

Marine Survey Report For SAMPLE SURVEY

"2004 Cruisers Yachts 405 Express"



Membership with the Society of Accredited Marine Surveyors and the American Boat & Yacht Council

INTRODUCTION

CERTIFICATION

This Is To Certify that the undersigned Marine Surveyor acting on behalf of Sun Coast Marine Surveying & Consulting, LLC inspected the referenced twin screw fiberglass motor vessel on the dates specified.

PURPOSE OF SURVEY

The survey was made at the request of the named client SAMPLE SURVEYfor his/her account, in order to ascertain the vessel's general condition and valuation for pre-purchase consideration.

CIRCUMSTANCES OF SURVEY

The vessel was inspected while afloat in its berth and later hauled for an inspection of the waterline hull, appendages, and machinery. All accessible compartments were entered but do to paneling, liner, tanks, and installed equipment only about 20 percent of the hulls interior surface could be observed. Any reference to bronze, aluminum or stainless steel metals is a color reference for convenience only, as the actual metallurgy cannot be determined without laboratory testing. The specific materials and layup schedule for the fiberglass moldings could not be determined with the non-destructive techniques available for inspection. A formal sea trial was performed. Machinery and equipment were inspected while operating unless specifically noted. Electrical power was available and used during the inspection. The deck and superstructure were examined visually and by way of ransom percussion testing, random moisture meter readings, and thermal imaging. The below draw waterline hull and appendages were examined visually and by of random percussion testing, the use of digital moisture meter and thermal imaging were applicable.

NOTE: Ownership, HIN and Official numbers from documents. Numbers verified on the hull. All specifications included in the report are from official documents or sources such as USCG Documentation, state registration, manufacturer's data or other reference materials and were not measured during the inspection.

REPORT FILE NO

18-336 2004 Cruisers Yachts 405 Express

SURVEYOR QUALIFICATIONS

The surveyor is a member of SAMS (Society of Accredited Marine Surveyors) with the designation of AMS (Accredited Marine Surveyor), and a Certified Standards Technician with ABYC (American Boat and Yacht Council)



INTENDED USE Recreational

GENERAL VESSEL INFORMATION

DATE OF SURVEY: 11/2/2018

FILE NUMBER: 18-336 2004 Cruisers Yachts 405 Express

CUSTOMER NAME: SAMPLE SURVEY
CUSTOMER ADDRESS: SAMPLE SURVEY
VESSEL BUILDER: Cruisers Yachts.
HIN (HULL IDENTIFICATION NUMBER): SAMPLE SURVEY

A true digital photograph of the hull ID number of the referenced vessel is shown in the report. The photograph has been enhanced for the purposes of

this report to provide maximum visibility.

MODEL YEAR: 2004

U.S.C.G. DOCUMENTATION NUMBER: SAMPLE SURVEY

LENGTH OVERALL (LOA): 42'6" Per Power Boat Guide
BEAM: 13'8" Per Power Boat Guide
DRAFT: 3'6" Per Power Boat Guide

DISPLACEMENT: 31000 Lbs Per Power Boat Guide

VESSEL NAME: NEW HURRAH

FUEL CAPACITY: 380 Gallons Per Power Boat Guide WATER CAPACITY: 100 Gallons Per Power Boat Guide

HOT WATER TANK CAPACITY: Two tanks 11 Gallons each Per Tank Label total 22 gallons.

HOLDING TANK CAPACITY: 70 Gallons Per Power Boat Guide

LOCATION OF SURVEY INSPECTION: Regatta Pointe Marina 1045 Riverside Drive Palmetto, FL 34221 LOCATION OF BOTTOM INSPECTION: Snead Island Boat Works 5225 Snead Island Rd, Palmetto, FL 34221

HULL, DECK & SUPERSTRUCTURE

DESIGN

Standard manufacture's hull, deck & superstructure.

HULL: Planing type hull with moderately raked bow, vertical with increasing flare forward, straight reverse sheer and square stern with dive platform. The bottom is a modified V design, with a reported 16-degree deadrise aft, lifting strakes and prop pockets steered by twin inboard rudders.

DECK(S) & SUPERSTRUCTURE: Single level deck with raised foredeck and recessed cabin house superstructure with FRP hard top.

