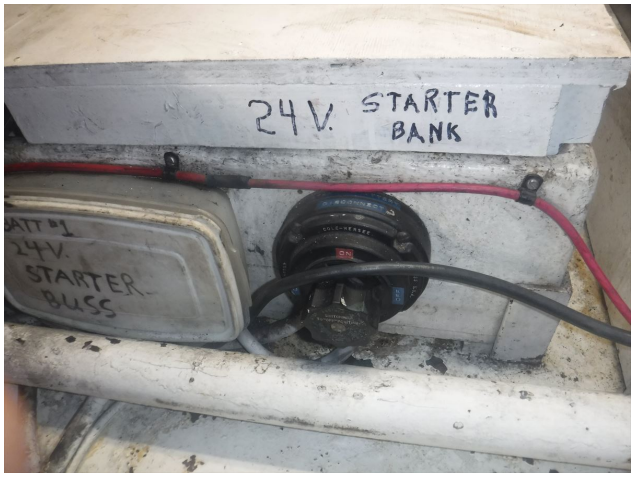
24/12 Volt systems.

BATTERIES

4D8's in banks, starting and ships emergency service. 12 L 16's in 3 additional banks for inverting. 4D Alternate Navigation electronics power (emergency radio power) on the bridge.

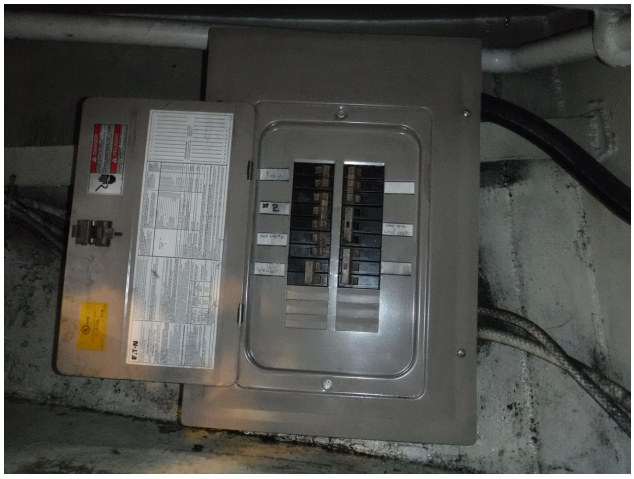
BATTERY SWITCHES

Five (5) rotary switches.



MAIN DC BREAKERS

The main DC breakers were installed in the engine room.



DC ELECTRICAL PANEL BREAKERS/FUSES

DC breakers at the helm.

DC ELECTRICAL SYSTEM MONITORS

Analog DC voltage & amperage gauges in the main electric panel.

BATTERY CHARGERS

ProMariner ProNautic 1250 c3 - 12 volt / 50 amp. Battery Charger. Out back 24 volt charger inverter. 12 volt motorcycle charger on the bridge

MAIN ENGINE ALTERNATORS

Two (2) 24 volt / 60 amp, engine mounted and belt driven.

GENERATOR ALTERNATORS

None

DC VOLTAGE CONVERTERS

Transpo 24/12 DC-to-DC Voltage Converter.

DC SYSTEM WIRING TYPE

Appeared serviceable for intended use, where sighted.

DC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

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

COMMENTS

I always recommend verifying that the AC/DC electrical systems have properly sized & rated overcurrent circuit protection and conductor sizes.

AC ELECTRICAL SYSTEMS

AC SHORE POWER SYSTEM VOLTAGE

120/240 Volt @ 60Hz.

