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## SAMPLE Condition and Valuation Report

1993 Beneteau Oceanis 510  
named

“XXXXXXXXXX”



Report prepared exclusively for:

Mr. xxxxxxxxxxxx

xxxxxxxxxxx

xxxxxxxxxxxxxxxxxxxx

Date of Report: April 5, 2006

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## **Purpose of the Inspection**

At the request of Mr. xxxxxxxxxxxx, the undersigned marine surveyor did attend the vessel named "XXXXXXXXXX", a Beneteau Oceanis 510 of fiberglass construction, when hauled and blocked for winter storage at xxxxxxxxxxxx.

The purpose of this marine inspection was to determine - insofar as possible within the limitations of visual and physical accessibility, through non-invasive and non-destructive means - the condition of the vessel's structure, its systems, equipment and its cosmetic appearance for marine risk evaluation and only those items affecting the insurability and value of the vessel have been examined.

This report is not to be used for pre-purchase purposes or any other purposes.

Guidelines used for this inspection were the Rules and Regulations for Recreational Boats, as excerpted from the *United States Code (USC)* and the *Code of Federal Regulations (CFR)* published by the American Boat and Yacht Council (ABYC), as well as the *Standards and Technical Information Reports for Small Craft*, also published by the ABYC, and *NFPA 302: Fire Protection Standard for Pleasure and Commercial Motor Craft*, published by the National Fire Protection Association (NFPA).

The Scope of Inspection can be found in **Appendix A**.

For Definition of Terms used in this report see **Appendix B**.

Where in this report recommendations have been made, it should be noted that recommendations related to the USC and the CFR are mandatory, while recommendations made to ABYC and NFPA standards are voluntary.

Recommendations marked \*\*\* relate to the USC and the CFR.

Recommendations marked \*\* relate to ABYC and/or NFPA standards and other safety issues.

Recommendations marked \* relate to maintenance issues and upgrades.

Recommendations marked (P) are considered priority items, which should be addressed prior to operating the vessel.

## **Summary**

The vessel "XXXXXXXXXX" appeared to be a standard production version of a Beneteau Oceanis 510; no unusual modifications or changes were observed.

The vessel had been maintained and cared for above and beyond average for its age and was sound with only a few repairs and modifications to be made.

A search of the "USCG Recall Notice database" revealed no recalls on this vessel.

A search of the BoatUS "On Watch" database revealed no warnings on this particular model.

The vessel was manufactured prior to enactment of some of the current ABYC and NFPA recommendations. This inspection report addresses those recommendations thought to be necessary for safety, but does not suggest complete compliance with current requirements or standards.

A Summary of Recommendations is given in **Appendix E**.

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With the recommendations related to regulatory issues (marked \*\*\*) and industry standards and other recommended safety issues implemented (marked \*\*), the vessel should be considered suitable for its intended service if operated in a seamanlike manner by a knowledgeable master and crew. The ultimate responsibility for the maintenance and safe operation of this vessel lies with the owner and master.

Recommendations concerning maintenance and upgrades (marked \*) should be considered normal maintenance or improvements to be done by a prudent owner.

When further inspections and repairs have been recommended, they should be made to the current Codes of Federal Regulations and/or professional industry standards by competent professional and qualified craftsmen, and when applicable, to any manufacturer's recommendations.

### Valuation

Estimated Current Fair Market Value (in US dollars):                   \$ xxxxxx  
Estimated Replacement Cost New (in US dollars):                   \$ xxxxxx

The Fair Market Value given herein is defined as the estimated highest price that can be obtained by a willing seller from a willing buyer, with neither being compelled to sell or buy, at the time of the inspection and the vessel having been offered on the open market for a reasonable time.

The assigned valuation assumes that components, systems or equipment, not accessible or proven during the inspection, were serviceable and/or operational. Discoveries made as a consequence of recommended additional testing or inspection procedures may significantly lower this valuation

The Replacement Cost New is the estimated current cost of replacing the subject vessel, as equipped, with an identical or equivalent vessel. This figure does not necessarily reflect available discounts or sales practices, fluctuation in international currency exchange rates, sales taxes, etc.

The guidelines used for the valuation are as provided by industry pricing guides, such as the current edition of the "BUC" book, "BUC ValuProfessional", the N.A.D.A.. Appraisal Guide and actual selling prices reported by SoldBoats.com, adjusted for the vessel's equipment and overall condition. Estimates based on currently listed asking prices, along with market conditions, were also considered.

Valuations are provided for use by underwriters and lenders only and do not constitute any guaranty that these figures are attainable in actual current or future markets. Valuation opinions are subject to prevailing economic conditions, both general and those specifically relating to local patterns of competition, consumer intensity, payment terms, etc. Parties having a secured interest in the valuation of the vessel should periodically review the currency of the valuation basis, in order to protect their financial interests.

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## General Information

**Date of survey:** March 27, 2006

**Weather during survey:** 55 degr.F, sunny, light breeze

**Inspection was attended by:** n/a

## Vessel Particulars

**Name of vessel:** "XXXXXXXXXX"

**Hailing port:** xxxxxxxxxxxx

**Owner:** xxxxxx xxxxxxxxxxxx

**Type:** auxiliary sailing vessel

**Builder:** Chantiers Beneteau S/A, France

**Model:** Beneteau Oceanis 510

**Model year:** 1993

**Year of manufacture:** 1992

**Designer:** Philippe Briand

**Hull ID number:** BEYFRXXXXXXXX (marked in portside lazarette).

**Official Number:** 990360 (in starboard cockpit locker. See **Appendix C** for Coast Guard Vessel Documentation Query.

**State registration number:** n/a

**Validation decal:** none sighted

**LOA:** 50' 2"

**LWL:** 44' 6"

**Beam:** 15' 7"

**Draft:** about 5' 11"

**Gross Tonnage:** 27    **Net Tonnage:** 24

**Displacement:** 30,860 lbs

**Ballast:** 10,800 lbs

**Sail area:** unknown

**Engine:** Perkins diesel    **hp:** 80

**Fuel capacity:** 150 gallons

**Potable water capacity:** 270 gallons

**Holding tank(s) capacity:** 20 gallons (estimate)

**Colors:** off-white topsides; off-white deck; teak overlay on cockpit seats; triple blue and red boot stripes; red and blue sheer stripes; blue anti-fouling

**Intended service:** recreational coastal cruising

**Navigation limits:** Underwriter determined

### **Comments:**

Measurements, capacities and weights were taken from available published information. No actual measurements were made by the surveyor.

