

# **Marine Consultants, Inc.**

## **Marine Surveyors and Consultants**

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## **CONDITION AND VALUATION SURVEY**

**File No. S320121D**

*This report is prepared subject to the terms and conditions attached or on the reverse side of the last page.*

Vessel Name: BOUNDARY Date of Survey: January 2 & 14, 2021  
Home Port: Hailey, ID Official No.: 1028331 Hauled: 01/02/2021  
Location of Survey: Seaview Boatyard Fairhaven and Squalicum Harbor Afloat: 01/14/2021  
Marina, Bellingham, Washington  
Requested by: Sebastian Sears  
Owner: Same  
Builder: Capital Yachts Designer: Wm. Garden Model Year: 1988  
Type of Vessel: Gulf 32 Displacement: Unknown  
Hull No.: CPY00256H788 LOD: 32' LWL: 25' Beam: 10' Draft: 5'-2"

*Note: The specifications noted for this vessel are obtained from outside sources, and have not been verified.*

### **EXTERIOR DESCRIPTION**

This is a production built Gulf 32 pilothouse sloop. The hull is round bilged and has a raked stem with anchor roller, an internal ballast full keel with inboard keel shoe hung rudder, and a transom stern with swim ladder. There are rubber/aluminum rubrails on the hull sides, there are stainless steel bow and stern rails, and double lifelines run on stainless steel stanchions.

The deck layout is that of a pilothouse sailboat. There is a flush hatch over a chainlocker on the foredeck. A low sloping cabin trunk followed by the raised pilothouse follows which has a skylight hatch in addition to the companionway hatch to the cockpit, large windows, and an overhanging top forming a visor. Side decks lead around the cabin to the "T" shaped cockpit, which has coaming seat backs, a steering pedestal, and seat hatches for storage and access.

See photos below.

### **INTERIOR DESCRIPTION**

The forwardmost compartment is a forepeak locker with deck access containing the anchor chain and rode. Aft of this is a stateroom with a V-berth followed by a port side seat, hanging locker, and locker and drawers and a starboard side head/shower compartment. Next aft is a starboard side "L" shaped settee and a port side settee/berth. Two steps lead up to the pilothouse, which has a starboard side helm station and outboard navigation station followed by a quarter berth, and a port side galley.

The engine compartment is beneath the pilothouse sole and the fuel tank is forward of the engine.

The interior is finished primarily in teak, molded surfaces, plastic laminates, and fabrics, and has storage in the form of drawers, bins, and cabinets.

See photos below.

### **CONSTRUCTION**

Hull: Molded fiber reinforced plastic (FRP)

Superstructure: Molded FRP with core materials used in areas

### **ENGINE**

Fuel: Diesel Make: Universal four cylinder HP: Unk Indicated Hours: Unk

Cooling: Fresh water cooled Exhaust: Waterlift muffler

Ventilation: Natural Fuel Filters: Racor, and engine mounted

### **SHAFT**

Size: 1 1/8" Material: Stainless steel

Struts & Bearings: Bronze flexibly mounted packing gland, rubber cutless bearing in stern tube

### **PROPELLER**

Size: 16D x 12P two blade Material: Bronze Condition: Good

### **STEERING SYSTEM**

Tiller Type: Emergency tiller Wheel Type: Yes No. of Stations: (2)

Type of Equipment: Yacht Specialties pedestal steering, pull/pull chain and cable over sheave to rudder quadrant, and push pull cable steering from inside station

Rudder Description: Outboard keel hung foil shaped

Material: FRP Stuffing Box: FRP Bearings: OK

### **EXTERIOR EQUIPMENT**

Windlass: None

Trim Tabs: None Bow Thruster: None  
Other: Swim ladder at stern

### CORROSION CONTROL

Zincs: Rudder shoe, Condition: New Bonding System: No  
propeller mounted  
Ground Plate: None Other: None noted

### THRU-HULL FITTINGS

Material: Bronze and plastic Valves: Quarter turn and gate valve types

### BILGE

Water: Some Oil: Trace Fuel: None Debris: Trace  
Bilge Pumps: Manual in cockpit, and 12VDC submersible type pump automatic/manual switched. Also, 12VDC shower sump pump

### WASTE SYSTEM

Manual marine head with holding tank with manual pump out pump and deck pump out plate

### FUEL TANKS

Quantity: (1) Capacity: 35 gallons Material: Plastic  
Shut-Off: No Vents: Yes Secured: Yes Grounded: Yes

### WATER TANKS

Quantity: (1) Capacity: Unknown Material: FRP  
Shut-Off: No Vents: Yes Secured Yes

### WATER SYSTEM

Fresh: Yes Manual: Foot pump Pressure: 12VDC No. of Outlets: Head, galley  
pump  
Raw: No Manual: NA Pressure: NA No. of Outlets: NA  
Water Heater: AC/engine Size: 6 gallons Pressure Relief Valve: Yes

### HEATING/AIR-CONDITIONING

Wallis 30DT diesel fired forced air furnace

### ELECTRICAL SYSTEM

Batteries & Voltage: (1) Group 24 engine start battery, (3) Group 27 service batteries, all wet celled  
Main Disconnect: Yes Inverter: None Grounded: Yes  
DC Circ. Protection: Fuses and DC Wiring: Insulated copper  
breakers  
AC Circ. Protection: Breakers AC Wiring: Insulated copper Shore Power: 30 amp 125V  
Good con'd