AC SHORE POWER INLETS

50 amp. 120/240 volt shore power inlets. Engine room

AC SHORE POWER CORDS

100 Amp. vinyl shore power cord.

AC SOURCES

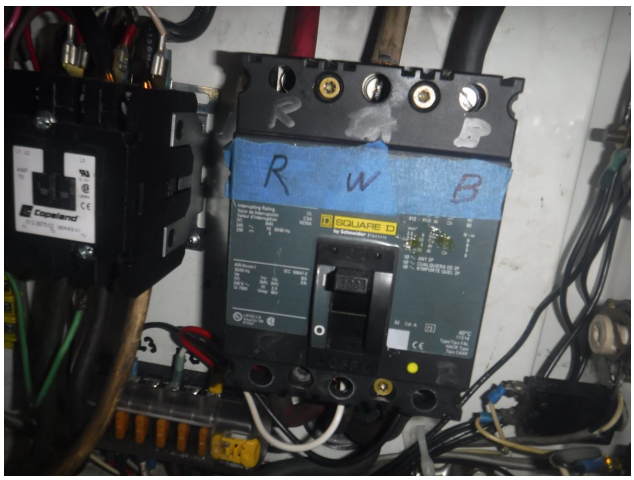
Shor, genset, inverters

AC ELECTRICAL SOURCE SELECTOR SWITCHING

Rotary switch in the engine room

MAIN AC SHORE POWER BREAKERS

The main AC breaker was installed in the engine room



AC ELECTRICAL PANEL BREAKERS

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

AC ELECTRICAL POWER OUTLETS

No gfci breakers installed

FINDING A-1

AC ELECTRICAL SYSTEM MONITORS

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

AC SYSTEM WIRING TYPE

Appeared serviceable for intended use, where sighted.

AC ELECTRICAL/WIRING COMMENTS (ABYC E-11)

I 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.

GALVANIC ISOLATION SYSTEM (ABYC A-28)

Highly recommended if not installed.

COMMENTS

I always recommend having an ABYC Certified Marine Electrician inspect the vessel's electrical system.

GENERATORS/AUXILIARY POWER

GENERATORS

GENERATOR MODEL
Detroit 3-71/Lima

GENERATOR SPEC
Unknown (the data tag was illegible).

GENERATOR FUEL TYPE
Diesel.

NUMBER OF CYLINDERS
3

GENERATOR KILOWATT RATING
30.0 KW

GENERATOR ENGINE RPM RATING
1250

GENERATOR VOLTAGE RATING
120/240 Volts AC.

GENERATOR PHASE RATING
Three Phase.

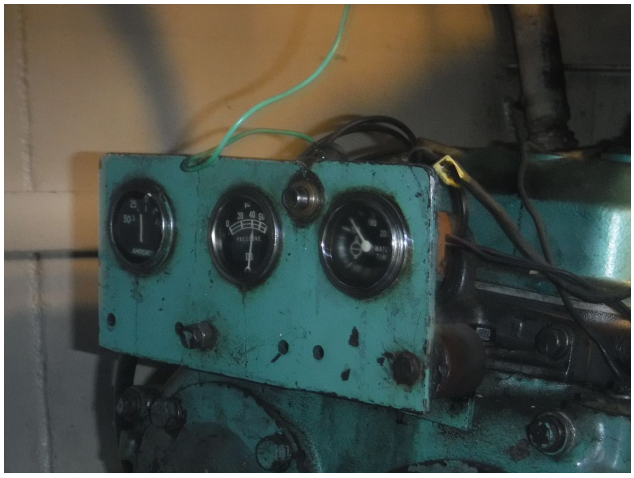
GENERATOR STARTER VOLTAGE RATING
24 Volt.

GENERATOR HOURS
SMOH 14000 hours

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

GENERATOR LABELS & NOTICES
None sighted.

GENERATOR INSTRUMENTATION GAUGES
Generator instrument panel installed at the generator.



GENERATOR ALARM SYSTEM
Generator audible/visual alarms. In general alarm panel

GENERATOR DRIVE BELT
None seen

GENERATOR LUBRICATION SYSTEM
Engine mounted mechanical oil pumps with spin-on type filters.

GENERATOR OIL LEVEL
Genset was running during the survey

GENERATOR COOLING SYSTEM TYPE
Keel kooled

GENERATOR FUEL SYSTEM
Engine mounted mechanical fuel pump.

GENERATOR EXHAUST SYSTEM
Keel cooled

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

GENERATOR COMMENTS
The generator operated with normal voltage and frequency while under load.