WATERTIGHT INTEGRITY: A single watertight compartment divided into separate cabins by apparently non-watertight bulkheads and an overboard self-draining anchor locker at the forepeak. The hatches and portholes opening to the exterior hull, weather decks, and cockpit were apparently water tight types (ABYC Standards H-3) except for the companionway, cockpit locker hatches which were apparently water tight. The companionway was equipped with a sill and the cockpit was a self-draining type via scuppers located at the aft outboard corners of the cockpits engine compartment hatch gutters.

HULL, DECK & SUPERSTRUCTURE

Conventional fiberglass reinforced plastic (FRP) moldings with unknown core material, white gel coat exterior shell below the waterline with anti-fouling bottom paint and white gel coat above the waterline with bulkheads grafted to the hull with FRP laminates. Deck has unknown core with white exterior gel coat surfaces and molded in anti-skid texture in tread areas. Hull-deck joint is a shoe box design sealed with an elastomeric type compound and secured with stainless steel fasteners and FRP tabbing where observed. Joint protection provided by an external type plastic rub rail with a stainless steel striker molding and stainless steel fasteners. See Findings & Recommendations.

FINDING B-1

STRUCTURAL MEMBERS

The longitudinal and athwartship framing system comprised of FRP encapsulated longitudinal box stringers and frames of an unknown core material. Both stringers and frames laminated to the hull's interior along with full and partial plywood bulkheads and plywood floors grafted to the hull with FRP laminates and full and partial plywood bulkheads secured with mechanical fasteners. See Findings & Recommendations.

FINDING C-1

BOTTOM PAINT

Bottom paint is in serviceable condition.

BLISTER COMMENT

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 the vessel has been in the 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.

TRANSOM

Well secured, no cracks or defects sighted. Moisture readings were relatively Dry. No delamination when checked with a percussion hammer.







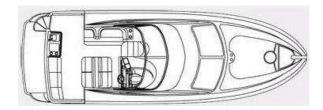






ABOVE WATER LINE HULL, DECK SUPERSTRUCTURE, HARDWARE & FITTINGS

LAYOUT OVERVIEW IMAGE Standard Manufactures Image



DECK FLOOR PLAN

Standard manufactures deck layout with no modifications to the original design.

ANCHOR PLATFORM

Stainless steel platform with single anchor roller, well secured to the deck and roller in good condition.

TOE RAILS & STANCHIONS & LIFELINES

Molded FRP toe rail, part of deck lay up, polished stainless steel bow and side rails mounted to the deck with stainless steel fasteners. Firmly mounted and serviceable except as otherwise noted.

MOORING HARDWARE

Polished stainless steel horn cleats firmly attached with stainless steel fasteners unless indicated in the Findings & Recommendations section.

FINDING C-2

HATCHES, PORTHOLES, PORTLIGHTS, DOORS & WINDOWS

Glass cabin trunk windows and sliding companionway door and aluminum framed hatch with Lexan type window at the forward end of the coach roof. Hatch sufficiently sized to act as a fire escape per NFPA 302. Stainless steel framed portholes with Lexan type windows at the ADWL hull and cord FRP hatches. Intact and serviceable except as otherwise noted.

EXTERIOR SEATING & TABLES

The exterior seat structures were firmly mounted and the upholstery was serviceable showing average wear and tear for age of the vessel.

COCKPIT EQUIPMENT

Aft bridge deck sink with pressurized water, ULine brand refrigerator and ice maker that was operational.

ENGINE HATCH

Manual lift hatch in the main salon that was functional.

BOARDING LADDER

A stainless steel collapsible boarding ladder is mounted on the swim platform in a platform pocket. The ladder shows minimal wear and was secure when tested.

SWIM PLATFORM

Molded in FRP swim platform with welded stainless steel supports. Serviceably showing moderate wear and tear from normal use except as noted in the findings.

ABOVE DRAW WATER LINE (ADWL) THRU HULLS

Stainless steel thru hull fittings, all secure and showing average wear and tear for the age of the vessel.















BELOW DRAW WATER LINE SKIN FITTINGS, MACHINERY & FITTINGS

BELOW DRAW WATER LINE THRU HULL FITTINGS

Bronze fittings that appear to be in serviceable condition showing average wear and tear for the age of the vessel and secure.

