



**41 North Marine, LLC
2 William Schmid Dr.
Wakefield RI 02879**

REPORT OF MARINE SURVEY

of the vessel

"XXXXXXXXXXXX"

2003/Cranchi/Endurance 33



PREPARED EXCLUSIVELY FOR:

XXXXXXXXXXXX

CONDUCTED BY:

Barton P. Cerra SAMS-SA

on

XXXXXXXXXXXX

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SURVEY SCOPE & GENERAL INFORMATION

SURVEY REQUESTED BY

Client name:
XXXXXXXXXXXXXX.

Street address:
XXXXXXXXXXXXXX.

E-mail address:
XXXXXXXXXXXXXX.

Cellular phone:
XXXXXXXXXXXXXX.

SCOPE OF SURVEY

Type of survey: PRE-PURCHASE CONDITION & VALUE.
Vessel Yr/Make/Model: 2003/Cranchi/Endurance 33.
Purpose of survey: Assess the overall condition and value of vessel for pre-purchase decision making and if purchased, used for insurance underwriting and/or financing.
Intended use: Pleasure-Atlantic coast line cruising.
Vessel surveyed at: XXXXXXXXXXXXXXXX.
Survey requested by: XXXXXXXXXXXXXXXX.
Inspection date: XXXXXXXXXXXXXXXX.
Inspection time: 1000.
Conducted by: Barton P. Cerra.
How survey conducted: The vessel was surveyed both while afloat in its assigned slip & hauled out of the water for bottom inspection. A sea trial was also conducted.
Weather conditions: Clear & dry.
Sea trial: A sea trial was performed as part of this survey. The results are included in the Sea Trial section.
Electrical systems checked: A.C. shore power was used to check A.C. electrical systems. DC power was used to check DC electrical systems. Onboard generator was also started to test AC power output.
Moisture / Delamination: The Tramex Skipper Plus moisture meter was used for moisture readings referenced in this report. All moisture readings are comparative to surrounding areas with terms of normal or relatively dry, relatively moist or relatively wet. If delamination is present with above normal moisture readings further testing is advised.
Oil Analysis: Oil samples were pulled from both engines and sent to a lab for analysis. Results should be available in 3-4 business days and will be sent via e-mail.
Boating Education Note: *NOTE: When getting into a larger class of vessels, and regardless of boating experience, the United States Coast Guard Auxilary and United States Power Squadrons offer boating safety classes that you may find very beneficial. In addition, many Insurance companies offer insurance premium discounts if you have a completion certificate from the USCG Auxilary or US Power Squadron regarding their boating safety classes. Some of the topics covered are: -Advanced Power Boat Handling -Mariner's Compass -Anchoring -Onboard Weather Forecasting -Basic Coastal Navigation -Sail Trim and Rig Tuning -Boat Handling Under Power -Trailerling Your Boat -USCG Regulations & CFR's -Knots, Bends and Hitches -Marine Radar -Using VHF & VHF/DCS Marine Radio -How to Use a Chart -Using a GPS*

VESSEL CONDITION & VALUE

Condition rating: AVERAGE CONDITION.
Estimated fair market value: XXXXXXXXXXXXXXXX.

Estimated replacement cost: XXXXXXXXXXXXX.

NOTE: *The overall vessel condition and value is for the vessel in its current condition at the time of survey prior to any repairs or maintenance and was established after a complete inspection of stated vessel, the results of which are included in this report of survey. The estimated fair market value and replacement cost includes all listed auxiliary equipment. See "Condition & Value Summary" section for additional details.*

VESSEL INFORMATION

Vessel Yr/Make/Model: 2006/Cranchi/33Endurance.
Vessel name: XXXXXXXXXXXXX.
Hailing port: XXXXXXXXXXXXX.
Hull ID number (HIN): -XXXXXXXXXXXXX A true digital photograph of the hull ID number of the referenced vessel is shown here and was found located on the transom.



State registration no.: XXXXXXXXXXXXX.
Manufacturer/Builder: Cranchi, Via Nazionale, Italy.
Month/Year built: 01/02.
Vessel Type: Fiberglass planing, deep vee hull, conventional sheer.
Vessel Specifications: **LOA**-Length Overall: 33' // **LWL**-Load Length Water Line: 31 // **Beam**- 10'2"// **Draft**:-3'4"// **Weight/Displacement**-12,897 // **Overhead Clearance**- NOT Including Antenna's: Vessel must be measured.
Source of Specs: BUC Research, Published Manufacturer Specifications.
Vessel description: 2003 33' Cranchi Endurante, powered with twin Volvo duo prop stern drives, fresh water cooled, (2) 75 gallon fuel tanks, anchor and anchor winch, full canvas, VHF radio, GPS DF/FF, radar, auto pilot, galley with sink, microwave, stove, refrigerator, fresh water system, enclosed head with sink and shower, stereo, swim platform, bow thruster, hydraulic engine cover lift, trim tabs, docking lights, etc.

SURVEY STANDARDS

Standards followed: *This survey was completed using as reference the federal regulations and amendments issued and enforced by the United States Coast Guard under the authority of Titles 33 and 46 of the United States Code of Federal Regulations (CFR's) in effect at the time of the survey inspection. In addition the American Boat and Yacht Council (ABYC) and National Fire Protection Association (NFPA-302) voluntary standards in effect at the time of the survey were used as reference. These ABYC and NFPA voluntary standard practices are generally followed by most vessel manufacturers today. 100% adherence is not guaranteed.*

SURVEY INSPECTION COMMENTS

Comments:

- All systems and components inspected and described herein apply only at Time of Survey and are considered serviceable and/or functional except as indicated in the survey report and listed in the Recommendations section. Electronic devices and instruments were checked for power up only - not for functionality. Areas not inspected include vessel structure areas which are covered, unexposed or inaccessible such as screwed down or false panels or bulkheads, moldings or any

area that was not readily open for visual inspection. If a component is not identified in this report, it was not sighted/inspected or not installed.

- It is the nature of marine vessels that deterioration, wear and accidents do occur and as such, this report therefore represents the condition of the vessel only on the date the survey was conducted. It provides no guarantee and no prediction of the vessel's condition on any later date.
- "**Priority I Recommendations**" are related to Safety & Regulatory findings and are printed **RED** in the report.
- "**Priority II Recommendations**" are related to Maintenance & Standards findings and are printed **BLUE** in the report.
- "**Other Observations & Suggestions**" are items that are relatively minor in nature and are printed **GREEN** in the report.
- **FRP**: Fibre reinforced plastic-Also known as Fiberglass or Fibreglass. This is the typical construction material for most modern day yachts and small craft.
- **APPEARS**: Indicates that a very close inspection of the particular system, component or item was not possible due to constraints imposed upon the surveyor (e. g. no power available, behind screwed down panels, or requirements not to conduct destructive tests).
- **FUNCTIONAL/OPERABLE**: Functions as intended.
- **POWERS UP**: Device was tested for Power Up only, not for full design functionality.
- **SERVICEABLE**: Sufficient for a specific requirement.
- **EXCELLENT CONDITION**: New or like new.
- **GOOD CONDITION**: Shows minimal wear with possible minor cosmetic discrepancies.
- **FAIR CONDITION**: Denotes that system, component or item is functional as is with minor repairs. (MONITOR OFTEN)
- **POOR CONDITION**: Requires repair or replacement of system, component or item to be considered fully usable.

Report terms used:

EXTERIOR HULL & BOTTOM INSPECTION

HULL EXTERIOR-SIDES

Hull type/Construction:	Hand laid and molded fiberglass.
Hull cosmetics:	Hull needs a thorough cleaning and polishing. A few minor dings/dock rash noted. This is normal for a vessel of this age. Deep scratches should be filled in and covered with matching gel coat.
Moisture/Delamination:	All moisture meter readings on hull sides and surrounding thru hull fittings were relatively dry with normal comparative moisture meter readings.
Stem:	Solid, no cracks on external inspection. Moisture readings relatively Dry.
Side thru hull fittings:	All thru hull fittings are adequately secured and sealed to hull.
Rub rail:	Rub rail is stainless steel with backing of white plastic. Well secured in good condition with only minor scrapes.