INVERTERS & OTHER AUXILIARY POWER

INVERTER SYSTEMS (ABYC E-11, A-31)
Outback 2500 watt
GoPower 600 watt

INVERTER SYSTEM LOCATION & VENTILATION
Go Power 600 watt in the bridge. Outback 2500 watt in the engine room

PORTABLE GENERATORS
Honda EU3000

PORTABLE GENSET FUEL
Gas

WATER SYSTEMS

FRESHWATER SYSTEM

WATER TANKAGE MATERIAL
Fore peak tank is steel , aft tanks are aluminum.

NUMBER OF FRESHWATER TANKS
Three (3).

WATER TANKAGE CAPACITY
reported 1,000 gallons

WATER TANKAGE SECURING
Steel braced aft. Welded into the hull forward

WATER TANKAGE LOCATION
Port & starboard, in the lazarette, fore peak

WATER FILL LOCATION
Port amidships side deck, marked for water.

FRESHWATER PUMPS
Jabsco 24 volt Sensor Max V35, DEMAND TYPE

HOT WATER SYSTEM

WATER HEATER
Sears Kenmore 10 gallon 110v, Force 10 6 gallon

WATER HEATER TYPE
Force 10 Marine Grade fired by the cabin furnace system

WATER HEATER CAPACITY
10 Gallons and 6 gallons.

WATER HEATER HEAT EXCHANGER SYSTEM
Espar HDW-16

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

20 gallon

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.

STEERING SYSTEMS

STEERING SYSTEM TYPE

Hydraulic Power Steering.

STEERING SYSTEM MANUFACTURER

Cetrek

NUMBER OF STEERING STATIONS

Two (2) helm station and waist station.

STEERING HOSES/LINES

Reinforced flexible hoses with metallic fittings. Appeared new

STEERING SYSTEM ACTUATORS

The steering ram appeared to be well secured.

RUDDER STOCKS

Stainless Steel Rudder Stocks. 3"

RUDDER LOG PACKING GLANDS

Flange & bolt type packing glands appeared serviceable. Monitor frequently.

RUDDER POSITION INDICATOR SENDER

Powered up. Demonstrated.

RUDDER INDICATOR DIAL

At each helm. Comnav.

STEERING SYSTEM COMMENTS

What appeared to be hydraulic steering fluid residue (possible leakage) was observed in the bilge under the lazarette steering ram.

GROUND TACKLE

ANCHORS

Danforth 500 pound Galvanized Anchor.

ANCHOR RODE TYPE

30 fathoms 5/8 chain, 60 fathoms 3/4" steel cable
TOTAL RODE: 90 FATHOMS (540 ft)

ANCHOR WINDLASS

Thompson hydraulic

COMMENTS

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

ELECTRONICS & NAVIGATION EQUIPMENT

VHF RADIOS

Standard Horizon Explorer VHF Radio.
SEA 156

LOUD HAILER

Raymarine RAY-430 Loud Hailer.

SINGLE SIDEBAND RADIO

SEA 235 Single SideBand Radio.

COMPASSES

(2) T Ritchie 6" Compasses, compasses swung, providing current deviation cards.
Comnav 5"

MONITORS

Sceptre powered up.

AIS (AUTO IDENTIFICATION SYSTEM)

COMAR SYSTEMS CSB200

NAVIGATION COMPUTER

Rose point. Olex

AUTOPILOT

Demonstrated. Powered up.
COMNAV2001

MULTI-DISPLAYS

MICROVISION MTV-7SIRV6

MARINE RADAR

navnet furuno 36 Mile Marine Radar, with Closed Array Radar Antenna.
Furuno 1731

GPS (GLOBAL POSITIONING SYSTEM)

Garmin GPSmap 182. (4)
Furuno GP32

COLOR FISH FINDER

Furuno FCV-295 Color Video Sounder.

SATELLITE TELEPHONE

Iridium Satellite Phone. Powered up. Demonstrated. Motorolla KVH

INTERCOM SYSTEM

Powered up. Demonstrated. Ratheon

BAROMETER

Quartz Barometer.