Battery Charger: Pronautic 12-10P Other: Engine alternator, (2) solar panels with charge controller (stored in cabin for winter)

Auxiliary Generator: None

### **FIRE EXTINGUISHERS**

Hand Units: (2) 2A10BC, (1) 5BC, (1) 1A10BC

Date Tested: 2020 Condition: See notes

Automatic System: None

Capacity: NA Date Tested: NA

### **GALLEY EQUIPMENT**

Stove: Force 10 two burner stove with oven Fuel: LPG

Other: None other

Tanks: (1) steel Remote Shut-Off Valve: Yes Secured: Yes

Refrigeration: Ice box, Engel AC/DC cooler

### **SPARS**

Rig Type: Masthead sloop Material: Aluminum Finish: Natural

Bowsprit: None Bumpkin: None Reaching Poles: (1) aluminum

### **STANDING RIGGING**

Stays/Shrouds: SS 1 x 19 wire Turnbuckles: Open bodied type Toggles: SS

Chainplates: SS and bronze Bonded: Not noted Other: No

### **RUNNING RIGGING**

Halyards: Synthetic and SS wire Condition: Good or apparently serviceable

Sheets: Synthetic Condition: Serviceable

Blocks: Garhauer Condition: Good or serviceable

Other: Sail sheet tracks and cars

### **WINCHES**

Primary: (2) Lewmar 40ST Secondary: Lewmar 14

Main Sheet: Lewmar 7 Halyards: (2) Lewmar 7

Other: None

### **SAILS**

Main: Yes Jib: Yes, stowed in bag Staysail: None

Genoa/Spinnaker: None

Storm Sails: None

Other Sails: None

Sail Covers: Main cover Other Canvas: Cover for pedestal

**FURLING GEAR**

Type: Hood roller furling jibstay

**VANE STEERING**

Type: None

**SAILING INSTRUMENTATION**

Wind Speed: None Wind Direction: Windex

Other: None

**NAVIGATIONAL EQUIPMENT AND ELECTRONICS**

Compasses: (1) Ritchie 3.5", (1) Ritchie 4" Auto Pilot: Autohelm

Depth Sounder: Raymarine i50 display

Radios: Standard Horizon Matrix, handheld

AIS: Reported AIS on laptop GPS: Laptop running OpenCPN navigation software with GPS input reported

Radar: None Plotter: Laptop running OpenCPN navigation software with GPS input reported

Knotmeter: Raymarine i50 display Log: Plotter

Other: None

**GROUND TACKLE**

Anchors: Mantus 45 lb., spare 10 kg Bruce

Anchor Rodes 5/16" chain, spare 1/4" chain with 1/2 rode

**DINGHY & LIFERAFT**

Description: None

**ADDITIONAL EQUIPMENT**

Appears to include but not limited to:


- LPG alarm
- CO alarm
- SOSDANBUOY
- Lifesling
- Magma barbecue

## VALUATIONS

### Valuation Considerations:

- This is a production built vessel and comparable asking prices and sales information are available. Therefore, a sales comparison approach can be used rather than a depreciated cost approach.
- The undersigned marine surveyor has examined this vessel closely to determine its condition and considered the results of the examination and the Findings and Recommendations below in determining the values shown. See condition statement under General Notes below.

Current **Yachtworld** listings of similar vessels for sale are shown below.



**Capital Gulf 32** **US\$34,900 \***

32 ft / 1984  
Vallejo, California, United States  
Rifkin Yachts

[Request Info](#)



**Gulf 32** **US\$37,500 \***

32 ft / 1989  
San Diego, California, United States  
CFB Marine Group

**BUC Value Pro** is a subscription service that provides estimated valuation information. The following are search results:













MARINE CONSULTANTS INC AARON BANDSTRA		January 14, 2021	
CAPITAL YACHTS INC, HARBOR CITY, CA (MIC: CPY) NEWPORT			
Model Year	1988	Hull Material	Fiberglass
Model	GULF 32 PILOTHOUSE	Hull Configuration	Keel
Length Overall	32'	Draft	5' 2"
Length On Deck		Beam	10'
Boat Type	Sailboat-Cruising   Sloop Rig	Weight	15000 lbs.
Engine Type	Inboard Single 32D Universal	Ballast	

The information presented here is believed to be reliable but not guaranteed. For various reasons, including the subjective nature of vessel evaluations and the possibility of incomplete or inaccurate information regarding comparable vessels and sales thereof, we do not make any warranties whatsoever regarding this report, and WE EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. BUC does not provide expert witness testimony.

Current Retail Value Range	\$24,500-\$27,200 120th edition.
Fair Retail Value Adjusted for <u>BUC Condition</u> in the Northern Pacific Coast/Alaska	\$25,400-\$28,300
Replacement Value	\$223,000

All prices in US Dollars.