THRU HULL STRAINERS & SCOOPS

Bronze slot style thru hull strainer covers, appear to be in serviceable condition with limited wastage unless indicated in the Findings & Recommendations section. See Findings & Recommendations.

FINDING C-3

TRANSDUCER(S)

Plastic type, intact for depth. See Findings & Recommendations.

FINDING B-2

FAIRING BLOCK(S)

The fairing block attached and secure on the port side hull bottom. No indication of excessive wear and tear noted on transducer.

SEA VALVES/SEA COCK TYPE

Bronze seacocks with mounting flanges. Valves were exercised and found to be functional.

FINDING A-1

SEA STRAINERS

Bronze Internal strainer(s) installed. Strainers were inspected visually for cracks or any evidence of blockage. Strainers were not opened and inspected due to destructive testing restrictions. It is recommended the buyer open and inspect each strainer prior to taking delivery.

TRIM TABS

Bennett brand 12VDc hydraulic trim tabs with reinforced flex piping, composite struts, stainless steel trim blades. Operable. No hydraulic fluid leaks found.

BOW/STERN THRUSTER(S)

Side Power brand bow thruster that was functional when tested.

NOTE

This company suggests the sea cock/ sea valves be serviced according to the manufactures recommendations as a preventative measure upon purchasing a used vessel and thereafter as recommended by the sea cock/ sea valve manufacturer or more frequently as a part of the vessel's regular maintenance program. We also strongly recommend that if the vessel is left unattended that all below waterline sea valves be closed with the exception of scuppers, bilge pump discharge, or other valves that are required to be in the open position to prevent flooding of the vessel during inclement weather. This provides an extra measure of safety for the vessel as well as the added benefit of familiarizing the crew with safety valve locations and to exercise the valves to prevent seizure. Moreover, if not already done so, it is strongly suggested that properly sized tapered wooden plugs be kept in the vicinity of each sea cock/sea valve/thru hull to be used as a plugging device in the case of an emergency. Finally, when renewing the vessels protective coatings, it must be kept in mind that antifouling paints containing copper or other metals must not be applied to metal fittings and/or machinery without first having an insulated coating such as underwater metal primer or epoxy barrier coat applied. Failure to do so can result in harmful galvanic corrosion damage to the fittings and/or machinery.

CONDITION & COMMENTS

In apparent serviceable condition except as noted in the Findings & Recommendations.







CATHODIC PROTECTION

BONDING SYSTEM

The bonding system was found to be using an individual green insulated bonding wire. Appeared to be serviceable were sighted except as indicated otherwise in this report. The thruster, shaft and trim tab anodes were replaced during the haul out.

LIGHTING PROTECTION

None, but not normally found on boats of this type.

Note: Few boats are actually wired for lightning protection from the manufacture. There is no known way to ensure complete protection for personnel and equipment from a lightning strike. However, we suggest that any owner review the information at www.marinelightning.com and ABYC TE_4.

ADDITIONAL REMARKS

A separate bonding system survey was not performed, and a corrosion meter was not used to establish the level of protection. If a more detailed analysis is required, a complete separate bonding system survey is recommended.

NOTE

A vessels bonding system should be checked as part of the vessel's regular maintenance program. Each bonding wire should be checked regularly for corrosion, and its connection should be checked for connectivity. Resistance should be less than one (1) Ohm.

HELM STATION & NAVIGATIONAL ELECTRONICS

HELM STATION

Electronics mounted on cockpit bulkhead. A 5" Plastimo compass in serviceable condition. The accuracy of the compass was not verified. An ICOM IC-M502 VHF radio, powered up and received transmission using the weather service. Unable to receive transmission when tested using the Sea Tow automated service. A Raymarine C120 chart plotter with navigational charts and SIMRAD AP20 autohelm system that was proven during the sea trial and a Furuno radar screen that was tested and proven operational. A Raymarine ST60 TriData depth and speed gauge that was partially functional. See Findings & Recommendations.

















FINDING C-4

THROTTLE & SHIFT CONTROLS

Volvo Penta Dual function levers for each engine throttle/shift controls. Functional.

ENGINE ROOM BLOWERS

Engine room blower(s) power up and are fully functional.