ANTENNAS

The antennas appeared to be well mounted where sighted.

STEREO SYSTEM

Powered up.

OTHER ELECTRONICS

midland CB
bottom mapping computer and software by Olex
Krupp echogragh paper machine
printer
watch alarm

SAFETY EQUIPMENT

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

WEARABLE PERSONAL FLOATATION DEVICES (33 CFR 175)

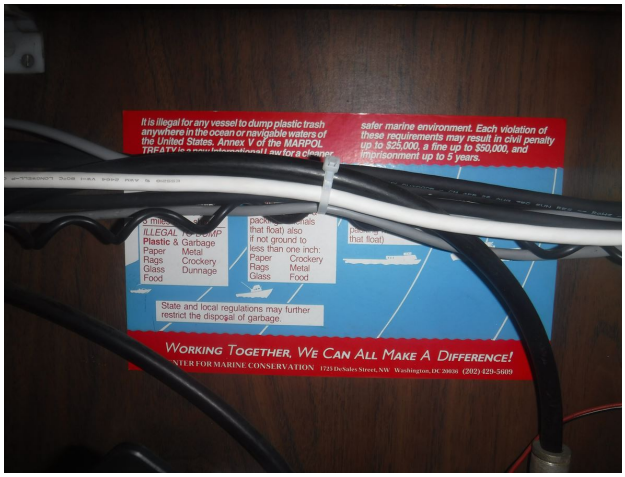
Immersion suit (46 CFR 28.110-25) (6), Eight (8) Type II U.S.C.G. Approved PFD's.

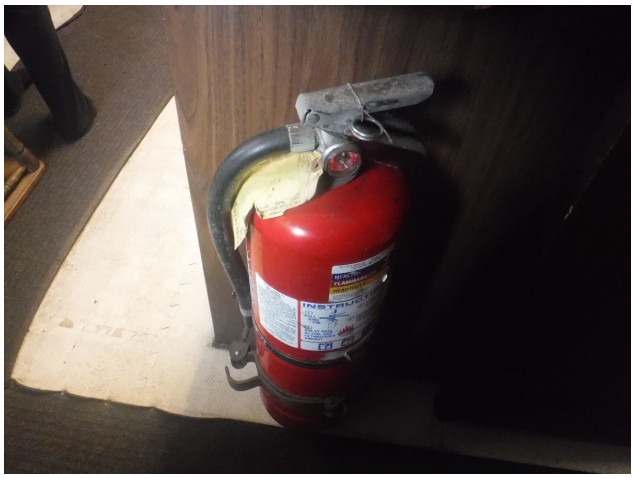
THROWABLE PERSONAL FLOTATION DEVICES (33 CFR 175)

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

FIRE EXTINGUISHERS (46 CFR 25)

Six (6) Type ABC-I 2.5 lb. Dry Chemical.




VISUAL DISTRESS SIGNALS (33 CFR 175.101)

Day/Night Visual Distress Signals were Hand-Held Flares. Adequate number of current dated flares observed. 12 Gauge Day/Night Visual Distress Signals.

SOUND PRODUCING DEVICES (33 CFR 83)

12 Volt DC Electric Air Horn. Powered up.

NAVIGATION LIGHTS (33 CFR 83)

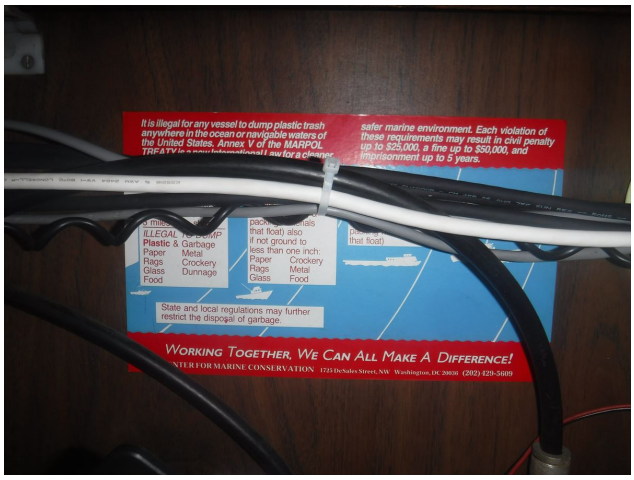
mast fishing (red), anchor (white) All Navigation Lights illuminated when tested.