**Soldboats.com** is a subscription service that provides the Yachtworld listings after a vessel is sold and shows the reported selling prices. This is some of the best information we have since it provides comparable sales. In this case, this is a production vessel and the search results for comparable sales in the last four years are shown below:

							
Filter				Sort			
View Selected		Print Selected		Email Selected		Export Selected	
Check All / Uncheck All		1 - 15 of 15 Listings ▾		Sort by: Sold Date: Newest first ▾			
Length	Make/Model	Year	Listed Price	Sold Price	Boat Location	Active	
<input type="checkbox"/>	32 ft Gulf Pilothouse 32	1988	US\$45,500	US\$40,000 (12/2020)	Port Angeles, WA, USA	202 Days	 
<input type="checkbox"/>	32 ft Gulf 32	1986	US\$29,000	US\$20,000 (9/2020)	San Diego, CA, USA	354 Days	 
<input type="checkbox"/>	32 ft Gulf 32	1987	US\$33,214	US\$29,260 (8/2020)	Pointe-du-Chêne, NB, CAN	50 Days	 
<input type="checkbox"/>	32 ft Gulf 32	1991	US\$38,900	US\$33,000 (6/2020)	Gig Harbor, WA, USA	72 Days	 
<input type="checkbox"/>	32 ft Gulf 32 Pilothouse	1989	US\$39,500	US\$36,000 (3/2020)	Kittery, ME, USA	285 Days	 
<input type="checkbox"/>	32 ft Gulf 32 Pilothouse	1988	US\$52,800	US\$48,000 (9/2019)	Anacortes, WA, USA	139 Days	 
<input type="checkbox"/>	32 ft Gulf 32 Pilothouse	1985	US\$27,900	US\$24,500 (2/2019)	Oak Harbor, WA, USA	449 Days	 
<input type="checkbox"/>	32 ft Gulf 32 Pilothouse	1986	US\$35,000	US\$30,750 (12/2018)	Seattle, WA, USA	283 Days	 
<input type="checkbox"/>	32 ft Gulf 32	1987	US\$28,500	US\$25,000 (12/2018)	National City, CA, USA	224 Days	 
<input type="checkbox"/>	32 ft Gulf 32 Pilothouse	1988	US\$55,000	US\$45,000 (11/2018)	Anacortes, WA, USA	53 Days	 
<input type="checkbox"/>	32 ft Gulf 32	1989	US\$39,000	US\$29,000 (9/2018)	San Francisco, CA, USA	148 Days	 
<input type="checkbox"/>	32 ft Gulf 32	1987	US\$31,000	US\$22,000 (8/2018)	Duluth, MN, USA	107 Days	 
<input type="checkbox"/>	32 ft Gulf 32	1988	US\$18,900	US\$9,000 (2/2017)	Edmonds, WA, USA	125 Days	 
<input type="checkbox"/>	32 ft Gulf 32	1990	US\$37,500	US\$34,000 (1/2017)	Olympia, WA, USA	99 Days	 
<input type="checkbox"/>	32 ft Gulf 32 Pilothouse	1985	US\$33,135	US\$26,888 (4/2016)	Sidney, BC, CAN	84 Days	 

The average sold price of the above listings is \$30,160. The subject vessel is in good condition, has been well maintained and upgraded.

**Valuation Consideration Results:**

This Vessel's Estimated Fair Market Value:	\$33,000
Estimated Value with Deficiencies Rectified:	\$35,000
Replacement Value with Like New Vessel:	\$223,000

The Fair Market Value is the amount in US dollars a willing, well informed buyer would pay a willing, well informed seller in an open market, neither being compelled to buy or sell, given a reasonable amount of time to sell. It is the value of this vessel as is, where is taking into account the survey findings. It is an opinion of value based upon one or more of the following: actual selling prices of similar vessels from the Marine Consultants, Inc. database, various pricing guides, comparables research and the opinions of other marine industry professionals.

The Replacement Value with Like New is the estimated cost to replace this vessel with a similar, new vessel. In many cases, a particular model is no longer in production and the estimation is based upon similar new vessels currently available, or the BUC Value Pro results.

**GENERAL NOTES**

- a. The interior and exterior of this vessel appear generally to be in good well maintained condition with only light normal wear and tear, except as noted below. The vessel was reported to have suffered some grounding damage, and was repaired at Seaview Boatyard Fairhaven. All repairs appear to be done in accordance with best marine practice. Acoustic sounding (hammer tapping) the hull appeared to show good sound condition.

A list of upgrades and maintenance provided by the owner is included below:

<b>DATE</b>	<b>DESCRIPTION</b>
November, 2015	Hypervent under v-berth, settees and quarter berth
November, 2015	High water alarm installed
March, 2016	New head stay
March, 2016	Hood SL707 roller furler installed
March, 2016	Wallas DT30 diesel forced air heater installed
March, 2016	Interior LED bulbs throughout
March, 2016	Hardwired CO2 and propane detectors installed
April, 2016	New sea valves x 5
April, 2016	New head hoses
April, 2016	Raymarine i50 depth and speed gauges and transducers
April, 2016	Rudder foot replaced with new cast from old
April, 2016	Prop shaft & cutlass bearing replaced
April, 2016	Double line jiffy reefing system installed
April, 2016	PSS dripless shaft seal installed
May, 2016	New fresh water pump on engine
June, 2016	Engine watchdog temperature alarm systems x 3 (engine head, exhaust riser, transmission)
June, 2016	Remote temperature gauge installed in cockpit
September, 2016	New fixed VHF radio with remote cockpit mic and AIS receiver
September, 2016	45# Mantus anchor, 100' chain, 200' anchor rode
October, 2016	Replace dangerous stock wiring of charging system
April, 2017	Transmission cooler (heat sink style) added, plumbed to raw water
April, 2017	Rail mounted solar panels (removable) 160w with heavy duty plugs to charge controller wired to house battery bank
April, 2017	New hour meter, upgraded voltmeter installed
April, 2017	Lewmar Evo ST40 sheet winches x 2 installed
April, 2017	New hoses for freshwater cooling circuit
September, 2017	New smart plug shore power plug
April, 2018	EV100 wheelplot with wireless remote installed
December, 2020	New LED anchor light and LED combo steaming/deck light

- b. This vessel survey does not include an examination of the sails, furling gear, or the upper portions of the mast and rigging, although the portions of the rig and spars accessible from deck level were observed.