ENGINE STATUS

All engine instruments are OEM.

OTHER ELECTRONICS & CONTROLS

Spotlight Controls: Jabsco spot light

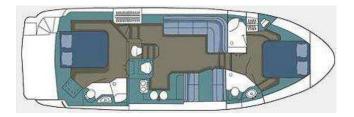
Thrusters: Side Power thruster that was functional.

Trim Tabs: Bennett Trim tabs.

CABIN INTERIOR APPOINTMENTS

MANUFACTURES IMAGE

Standard manufacture layout, no interior changes to the original factory designed interior. Not to scale. For general information purposes only.



ENTERTAINMENT BERTHING & SALON

Bulkhead mounted 120 VAc Hitachi brand flat screen TV in the salon, a VIZIO in the Guest Stateroom and a Hitachi TV in the main salon, . Cabinet mounted Phillips brand DVD player. Kenwood brand in-dash type (automotive style) 12 VDc model KMR MG 188T MP3/Satelitte/AM/FM digital stereo mounted in the cabin near the electrical distribution panel. A forward V berth, an aft berth located below the cockpit sleeps two. The appliances powered up and appeared to function normally and showed negligible wear and tear. Furthermore, the berthing and entertainment provisions were considered to be satisfactory for the vessels type.

INTERIOR LIGHTING

12 VDc. Operable except as noted in the findings.

GALLEY/DINETTE & ACCESSORIES

The galley was fitted with a Corian like counter top, storage lockers, cabinets and drawers. A single stainless steel sink and piped with flex type drain hose secured with hose clamp and polished stainless steel faucet. Cabinet mounted Contoure microwave, fixed mounted Princess dual burner electric stove, cabinet mounted Tundra 120 VAc/12VDc upright refrigerator/freezer with door lock. All of the galley appliances and equipment operated normally and presented low exterior wear and tear. The galley arrangement was also considered adequate for the vessel type.

WATER CLOSET(S)

Two water closets formed with pre-molded FRP liner module with gelcoat and exterior surfaces and Corian type counter. Wash basin piped with flex hose and secured with a hose clamp to polished stainless steel faucet. Integrated shower stall with drain on sole. 12VDc exhaust fan. A Sealand brand marine head (Toilet) that operates on a vacuum flush system piped with reinforced hoses and secured with hose clamps. The installed equipment operated normally and presented low wear and tear.

CLIMATE CONTROL

The vessel was equipped with four 240 VAc Cruise Air brand units. All units were controlled with digital controllers and were operational when tested. The temperature difference from intake vent to blower vents were at a minimum of 20 degrees variation.







ELECTRICAL SYSTEMS

DIRECT CURRENT SYSTEM(S) TYPE

The vessel was equipped with a single 12VDc system consisting of two battery banks. (3) Group 31, (1) Group 29, (1) Group 27 and (1) Group 24 12VDc wet cell lead acid batteries are located in the engine compartment on the port and starboard outer sides and are in plastic battery trays and secure. The batteries provide power to all 12 V systems to include the engine start batteries, generator start battery, house electrical and anchor windlass. Four Perko rotary switches are located in the engine compartment. Where visible the vessel was wired with multistranded copper conductors with plastic-type insulation. Much of the wire did not appear to have been modified from its factory installation. Furthermore, were observed, no indications of overheating conductor insulation was observed. The terminals where splices could be seen consisted of ring terminals, terminal plugs, spade and blade terminals, fork terminals, common butt splices, and waterproof butt splices. Battery charging was accomplished by 12 VDc unknown amperage alternators on each engine, the onboard generator and shore power by two Power Mania Turbo 340 30-3 battery chargers that powered up. The main DC panel board is located on the starboard side wall of the main salon. All panels were clearly marked for voltage. Overcurrent protection of the system was provided by a variety of in-line fuses of different types, push-button thermal reset breakers and circuit breakers. See Findings & Recommendations.

Check all battery dates prior to purchase to determine any batteries that are older than 3 years, It is recommended any battery over 3 years be replaced. Batteries are not load tested as a part of the survey and often battery dates are not visible. Verify this information prior to closing.









FINDING B-3

BATTERY HEALTH STATUS See Findings & Recommendations.