Docking lights: Docking lights installed on both forward sides of hull. Both lights power up properly when tested. Port side light shows signs of severe corrosion.



Port Lights: Port side: Two, Starboard side: Three, - opening type All secure.
Engine room vents: Engine room vents are molded in and in excellent condition.

Findings:	Recommendations:
Port side docking light shows signs of severe corrosion.	Further investigate and repair with like kind parts and general marine practices.

TRANSOM

Transom type: Rounded transom with molded in swim platform, Well secured, no cracks or defects sighted.

Moisture/Delamination: All moisture meter readings on transom and surrounding thru hull fittings were relatively dry with normal comparative moisture meter readings. No delamination discovered when randomly testing with percussion hammer.

Transom cosmetics: Very good transom surface condition.

Swim Platform/Step: Molded in, fiberglass with teak inserts, swim platform is well secured to transom.

Swim/Boarding ladder: The boarding ladder is stainless steel drop down that is mounted, under swim platform, The ladder is well secured and functional.

Engine room vents: Molded in caps on back of transom. Functional.

Transom shower: Not tested, water system was winterized. Appears functional.

Transom door: Transom door on port side off swim platform. Well secured and functional.

Transom thru hull fittings: All well secured and functional.

Trim tabs: Bennett single ram hydraulic trim tabs. Well secured. Power up and function OK. No damage or leaks sighted.

Transducers: NOTE: Recommend not painting the speed or depth transducers. Paint can sometimes interfere with their proper function/readout.

Transom anode: Well secured and functional anode on lower transom.

HULL BOTTOM

Construction material: Molded fiberglass, no cracks or separation sighted on any portion of hull bottom.

Bottom paint: Anti-fouling bottom paint in good condition.

Osmotic blistering: NO evidence of blisters was found on hull bottom during bottom inspection.

Blister comments: *Blisters are an unknown factor on all boats and if not currently present, there is no guarantee that they will not appear in the future. Blisters have a tendency to dry out over winter storage unless severe or large. Blisters (if any) best appear after vessel has been in water for an entire season. In addition, the symptomatic evidence of blistering can be obscured by bottom coatings, a dry storage period during which blisters spontaneously depressurize, bottom laminate sanding, and other conditions or actions. Recommend full inspection for blisters immediately after haul-out and power wash. Surveyor has no firsthand knowledge of the history of bottom maintenance, blistering, repairs or prophylactic coatings on this vessel.*

Moisture/Delamination: All random moisture meter readings on hull bottom and surrounding thru hull fittings

Strainers/Scoops/Screens:

were relatively dry with normal comparative moisture meter readings. No delamination discovered when randomly testing with percussion hammer. All strainers/screens are well secured to hull bottom. Clear of debris & marine growth. **Haloing** sighted around the port side raw water engine strainer.



Transducers:

Transducers for speed and depth are adequately sealed and bonded to the hull. *NOTE: Recommend not painting the speed or depth transducers. Paint can sometimes interfere with their proper function/readout.*

Thru Hull fittings:

Mushroom type bronze fittings for all below water line sea cock locations. Well secured to hull bottom. **Haloing** sighted around the two through hulls in the area of the port side engine strainer.



Hull bottom drain plugs:

Bronze bottom mounted drain plug under engine. In place and secure. *NOTE: Remove drain plug(s) at the end of each boating season after haul out to allow bilge areas to completely drain off. Suggest tying removed drain plug to steering wheel to serve as a reminder when launching vessel in spring that it must be re-installed prior to launch.*

Findings:	Recommendations:
Haloing sighted around the port side raw water engine strainer. Haloing sighted around the port side raw water engine strainer as well as the two other through hulls in the area.	Haloing is an indicator of stray current leaking from the vessel. A qualified marine technician should further investigate, evaluate and repair as necessary.

STABILIZERS AND THRUSTER SYSTEMS

Bow thruster:

Side Power thruster system, Prop drive fitting is securely mounted inside the thruster tube which is well fared into the hull and securely fastened. No cracks sighted where thruster tube is fit into hull. Thruster fit with 5 blades on each side. All blades intact. Powers up and is functional. Positive terminal(s) not covered as required. RECOMMENDATION: Code of Federal Regulations - CFR33.183.420 mandates that positive terminals be protected against accidental shorting by the use of insulation barriers or sleeves or with battery case cover. Recommend compliance with Code of Federal Regulations.



Findings:	Recommendations:
Positive terminal(s) not covered as required.	Code of Federal Regulations - CFR33.183.420 mandates that positive terminals be protected against accidental shorting by the use of insulation barriers or sleeves or with battery case cover. Recommend compliance with Code of Federal Regulations.

ANODES

Trim tabs: Missing.



Out drive(s): All in serviceable condition.

Hull mounted: Two ground/anodes securely mounted on hull bottom. No deterioration sighted. **Transom anode** securely mounted. More than 50% of deterioration sighted.



Replacement required?: Trim Tabs. Transom Anode.
Anode notes: Monitor all anodes frequently on hull and underwater equipment and replace when they are no more than 50% wasted. Anodes are normal replacement items designed to help protect the running gear from electrolysis. Keep spares aboard vessel.

INTERIOR HULL & STRUCTURAL INSPECTION

HULL INTERIOR & STRUCTURAL COMPONENTS

Hull to deck joint: Overlap (Shoe box type), Elastomeric compound sighted in hull to deck joint. No leaks thru any part of hull to deck joint area sighted.

Bilge(s): Clean and dry for areas open to inspection. *NOTE: Whenever you visit your boat, it's good practice to check the bilge area(s) for higher than normal levels of water and proper functionality of the bilge pump(s) or anything else that could be causing trouble.*

Stringers: Hull stiffness provided by FRP covered wooden longitudinal stringers that run the length of the vessel. Complete inspection not possible due to limited access. Stringers were sighted in the engine compartment and under portions of cabin sole and are well glassed into hull where sighted. Stringers checked with Moisture meter where accessible and all readings were relatively Dry. Stringers sounded with hammer where accessible and appeared very sound. No soft spots, separation, cracks rotting or splitting sighted. Limber holes appear to be adequately sealed where sighted.

Bulkheads: Athwartships reinforcement enhanced by structural bulkheads bonded to the hull with FRP (fiber reinforced plastic). All tabbing appears serviceable and sound with no cracks or separation of tabbing sighted in any compartments. No visual evidence of movement sighted in any bulkhead.

Stem: Solid stem, no cracks or separation sighted inside.

Inside of transom: Reinforced. Secure-no cracks or separation sighted.

ALL THRU HULL FITTINGS

Sea valves: Bronze seacock ball valve(s) installed, Sea valves sighted are used for: Air Conditioner(s) raw water intake(s), Engine(s) raw water intake(s), Generator raw

Sea valve condition:	water intake, Waste holding tank(s) discharge.
Sea valves piping:	Sea valves are all functional.
	Monitor all hoses periodically and replace if cracks appear. Marine rubber covered reinforced hose. Hoses are double clamped. Monitor all hoses periodically and replace if cracks appear.
Sea strainers:	Internal strainer(s) installed for engine raw water, generator raw water, air conditioner raw water pickup. Sea strainer(s) are clear of debris.
Transducers:	Speed transducer installed in area. No leakage sighted inside hull. Depth transducer installed in area. No leakage sighted inside hull. Speed & Depth transducers are adequately sealed. No leakage sighted inside hull.