Routine sailboat maintenance should include annual inspection and service of the rig by a qualified rigger. The rigger may recommend that standing rigging components be replaced every ten to fifteen years in the Northwest, or more frequently with heavy use or severe climate service. Additionally, chainplates and their fasteners should be periodically examined by disassembly.

- c. This vessel survey does not include an intensive engine survey or oil analysis, although the engine was observed externally and operated normally. Maintenance records and engine manual maintenance recommendations should be compared, and all long and short term maintenance service should be brought up to date.
- d. Most equipment was tried out to determine apparent functional status, but testing could not be exhaustive. The batteries were not tested. The undersigned did not attend a trial run, and the autopilot was not tested.
- e. Current advisory and service/maintenance notes include:
  - Bilge pump function should be periodically checked with water.
  - The current ABYC standards call for an audible high bilge water alarm system and this is therefore recommended.
  - The current ABYC standards recommend installation of a Galvanic Isolator or Isolation Transformer to help increase anode life and to protect the underwater metals.
  - The current ABYC standards call for an indicator at the helm to warn of a loss of exhaust system cooling water flow.
  - The current ABYC standards subsequent to the construction of this vessel recommend an automatic fire extinguishing system for the engine compartment, or, a suitable fire extinguishing port in the side of the engine box, and a suitable clean agent fire extinguisher mounted adjacent.
  - Prior to use of the vessel, learn the locations or place on board the USCG or Washington state required safety equipment, including suitable approved lifejackets (PFDs) for each person, the fire extinguishers, approved current signal flares, a sound signaling device, an approved throwable PFD, and the required discharge of oil, CO warning, and waste placards.

### **PRIORITY FINDINGS & RECOMMENDATIONS**

1. \* The following problems were noted with the AC electrical system:
  - a. The hot water heater power supply neutral connects to the shore power input neutral before the double poled main breaker, and so is always connected to shore neutral regardless of the main breaker position.  
Recommendation: Wire the hot water heater neutral through the shore power main breaker.
  - b. The shore power system is a 30A system and the conductors from the shore power inlet to the AC main breaker appear to be undersized.  
Recommendation: Install 10AWG size boat cable for this shore power cable from the inlet to the main breaker panel main breaker.
  - c. There are some unterminated and loose wires behind the panel.  
Recommendation: Remove or properly terminate and secure these wires.
  - d. The electrical panel can be opened without a key or tools, and the back side of the AC portion of the panel is exposed.  
Recommendation: Add screw fastening or lock to electrical panel. In the case of a combination electrical panel with AC and DC circuits, ABYC standards call for a cover over the AC section to prevent hazard while working on the DC section.
  
2. \* Other battery wiring issues include the following:
  - a. In one or more cases, five conductors have been connected to a terminal stud.  
Recommendation: ABYC standards call for a maximum of four conductor ring terminals on a stud, to avoid high resistance connections. A separate positive buss bar should be used.
  - b. In one or more cases, the connected conductors to the battery terminal studs have been incorrectly stacked, including on the starter motor.  
Recommendation: ABYC standards call for the largest conductor ring terminals to be at the bottom ranging up to the smallest at the top under the securing washer and nut, for lowest resistance connections.
  - c. The battery cabling prevents opening most of the battery covers in order to check the electrolyte levels.  
Recommendation: Re-route the cabling as needed to access the covers.



3. \* The aft navigation light aft has a frosted lens, reducing its visibility and sharpness of angular display.  
Recommendation: Renew this lens to comply with USCG Navigation requirements for visibility and safety.

**\* The Resolution of the above asterisk items is considered essential for the continued safe use or operation of this vessel.**

#### **OTHER FINDINGS AND RECOMMENDATIONS**

4. One of the hand held fire extinguishers is a plastic headed unit that is more than twelve years old and cannot be hydrotested and must be replaced.  
Recommendation: Replace the fire extinguishers, and service and tag annually per NFPA standards to ensure reliability.
5. Two of the fire extinguishers are stored loose in lockers.  
Recommendation: Mount the extinguishers, and label the lockers.
6. The port upper shroud clevis pin at the chainplate is undersized.  
Recommendation: Install the correctly sized clevis pin.
7. The following was noted with the furnace:
  - a. The diesel furnace fuel line is plastic.  
Recommendation: ABYC standards call for copper fuel line, or suitable USCG fuel hose. Another solution is to place the existing tubing inside a USCG fuel hose for fire protection.
  - b. The furnace system has a circuit breaker on the electrical panel. This is not recommended since if the system is turned off by this breaker, the unit will not be able to run through its normal cool down cycle.

Recommendation: This breaker should be specially labeled or covered, or be moved to a location such as behind the panel, so that it is never turned off when the heater is operated.