FINDING B-4

ALTERNATIVE CURRENT (A.C.) SYSTEM(S)

The vessel was equipped with two 240 VAc Glendenning Cable Master 50 amp single phase Ac system. The vessel shore power connections were located on the port aft deck. The operable main shore power circuit breaker is located at the AC distribution panel in the main salon. All breakers were operable and analog volt and amp gauges were installed at the power panel. Overcurrent protection was provided for with individual branch circuit breakers in addition to the main shore power circuit breaker installed on the panel board. An operable main circuit breaker was also installed at the generator, and the generator/shore power selector switch at the panelboard in the salon was an operable make or break type switch. Where accessible and visible, the shore powers system's consisted of multistranded copper conductors with plastic-type insulation, and the terminal's consisted of ringing terminals and butt slices. The system's wiring in so far as could be determined did not appear to be modified from its factory installation, and no indications of overheating of the visible portion's of the wiring insulation was found. The Ac panel board was fitted with reverse polarity indicators which were functioning. GFCI protected AC receptacles were installed in the vessel. The systems impedance, voltage drop, polarity and GFCI function were tested at each Ac receptacle with a Suretester device with shore power and generator supplied power and tested normal except as indicated in the Findings & Recommendations. As far as could be determined by general examination without making disassemblies, the system was found to be in apparently good working order.









GENERATOR

Located in the engine room is an Onan 15KW 4 cylinder diesel generator. The generator is a freshwater cooled unit, coolant levels were full. The oil level was full when checked. All hoses appeared to be serviceable. The generator started and functioned by holding a full load, all air conditioning units, stove burners, oven and microwave were powered on, the generator maintained voltage. See Findings & Recommendations.

Serial Number: K030569429 Generator Hours: 918.3



FINDING A-2

INBOARD PROPULSION SYSTEM

ENGINE(S)

Two Volvo-Penta model TAMD74EDC in-line six-cylinder diesel engines with raw water cooled closed loop cooling system and wet type of exhaust with 430 rated horsepower. The engines were secured to the vessels longitudinal main stringers made fast by stainless steel engine mount fasteners. No drip pads available, fluid and the debris fall into the bilge area beneath the engines. The engines cooling systems were equipped with engine mounted heat exchangers, engine mounted raw water cooling pumps, engine mounted closed system circulating pumps, remotely mounted closed system expansion bottles and pipe with reinforced hard wall marine water hoses secured with hose clamps, engine mounted OEM type cooling system hoses secured with hose clamps and metal piping. Bronze raw water strainers with site glass were incorporated into the raw water intake hoses, and the raw water was discharged to the exhaust at the mixing elbows. The exhaust systems were wet type with approved high-temperature silicon wet exhaust hose sections, common approved type wet exhaust hoses, metal exhaust tubing and discharged to the aft stern quarters through FRP exhaust tubing laminated into the hull. All sighted exhaust hose connections were made fast with double hose clamps per ABYC recommendations. All hoses appear to be in serviceable condition. Belt condition appears to be serviceable with no cracks or evidence of belt dust sighted. All fluid levels appeared to be full.





SERIAL NUMBERS

Port Engine: 2071174713 Starboard Engine: 2071174712

ENGINE(S) HOURS

Port Engine: 762 Starboard Engine: 761

OTHER NOTE

It is good practice when buying a used vessel that all fluids (Engine/Transmission or Outdrive) be changed and the raw water cooling impeller(s) also be changed.

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 surveyor/mechanic to determine the internal condition and any repairs necessary of the engine(s), transmission gears, and pumps, heat exchangers, coolers, etc.

REVERSE GEAR(S)

ZF Hurth ZF280-1 A transmissions. Fluid levels were full for both transmissions.

Gear Ratio: 1.769

Port Transmission Number: 20043763 Starboard Transmission Number: 2004333

SHAFTING & PROPELLER(S)

The prop shafts were 2" in diameter and stainless steel with raw water dripless shaft logs. Shaft log hose clamps were in good condition and double clamped on each side. The struts are P type struts with cutlass bearings in good condition, no indication of excessive play was noted. The props are four bladed bronze props, inspection did not show any damage to shafts or props.



OIL CHANGE SYSTEM

A Reverso system sighted in the engine room that was functional when tested.