Documented vessels and vessels numbered by another State must display a current Connecticut validation decal on both sides of the bow.

**Recommendation:** *Display Connecticut validation decal on both sides of the bow.\*\*\**

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## **Hull, Deck, Cabin Trunk and Cockpit**

**Design:** production sloop rigged cruiser/racer with a raked stem, reverse “sugar scoop” transom incorporating swim steps, fin keel, spade rudder, cabin trunk and aft cockpit.

Auxiliary power was provided by a Perkins diesel engine.

**Hull:** solid fiber reinforced polyester (FRP) with gelcoat finish

**Interior structure:** FRP grid with frames and stringers glassed to the hull. Transverse bulkheads, partitions, stringers and joinery bonded to the hull and deck.

**Decks:** textured non-skid FRP with core material; gelcoat finish and teak overlay on cockpit sole and cockpit seats.

**Cockpit:** integral part of deck molding. Walk-through transom. Lockers under the seats and lazarettes in the back. A bridge deck separated the cockpit from the companionway leading downbelow.

**Cabin trunk:** integral part of deck molding

**Hull-to-deck-joint:** inward turning hull flange with deck set upon it and attached with through bolts on 6” centers, incorporating a slotted aluminum toe rail.

**Rubrail:** n/a

### **Comments:**

The vessel generally appeared to have been built to accepted recreational marine industry production standards and practices at the time of its construction, using commonly accepted materials. A placard with Bureau Veritas type approval (number 6631/4423/A0/0) was onboard.

The hull was sighted from all sides, to the extent space around the vessel would allow. The hull and deck moldings appeared to be as manufactured and showed no evidence of having been materially modified to make the vessel different from its production sister ships.

Hull and deck moldings were sounded at random with a phenolic mallet for evidence of hollow or dull areas in the lay up.

Moisture meter readings were taken randomly at clean and dry locations with a Protimeter Aquant. It has a scale from 0-1000, on which readings below 150 represent a dry condition, between 150 and 225 a border line state and over 225 a damp condition.

It should be noted that moisture meter readings on a fiberglass vessel are only indicators and are not absolute since the composition of the laminate, surface coatings and the anti fouling bottom paint may greatly affect the readings.

### **Topsides**

The topsides were found to be symmetrical overall, fair and smooth without indications of hard edges or stress and with only minimal flutter and no visible print- through sometimes observed in laminated FRP products.

There were only a few mars and scratches usual for the age of the vessel.

There was no readily visible evidence of collision damage.

Soundings did not reveal voids or delamination.

Moisture meter readings were unremarkable.

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**Bottom**

A fresh coat of antifouling paint had recently been applied.

There were no indications of hard edges, stress or damage.

Soundings did not reveal voids or delamination.

Moisture meter readings were unremarkable.

There was no evidence of (osmotic) blisters. It should be noted however that small blisters can often only be observed if the bottom paint would have been removed.

Small blisters can shrink upon hauling a vessel, so they may not have been evident.

**Deck, cockpit and cabin trunk**

The gelcoat finish of deck, cockpit and cabin trunk was in good condition. No significant cracks were observed.

Moisture meter readings were unremarkable, except for a small area around the forward mooring cleats. Soundings were crisp.

The teak overlay was in good repair.

**Interior structure**

Access to the interior structure was limited by liners, cabinetry, furniture, tanks and other equipment and was only inspected where visible. No attached materials were removed during the inspection.

Where inspected, the interior structure and bonding between bulkheads, stringers and the hull were secure.

The hull-to-deck joint was inspected where accessible. Where visible, the joint was free from stress, damage or leaks.

**Keel and Ballast**

**Keel design:** external cast iron fin keel with "beaver tail"

**Keel bolts:** not accessible

**Comments:**

No evidence of past grounding was noted.

The hull to keel joint was tight and secure.

Only one of the keel bolts was visible. It appeared to be secure.

**Rudder and Steering Gear**

**Rudder type:** semi-balanced unbalanced FRP spade rudder

**Rudder stock:** FRP with metal drive for emergency tiller

**Bearing:** FRP log glassed into the hull and supported by brackets; stainless steel carrier ring and Delrin bushing

**Steering gear:** two FRP pedestal mounted destroyer type wheels, each with sprocket, chain, sheaves and open stainless steel cables driving a quadrant clamped to rudder stock.

**Auto pilot:** Raymarine ST 7000+

**Emergency tiller:** yes

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**Comments:**

The exterior of the rudder was smooth and fair, no weeping or swelling was noted. It rotated easily without binding and there was no play between the rudder stock and its bearing or between the rudder blade and the rudder stock.

Moisture meter readings were moderately elevated (up to 228).

Soundings revealed some small dull areas at the top of the rudder near the rudder stock.

***Recommendation:*** Monitor the rudder for delamination or movement of the blade in relation to the rudder stock at each haul out. Consideration should be given to drill a small hole near the bottom of the rudder in the fall in order to drain any water that might have accumulated, thus preventing frozen water to split the rudder.\*

The pedestals were not opened up and the condition of the axles and their bearings, sprockets and chains was not assessed.

***Recommendation:*** Open steering pedestals, clean, check and grease all components as needed as part of normal maintenance\*.

The quadrant was clean and free from significant corrosion.

The steering cable was free of broken strands where visible and its tension was adequate. The bulldog grips were properly installed. The cable was in need of lubrication.

The bronze idler sheaves were in serviceable condition.

***Recommendation:*** Lubricate the steering cable with oil (not grease).\*



## **Thru-Hull Fittings and Plumbing**

**Material:** bronze

**Seacocks:** nickel-coated copper alloy

**Hoses:** reinforced flexible hoses; double clamped

**Emergency wood plugs:** attached to all thru-hull below waterline

**Transducers:** polycarbonate depth sounder and speed/log

**Comments:**

The location of thru-hulls is shown in **Appendix D**.