TOP DECK & SUPERSTRUCTURE

MAIN DECK & FITTINGS

Deck Surface:	Molded, cored fiberglass deck and side deck construction (core not sampled). White gel coat with molded in non skid fiberglass surface. Good condition. Deck is solid under foot, no soft spots discovered and no visible cracks or chips sighted.
Moisture/Delamination:	Moisture meter readings on top and side decks and surrounding thru deck fittings were relatively dry with normal comparative moisture meter readings. No Delamination discovered when randomly testing with percussion hammer.
Anchor platform:	Integrally molded FRP platform with attached anchor roller assembly. Well secured-no cracks sighted.
Anchor/chain locker:	Yes accessed from top deck with hatch lock. Functional.
Windlass:	Lofrans Marlin.
Bow pulpit/rail:	Stainless steel, well secured.
Fender holders:	Stainless steel fender holders with fenders secure to forward side rails on both port and starboard sides.
Stanchions/side rail(s):	Stainless steel, well secured.
Toe rail(s):	Molded in, no cracks or separation sighted.
Deck hatches:	Yes, well secured, seals in good condition, support arm(s) in place.
Cleats & fairleads:	Horn cleats are all well secured to deck and side deck and are functional.
Cabin (house) to deck joint:	Molded in -- no stress cracks noted.
Windshield:	Large three piece aluminum framed with tapered side panels. No cracks or separation sighted.
Horns:	Single horn- well secured.

COCKPIT / AFT DECK

Cockpit area:	Express style cockpit with sun pad and padded seating.
Cockpit & Helm seating	Vinyl stand/sit padded bolster seat at helm and side companion seat. Vinyl in good condition. Padded cockpit vinyl seat cushions available and are in good condition. No holes or tears sighted.
Sole:	Teak deck/grate overlay on cockpit sole.
Moisture/Delamination:	All moisture meter readings on sole were relatively dry with normal comparative moisture meter readings.
Scuppers/deck drain(s):	Yes. Drains are clear, hoses secure.
Cockpit equipment:	Cockpit table. Sink/Wet bar has molded in sink.
Cabin entrance:	Sliding plexi-glass door for cabin entrance with lock.
Engine compartment access:	Powered lift engine compartment hatch cover and fully functional.

HELM & NAVIGATION ELECTRONICS

NAVIGATION ELECTRONICS

Helm station:	Main Helm station, with tilt wheel steering.
Compass(es):	Mounted at main helm: 6" Ritchie Powerdamp.
VHF radio(s):	Mounted at main helm: Raymarine Ray240. Serial number was not sighted. Unit is built in.
Depth sounder(s):	Mounted at main helm: Raymarine. Functional. Serial number was not sighted. Unit is built in.
Speed instrument(s):	Mounted at main helm: Raymarine. Functional. Serial number was not sighted. Unit is built in.
Multi-function instrument(s):	Mounted at main helm: Simrad G09 XSE S/N: 118756603.
Radar:	Mounted at main helm: Furuno The Radar did not power up and array is missing.



GPS: Mounted at main helm: Simrad G09 XSE S/N: 118756603.

Findings:	Recommendations:
The Radar did not power up and array is missing.	Repair or replace as necessary.

OTHER ELECTRONICS AND CONTROLS

Antenna(s):	VHF, GPS.
Bilge pump switches:	(See bilge pumps section for details on operational status.)
Courtesy lights:	Functional.
Docking lights:	Docking lights are functional.
Drive/Trim Position:	Drive and Trim position indicators appeared fully functional when drives were raised or lowered.
Horn:	Electric horn switch is fully functional.
High water alarm:	Not sighted. Since 2005, ABYC H-22 has recommended use of a high water bilge alarm for all vessels with accommodation spaces. Recommend compliance with ABYC.

ENGINE INSTRUMENTS AND CONTROLS

Throttle and shift controls:	Digital control levers. Two levers for port/starboard engine throttle/shift control.
Engine room blowers:	Engine room blower(s) power up and fully functional.
Engine alarm/shutdown:	Engine Alarm, Alarm tested and found Emergency Shutdown, Fuel shutoff pull handle functions as emergency shutdown. Appear functional.
Engine status:	All engine instruments are OEM. (Original Equipment Manufacturer), Red indicator warning lights.
Panel lights:	All panel lights are functional.
Volt meter(s):	OEM. Functional.
Hour meter(s):	OEM. Functional.

Oil pressure: OEM. Functional.
Tachometer(s): OEM. Functional.
Temperature: OEM. Functional.
Fuel: OEM. Functional.

CABIN INTERIOR APPOINTMENTS

MAIN SALON

Style: Contemporary, combined with galley and dinette area.
Cabin steps: Teak cabin entrance steps. **All steps are loose.**



Sole: Carpeting installed throughout **Carpet needs cleaning.**
Headliner: Padded vinyl. Clean and well fastened. No tears, splits or stains sighted.
Water intrusion signs: No evidence sighted.
Doors: Teak door.
Hatch screens: Hatch screens available for all hatches.
Light fixtures: 12 volt cabin lights throughout the vessel, Fully functional.
Seating: Full cushions, cloth covered.
Overall interior condition: Interior is in good condition for its age.

Findings:	Recommendations:
Cabin steps are all loose.	Secure steps as to prevent injury.

ENTERTAINMENT ELECTRONICS

Stereo(s): Main salon: Fusion MS-UD750 AM/FM with CD player, Unit is built in and well secured. Powers up OK and appears functional. Serial number was not sighted. Unit is built in.
Speaker(s): Four total speakers located In Cockpit, in Main salon, Speakers are manufactured by: Clarion 6" round. All speakers powered up OK with the stereo.

GALLEY

Location: Port side. with solid surface counter top.
Sink(s): Stainless steel shallow well.
Water system: Pressurized hot and cold, Not tested. **Water system was winterized. Re-test on board fresh water system after filling water tank with water.**
Stove: Kenyon, **Electric function did not power up. RECOMMENDATION: Have stove and wiring circuit checked and repaired as necessary to make stove fully functional.**
Refrigeration: Upright, Isotherm with freezer, 12 Volt, Powers up OK.
Galley lighting: All functional.
Storage: Appears to be adequate.

DINETTE

Table type: Teak, excellent condition.
Seating: U-shaped seating around table. Seat cushions and seat backs in good condition.

BERTHS / STATEROOMS

Berths: Single berth aft cabin sleeps two.
Damage sighted: Mold sighted.



Recommendations: Further investigate source of mold and clean aft cabin.

HEAD(S)

Number/Location: One head on Starboard side, with solid surface counter top.
Toilet(s): Jabsco, electric flush pump not tested winterized.
Sink: Stainless steel.
Shower(s): Head area doubles as shower with pull out handheld fixture, not tested winterized.
Medicine cabinet: Sighted and fully functional.
Head lighting: Head lighting is all functional.
Shower sump tank/ pump: Located in sump tank with auto float and automatic bilge pump. Not tested-float inside sealed sump container.

AIR CONDITIONING (A/C)

Manufacturer & Type: Cruisair, 120 volt - reverse cycle.
Locations / BTU Capacity: Main cabin, 12,000 BTU.
Temp Controls: Cruisair SMX II digital temperature controls.
Filter(s) Condition: Filters appeared clean. *Recommend that A/C filter(s) be checked and cleaned frequently to allow the A/C unit to operate at maximum efficiency.*
Condensate drain: Drains into sump tank.
A/C Raw water: Bronze sea cock for A/C Raw water intake. Fully functional and hose is double clamped with sea strainer.
Hoses & connections: Hoses appear to be adequate size and serviceable for application. No cracks or hose damage sighted. Hoses are clamped and secure on all fittings sighted.
Raw water cooling pump: 120 Volt pump functioned well when testing A/C unit.
Damage sighted: Control panel not secured.



Recommendations: Secure control panel.

ELECTRICAL SYSTEMS

D.C. ELECTRICAL SYSTEMS

D.C. Voltage system:

12 Volt system.

Battery Set One:

Port battery set has a total of one 12 Volt sized sized that are type 4D970 lead acid batteries that are located in the engine compartment which provide service to house and engine start. **Battery not fully secured. RECOMMENDATION:** Code of Federal Regulations CFR33.183.420 mandates that batteries be well secured from movement of no more than 1" in any direction with a pull force of 90 lbs or 2 times the battery weight. Recommend compliance with Federal Law. Positive terminal(s) not covered as required. **RECOMMENDATION:** Code of Federal Regulations - CFR33.183.420 mandates that positive terminals be protected against accidental shorting by the use of insulation barriers or sleeves or with battery case cover. Recommend compliance with Code of Federal Regulations.