STEERING SYSTEM

MANUFACTURE Seastar-Teleflex

STEERING SYSTEM COMPONENTS

Helm pump wheel assembly, reinforced steering system hoses, hydraulic ram, steel drag link with clevis ends, autopilot reference sensor, bronze tiller arms with set screws, bronze upper rubber and bear cross members secured to the longitudinal stringers with stainless steel fasteners, bronze rudder ports/packing glands secured to the hull using stainless steel fasteners, and bronze rudders with stainless steel stocks secured by the tiller arms and fitted with stainless steel cotter pins at the top to act as safety's. Where visible the components were adequately mounted and no indication of fluid leaks was noted. The system operated normally, and no evidence of damage was found on the rudders. Furthermore, none were found at the packing glands.

Note: Upon purchase of a used vessel this company suggests, the steering system is serviced according to the manufacturer's recommendations as a preventive measure and inspected regularly thereafter as part of a regular on-going maintenance program.













TANKAGE

FUEL TANK(S) & PIPING

Two tanks located in engine space, on the port and starboard sides with visible manufactures labels at the inboard sides of the engine compartment. The tanks were secured with metal straps and due to their location access was very limited and only part of the inboard sides and tops could be observed. Grounding conductors were observed at the tanks and both pipe to weather deck mounted stainless steel pipes marked for diesel. Continuity testing was performed using a multimeter and the results were consistent with tanks and fills that are grounded. The fill hoses were USCG approved Type A hoses secured with double hose clamps where visible. The tanks were vented to topside mounted fittings with flame screens and were plumbed with SAE j1527 hoses secured with hose clamps. The fuel supply and return hoses were also SAEj1527 with swaged mechanical fittings, and the engines were equipped with OEM type flexible fuel lines and metal fuel tubing. Fuel filtration was provided by two remotely mounted Raycor primary fuel filters and engine mounted OEM type fuel filters. Fuel shutoff valves were sighted on tank tops and three shut off valves are located in the aft cockpit area. Tanks appear to be original and in serviceable condition.

POTABLE WATER SYSTEM

The potable water system consists of two plastic water tanks secured below the salon sole. The tank was not visible. The system was equipped with one ShurFlo brand 12 VDc on-demand water pump installed in the engine room. The water pump functioned when tested. The water heater itself was a marine grade Atwood brand 120 VAc water heater with engine heat exchanger provision. The water heater was located below the aft berth and the unit was fitted with a pressure relief valve. The water heater was functional and no leaks were sighted. The system's piping was made of semi-flexible polyethylene tubing with compression fittings as well as reinforced vinyl type hose sections secured with hose clamps. A municipal pressure water supply hook up with regulator was also installed in the transom locker but was not proven. The system was operable.

HOLDING TANK(S)-BLACK WATER

Two Sealand brand 12VDc Vacu Flush systems with two vacuum pumps and reservoirs located below the master stateroom berth and the salon sole. An operable 12VDc Sealand macerator was also installed forward of the holding tanks. The holding tanks were plastic and also shared the same location with the vacuum pumps. The systems plumbing consisted of polyethylene semi-flexible tubing with compression fittings at the flushing side and PVC fittings and reinforced sanitation type hose secured with hose clamps at the discharge side. No waste odors were noted within the confined spaces of the vessel, and the system was operable. The visible portions of the holding tank were intact as was the port side plastic vacuum reservoir. No active leaks were observed in the visible portions of the systems components.

SAFETY EQUIPMENT

NAVIGATIONAL LIGHTS

All Navigation lights are fully operational.

LIFE JACKETS (P.F.D,'S)

The following USCG approved life jackets were sighted on board: (12) U.S.G.G. Type II All appear to be in serviceable condition showing minimal wear and tear.

THROWABLE TYPE P.F.D.

The type of USCG approved throwable PFD devices sighted were: wo USCG approved Ring buoy(s) All appear to be in good condition showing average wear and tear for the age of the vessel.

VISUAL DISTRESS SIGNALS

See Findings & Recommendations.

FINDING A-3

SOUND DEVICES

12 VDc horn, functional.

U.S.C.G. PLACARDS

Discharge of Oil placard sighted. See Findings & Recommendations.