- c. The furnace exhaust is unsupported in the lazarette compartment, where gear is stored.  
Recommendation: Support the furnace exhaust with metal standoffs, and create a barrier to prevent gear from contacting exhaust.
- d. The furnace exhaust is insulated, but does not have insulation for the first six inches at the furnace. This uninsulated exhaust contacts the fiberglass overhead above.  
Recommendation: Add insulation to this section, and re-mount furnace slightly lower to create an air space between the exhaust and the overhead. Add heat shield to overhead if needed.



- 8. The swim ladder is tied to the rail.  
Recommendation: Rig the swim ladder so that it is deployable by a swimmer in the water.
- 9. There is a CO detector on board.  
Recommendation: Smoke detection systems should also be installed, per NFPA standards.  
  
The standards call for CO detectors meeting UL2034, and for smoke detectors meeting UL217.
- 10. Recommendation: The alternator and starter motor positive terminals need insulating boots, per ABYC standards.
- 11. The steering cable passes between the starboard side of the engine and the hull, but is pinched.  
Recommendation: Free up cable and re-route to avoid pinching.
- 12. This vessel is fitted with a shaft seal which utilizes a stainless steel ring secured to the propeller shaft with set screws. This ring must not move on the shaft, or a leak will develop.

Recommendation: It is recommended that a stainless steel hose clamp, or a shaft collar zinc, be installed on the shaft against the face of the stainless ring, to prevent the chance of the ring sliding forward if the set screws do not hold or should loosen.

Also note: PYI, the manufacturer of this seal, recommends that the bellows hose be replaced every six years.

13. The alternator belt is loose.

Recommendation: Adjust as needed.

14. The Racor fuel filter is not a marine type.

Recommendation: When the fuel filters are next changed, this filter can be upgraded to the marine type by adding the metal bowl shield and metal drain fitting.

15. The port side cockpit drain hose is secured to the seavalue with a hose clamp that does not appear to be properly installed.

Recommendation: Reinstall this hose clamp to fully clamp the hose to the fitting.

16. The decks and fiberglass hatches are of fiberglass reinforced plastic (FRP) "sandwich" construction in areas, with a FRP laminate above and below a core material.

A GE Protimeter Aquant moisture meter was used for spot checking the decks for moisture. The meter indicated apparent elevated moisture around the port shroud chainplate extending aft about five feet, around the heater exhaust pipe, and just to starboard of the mast step on the cabin top. Acoustic sounding (hammer tapping) of these surfaces did not find a structural problem at this time.

Recommendation: Re-seal the chainplate escutcheon plates and the stove pipe penetration. It is reported that this chainplate was fully removed for cleaning and examination and then was reinstalled in recent years to ensure that the moisture has not caused corrosion or stress corrosion cracking. Reseal the chainplate escutcheon plates to make watertight now and occasionally going forward.

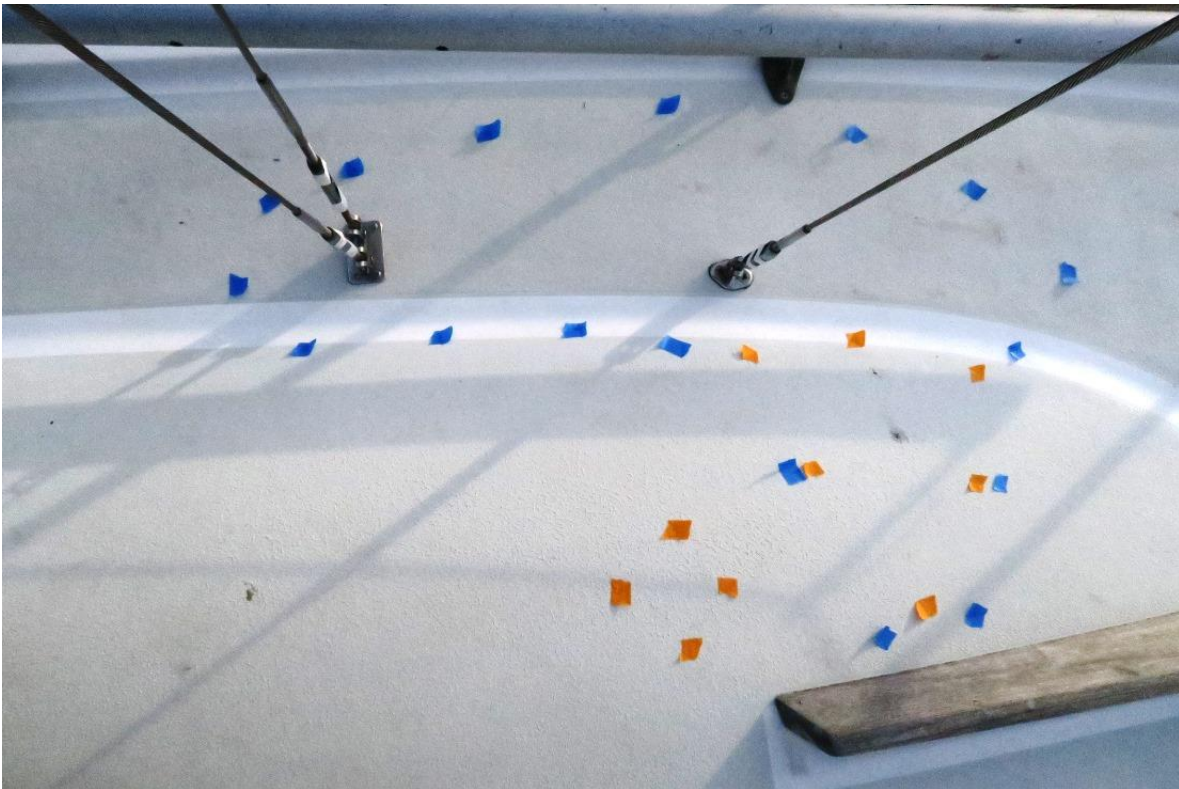
Consider drilling holes in the underside of these areas to help its core material to dry out.