All thru-hulls, seacocks and hoses were in good condition as seen.

The exact composition of the alloy of the seacocks was unknown, but it may be galvanically incompatible with the bronze through-hulls, which may lead to catastrophic failure of the seacock or through-hull.

***Recommendation:*** Remove some of the seacocks from their through-hull fittings and check both for galvanic corrosion. Replace all seacocks if galvanic corrosion is found.\*\*

The transducers of the depth sounder and speed/log were inspected for signs of stress or damage and neither was observed.

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### Hatches and Ports

**Deck hatches:** seven in aluminum frames; acrylic lenses

**Opening portlights:** five on each side of cabin trunk and two in cockpit well; aluminum frames; acrylic lenses

**Fixed portlights:** three in each side of topsides; acrylic lenses

**Windows:** two at each end of cabin trunk; “frameless”

**Companionway:** acrylic sliding hatch with teak drop boards

#### **Comments:**

The hatches in the forward cabin were of adequate dimensions to serve as emergency escape hatches.

A large fixed hatch was installed on the centerline above the main saloon. It was protected by a sliding FRP hatch cover.

All hatches, portlights and companionway were in good condition. There were no signs of leaks.

The drop boards could be secured with the sliding hatch open.

### Rails, Stanchions, Lifelines and Ladders

**Pulpit and stern rail:** double stainless steel

**Stanchions:** stainless steel with separate base attached to toe rail

**Height:** 25”

**Lifelines:** double stainless steel 7x19

**Gates:** to port, starboard and in stern rail

**Swim ladder:** stainless steel integrated in transom

**Guard rails:** stainless steel at pedestal, at forward hatch and at either side of foot of mast

#### **Comments:**

Pulpit, stern rail and guard rails were secure and in good repair.

Stanchions were secure. One of the stanchions to port was bent.

**Recommendation:** *Repair or replace bent stanchion.\**

The life lines with their swages and turnbuckles were secure but some sections needed to be tightened.

The securing nut of the lower forward lifeline to port was missing.

Gates were provided with diagonal braces.

**Recommendation:** *Tighten lifelines and replace missing securing nut of the lower forward lifeline to port.\**

### Mast Collar, Mast Step and Chainplates

**Mast collar:** cast aluminum on cabin top and bolted through

**Mast step:** keel stepped; cast aluminum fitting secured to FRP grid

**Chainplates:** top and intermediate shrouds: stainless steel rod types with self aligning fittings securely anchored to the internal grid structure.

Lower shrouds: stainless steel tangs bolted to bulkhead belowdecks.

Forestay: attached to stainless steel stemhead fitting.

Double backstays: attached to stainless steel tangs bolted to the transom.

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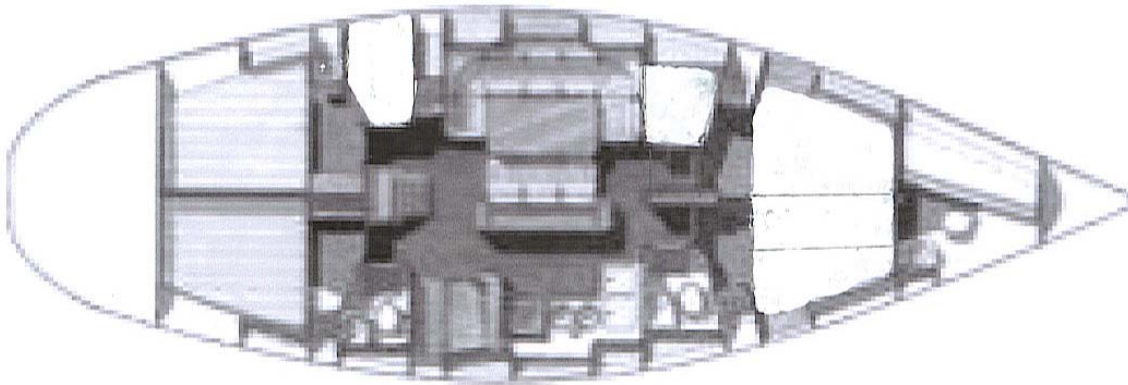
**Comments:**

Chainplates, mast collar and mast step were secure. No signs of leaks were observed. Moisture meter readings around chainplates were unremarkable. Soundings were crisp.

**Accommodation****Layout**

The original layout of the accommodation of this model featured twin cabins forward and four head compartments.

The layout of "XXXXXXXX" was different from her near-sister ships in that there was one large cabin forward and two of the four head compartments were in use as storage lockers. The layout is shown below:



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**Crew cabin**

Aft of the forepeak was a crew cabin with two bunks and a sink.

**Forward cabin**

There was one forward cabin with a double berth, settee and cabinets and lockers.

**Forward head compartment**

The forward head compartment was located to starboard and comprised a manual toilet, a vanity with stainless steel sink and shower. The shower unit was an integral part of the inner lining.

**Main saloon**

Aft of the forward cabin was the main saloon with a U-shaped dinette to port, an island counter with settee at the centerline and the galley to starboard. Cabinets and lockers.

**Galley**

The galley was located in the main saloon to starboard.

**Navigation station**

The navigation station was located to starboard, aft of the galley.

**Aft cabins**

To port and starboard were cabins with double berths.

**Aft head compartment**

To starboard was an aft head compartment, which was similar to the forward head compartment.

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**Comments:**

The accommodation was clean and well maintained throughout.  
The brightwork of bulkheads and furniture was in excellent condition.  
The condition of the upholstery was good  
The teak and holly cabin sole remained in good condition.

Furniture and cabinetry were found in good repair.  
Doors closed easily were provided with positive catches.

No internal water leakages were observed.