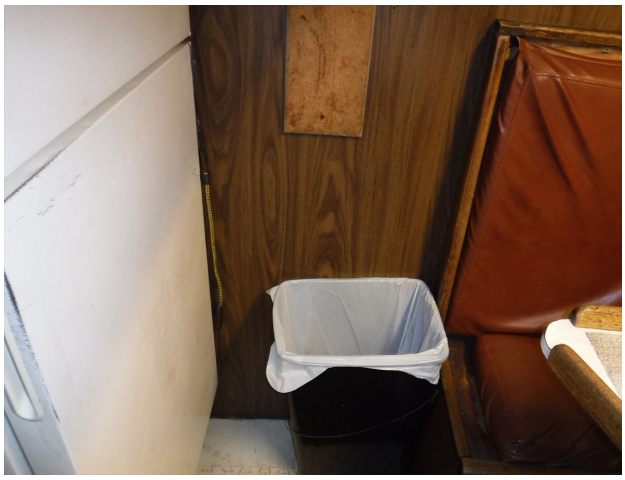
"NO OIL DISCHARGE" PLACARD (33 CFR 151/155)

Found properly displayed.

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

Observed on board, but may be not properly displayed. Properly display if necessary.





FINDING C-2

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

Found properly displayed in the Galley.

COMMENTS

It is the requirement of many insurance underwriters and pools that vessels display a current USCG VOLUNTARY DOCKSIDE EXAM STICKER. SIGHTED

AUXILIARY SAFETY EQUIPMENT

FIXED FIRE SUPPRESSION SYSTEM

FM-200 Fixed Fire Suppression Tank in the engine compartment. Automatic thermal and manual activation, with override switch.

BILGE HIGH WATER ALARMS

Test sounded bilge switch in the Lazarette, Seawitch in the engine room bilge. Both bilges are continuous

LIFE RAFTS

Viking Life Saving Equipment 10 Person Life Raft. New 2019

E.P.I.R.B.

A current battery tag was observed. Current battery and inspection tags were observed. ACR

MAN OVERBOARD SYSTEM (MOB)

Lifesling M.O.B. Rescue Sling.

FIRST AID SUPPLIES

Two (2) First Aid kits were observed onboard.

CARBON MONOXIDE DETECTORS (ABYC A-24)

Kidde Carbon Monoxide/Smoke Detector. Test sounded.

SMOKE DETECTORS (NFPA 302)

One (1) Smoke Detector. Test sounded.

VESSEL FIRE ALARM SYSTEM

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

VESSEL SAFETY PLAN

Posted in the galley

ADDITIONAL SAFETY EQUIPMENT

Zoll defibrulator

COMMENTS

PLEASE VISIT THE FISHSAFEWEST.COM WEB PAGE

BILGE PUMPING SYSTEMS

ELECTRIC BILGE PUMPING SYSTEMS

Simco 1 1/4" 110 volt, seen, untested.
Rule 3500 GPH automatic 24 volt Lazarette
4 208 volt crab pumps on a manifold may be diverted from crab sump/washdown to bilge pumping
The pumps on auto switches were unseen due to access except for the pump in the lazarette.
the pumps auto switches are reported but were not demonstrated. The high water alarm float switch was demonstrated

MANUAL BILGE PUMPING SYSTEMS

55 gallon barrel pump

EMERGENCY BILGE PUMPING SYSTEMS

Two Teel 2" 208 volt Electric/ Emergency Bilge Pumping System with manifold. Two Weinman 5" 208 volt crab pumps with manifold

COMMENTS

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

CRAB PUMPS

(2) Teel 2" 208 volt. (2) Weinman 5"x 4" 208 volt

UNDERWATER EQUIPMENT & HULL INSPECTION

PROPELLERS

Bronze, right hand 3-blade, 42 pitch note some slight impact damage.