17. There is moisture damage to the lower portion of the starboard plywood bulkhead that measures damp using a GE Protimeter Aquant moisture meter. The water source is unknown. Note that the bulkhead in the area of the chainplates measures dry, and is not moisture damaged.

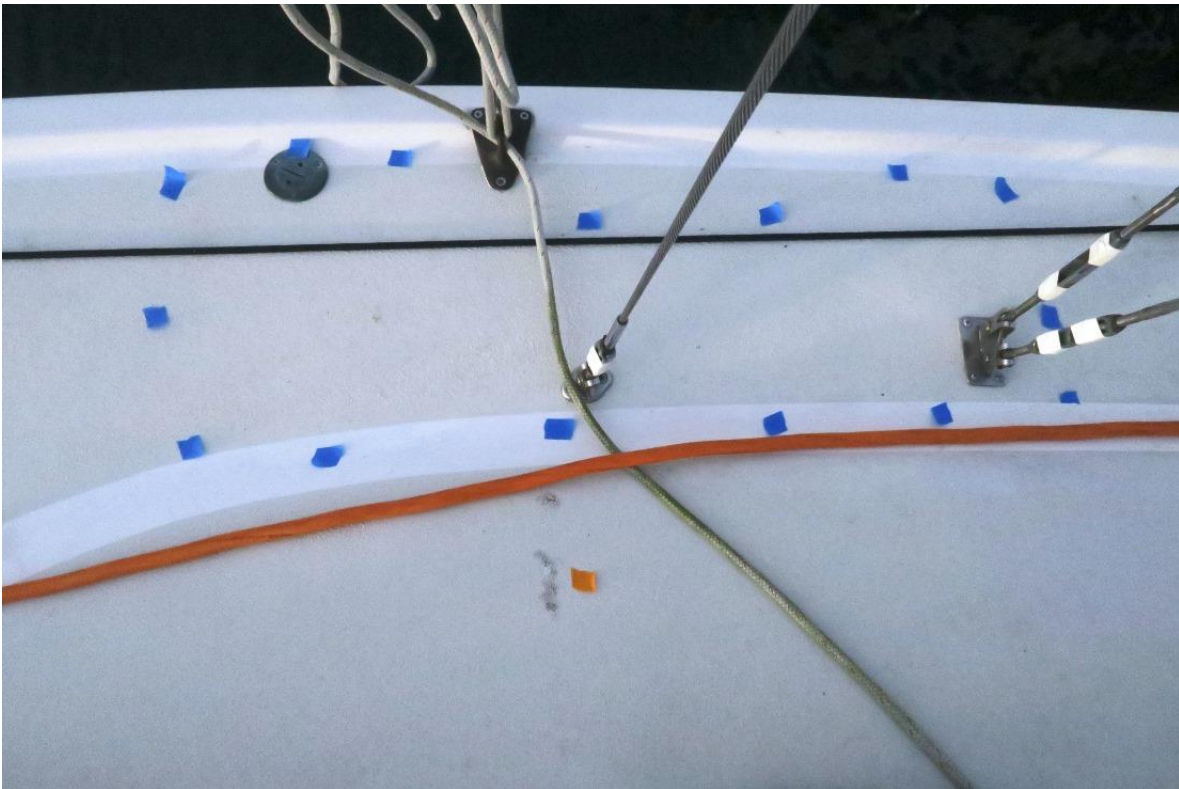
Recommendation: Plan to repair woodwork, and monitor area for leaking.