Battery Set Two:

Starboard battery set has a total of one 12 Volt sized sized that are type 4D970 lead acid batteries that are located in the engine compartment which provide service to house and engine start. **Battery not fully secured. RECOMMENDATION:** Code of Federal Regulations CFR33.183.420 mandates that batteries be well secured from movement of no more than 1" in any direction with a pull force of 90 lbs or 2 times the battery weight. Recommend compliance with Federal Law. Positive terminal(s) not covered as required. **RECOMMENDATION:** Code of Federal Regulations - CFR33.183.420 mandates that positive terminals be protected



against accidental shorting by the use of insulation barriers or sleeves or with battery case cover. Recommend compliance with Code of Federal Regulations.

Battery selector switch:

Yes two rotary switches are functional.

Charging system:

Both engine mounted alternators, battery charger is a Professional Mariner Pro Nautic 1260C 3, serial number not sighted.

Distribution panel:

Located in main salon combined with A.C. power panel. Some DC breaker labels unreadable.



Battery monitor:

Switched digital gauge to test battery condition.

Breaker(s)/fuse(s):

All DC circuits are adequately protected by branch or switched breakers. 5 single pole breakers.

D.C. wiring:

All wiring runs are properly secured every 18" per ABYC E-11 recommendations. Ring spade or crimp on connectors sighted for wiring connections per ABYC recommendations. Anti Chafe protection sighted at all compartment pass through locations.

DC Electrical ground:

DC electrical system is properly tied into vessels electrical ground system using the engine as a common ground.

Other notes:

Note: For 12 volt systems, a fully charged battery reads 12.7 Volts, 75% charged battery reads 12.4 Volts, 50% charged battery reads 12.2 Volts, 25% charged battery reads 12.0 Volts and a discharged battery reads 11.9 Volts or less. Check battery condition frequently.

Findings:	Recommendations:
Port and starboard batteries not fully secured. RECOMMENDATION: Code of Federal Regulations CFR33.183.420 mandates that batteries be well secured from movement of no more than 1" in any direction with a pull force of 90 lbs or 2 times the battery weight. Recommend compliance with Federal Law. Port and starboard battery positive terminal(s) not covered as required. RECOMMENDATION: Code of Federal Regulations - CFR33.183.420 mandates that positive terminals be protected against accidental shorting by the use of insulation barriers or sleeves or with battery case cover. Recommend compliance with Code of Federal Regulations. Some DC breaker labels unreadable.	RECOMMENDATION: Code of Federal Regulations CFR33.183.420 mandates that batteries be well secured from movement of no more than 1" in any direction with a pull force of 90 lbs or 2 times the battery weight. Recommend compliance with Federal Law. RECOMMENDATION: Code of Federal Regulations - CFR33.183.420 mandates that positive terminals be protected against accidental shorting by the use of insulation barriers or sleeves or with battery case cover. Recommend compliance with Code of Federal Regulations. Label all DC breakers to comply with ABYC E-11.5 recommendations.

A.C. ELECTRICAL SYSTEMS

A.C. Voltage system:

30 Amp - 120 Volt system. One shore power inlet.

Shore power cord(s):

NOTE: Doing a regular inspection of your power cords is a good way to ensure

that they haven't incurred heat damage that could start a fire aboard your boat. When examining your cords, start at the ends and look for brown discoloration at the base of the blades - a clear indicator of excessive heat. (Blades with a worn nickel coating or pitting are another red flag). Next, identify what caused the damage and replace any overheated connections immediately before a cord is used again. Often, a damaged inlet is the culprit and just replacing the shore power connection will only damage the new one.

Shore power breaker:

An ELCI (Electrical Leakage Circuit Interrupter) is installed in the main shore power conductor between the boats shore power connection and the AC panel and was sighted at the main panel. The ELCI is for whole boat protection for leaks to ground that would go outside of the boat hull for in water swimmer protection and measures the imbalance between the hot and neutral and will trip at 30 milliamps. *NOTE: If the ELCI trips, the owner should shut down all AC circuits, reset the ELCI, and then power up circuits one at a time until the ELCI trips again. The AC device that tripped the ELCI needs to be serviced.* Unit not functional, generator was used to test AC power bank for survey.



- A.C. power selector switch:** AC/Generator manual break/make lever switch located in main AC panel.
- Distribution panel(s):** Yes combined with DC power panel.
- Branch breakers:** All AC circuits are adequately protected by branch breakers. 4 single pole breakers.
- Reverse polarity indicator:** Functional and outlets tested OK for proper polarity.
- GFCI protection:** No GFCI protection sighted for 110V outlets in/near wet locations (galley, head). **RECOMMENDATION:** Provide GFCI protection as currently recommended by ABYC E-11 and NFPA 302. (Install a GFCI equipped breaker in each wet location or as first outlet from power source in each circuit and test regularly.)
- A.C. meter(s):** Digital type, Volts.
- A.C. wiring:** Stranded copper boat cable- size and rating, where sighted, appears correct and serviceable for intended use. All wiring runs are properly secured every 18" per ABYC E-11 and NFPA 302 recommendations. Anti chafe protection sighted at all compartment pass thru locations. AC wiring is properly terminated. No wire nuts or loose connections sighted. Ring spade or crimp on connectors sighted for wiring connections per ABYC recommendations.
- A.C. Electrical ground:** AC electrical system is properly tied into vessels electrical ground system using the engine(s) as a common ground.

Findings:	Recommendations:
ELCI unit not functional.	A qualified marine technician should further investigate, evaluate and repair as necessary.
No GFCI protection sighted for 110V outlets in/near wet locations (galley, head).	Provide GFCI protection as currently recommended by ABYC E-11 and NFPA 302. (Install a GFCI equipped breaker in each wet location or as first outlet from power

GENERATOR

Manufacturer/Location:	Fischer Panda, Generator installed in engine space, Installed: Inside insulated sound box.
Generator specifications:	Diesel powered, Serial number: Not sighted on unit.
Generator hours:	Hour meter was not sighted on generator or control panel.
KW/Volts/Amps rating:	5 KW.
Hoses and clamps:	Good condition-No cracks sighted.
Belts and pulleys:	Belts condition are serviceable. No cracks or splits sighted. Pulleys/belts appear to be in line.
Cooling system(s):	Fresh water/heat exchanger cooled with water intake through lever action seacock, coolant level is full and in good condition, raw water cooled-engine driven pump. Water intake through lever action seacock. Raw water strainer installed and is clear.
Oil level and condition:	Clean & full on dipstick. No evidence of water or cuttings in lube oil.
Fuel pump(s):	Engine mounted. No leaks sighted.
Fuel filter(s):	Remote mounted. No leaks sighted.
Engine mounts and beds:	Engine mounts appear to be well secured to the support mounting.
Engine ground cable:	Generator is properly grounded with a proper size conductor cable.
Exhaust piping:	Flex hose. Exhaust hose is properly double clamped at both ends.
Muffler:	Fiberglass water lift muffler double clamped at both ends.
Ventilation:	Blower and natural. Blower powers up OK.
Warning labels:	Sighted.
Accessibility:	Good.
Generator performance:	Generator was tested under full load of A/C units and other AC powered devices. Generator started and ran properly and properly maintained voltage readings.

GROUND/BONDING SYSTEM

Main bonding conductor:	Twin engines are properly connected to each other by a common conductor circuit. The remaining ground/bonding system is well established where sighted; Electrical system, Seacocks, Shaft logs, Rudders, Sea Strainers, Pumps, Fuel system/tanks, Hull Zincs were all bonded. The bonding system is using individual green insulated wire or copper strips.
Generator set(s) :	Generator engine ground bus.
Through-hull(s) connected:	Connected.
Sea strainer(s) connected:	Connected.
Trim tabs connected:	Connected.
Grounding plate(s):	External-well secured to hull and ground wires well secured. Haloing also sighted around the port side grounding plate.