FINDING C-3

RUDDER MATERIAL

steel

RUDDER MOUNTING

Skeg mounted.

ANTI-ROLL CONTROL STABILIZER SYSTEM

fixed roll chocks port and starboard

HULL TRANSDUCERS

The transducers appeared serviceable, where sighted.

SACRIFICIAL ANODES

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

ANTIFOULING PAINT

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

FINDING C-4

HULL SURFACE COMMENTS

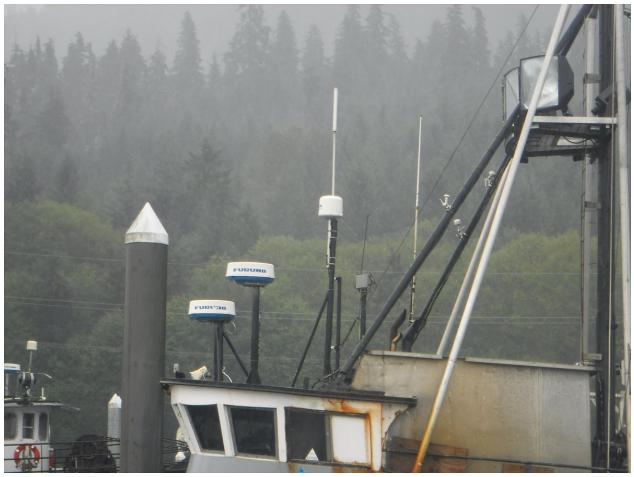
Overall the hull shell appeared to be sound

RIGGING & SAILS

STANDING RIGGING

MAST

Steel Mast. A-frame style. Has a light platform 3/4 of its height with sodium lights mounted. Above are antenna spreaders and fishing red, anchor white lights. Forward of the a-frame mounted atop the pilot house are three auxiliary, masts two with radar array platforms, and the tallest to which is mounted various antennae. (3) GPS antennae are mounted on the fore a-frame struts.




MAST STEP

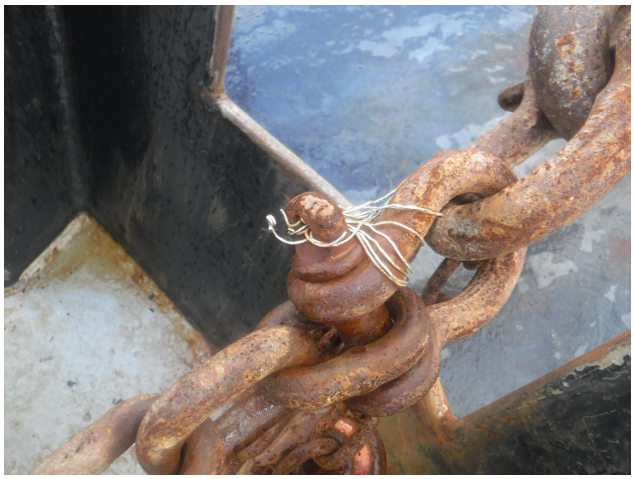
The main mast is stepped on the weather deck aft on the cabin roof. The auxiliary antennae are all stepped to the pilot house roof.