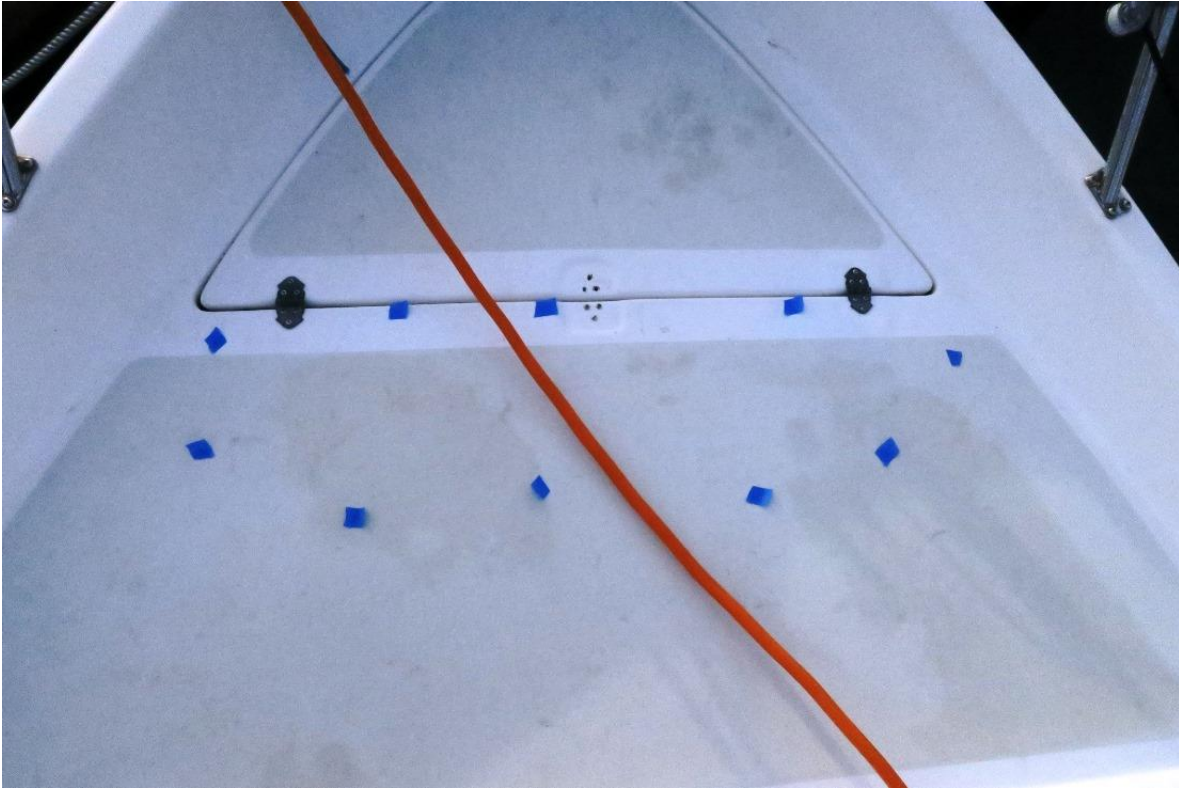
18. There is moisture damage to the woodwork below the port aft pilothouse window, and the area measured damp using a GE Protimeter Aquant moisture meter.  
Recommendation: Plan to reseal this window, and replace or repair woodwork as needed.
  
19. The decks and cabin tops are of fiberglass reinforced plastic (FRP) “sandwich” construction in areas, with a FRP laminate above and below a core material. Spot moisture meter checks were made using a GE Protimeter Aquant moisture meter, and areas with elevated moisture are marked with blue tape in the photos below. Areas where delaminated or compromised core were detected are marked with orange tape in the photos below. See photos below.
  - a. The port side deck and cabin top in the area of the chainplates shows elevated moisture, marked in blue tape in the photo below.  
Recommendation: Remove the chainplates and clean and inspect for any corrosion or cracking. While the plate is removed, check the core material at the chainplate penetrations for deterioration, and repair and/or dry out as needed. Check the chainplate bulkhead for any water damage and repair if needed. Remove the core around the deck penetrations if necessary and seal out with epoxy. Reinstall the chainplates using new stainless steel 316 grade fasteners.



- b. A section of the port cabin top has two areas that are delaminated or have compromised core material, marked in orange tape in the photo above. The aft (left side) area is a void with perimeter stress cracks, and the forward area appears to have two holes that were inadequately repaired, and may have allowed water ingress, compromising the core.  
Recommendation: Have a fiberglass technician repair these areas using best marine practice.
- c. The starboard side deck and cabin top in the area of the chainplates shows elevated moisture, marked in blue tape in the photo below.  
Recommendation: Remove the chainplates and clean and inspect for any corrosion or cracking. While the plate is removed, check the core material at the chainplate penetrations for deterioration, and repair and/or dry out as needed. Check the chainplate bulkhead for any water damage and repair if needed. Remove the core around the deck penetrations if necessary and seal out with epoxy. Reinstall the chainplates using new stainless steel 316 grade fasteners.



- d. There are fastener holes on the starboard cabin top that have been inadequately repaired, marked with orange tape in the photo above.  
Recommendation: Have a fiberglass technician repair this area using best marine practice.
  
- e. A section of the foredeck shows elevated moisture, marked in blue tape in the photo below, and there are open holes where a hinge was mounted.  
Recommendation: Install a hinge and seal the holes to prevent further water ingress. Consider a positive close out of the core at the penetrations, by local removal of the core, making the area solid with epoxy filler, and re-drilling for the fasteners through the new solid material. Use suitable marine sealant when re-installing the hardware.



20. The following other equipment appears to need service:
- a. There is some corrosion on the forward engine mount and bracket.  
Recommendation: Clean off corrosion and treat with anti-corrosive coating to preserve.
  - b. There is a broken light bulb in the compartment below the cockpit.  
Recommendation: Replace this light bulb.
  - c. Recommendation: Secure the refrigeration cooler with straps or similar.
  - d. The manual bilge pump handle socket is cracked, but the pump remains functional.  
Recommendation: Replace the socket.

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This examination has been conducted without making removals or opening up to expose areas or components ordinarily concealed, or test boring, testing for tightness, pressure testing tanks, trying out machinery, or performing an exhaustive survey of the vessel's AC or DC electrical system or bonding system, and does not, therefore, address any damages and/or deficiencies which might have been revealed if such procedures had been executed. No evaluations were made and no opinions are offered relative to the vessel's engineering, performance, or stability, or of the sizing or suitability of any installed components, design, or feature.