**Galley equipment:**

**Counter top:** laminated material; storage under and above

**Sink:** double stainless steel

**Stove:** gimbaled three-burner, with oven; make Force 10

**Fuel:** LPG

**Refrigeration:** top loading refrigerator/freezer compartment; Frigoboat dual voltage

**Comments:**

**Recommendation:** *Affix a label near the stove with the following information:*

*"CAUTION: Open-flame appliances consume oxygen. Lack of oxygen can cause asphyxiation or death. Maintain open ventilation when stove is in use." (NFPA 8.5.14.7).\*\**

**Domestic Water System**

**Tanks:** four FRP tanks

**Pumps:** two Flojet

**Accumulator:** yes

**Piping:** flexible hoses

**Hot water tank:** with 120 V AC heating element and heat exchanger with engine.

**Safety valve:** yes

**Dockside water connection:** no

**Water maker:** no

**LPG system**

**Gas:** LPG for cooking purposes

**Tanks:** two aluminum, 20 lbs

**Locker:** sealed from interior of vessel

**Location:** in starboard lazarette

**Drain over board:** above waterline

**Solenoid valve:** solenoid valve with control panel in galley

**Regulator:** yes

**Low side pressure relief device:** yes

**Pressure gauge:** yes

**Fuel lines:** copper with flexible gas rated hose; connections with permanently attached end fittings.

**Gas detector:** no

**Comments:**

The solenoid was functional. The system was pressure tested and no pressure loss was noted in the system for five minutes after closing the cylinder valve.

**Recommendation:** *Install a LPG gas detector.\**

**Heads/Sanitation System (MSD's)**

**Heads:** two manual heads; make Jabsco

**Discharge:** via MSD overboard, to holding tank or through deck fitting by shore based pump-out facility

**MSD:** make Lectra/San type I

**Holding tank:** polyethylene (aft head only)

**Level indicator:** remote in aft head

**Waste pump:** electric

**Comments:**

The system was not tested.

**Bilges and Bilge Pumping**

**Electric bilge pumps:** two

**Manual bilge pumps:** one Whale pump in cockpit and one under port settee in main saloon

**High bilge water alarm:** no

**Sump pumps:** electric

**Discharge:** above heeled waterline

**Comments:**

The bilges were generally dry and clean

The electrical bilge pumps were functional. No pumping of water was observed since there was no water in the bilges.

**Auxiliary Engine**

**Make:** Perkins

**No. cyls:** 4     **model:** M 90

**Serial number:** 14819

**Type:** diesel

**Power:** 80 hp

**Last overhauled:** unknown

**Hours of operation:** unknown

**Cooling:** closed fresh water

**Instrumentation:** tachometer, cooling water temperature, lub.oil pressure, alarms

**Transmission:** make: Hurth- Muenchen.

**type:** HBW 360-2R     **serial #:** 086002

**Engine control:** push-pull cables single lever combining gearshift and throttle control

**Location:** under settee and island in the main saloon



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**Comments:**

The engine was visually inspected only and no diagnostic analyses were made.

Engine and engine compartment were clean.

Flexible mounts were supported by molded FRP beds, which were part of the structural grid.

They were free of signs of stress or significant corrosion.

All of the existing hoses were serviceable, with no signs of failure.

**Fuel System (diesel)**

**Tanks:** two aluminum, located under berths in aft cabins

**Filters:** two Racor.

**Remote fuel gauges:** two in cockpit

**Fuel distribution hoses:** A1, Trident and Hutchinson Marine type A-ISO 7840

**Fuel and vent hoses:** markings not legible

**Grounding:** fuel tank and deck fill fitting

**Comments:**

No leaks were observed in the system.

Fuel hoses were in serviceable condition. Some of the hoses were not marked with USCG rating.

The fill hose was double clamped.

**Recommendation:** *Replace fuel fill and vent hoses by USCG type A1, A2, B1 or B2.(ABYC H-33).\*\**

**Exhaust Systems**

**Type:** wet exhaust system

**Lines:** flexible hoses

**Muffler:** stainless steel waterlift type

**Comments:**

The exhaust hoses were not marked, but appeared to be in serviceable condition where visible.

No stains or other signs of leaks were observed. All connections were double clamped.

**Recommendation:** *Monitor exhaust lines for deterioration and replace by hoses meeting UL 1129 standards for Wet Exhaust Components or SAE J2006 Marine Exhaust Hose (ABYC P-1.7.1.5) when necessary.\*\**

**Drive train**

**Propeller:** bronze three-bladed feathering, make Max Prop 22" diameter

**Shaft:** stainless steel 40 mm diam.

**Shaft seal:** Volvo dripless

**Rope cutter:** no

**Comments:**

The blades of the propeller rotated easily without binding and no undue play was observed.

Repairs had been made to the blades, which appeared to be adequate.

There was no undue play in the cutless bearing.

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## Electrical System

### 12 Volt DC system

**Power source:** one group 27 starting battery; two 4D house batteries

**Location:** under sole main saloon

**Secured:** in acid proof battery boxes

**Battery switches:** three two position switches and one negative disconnect switch.

**Battery charging system:** by engine alternators or battery charger when connected to shore power

**Battery cables:** 1/0 AWG; PVC coated with swaged lugs

**Power distribution:** panelboard at navigation station with main and branch circuit breakers, Volt and Ampere meters. The circuits of Electra San MSD's were protected by fuses and the circuit of the anchor windlass was protected by a breaker close to the solenoid switch.

### **Comments:**

Batteries were not load tested but appeared to be in good repair.

The power distribution panel was opened and the wiring was well organized.

All 12 V circuits were tested and were found functional. There were no signs of over-heating.

### 120 Volt AC System

**Power sources:** shore power

**Shore power inlet:** 30 Amp power cable directly connected to disconnect switch

**Circuits:** one

**Reverse polarity indicator:** not required: all branch circuits were provided with two-pole breakers

**Galvanic isolator:** not observed

**Battery charger:** output unknown

**Inverter:** no

**Power distribution:** distribution panel with main and branch circuit breakers under companionway

### **Comments:**

Shore power cable was serviceable and there were no signs of over-heating.

The 120VAC circuits were tested with an Ideal Sure Test Circuit Analyzer ST-2D for proper wiring, reverse polarity, voltage drop, ground-neutral voltage and line impedance.

Adequate grounding was established.

Ground and neutral wiring were separated.

The polarity of the receptacle in the forward cabin to starboard was reversed.

***Recommendation:*** Reverse the hot and neutral wiring of the receptacle in the forward cabin to starboard.\*\*

The negative 12 VDC system was properly connected to the 120 VAC grounding.