FINDING A-4

ENGINE VENTILATION

Power exhaust ventilation blower(s) are installed and fully operational.

INLAND NAVIGATIONAL RULE BOOK

See Findings & Recommendations.

FINDING A-5

WASTE MANAGEMENT PLAN

See Findings & Recommendations.

FINDING A-6

FIRE FIGHTING EQUIPMENT

Type I portable extinguishers were sighted in the following locations: Helm Station, Galley, Guest Stateroom, Master Stateroom.

Fixed firefighting system was located in the engine room and was a FE241 unit. See Findings & Recommendations.

FINDING A-7

BILGE PUMPS

Forward Bilge: A Johnson brand pump with 2200 GPH capacity, pump had an operational high water alarm that was functional.

Midship Bilge: A Johnson brand pump with 2200 GPH capacity, pump had an operational high water alarm that was functional

Aft Bilge: A Johnson brand pump with 2200 GPH capacity, pump had an operational high water alarm that was functional.

Sump Tanks: A forward and aft sump tank with a Sea Flow 750 GPH bilge pumps. See Findings & Recommendations.

FINDING B-5

GROUND TACKLE & WINDLASS

(The anchor rodes were inspected as stored without ranging)

Primary: A galvanized steel 44fluke type anchor is mounted at the anchor platform with an undetermined length of raw chain and considered serviceable other than noted in the Findings & Recommendations, showing moderate wear and wastage.

Windlass: A Maxwell windlass is mounted on the platform and was functional using both the helm and the bow foot controls.





AUXILIARY SAFETY EQUIPMENT

See Findings & Recommendations.

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. CO is a silent menace and kills without warning, Regular testing of installed CO detectors in any occupied spaces below decks is highly recommended.

FINDING A-8

SEA TRIAL

OBSERVATIONS

A formal sea trial was conducted while in route back from the vessel haul out. Weather conditions were partly cloudy skies, a temperature of approximately 95°F and a moderate chop on the waterway. The vessel was operated by a professional captain hired by the seller. The total operational time considered sea trialing was from 11:55 AM and completed at 12:30 PM. Total sea trial time was approximately 35 minutes.

The vessel responded to throttle, trim tabs and helm manipulation in a normal and predictable manner and visibility from the helm considered adequate for the vessels type. All observed engine temperatures, oil pressures and RPMs as per the vessels gauges appeared to operate at acceptable temperature ranges and pressure ranges.

STATISTICS:

Indicated engine wide open throttle speed (WOT): 2480 RPM Port and 2440 RPM Starboard which resulted in a speed over ground of 27.8 mph. Max RPM for the engines is 2500 RPM.

Indicated engine temperature: 177 degree Port and 175 degree Starboard.

Indicated turbo pressure: 30.7 PSI Port and 32.2 PSI Starboard. Indicated battery voltage: 14.0 Volts Port and 13.9 Volts Starboard

A: SAFETY DEFICIENCIES

FINDING A-1 SEA VALVES/SEA COCK TYPE

Corroded and broken hose clamps sighted on raw water intake hose on the port engine and other raw water intake sea valves.

RECOMMENDATION

Replace all hose clamps with corrosion on raw water intake valves and strainers.





FINDING A-2 GENERATOR

The exhaust hose for the generator has a broken hose clamp and all show corrosion.

RECOMMENDATION

Replace hose clamps before use.





FINDING A-3 VISUAL DISTRESS SIGNALS

Expired and or no visual distress signals are onboard the vessel.

RECOMMENDATION

Ensure visual distress signals are aboard to comply with USCG regulations 33 CFR 175.110 for visual distress signals prior to using the vessel. You must have at least three aerial or three red handheld signals that are current.

FINDING A-4 U.S.C.G. PLACARDS

No placards sighted for garbage. These are required for any vessel 26' or longer.

RECOMMENDATION

To avoid a potentially large fine, post a trash disposal placard near the waste area to comply with USCG 33 CFR 151.59.

FINDING A-5 INLAND NAVIGATIONAL RULE BOOK

A copy of the Inland Navigational Rules was not sighted as required for vessels over 39'4" (12M) or longer.

RECOMMENDATION

Obtain a copy of the Inland Navigation Rules and be familiar with its contents. Keep rule book on board vessel to comply with USCG regulations and to avoid a potential fine.