Findings:	Recommendations:
Haloing also sighted around the port side grounding plate.	Haloing is an indicator of stray current leaking from the vessel. A qualified marine technician should further

ENGINE COMPARTMENT / PROPULSION SYSTEM

MAIN ENGINE(S)

Engine specifications	Two, 285hp Volvo Penta KAD 300 EDC inboard/outdrive 3.6 liter in line 6 cylinder using diesel fuel.
Engine serial no(s):	Starboard engine serial no: 869175 Port engine serial no: 869174.
Engine(s) hours:	Port hrs: 495 Starboard hrs: 495.
Raw water hoses:	Good condition-No cracks, soft spots or leakage sighted.
Belts and pulleys:	Belts condition are serviceable. No cracks or splits sighted. Pulleys/belts appear to be in line.
Cooling system(s):	Fresh water / heat exchanger cooled, -- coolant level is good and appears in good condition. Raw water intake through intake side of out drives lower unit circulated through engine and combined with engine exhaust and routed through the out drive prop hubs. <i>NOTE: It is recommended that water pump impeller(s) be changed every three years. Always keep spares aboard to use when necessary.</i>
Engine ventilation:	Natural ventilation for engine space is provided. Power exhaust ventilation blower(s) are installed. Power vents are fully operational.
Engine ground cable:	Engines are properly grounded together with a proper size conductor cable.
Oil level and condition:	Oil level is Full but-oil appears dirty. Change crankcase oil before using vessel and at least every year prior to haul out and winter storage.
Flame arrestor(s):	Yes- USCG approved.
Ignition protection:	Alternator and Starter appear to be OEM and ignition protected.
Fuel pump(s):	Engine mounted. No leaks sighted.
Fuel supply lines:	USCG A1 flex. No leaks, cracks or soft spots sighted.
Fuel filter(s):	No leaks sighted at fuel filter(s).
Engine mounts and beds:	Engine mounts appear to be well secured to the support stringers. NOTE: See Hull Interior section for condition of stringers themselves.
Drip pad(s):	No Pads in place beneath engine(s). Fluids and debris fall into bilge area. Consider installing drip pads beneath engine(s) to catch fluid drippings and rapidly identify leaks of any kind.
Insulation:	Sighted in very poor condition, replacement recommended.



Engine(s) operated:	On sea trial. See sea trial section for details.
Engine room summary:	Engine room is accessed by power lift hatch which was fully functional. Engine room is clean and uncluttered.
Other notes:	<ul style="list-style-type: none">• It is good practice when buying a used vessel that all fluids (Engine/Transmission) be changed and the raw water cooling impeller(s) also be changed. <i>As stated in the Terms and Conditions agreement, It is understood that the attending surveyor is not an engine/transmission surveyor. As such, I recommend that all engines and transmissions be inspected by a qualified expert engine</i>

surveyor/mechanic who use sophisticated electronic tools specific to the make/model of engine(s) to determine the internal condition of engine performance and determine any repairs necessary of the engine(s), transmission gears, and pumps, heat exchangers, coolers, etc.

Findings:	Recommendations:
Engine compartment insulation sighted in very poor condition.	Engine compartment insulation replacement recommended.

EXHAUST SYSTEM

Exhaust manifold:	Good condition- The exhaust system including exhaust connection and hoses were inspected using an inspection mirror and no obvious cracks or leakage issues were noted.
Muffler(s):	No visible leaks or water tracks sighted.
Piping/Clamps:	Flex hose, securely double clamped as required. No cracks soft spots or evidence of leaks sighted in exhaust system.
Discharge location(s):	Through out drive(s).

TRANSMISSION(S)

Fluid level and condition:	Good, Fluid levels show full, fluid is bright red and does not smell burnt.
Propeller shaft(s):	No pitting, cracks or corrosion sighted. Couplers are properly safety wired.
Stuffing box(es):	No leaks sighted.

OUTDRIVE(S)

No/Make/Model:	Two, Volvo Penta Duo Prop.
Serial number(s):	Not sighted on outdrive.
Transom/ gimbal housing(s):	Sound - No corrosion sighted. Well secured.
Gimbal bearing:	Gimbal bearing is tight. Minimal or no excess play.
Ground wire:	Ground wires in place and properly secured.
Upper housing(s):	Sound-No corrosion sighted.
Lower housing(s):	Sound-No corrosion sighted.
Upper bellows:	No cracks or wear areas sighted on upper bellows. Good condition. Monitor frequently and replace if any cracks begin to appear. NOTE: All bellows should be inspected annually and normally should be replaced every 5 years.
Lower bellows:	No cracks or wear areas sighted on lower bellows. Good condition. Monitor frequently and replace if any cracks begin to appear. NOTE: All bellows should be inspected annually and normally should be replaced every 5 years.
Shift control bellow:	No cracks or wear areas sighted on small shift control bellows. Good condition. Monitor frequently and replace if any cracks begin to appear.
Skeg condition:	Corrosion deterioration damage sighted on lower skeg(s).



Prop(s):

Gear Noise:

Hydraulic lines:

Drive anodes:

Outdrive props have three blades and are made of stainless steel. Props are in good condition with no cracks, corrosion or bent, nicked or chipped blades. Prop nuts are secure and properly locked in place with lock nut/washer.

Prop spins free with no gear noises heard. Prop shaft(s) did not appear to have any distortion when checked visually.

Hydraulic lines are secured and show no signs of leakage.

Port and starboard collar anodes show excessive deterioration. RECOMMENDATION: Replace collar anodes. Monitor all anodes frequently and replace as necessary. Anodes are normal replacement items designed to protect the running gear from electrolysis. Keep spares aboard vessel.



Findings:	Recommendations:
Starboard drive unit: Vertical play observed.	Further investigate and repair as required.

Port and starboard collar anodes show excessive deterioration.

Replace collar anodes.

STEERING SYSTEM

STEERING SYSTEM

Type:	Sea Star-Teleflex, Wheel steering, Hydraulic lines and ram cylinder.
Mounting(s):	Secure.
Lines and fittings:	No leaks sighted.
Packing glands:	Appear well sealed- no leaks sighted. <i>NOTE: Rudder packing glands should always be totally dry. Check frequently and adjust if necessary.</i>

TANKAGE / PLUMBING

FUEL TANK(S)

No & Location:	One tank located under the cockpit sole.
Tank type & capacity:	Tank(s) are constructed of Stainless steel. The tank(s) capacity is 166 gallons as reported by manufacturer.
Manufacturer' s label(s):	The USCG required label was sighted on fuel tanks.
Fuel supply lines:	USCG A1 flex hose from tank to fuel pump. Well secured and No cracks, soft spots or splitting sighted. Serviceable, <i>NOTE: Most fuel hose manufacturers now recommend fuel hoses be replaced every five years.(just like replacing older signal flares).This is more important with the introduction of ethanol into gasoline as hoses can and do deteriorate from the inside. The date of manufacture is imprinted on all USCG approved fuel hoses. Consider replacing all flexible fuel hoses every 5 years as a part of routine maintenance.</i>
Diesel return line(s):	Engine uses grade USCG Type A1 return line. No cracks, soft spots or splitting sighted. Serviceable.
Shut off valve(s):	On tank top. Serviceable.
Vent line/location:	Vent located on hull side(s), with flame screens or cleanable vents in place and clear. USCG A1 No cracks, soft spots or splitting sighted. Serviceable.
Fill line(s) located:	Side deck.
Fill pipe & condition:	USCG A1 flex type hose, No cracks, soft spots or splitting sighted. Serviceable. Fill hose is properly double clamped at both ends of fill hose.
Fuel fill grounded:	Fuel fills are properly grounded to the fuel tanks.
Tank(s) grounded:	Both tanks are properly grounded.
Tank(s) secured:	Metal straps with chafe protection sighted, all secure.
Inspection/cleaning access:	Good.
Tank(s) condition:	Visually good (where accessible)

FRESH WATER TANK(S)

No & locations of tanks:	One tank under cabin sole.
Tank(s) type & capacity:	Plastic with a total capacity of 40 gallons.
Tank(s) secured:	Yes.
Inspection/cleaning access:	Good.
Tank(s) condition:	Visually good (where accessible)
Water pump(s):	12 Volt. Jabsco 31750. Not tested. Water system was winterized.
Supply lines:	Grey plastic piping for all water connections. No leaks sighted for areas open to inspection.
Filling line(s) located:	Side deck clearly marked for water.
Vent(s) location(s):	Side hull.