BOOM

2 Aluminum booms rigged with lifting, topping and vanging winches.

RIGGING CLEVIS PINS & COTTER PINS

appeared serviceable moused as per good marine practice

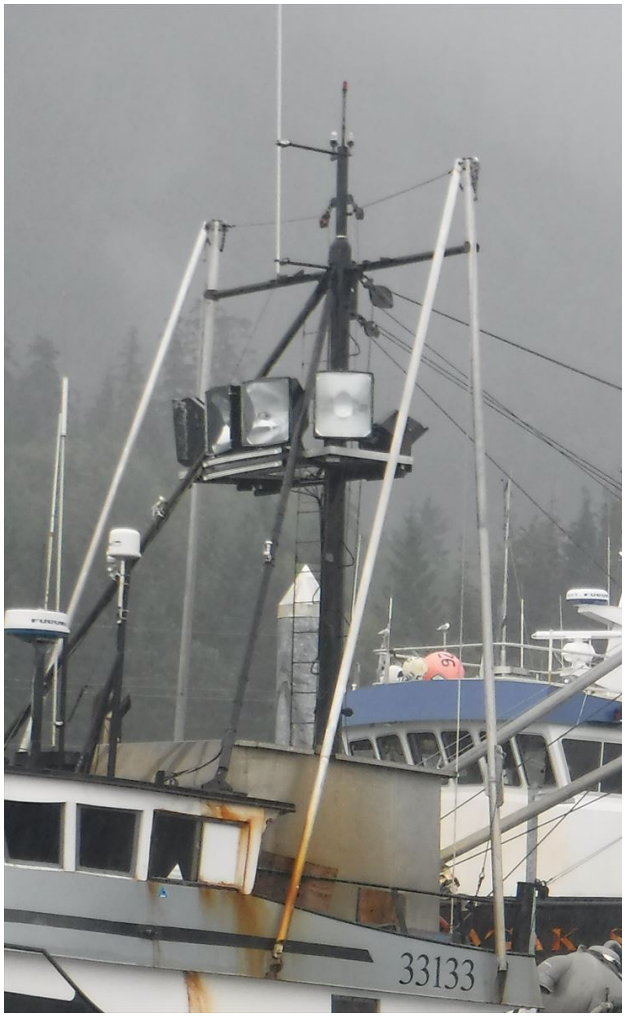


COMMENTS

The vessel is currently rigged for fish tendering. Rigging inspection was performed from deck level.

STABILIZER POLES

Aluminum poles, flybridge mounted with stiff arms at the house top. Stabilizer fish



RUNNING RIGGING

TOPPING LIFT

The Boom's Topping Lifts appeared serviceable.
Seahorse S4-5
Bloom S-8

VANGING WINCHES

on port and starboard aft cabin bulkhead, Kinematic TY-6's

SWIVEL BLOCKS

Heavy duty red snatch blocks (steel)

WINCHES

2 Pullmaster PL-4, Powered up.

VESSEL DOCUMENTATION

DOCUMENTATION COMPLIANCE (46 CFR 67)

HULL NUMBER SIGHTED AND MATCHED FED. DOC.

STATE REGISTRATION COMPLIANCE (33 CFR 173)

The vessel's State Registration decal was CURRENT

ADF&G #

33133

VOLUNTARY DOCKSIDE EXAM DECAL (USCG)
A current dockside exam decal was sighted

STABILITY LETTER
Stability letter was found on board

Findings & Recommendations

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 it's value.

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

Deficiencies will be listed under the appropriate heading:

A. FIRST PRIORITY/SAFETY AND COMPLIANCE FINDINGS

B. SECOND PRIORITY/FINDINGS REQUIRING TIMELY ATTENTION

C. SURVEYOR'S GENERAL FINDINGS AND OBSERVATIONS

A: SAFETY DEFICIENCIES

AC ELECTRICAL POWER OUTLETS

No gfci breakers installed

FINDING A-1

There were no GFCI protected AC outlets observed onboard.

RECOMMENDATION

Replace the outlet, as necessary.

B: OTHER DEFICIENCIES REQUIRING ATTENTION

SAFETY RAILING

Steel railings encompassed the aft flybridge weather deck area. Stainless Steel railings ran along the work deck gunwales.

FINDING B-1

No protective railings around the mast work platform

RECOMMENDATION

fabricate and mount safety rails around the platform

FUEL FILL MARKING

The deck fuel fill fittings were not clearly marked as to fuel type.

FINDING B-2

The fuel fill fittings were not marked for diesel (labeled "fuel").

RECOMMENDATION

Label fuel fills to identify as fuel fill.