### Wiring

**Type:** multi-stranded PVC insulated

**Lightning protection:** no protection system meeting ABYC or NFPA standard was installed.

### **Comments:**

All observed wiring was well supported and in good condition. Wiring was neatly and mostly unobtrusively routed.

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## Ground Tackle and Mooring Equipment

**Anchor roller:** - stainless steel fitting integrated with stemhead fitting and double Marithane rollers  
- aluminum fitting with Marethane roller at the stern

**Windlass:** electric 12-Volt, make Lofrance; vertical with chain gypsy and capstan

**Anchor and rode:** 45 lbs CQR } 3/8" chain rode and 3/4" three strand nylon rode  
33 lbs Bruce claw anchor }

**Anchor/chain locker:** well with hatch in foredeck

**Spare anchor:** 45 lbs CQR stowed downbelow

**Mooring equipment:** three chocks and three cleats on each side.

### **Comments:**

The visible chain and nylon rode were serviceable, although they were not removed from the locker for a complete inspection. The length of the rode was not measured, but appeared adequate.

**Recommendation:** *Pull up anchor rode from anchor locker and check its condition..\**

**Recommendation:** *Secure CQR anchor shackle with a seizing wire.\**

The anchoring and mooring equipment appeared adequate for this vessel.

## Spars, Rigging and Sails

**Rig:** masthead sloop

**Mast:** anodized aluminum; double spreaders; internal sheaves for halyards; make Isomat

**Main boom:** anodized aluminum; make Charleston Spar

**Spinnaker poles:** one anodized aluminum

**Reaching strut:** one anodized aluminum

**Standing rigging:** 1x19 stainless steel headstay, double backstay, cap, intermediate and lower shrouds.

**Terminals:** swaged

**Turnbuckles:** open stainless steel

**Running rigging:** low-stretch rope

**Sail inventory:** no sails were aboard at the time of the inspection

### **Comments:**

The mast was un-stepped at the time of the survey and was not accessible for a full inspection. Spars, spreaders, standing and running rigging were in good condition.

The rig was inspected by xxxxxxxxxxxx (riggers), who informed the surveyor that new standing rigging and new genoa halyards including sheaves were installed in 2005/6

The mainsheet was also replaced.

A new main boom was on the vessel.

The anodized finish of all spars was in good condition as seen

The mast butt showed a repair which appeared to be sound.

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## Sailing Hardware

**Winches:** -two Lewmar 66 2-speed ST primaries in cockpit  
-two Lewmar 48 2-speed secondaries in cockpit  
- one Lewmar auxiliary ST winch in cockpit  
- two Lewmar 48 2-speed ST on cabin trunk  
- two Lewmar 40 2-speed ST on cabin trunk  
-one Lewmar 40 ST single speed on mast  
- one Lewmar 30 ST single speed on mast  
- one Lewmar 40 single speed on mast

**Genoa tracks:** inboard with sheeting cars

**Traveler:** on cabin top

**Rope clutches:** on cabin top

### **Comments:**

The hardware was in good condition and securely installed.

The winches were secure and functional.

## Canvas

**Dodger:** no

**Bimini:** no

**Covers:** mainsail cover

## Fire Fighting Equipment

**Portable Fire Extinguishers:** four USCG approved size-I dry chemical rated for class A, B and C fires

**Fixed Fire Extinguishers:** no

**Smoke detector:** no

### **Comments:**

The extinguishers were in good condition.

The number and type of portable fire extinguishers met USCG minimum standards.

ABYC standards recommend a portable clean agent extinguisher for discharge in the engine compartment through a fire port. A clean agent is an electrically non-conducting, volatile, or gaseous fire extinguishant that does not leave a residue upon evaporation.

**Recommendation:** *Install a fire port in the engine casing and equip the vessel with a clean agent portable fire extinguisher (ABYC A-4.5). One fire extinguisher should be within reach of the helmsman.*

*Inspect portable fire extinguishers monthly. Pressure gauges of dry chemical extinguishers should be checked. Recharge or replace units after any discharge and have all units checked annually by a qualified person. A tag should be attached showing the date of such maintenance check (ABYC A-4.Ap.6.3).\*\**

The 2004 NFPA Fire Protection Standard for Pleasure and Commercial Motor Craft recommends smoke detectors on boats with a length of 26 feet or over.

**Recommendation:** *Install a single station smoke alarm, listed to UL217, in each overnight sleeping space (NFPA 302-12.3).\*\**

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## Safety Equipment

**Personal Flotation Devices:** seven USCG Type II; one child type II; two USCG type IV

**Life ring/horse shoe:** yes

**Lifesling:** yes

**Lifesling tackle:** not observed

**MOB pole:** not on board at the time of the survey

**Liferaft:** not onboard at the time of the survey since it was being repacked

**Harnesses:** four with tether lines

**Flares:** several handheld flares, parachute flares, smoke signals

**Distress flag:** yes

**EPIRB:** ACR mini B-class

**First Aid kit:** yes

**Vapor Detectors: CO:** no

### **Comments:**

The service life of all flare and smoke signals had expired.

**Recommendation:** *Equip vessel with at least 3 day and 3 night, or 3 day-and-night flares with current dates, in order to meet USCG requirements(33CFR 175.110.\*\*\**

A 121MHz EPIRB was found on board. These units are obsolete, are illegal to use and should be removed from the vessel.

**Recommendation:** *Remove the 121MHz EPIRB from the vessel and replace it by a 406MHz EPIRB before any offshore passage.\*\*\**

The vessel was equipped with a Lifesling, but no Lifesling tackle was observed. A dedicated tackle will greatly facilitate hoisting a person out of the water.

**Recommendation:** *Equip vessel with a Lifesling tackle.\*\**

ABYC standards recommend CO detectors on all boats with an enclosed accommodation if a gasoline generator or inboard gasoline propulsion engine is installed. Although diesel exhaust does not normally have CO concentrations as high as gasoline exhaust, diesel exhaust does produce dangerous levels of CO.