HOLDING TANK(S) - BLACK WATER

No & Location of tanks:	One holding tank located under cabin sole.
Marine Sanitation Device:	Certification Type: MSD U.S.C.G. Type III. (Holding tank). Waste tank is connected to deck waste fitting for pump out. Overboard discharge lines and fittings are properly disabled to comply with USCG regulations for the Great Lakes and all inland waters.
Tank(s) type & capacity:	Plastic with a total capacity of 25 gallons.
Tank(s) secured:	Secured.
Tank(s) condition:	Visually good (where accessible).
Inspection/cleaning access:	Good.
Lines:	Lines are all well secured. No cracks or leaks sighted.
Discharge line(s) located:	Marked for Waste.
Y valve(s) installed:	Properly disabled to prevent overboard discharge per USCG regulations for Great Lakes and Inland waters.
Vent(s) location(s):	Side hull.
Macerator pump(s):	12V Jabsco.

WATER HEATER

Tank location:	Engine compartment.
Manufacturer/capacity:	Unknown/unknown.
How powered:	110V no heat exchanger installed.
Ignition protected:	Water heater is marine type and labeled as ignition protected.
Water heater test:	Not tested - water system appeared to be winterized. Test after filling water heater to be sure fully functional.
Pressure relief valve(s):	Drains into bilge area.
Drain fixture(s)/plug(s):	Appears functional.
Supply lines:	No leaks sighted.
Outer tank material:	Fiberglass.
Tank(s) secured:	Tank is well secured to base.
Inspection/cleaning access:	Good.
Other notes:	NOTE: Do not leave hot water heater AC switch on unless water is in the hot water tank or the heating element will burn out. Recommend turning off water heater whenever leaving the vessel.

SAFETY EQUIPMENT

U.S.C.G. REQUIRED

Navigation lights:	All Navigation running lights were tested and found fully operational.
Life Jackets(PFD's):	USCG Type II, 1 to 5 sighted aboard.
Throwable type PFD's:	USCG approved Ring buoy(s)
Visual Distress Signals:	Visual distress not sighted. RECOMMENDATION: Replace expired visual distress signals to comply with USCG regulations 33 CFR 175.110 for visual distress signals prior to using vessel.
Sound devices:	Electric horn control at helm station is functional.
USCG placards:	Both USCG mandated placards (Oil & Garbage) are properly posted.
Engine ventilation:	Natural ventilation for engine space is provided, power exhaust ventilation blower(s) are installed and are fully functional.

FIRE FIGHTING EQUIPMENT- U.S.C.G. Required

Dry Chemical Size I:	None sighted: USCG REQUIRES that vessels 26'-40' need to have at least two B-1 fire extinguishers on board. RECOMMEND: Installing at least two B-1 fire extinguishers on board.
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**FIRE EQUIPMENT
OBSERVATION:**

NOTES:

- Recommend at least one fire extinguisher be located in the galley area where fires are more likely to occur from cooking.
- ABYC A-4 recommends that all fire extinguishers have a full maintenance check performed at least once per year by a qualified fire extinguishing service company a tag should be attached showing the date of the maintenance check.
- Fire extinguisher pressure gauges should be checked monthly to assure that readings are full or in the green area.
- NFPA recommends that dry chemical fire extinguishers be periodically shaken to ensure the dry chemical powder is loose and is not compacted. If in doubt, replace the extinguisher.

BILGE PUMPS

**MIDSHIP/CENTRAL
BILGE:
ENGINE
COMPARTMENT:**

One electric fully automatic pump. Located at: Midship / Central bilge, Pumps sighted are: Rule 12 volt, 500 GPH, Pump(s) power up when switched on manually.

Two electric fully automatic pumps. Located at: Engine compartment bilge Pumps sighted are: Rule 12 volt, 500 GPH, 1100 GPH, Pump(s) power up when switched on manually. Fwd bilge pump located at engine space is adrift and Not secured to hull bottom. RECOMMENDATION: ABYC H-22 recommends that all bilge pumps be securely fastened to the hull bottom in order to resist pump movement under normal marine service.

Recommend compliance.



**SHOWER & SUMP
PUMP(S):**

One pump with auto float switch but was not tested due to inside sealed sump tank.

MANUAL PUMPS:

Whale manual operated bilge pump. Appears serviceable.

Bilge Pump Comments:

CAUTION: Bilge pumps are high maintenance items. Bilge pumps are only the initial part of a de-watering system, which may include a strum-box, check-valves or occasionally anti-siphon loops and valves, piping, a seacock if the exit is below waterline and a thru-hull tailpiece. This entire system must be understood and maintained. Bilge pumps may fail at any time. No warranty as to longevity can be expressed or implied at survey. Tapered wooden plugs tied to seacocks are an inexpensive safety item and highly recommended under current ABYC standards. Keeping bilges clean and free of debris is a vital part of insuring proper operation. It is also recommended that each bilge pump be periodically tested by filling the immediate bilge area with water, to ensure the pump(s) and float switch(s) and or high water alarms (if equipped) are operating as designed.

Findings:

Fwd bilge pump located at engine space is adrift and Not secured to hull bottom.

Recommendations:

ABYC H-22 recommends that all bilge pumps be securely fastened to the hull bottom in order to resist pump movement under normal marine service. Recommend compliance.

AUXILIARY SAFETY EQUIPMENT

First aid kit:	Not sighted. Highly recommended.
Smoke detector(s):	None sighted. Since 2004, NFPA 302-12.3 has recommended RV tested or more recently marine tested Smoke Detection devices for all vessels 26 ft (8m) or more in length with accommodation spaces intended for sleeping and is installed and maintained according to the manufacturer's instructions.
Carbon monoxide detectors:	Carbon monoxide fume detectors were not sighted but have been recommended since 2001 by both ABYC and NFPA. RECOMMENDATION: Due to the number of carbon monoxide related deaths on boats, this surveyor highly recommends the installation of CO detection devices on all gasoline and diesel powered vessels to comply with ABYC A-24 and NFPA 302 recommendations. Detectors shall be located to monitor the atmosphere in the main cabin and each sleeping area. Obtain and install suitable marine carbon monoxide detectors. <i>NOTE: During the burning of any of fuels, Carbon Monoxide (CO) gas may be created due to incomplete combustion from propulsion systems, cabin heater or stove as well as nearby boats running generators. Adequate ventilation must be provided at all times while burning any of these fuels, but CO may also be drawn into the cabin through ventilation systems. This is especially true of boats running air conditioning. Unlike smoke, CO is odorless and colorless and can't be detected by a human. CO is a silent menace and kills without warning, regular testing of installed CO detectors in any occupied spaces below decks is highly recommended. Also, remember that CO alarms have a limited life span - five years according to most manufacturers. Check the manufacture date on the CO detectors on board and replace as recommended by the manufacturer.</i>

GROUND TACKLE

Primary anchor:	CQR, Sized: size not marked, with undetermined length of raw chain with undetermined length of what appears to be three strand.
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SEA TRIAL RESULTS

SEA TRIAL DETAILS

Date & Time:	XXXXXXXXXXXXX.
Vessel operated from/to:	XXXXXXXXXXXXX.
Attendees:	Client, current owner, broker and surveyors.
Vessel operated by:	Current owner.
Sea water temperature:	55 F.
Ambient air temp:	41 F.

SEA TRIAL DOCKSIDE OBSERVATIONS

Start Engine Hours:	Port engine starting hours: 495 Starboard engine starting hours: 495.
Engine alarms:	Both engine alarms were fully functional with ignition key on before starting engines.
Cranking:	The engine(s) started without excessive cranking.
Exhaust smoke:	The engine(s) exhaust smoke was minimal at dock side.
Cooling water:	The cooling water exhaust appeared adequate and normal at dock side.
Instruments:	The engine instruments all operated and within normal operating limits at idle. (See "Engine Instrument Readings" below.)
Thrusters system:	Bow thruster worked properly backing out as well as entering the slip.
Leaks sighted:	There were no oil, coolant or other leaks observed during or after the sea trial.