Marine Consultants, Inc.

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This report is only a statement of opinion and is neither a guarantee nor a warranty relative to: the merchantability of the vessel, the valuation of the vessel, the condition of the vessel or its machinery or equipment, or any unforeseen or undetected damages or other conditions that may exist.

This limited report is issued in accordance with the Terms and Conditions below, and/or the Work Order of this survey, which Terms and Conditions apply to the attending marine surveyor and Marine Consultants, Inc. Acceptance of this report or its use for any purpose serves as acknowledgement and agreement with these terms and conditions.

The undersigned certifies that the statements in this report are true and correct; that the analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions. I have no bias with respect to the property that is the subject of this report or to the parties involved. My engagement in this assignment was not contingent upon developing or reporting pre-determined results. My compensation for this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client.

Marine Surveyors:



Marine Consultants, Inc.

Aaron Bandstra, SAMS-SA®



Marine Consultants, Inc.

Matthew L. Harris, NAMS-CMS, SAMS AMS®



## TERMS AND CONDITIONS

Marine Consultants, Inc. (hereafter referred to as MCI) agrees to undertake the work requested by Customer only on the following terms and conditions which shall apply to all work done by MCI and all reports relating to such work.

**1. Additional Services:** Any additional work requested or authorized by Customer, either verbally or in writing shall be subject to these terms and conditions. Additional work performed will be charged at MCI's normal hourly rate.

**2. Expenses:** Customer shall pay MCI all costs, including but not limited to travel expenses, hotel, meals, lodging, telephone and telex, relating to the work requested.

**3. Payment and Interest:** Payment of all fees and expenses shall be due upon completion of the work unless other arrangements are made. All payments, if unpaid when due, shall bear interest at the rate of 1.5% per month from the date due until paid.

**4. Lien:** Customer grants MCI a lien (including a maritime lien) on the vessel and its equipment involved in this work order until all fees and expenses have been fully paid. MCI shall have and retain all other legal rights it may have, until the fees and expenses have been paid in full. Customer, including the vessel, and/or the person directly contracting MCI for this work remain separately responsible for the charges until fully paid. The person signing this work order warrants that he has authority to bind all such parties to these fees and expenses.

**5. Limited Report:** Customer is cautioned that this is a limited report representing a limited inspection by visual means and soundings. Inspection of areas normally concealed, areas requiring disassembly of the vessel, scaling of masts, or the operation of equipment is specifically not included unless otherwise agreed upon in writing. Such reports constitute only statements of opinion and are not to be construed or considered as representations, warranties or guarantees. MCI disclaims any expertise regarding insurance. Any statements made by surveyor are not to be construed in any way as bearing upon the possible existence of insurance coverage.

**6. Limited Liability:** MCI shall not be liable to Customer for any claim, loss, cost, penalty, or damages of whatsoever kind or nature arising out of, in connection with, or incident to, the work requested, except that caused by the direct sole negligence of MCI. Negligence shall not be legally presumed but must be affirmatively established. Such liability shall continue for a period of not more than ninety (90) days from completion of the work. MCI shall not be liable in any event for any loss, cost, penalty or damages in excess of \$1,000.00.

MCI shall not be liable to Customer except on the limited basis identified above. MCI shall specifically not be liable for incidental, special or consequential damages, nor loss of use, loss of profits/earnings, crew wages, shares, salvage, repair, tug expense, demurrage, loss of time, loss of freight, loss of charter and/or similar and/or substituted expenses.

In addition, MCI shall not be liable to Customer on any legal basis other than negligence as stated above. Liability to Customer for breach of contract, breach of warranty of workmanlike service, strict and/or products liability, liability for breach of warranties of merchantability or fitness for a particular purpose or any other legal theory or basis for liability, and liability (directly or indirectly) to Customer's insurers, are specifically agreed by Customer's insurers, are specifically agreed by Customer and MCI to be excluded.

It is understood by Customer that MCI's charges for services are based upon this limited liability. MCI agrees to assume additional liabilities only if requested by Customer and a written agreement setting forth liabilities and additional charges are signed by both MCI and Customer.

**7. USCG:** The USCG and other government agencies may require additional equipment and/or modifications to the vessel depending upon its use. MCI shall not be liable for anticipation of these requirements.

**8. Markings:** MCI assumes no legal or financial liability for any cosmetic work necessary to remove marks or blemishes caused by the inspection.

**9. Notice, Claim, Time Limits or Suit:** MCI shall in no event be liable even on the limited basis identified above, unless notice of claim thereof is presented in writing to MCI within ninety (90) days of completion of the work. Customer must also commence suit on any claim or controversy arising under this work order or the work performed pursuant to the work order, within six (6) months from completion of work. If Customer fails to do either then MCI is discharged from all liability to Customer on any basis.

**10. Law and Venue:** Any work performed by MCI and any report issued by MCI shall be construed in accordance with general maritime law of the United States and the laws of the State of Washington. Any action, claim, or suit between the parties must be brought in the state or federal courts located at Bellingham, Whatcom County, Washington. If MCI is the prevailing party in any litigation, MCI shall be entitled to recover all costs including reasonable attorneys' fees.

**11. Specifications:** MCI shall not be liable for the accuracy of dimensions, capacities, ratings, equipment, inventory, etc. This data is often obtained from outside sources and is included for general descriptive purposes only.