**Recommendation:** *Install Carbon Monoxide (CO) detectors in the main saloon and in each sleeping area. The detectors should be certified to meet the requirements of UL 2034. If a circuit breaker is installed, it should be non-switchable (ABYC A-24).\*\**

## Navigation Instruments/Electronics

**Compass:** - two Plastimo magnetic spherical steering compasses

- one Autohelm Personal Compass

**Compass deviation chart:** not sighted

**Radar:** Raymarine SL 70C

**Radar antenna:** radome on radar mast

**Loran:** no

**GPS:** Garmin 128

**Depth Finder:** B&G

**Log/ Speed:** B&G

**Wind indicator:** B&G

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**VHF:** Standard**SSB:** Kenwood; model TKM-707.**Stereo system:** Kenwood AM/FM/CD**TV:** Panasonic Omnivision 13" with VCR**Aerials:** VHF; new in 2006**Comments:**

No compass deviation chart was sighted. An uncorrected compass can not be relied upon.

**Recommendation:** *Swing the compass or perform checks with GPS readings. \**

No FCC license for the SSB radio was found onboard.

**Recommendation:** *Ensure that a valid FCC license is on board. See <http://wireless.fcc.gov/uls/> for obtaining or renewing a FCC license.\*\*\**

It has been reported that TV sets have been a major cause of shipboard fires, even when they were turned off.

**Recommendation:** *Turn off electrical circuits serving TV sets whenever the vessel is left unattended.\**

### **Other Navigation Equipment**

**Navigation lights:** side lights, masthead light, stern light, anchor light**Radar reflector:** yes**Navigation shapes:** not observed**Sound Producing Devices:** disposable hand held compressed gas horn**Bell:** yes**Navigation rules:** not observed**Comments:**

Stern and side lights were functional.

The International Navigation Rules and the Inland Navigation Rule require that a vessel proceeding under sail when also under power, exhibit a dayshape in the form of a cone, apex downwards. A vessel at anchor shall exhibit during the day a dayshape in the form of a ball.

**Recommendation:** *Equip vessel with a conical dayshape and an anchor ball (Navigation Rules Annex I).\*\*\**

The Inland Navigation Rules require that a copy of the rules is carried on all vessels 40 feet in length.

**Recommendation:** *Equip vessel with an up-to-date copy of the Inland Navigation Rules.\*\*\**

### **Miscellaneous Equipment**

**Oil Discharge Prohibited Placard:** yes**Waste Discharge Prohibited Placard:** yes**Waste Management Plan:** not observed**Various:** Boat hook, Bosun's chair, fenders, dock lines, BBQ, 2 buckets with lanyards; rigging cutter

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**Comments:**

Recreational boats 40 feet or more in length and equipped with a galley and berthing are required to carry a Waste Management Plan, describing the procedures for collecting, processing, storing and discharging garbage, and designate the person who is in charge of carrying out the plan if the vessel operates, or is certified to operate, beyond 3 nautical miles from shore.

***Recommendation:*** *Make a Waste Management Plan and carry it on board, if the vessel will operate beyond 3 nautical miles from shore (33CFR151.57). \*\*\**

**Survey Practice Statement**

This report is prepared for the exclusive use of the Client whose name and address appears on page one of this report, and this report is not transferable to any other person or entity. The intended users of this report and appraisal are the client and those lenders and underwriters considering financing or insuring this vessel for this Client only.

The report is not intended for distribution to any persons or entities having a subsequent interest in the vessel.

The surveyor warrants that this report is a true and unbiased opinion of the vessel, based upon a visual inspection on the date of the inspection.

It is the nature of marine vessels that deterioration, wear, and accidents do occur and as such this report can only be indicative of the condition and value of the vessel at the time the inspection was conducted.

The findings, opinions and conclusions are based upon the best professional judgment of the undersigned surveyor. If this report does not discuss a specific item, equipment or machinery, it is not covered by this inspection.

While every effort has been made to conduct a thorough inspection, there can be no guarantee or warranty, express or implied, as to the condition or suitability of the vessel and her equipment or machinery.

This report makes no representation and does not purport to describe any condition which may have changed since the date of the inspection and the recommendations herein are limited to those that, in the opinion of this surveyor, are reasonably necessary and appropriate, based upon the conditions and circumstances as they existed at the time of the inspection.

The surveyor assumes no responsibility for any defects and is to be held harmless for conditions subsequently arising.

The undersigned has no present or prospective interest in the subject vessel. There is no bias or interest toward the parties involved. Compensation for this service is not contingent on any action or event resulting from the findings, opinions or conclusion in this report.

Respectfully submitted,

Jan W. Muntz, SAMS  
Accredited Marine Surveyor

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## Appendix A

### Scope of Survey

Hull and deck moldings were subjected to close visual inspection and random percussion soundings with a light phenolic mallet and moisture meter readings with an Electrophysics Moisture Meter Model GRP33 and/or a Protimeter Aquant, unless stated otherwise in the report.

The interior structure of the vessel was visually inspected.

Certain parts of the vessel's structure, systems and equipment could only have been inspected after removing bulkheads, joinery, liners, cabin soles, tanks, etc. This would have been prohibitively time consuming, potentially destructive and costly to restore. Unless noted otherwise, components requiring access with tools or by disassembly have not been inspected and core material of deck or hull, if any, were not sampled.

Dirt, marine growth, coatings buildup or corrosion may also have restricted the surveyor's ability to examine the hull off the vessel.

The installation and external condition of machinery, plumbing, electrical systems and equipment was visually inspected. Complete inspection could only be made by disassembly or by continuous operation. This has not been done. No mechanical tests were performed on propulsion or auxiliary generating equipment. No compression tests were performed.

No fluid samples were drawn. Unless expressly stated, there has been no operation or opening or removal of any portion of the vessel's machinery, electronics, ancillary equipment, tanks or fittings for internal examination.

The inspection of flexible piping was limited to the condition of its external casing and only where readily accessible for visual inspection.

Batteries and their installation were visually inspected, but the batteries were not load tested. The external condition of electrical wiring, connections and system installation was inspected. If shore power was readily available, the 120VAC wiring system was tested with an Ideal Circuit Analyzer. Electronic and electrical equipment was tested by powering up and observing basic function. No measurements were taken; no calibrations or adjustments were made.

A complete analysis of the vessel's electrical systems was beyond the scope of the survey.

Propulsion and rudder shafts were not drawn for inspection, and no engine/propeller shaft alignment was checked.