UNDERWAY TESTS / OBSERVATIONS

Shift/Throttle levers:	The shift/ throttles operated normally/smoothly.
Instruments:	The engine instruments all operated and within normal operating limits at various speeds and at maximum throttle during the sea trial. (See "Engine Instrument Readings" below.)
Transmissions:	The transmissions operated normally/smoothly in both forward and reverse gears.
Vibrations:	There were no excessive vibrations noted at any time during the sea trial run.
Exhaust smoke:	The engine(s) exhaust smoke was minimal and appeared normal throughout the sea trial.
Cooling water:	The cooling water exhaust appeared adequate and normal during the sea trial. Engine temperature gauge(s) also reflected a normal cooling temperature.
Compass:	Compass operated properly and appeared to continually showed correct headings thru out the sea trial.
Trim tabs:	Trim tabs were fully functional as vessel planed out at high speed.
Out Drive Trim:	The out drive trim control switches functioned OK and the Out drive(s) responded with proper trim control during the sea trial.
Auto Pilot:	Auto pilot was tested and found fully functional including port and starboard dodge tests.
Steering:	The steering system operated normally/smoothly from stop to stop in wide sweeping turns.
Backdown:	The back down test was satisfactory. Engine mounts secure & No unusual movement of the engine(s) was sighted.
Start in gear:	The engine(s) properly would NOT start while in Forward or Reverse gears. <i>Note: This was tested in open water in case of failure.</i>
Engine shut down:	Engine shut down properly using The Emergency shutdown was also tested and found fully functional.
Max Throttle:	Manufacturer's recommended max RPM is 3000: Both Engines reached 3000 RPM and a speed of 27 knots at full throttle while under load.
Ending engine hours:	Port engine starting hours: 495 Starboard engine starting hours: 495.

SEA TRIAL ENGINE INSTRUMENT READINGS

RPM:	Port/Stbd= IDLE: 750 / 750 CRUISE: 2600 / 2600 WOT: 3000 / 3000.
VOLTS:	Port/Stbd= IDLE: 13.1 / 13.2 CRUISE: 14.1 / 14.2 WOT: 14.1 / 14.2.
WATER TEMP:	Port/Stbd= IDLE: 180 / 175 CRUISE: 180 / 175 WOT: 180 / 175.
OIL PRESSURE:	Port/Stbd= IDLE: 50 / 55 CRUISE: 65 / 70 WOT: 80 / 85.
SPEED at WOT:	The speed attained at Wide Open Throttle (WOT) is considered within the normal range.

PHOTO PAGES

PHOTO PAGE(S)

Inspection Photo's:

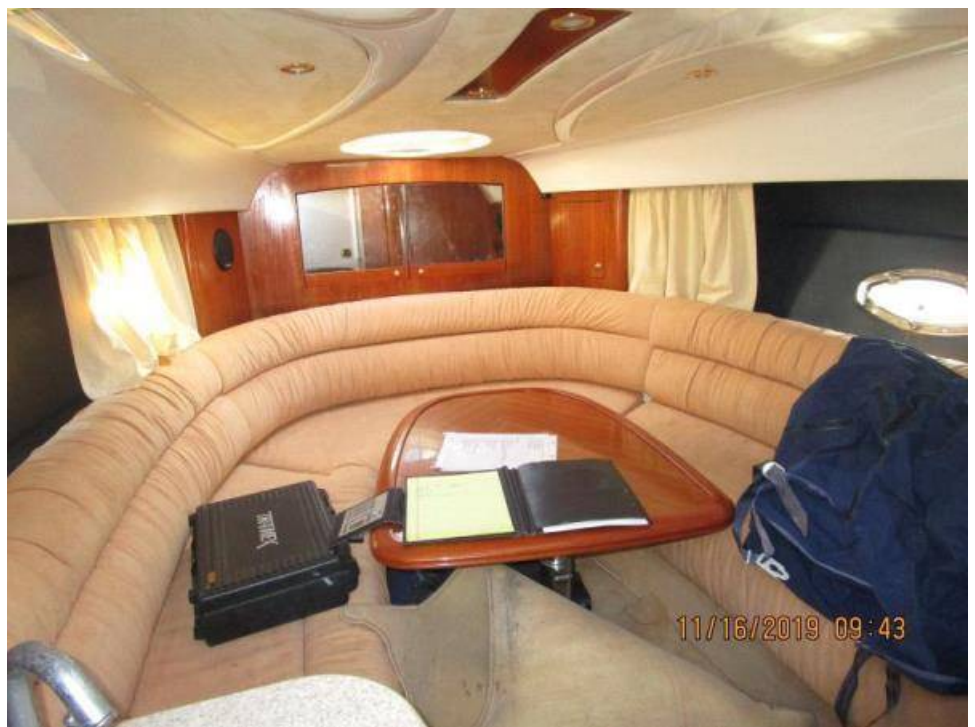
















INSPECTION RECOMMENDATIONS SUMMARY

PRIORITY I - SAFETY & REGULATORY RECOMMENDATIONS:

(MAY BE MANDATORY)

The items listed are required by state laws or federal laws and U.S.C.G. regulations or are considered by the attending surveyor to represent unsafe operating conditions. Recommend these items be corrected before next use of vessel.

PROPELLER(S)/SHAFT(S) / STRUT(S)

STABILIZERS AND THRUSTER SYSTEMS

Bow Thruster:

Positive terminal(s) not covered as required. RECOMMENDATION: Code of Federal Regulations CFR33.183.420 mandates that positive terminals be protected against accidental shorting by the use of insulation barriers or sleeves or with battery case cover. Recommend compliance with Code of Federal Regulations.

CABIN INTERIOR APPOINTMENTS

MAIN SALON

Cabin Steps:

All steps are loose. RECOMMENDATION: Secure steps as to prevent injury.

ELECTRICAL SYSTEMS

D.C. ELECTRICAL SYSTEMS

Battery Set One:

Port battery set not fully secured. RECOMMENDATION: Code of Federal Regulations CFR33.183.420 mandates that batteries be well secured from movement of no more than 1" in any direction with a pull force of 90 lbs or 2 times the battery weight. Recommend compliance with Federal Law. Positive terminal(s) not covered as required. RECOMMENDATION: Code of Federal Regulations - CFR33.183.420 mandates that positive terminals be protected against accidental shorting by the use of insulation barriers or sleeves or with battery case cover. Recommend compliance with Code of Federal Regulations.

Battery Set Two:

Starboard battery set not fully secured. RECOMMENDATION: Code of Federal Regulations CFR33.183.420 mandates that batteries be well secured from movement of no more than 1" in any direction with a pull force of 90 lbs or 2 times the battery weight. Recommend compliance with Federal Law. Positive terminal(s) not covered as required. RECOMMENDATION: Code of Federal Regulations - CFR33.183.420 mandates that positive terminals be protected against accidental shorting by the use of insulation barriers or sleeves or with battery case cover. Recommend compliance with Code of Federal Regulations.

SAFETY EQUIPMENT

U.S.C.G. REQUIRED

Visual Distress Signals:

Visual distress not sighted. RECOMMENDATION: Replace expired visual distress signals to comply with USCG regulations 33 CFR 175.110 for visual distress signals prior to using vessel.

FIRE FIGHTING EQUIPMENT

U.S.C.G. REQUIRED

No fire fighting equipment sighted anywhere on vessel. USCG REQUIRES that vessels 26'-40' need to have at least two B-1 fire extinguishers on board. RECOMMEND: Installing at least two B-1 fire extinguishers onboard.

PRIORITY II - MAINTENANCE & STANDARDS RELATED RECOMMENDATIONS:

(NOT NORMALLY MANDATORY)

These are important maintenance items sighted which in this firm's opinion should be performed. They may also include recommendations to conform to current ABYC and NFPA-302 voluntary standards which may not have been in effect or may not have been adhered to by the builder when the vessel was constructed. Some of these, if not addressed, could lead to a Priority I safety issue and/or may result in a reduced vessel market value.

EXTERIOR HULL & BOTTOM INSPECTION

HULL EXTERIOR-SIDES

Docking lights:

Port side light shows signs of severe corrosion. RECOMMENDATION: Further investigate and repair or replace as necessary.