C: SURVEYOR'S NOTES & OBSERVATIONS

HYDRAULIC FITTINGS/VALVES

Commercial Shearing 55 gallon pump, direct drive on a Funk PTO to the main
Vickers 24 gallon direct drive on Funk PTO to the auxillary.
Fittings and valves appear serviceable. The fittings where seen were all encased in protective petro (Denzo) tape. The tape appears worn and dry. The fittings are due for retaping.

FINDING C-1

Denzo taping on fittings appear to be losing its protective oils, drying out

RECOMMENDATION

rewrap fittings and valves or replace and wrap as needed

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

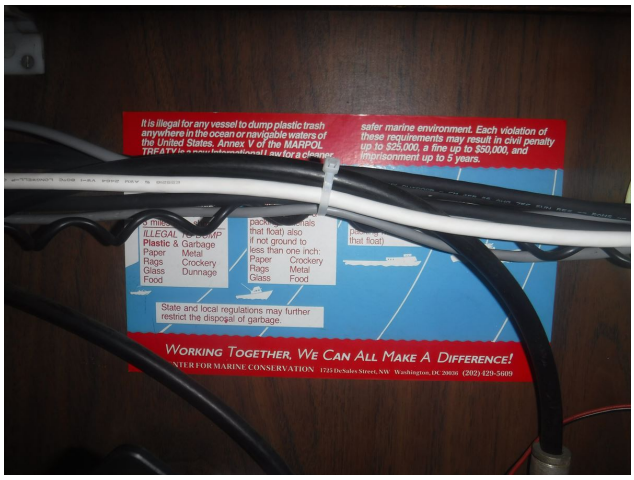
Observed on board, but may be not properly displayed. Properly display if necessary.

FINDING C-2

A "Garbage Disposal Rules" Placard was observed onboard. Displayed on the bridge

RECOMMENDATION

Display approved Pollution Placard to comply with USCG regulations for Trash dumping and plan (33 CFR 151.59). Required on vessels over 26' in length. Investigate further



PROPELLERS

Bronze, right hand 3-blade, 42 pitch note some slight impact damage.

FINDING C-3

The port propeller blade had an impact ding.

RECOMMENDATION

Investigate further, and recondition the propeller as necessary.

ANTIFOULING PAINT

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

FINDING C-4

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

RECOMMENDATION

Clean, prepare and repaint, as necessary.

Read the USCG pamphlet Federal Requirements for Commercial Vessels as found on the web site Fish safe west Http://fishsafewest.info/PDFs/FederalRequirementsforCommercialFishingVessels_2009.pdf.. You can generate the safety (dockside exam)checklist persuint to your particular vessel. Download it from www.fishsafewest.com recommended

SUMMARY

VESSEL CONDITION

incomplete overall, excellent so far It is the Surveyor's experience that develops an opinion of the OVERALL VESSEL RATING OF CONDITION, after the Survey has been completed and the findings have been organized in a logical manner.

The grading of condition developed by BUC RESEARCH and accepted in the marine industry for a vessel at the time of Survey, determines the adjustment to the range of base values in the BUC USED BOAT PRICE GUIDE for a similar vessel sold within a given time period, as a consideration to determine the Market Value.

The following is the accepted Marine Grading System of Condition:

''EXCELLENT (BRISTOL) CONDITION'', is a vessel that is maintained in mint or bristol fashion (usually better than factory new, loaded with extras, a rarity).

''ABOVE AVERAGE CONDITION'', has had above average care and is equipped with extra electrical and electronic gear.

''AVERAGE CONDITION'', ready for sale requiring no additional work and normally equipped for her size.

''FAIR CONDITION'', requires usual maintenance to prepare for sale.

''POOR CONDITION'', substantial yard work required and devoid of extras.

''RESTORABLE CONDITION'', enough of hull and engine exists to restore the boat to usable condition.

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

AVERAGE

Report Summary

STATEMENT OF VALUATION

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

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

a. Buyer and seller are typically motivated.

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

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

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

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

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

$630,000

Six Hundred Thirty 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

SUMMARY

In accordance with the request for a Marine Survey of the "f/v: Demo Man's Fish Boat", 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 September 22, 2019. 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,
Master Marine Surveyor