Bimini tops, awnings, winter covers, etc, that were not rigged or laid out for inspection, have not been evaluated.

If the mast was stepped, it has been viewed from deck level only.

If the vessel was in a state of winter lay-up, operation of winterized systems was precluded.

If this survey report did not discuss a specific item, equipment or machinery, it was not covered by this survey. Small defects such as loose hinges or scratches, minor chips in the cosmetic finish, normal wear & tear were not discussed in this report.

No evaluation was made of the vessel's stability or other design aspects.

An assessment whether the vessel was in full compliance with all of the rules regulations and standards mentioned in the section "Purpose of the Survey" of this report, was beyond the scope of the survey. The surveyor does not warrant expressly or implied, or guarantee compliance of the vessel with all of these rules, regulations and standards.

## **Appendix B** **Definition of Terms**

**Appeared:** means that a close inspection and/or testing of the particular item or system, was not possible due to constraints imposed upon the surveyor (e.g. no power available, the item was not clearly visible or readily accessible, or requirements not to conduct destructive tests, etc.).

**Powered up:** means that the unit was turned on and powered up. Calibration or verification of proper operation was not done. It does not mean that the unit is fully operational or functional unless specifically stated in this report.

**Fit for Intended Service:** service intended by the Client and stated in the report.

**Good Marine Practice:** a time-honored practice, method or technical configuration that has proven to be practical, sound and/or to improve the safety of vessels and/or their crews.

### **Categories of Cruising (as defined in the Safety Recommendations for Cruising Sailboats by US Sailing):**

- **Inshore Cruising (IC):** short-duration cruising in open, relatively warm water, most of which is protected or close to shorelines. Extended severe weather can generally be avoided by heeding local weather forecasts or by returning to harbor. Night sailing is included.
- **Coastal Passage-Making (CPM):** long-duration cruising along or not far removed from shorelines, but where a high degree of self-sufficiency is required of the boat and crew although outside assistance would normally be available in the event of serious emergencies. The boat and crew may be required to manage severe weather for significant periods before safe harbor can be reached.
- **Ocean Passage-Making (OPM):** long-duration cruising, well offshore or in large unprotected bays or other areas where the crews may experience large waves, strong currents and conditions leading to the rapid onset of hypothermia; where the boat must be completely self-sufficient for extended periods, capable of withstanding heavy storms and prepared to meet serious emergencies without the expectation of outside assistance.

### **Condition of a component or system:**

- **Poor Condition:** means that the item or system required more than minor attention, or had more than a few deficiencies, or was in need of service, repairs, or replacement.
- **Fair Condition:** means that the item or system was marginally serviceable, or cosmetically poor, but still functions. The term may also mean that the overall system is less than in good condition.
- **Adequate or Serviceable Condition:** means that the item or system was in reasonable condition and sufficient for a specific requirement.
- **Good Condition:** means that the item or system was nearly new, with only minor cosmetic or structural discrepancies.

**Overall condition of a vessel:**

- **Restorable Condition:** means that enough of the hull and machinery existed to restore the vessel to useable condition.
- **Poor Condition:** means the vessel was unusable as is. It required repairs or replacement of systems, components, or other gear in order to be considered functional.
- **Fair Condition:** means that the vessel needed major additional work and/or additional equipment.
- **Average Condition:** means that the vessel was ready for its intended service, requiring no major or extensive additional work and was normally equipped for a vessel of its size and its intended service.
- **Above Average Condition:** means that the vessel had been cared for above average and/or was equipped with extra (electrical) equipment and electronic gear.
- **Excellent Condition:** means that the vessel was new or like new.

**USCG:** United States Coast Guard

**USC:** United States Code

**CFR:** Code of Federal Regulations

**ABYC:** American Boat and Yacht Council

**NMMA:** National Marine Manufacturers Association

**NFPA:** National Fire Protection Agency

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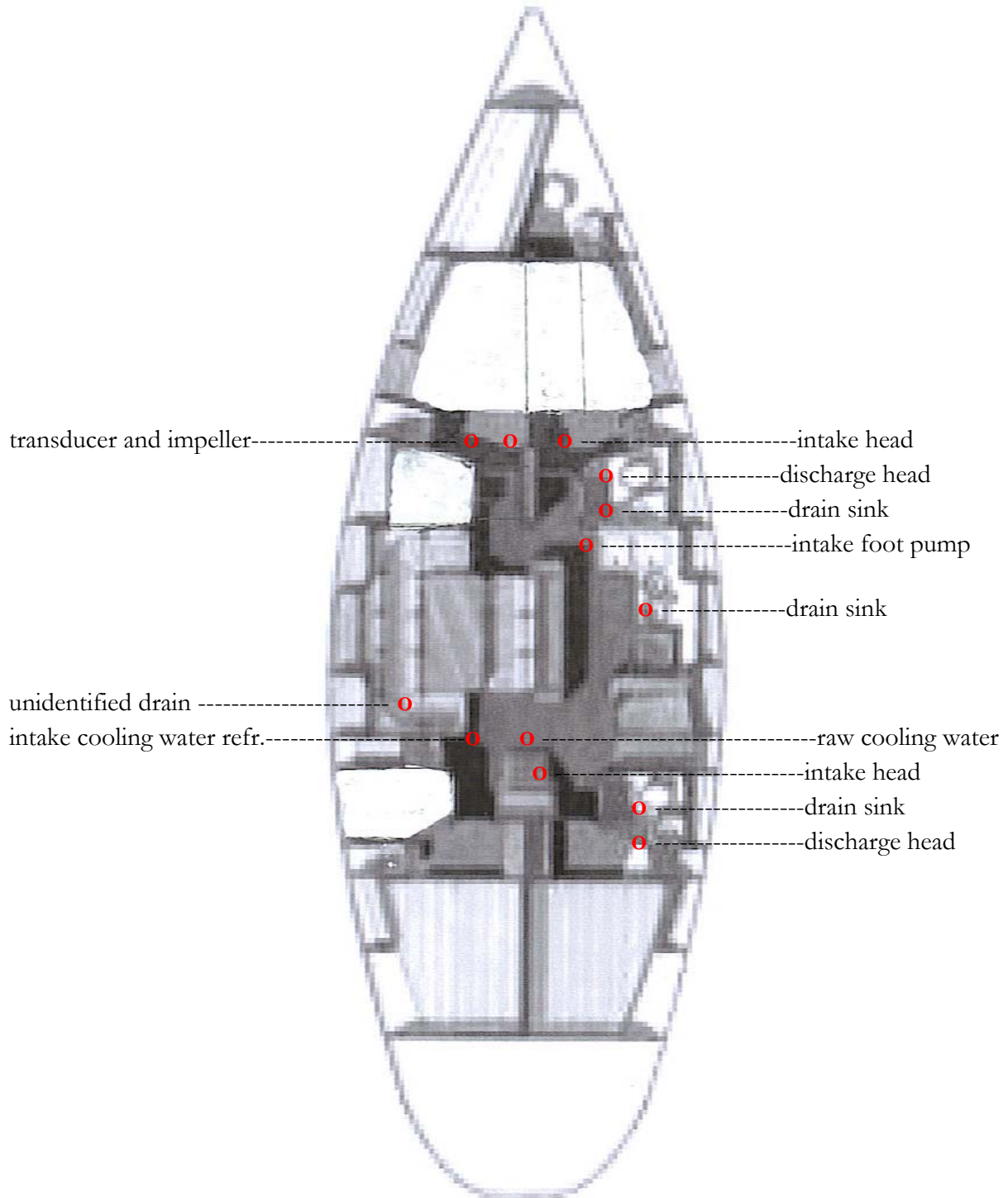
**Appendix C**  
**Coast Guard Vessel Documentation Query**