EXTERIOR HULL & BOTTOM INSPECTION

HULL BOTTOM

Strainers/Scoops/Screens:

Haloing sighted around the port side raw water engine strainer. RECOMMENDATION: Haloing is an indicator of stray current leaking from the vessel. A qualified marine technician should further investigate, evaluate and repair as necessary.

Strainers/Scoops/Screens:

Haloing sighted around the two through hulls in the area of the port side engine strainer

RECOMMENDATION: Haloing is an indicator of stray current leaking from the vessel. A qualified marine technician should further investigate, evaluate and repair as necessary.

ANODES

Hull Mounted:

Transom anode securely mounted. More than 50 % of deterioration sighted. RECOMMENDATION: Replace transom anode.

HELM & NAVIGATION ELECTRONICS

NAVIGATION ELECTRONICS

Radar:

The Radar did not power up and array is missing. RECOMMENDATION: Repair or replace as required.

CABIN INTERIOR APPOINTMENTS

GALLEY

Stove:

Electric function did not power up. RECOMMENDATION: Have stove and wiring circuit checked and repaired as necessary to make stove fully functional.

BERTHS/STATEROOMS

Damage sighted:

Mold sighted. RECOMMENDATION: Further investigate source of mold and clean aft cabin.

CABIN INTERIOR APPOINTMENTS

AIR CONDITIONING (A/C)

Damage sighted:

Control panel not secured. RECOMMENDATION: Secure control panel.

ELECTRICAL SYSTEMS

DC ELECTRICAL SYSTEMS

Distribution panel:

Some breaker labels unreadable. RECOMMENDATION: labeling all switches to comply with ABYC E-11.5 recommendations.

AC ELECTRICAL SYSTEMS

Shore power breaker:

Unit not functional, generator was used to test AC power bank for survey. RECOMMENDATION: A qualified marine technician should further investigate, evaluate and repair as necessary.

GFCI protection:

No GFCI protection sighted for 110V outlets in/near wet locations (galley, head). RECOMMENDATION: Provide GFCI protection as currently recommended by ABYC E-11 and NFPA 302. (Install a GFCI equipped breaker in each wet location or as first outlet from power source in each circuit and test regularly.)

GROUND/BONDING SYSTEM

Grounding plate(s):

Haloing also sighted around the port side grounding plate. RECOMMENDATION: Haloing is an indicator of stray current leaking from the vessel. A qualified marine technician should further investigate, evaluate and repair as necessary.

ENGINE COMPARTMENT / PROPULSION SYSTEM

MAIN ENGINE(S)

Insulation:

Sighted in very poor condition. RECOMMENDATION: Replace insulation.

OUTDRIVE(S)

Skeg condition:

Corrosion deterioration damage sighted on lower skeg(s). RECOMMENDATION: Further investigate and repair as necessary.

Drive anodes:

Port and starboard collar anodes show excessive deterioration. RECOMMENDATION: Replace collar anodes.

Starboard drive unit:

Vertical play observed. RECOMMENDATION: Further investigate and repair as necessary.

SAFETY EQUIPMENT

BILGE PUMPS

Engine compartment:

Fwd bilge pump located at engine space is adrift and Not secured to hull bottom. RECOMMENDATION: ABYC H-22 recommends that all bilge pumps be securely fastened to the hull bottom in order to resist pump movement under normal marine service. Recommend compliance.

AUXILIARY SAFETY EQUIPMENT

First aid kit:

Not sighted. Highly recommended.

Smoke Detector(s):

None sighted. RECOMMENDATION: Since 2004, NFPA 302-12.3 has recommended RV tested or more

recently marine tested Smoke Detection devices for all vessels 26 ft (8m) or more in length with accommodation spaces intended for sleeping and is installed and maintained according to the manufacturer's instructions. Obtain and install suitable marine smoke detectors.

Carbon monoxide detectors:

Carbon monoxide fume detectors were not sighted but have been recommended since 2001 by both ABYC and NFPA. RECOMMENDATION: Due to the number of carbon monoxide related deaths on boats, this surveyor highly recommends the installation of CO detection devices on all gasoline and diesel powered vessels to comply with ABYC A-24 and NFPA 302 recommendations. Detectors shall be located to monitor the atmosphere in the main cabin and each sleeping area. Obtain and install suitable marine carbon monoxide detectors.

OTHER OBSERVATIONS:

These are other less significant maintenance items or observations that if not addressed, could lead to more important priority issues and/or could lead to a reduced vessel market value. The cost of addressing these recommendations is generally minimal.

EXTERIOR HULL & BOTTOM INSPECTION

HULL EXTERIOR-SIDES

Hull cosmetics:

Hull needs a thorough cleaning and polishing. A few minor dings/dock rash noted. This is normal for a vessel of this age. Deep scratches should be filled in and covered with matching gel coat.

INTERIOR HULL & STRUCTURAL INSPECTION

ALL THRU HULL FITTINGS

Sea strainers:

Internal strainer(s) installed for engine raw water, generator raw water, air conditioner raw water pickup. Sea strainer(s) are clear of debris.

HELM & NAVIGATION ELECTRONICS

OTHER ELECTRONICS AND CONTROLS

High water alarm:

Not sighted. Since 2005, ABYC H-22 has recommended use of a high water bilge alarm for all vessels with accommodation spaces. Recommend compliance with ABYC.

CABIN INTERIOR APPOINTMENTS

MAIN SALON

Sole:

Carpet needs cleaning.

GALLEY

Water system:

Pressurized hot and cold, Not tested. Water system was winterized. Re-test on board fresh water system after filling water tank with water.

ENGINE COMPARTMENT / PROPULSION SYSTEM

MAIN ENGINE(S)

Oil level and condition:

Oil level is Full but-oil appears dirty. ----- Change crankcase oil before using vessel and at least every year prior to haul out and winter storage.

Drip pad(s):

No Pads in place beneath engine(s). Fluids and debris fall into bilge area. ----- Consider installing drip pads beneath engine(s) to catch fluid drippings and rapidly identify leaks of any kind.

TANKAGE / PLUMBING

WATER HEATER

Water heater test:

Not tested - water system appeared to be winterized. ----- Test after filling water heater to be sure fully functional.

CONDITION & VALUE REPORT SUMMARY

DECLARATION:

Rating of vessel condition was determined upon completion and review of all reported survey information including recommendations and comparing vessel to the same or similar age models. Possible vessel condition ratings are as follows:

- **EXCELLENT** - Essentially as new or bristol in appearance.
- **ABOVE AVERAGE** - Has had above average care with no obvious defects or limitations.
- **AVERAGE** - Ready for sale but needs some maintenance or repairs, updates or cleaning.
- **BELOW AVERAGE** - Needs significant maintenance, repair or service.

Estimated fair market value was determined by cross referencing data from Soldboats.com, BUC, ABOS, NADA, Powerboat Guide and other brokerage listings or local dealers. Adjustments are then made for condition or equipment as necessary. The fair market value is for the vessel in it's current condition prior to any repairs or maintenance.

Estimated replacement cost was determined using information obtained from BUC, ABOS or local dealer prices using the same or similar make and model with similar equipment options.

- **RATING OF VESSEL CONDITION.....AVERAGE CONDITION**
- **ESTIMATED FAIR MARKET VALUE.....\$XXXXXXXXXXXX**
- **ESTIMATED REPLACEMENT COST.....\$XXXXXXXXXXXX**
- **INTENDED USE OF VESSEL..... Pleasure-Atlantic coast line cruising**
- **SUITABILITY FOR INTENDED SERVICE: *Vessel IS considered fit for it's intended use and upon correction of all listed Priority I recommendations.***

NOTE: All "Priority II" and "Other Recommendations" should be thoroughly reviewed to bring vessel up to current standards and or improve the value of the vessel.

CONDITION & VALUE REPORT SUMMARY

CLOSING STATEMENT & SIGNATURE:

This report is submitted in confidence for the exclusive use of XXXXXXXXXXXX without prejudice to the rights and/or interests of other concerned parties and may not be used for any other purpose or relied upon by any other person.

ATTENDING SURVEYOR(S):



Barton P. Cerra SAMS®-SA Marine Surveyor