**Coast Guard Vessel Documentation**

**Data found in current database.**

Vessel Name:	XXXXXXXXXX	USCG Doc. No.:	XXXXXXX
Vessel Service:	RECREATIONAL	IMO Number:	*
Trade Indicator:	Recreational, Registry	Call Sign:	*
Hull Material:	FRP (FIBERGLASS)	Hull Number:	BEYFRXXXXXXXX
Shipyard and Address:	CHANTIERS BENETEAU SA *	Year Built:	1992
Hullyard and Address:	* ST HILAIRE DE RIEZ	Length (ft.):	49.2
Hailing Port:	SAN FRANCISCO, CA	Hull Depth (ft.):	7
Owner:	XXXXXXXXXXXXXXXX	Hull Breadth (ft.):	15.5
		Gross Tonnage:	27
		Net Tonnage:	24
Documentation Issuance Date:	xxxxxx	Documentation Expiration Date:	xxxxxx
<b>Previous Vessel Names:</b>	No Vessel Name Changes	<b>Previous Vessel Owners:</b>	No Vessel Owner Changes

**Appendix D**  
**Schematic Location of Below-Waterline Thru-Hulls**



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## Appendix E

### Summary of Recommendations

#### Recommendations related to USC and CFR's\*\*\*

1. *Display Connecticut validation decal on both sides of the bow.*
2. *Equip vessel with at least 3 day and 3 night, or 3 day-and-night flares with current dates, in order to meet USCG requirements(33CFR 175.110).*
3. *Remove the 121MHz EPIRB from the vessel and replace it by a 406MHz EPIRB before any offshore passage.*
4. *Ensure that a valid FCC license is on board. See <http://wireless.fcc.gov/uls/> to obtain or renew a FCC license.*
5. *Equip vessel with a conical dayshape and an anchor ball (Navigation Rules Annex I).*
6. *Equip vessel with an up-to-date copy of the Inland Navigation Rules.*
7. *Make a Waste Management Plan and carry it on board, if the vessel will operate beyond 3 nautical miles from shore (33CFR151.57).*

#### Recommendations related to ABYC and/or NFPA standards and other safety issues.\*\*

8. *Remove some of the seacocks from their through-bull fittings and check both for galvanic corrosion. Replace all seacocks if galvanic corrosion is found*
9. *Affix a label near the stove with the following information:  
"CAUTION: Open-flame appliances consume oxygen. Lack of oxygen can cause asphyxiation or death. Maintain open ventilation when stove is in use." (NFPA 8.5.14.7).*
10. *Replace fuel fill and vent hoses by USCG type A1, A2, B1 or B2.(ABYC H-33)*
11. *Monitor exhaust lines for deterioration and replace by hoses meeting UL 1129 standards for Wet Exhaust Components or SAE J2006 Marine Exhaust Hose (ABYC P-1.7.1.5) when necessary.*
12. *Reverse the hot and neutral wiring of the receptacle in the forward cabin to starboard.*
13. *Install a fire port in the engine casing and equip the vessel with a clean agent portable fire extinguisher (ABYC A-4.5). One fire extinguisher should be within reach of the helmsman.  
Inspect portable fire extinguishers monthly. Pressure gauges of dry chemical extinguishers should be checked.  
Recharge or replace units after any discharge and have all units checked annually by a qualified person.  
A tag should be attached showing the date of such maintenance check (ABYC A-4.Ap.6.3).*
14. *Install a single station smoke alarm, listed to UL217, in each overnight sleeping space (NFPA 302-12.3).*
15. *Equip vessel with a Lifesling tackle.*
16. *Install Carbon Monoxide (CO) detectors in the main saloon and in each sleeping area. The detectors should be certified to meet the requirements of UL 2034. If a circuit breaker is installed, it should be non-switchable (ABYC A-24).*

#### Recommendations concerning maintenance and upgrades\*

17. *Monitor the rudder for delamination or movement of the blade in relation to the rudder stock at each haul out.  
Consideration should be given to drill a small hole near the bottom of the rudder in the fall in order to drain any water that might have accumulated, thus preventing frozen water to split the rudder.*
18. *Open steering pedestal, clean, check and grease all components as needed as part of normal maintenance*
19. *Lubricate the steering cable with oil (not grease).*
20. *Repair or replace bent stanchion.*
21. *Tighten lifelines and replace missing securing nut of the lower forward lifeline to port.*

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22. *Install a LPG gas detector.*
23. *Pull up anchor rode from anchor locker and check its condition.*
24. *Secure CQR anchor shackle with a seizing wire.*
25. *Swing the compass or perform checks with GPS readings.*
26. *Turn off electrical circuits serving TV sets whenever the vessel is left unattended.*