FINDING A-6 WASTE MANAGEMENT PLAN

A written waste management plan was not sighted on board to comply with USCG regulations.

RECOMMENDATION

Vessels over 39'4" (12M) or longer with a galley and berthing require a written waste management plan describing the procedures for collecting, processing, storing and discharging garbage, and designate the person who is in charge of carrying out this plan. This is a USCG CFR 33 151.57 requirement. Noncompliance could lead to a fine.

FINDING A-7 FIRE FIGHTING EQUIPMENT

Fixed fire extinguisher in engine space has outdated or no certification tag. The portable extinguishers' gauge indicated serviceable but appeared to be of considerable age and no inspection tags were observed.

RECOMMENDATION

ABYC A-4 and NFPA 302 recommends that fixed fire protection systems be inspected and reweighed at one year Recommend compliance. NOTE: Halon or other "clean agent" type fire extinguishers must be weighed to determine true contents. Monitor lights and gauges only show there is pressure available and do not reflect the quantity available. Annual inspection and a tag to show date is recommended to meet ABYC A-4 and NFPA 302 standards. Have portable fire extinguishers inspected annually per ABYC A-4.

FINDING A-8 AUXILIARY SAFETY EQUIPMENT

No or nonworking CO2 monitors.

RECOMMENDATION

Install Carbon Monoxide detectors in any enclosed accommodation spaces per ABYC A-24 and NFPA 302 recommendations.

B: OTHER DEFICIENCIES REQUIRING ATTENTION

FINDING B-1 HULL, DECK & SUPERSTRUCTURE

Elevated moisture readings were recorded where the stanchions are mounted to the deck and at the port side deck just forward of the door leading forward.

RECOMMENDATION

Remove and re-bed the forward stanchion fasteners and monitor aft port deck moisture levels and take action if condition worsens.

FINDING B-2 TRANSDUCER(S)

The log paddle wheel is not intact on the transducer.

RECOMMENDATION

Replace log speed wheel.

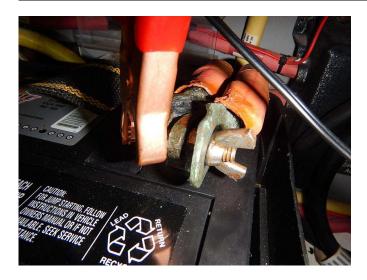


FINDING B-3 DIRECT CURRENT SYSTEM(S) TYPE

One battery had a wing nut used for securing battery cable.

RECOMMENDATION

ABYC E10.8.3 states: "Battery cables and other conductors size 6 AWG (13.3 mm²) and larger shall not be connected to the battery with wing nuts". Recommend compliance.



FINDING B-4 BATTERY HEALTH STATUS

The port most forward Group 31 battery has a 20% status life and the Group 24 generator battery has a 63% status life as tested using a Foxwell 12V Battery Analyzer BT100 Pro.

RECOMMENDATION

Replace both batteries.









FINDING B-5 BILGE PUMPS

The forward sump bilge pump was not operational when tested.

RECOMMENDATION

Repair or replace as required to make operational.





C: SURVEYOR'S NOTES & OBSERVATIONS

FINDING C-1 STRUCTURAL MEMBERS

Elevated moisture meter readings were taken on longitudinal stringers. Phonetic soundings did not indicate delamination. Thermal images also did not show evidence of moisture.

RECOMMENDATION

Monitor stringers and sound periodically and take action if indication of delamination surfaces.

FINDING C-2 MOORING HARDWARE

The forward port cleat had slight movement when struck with a rubber mallet.

RECOMMENDATION

Tighten fasteners for forward port cleat.

FINDING C-3 THRU HULL STRAINERS & SCOOPS

Two of the screens had the teeth broken.

RECOMMENDATION

Consider replacing screens at next bottom job haul out.



FINDING C-4 HELM STATION

The Raymarine ST60 Tri-data unit did not read speed.

RECOMMENDATION

Replace the speed wheel if log speed is desired.

VALUE

CONDITION & VALUATION

CONCLUSION:

Insofar as could be determined by general examination without making removals to expose concealed parts, the vessel was considered to be in good overall general condition, and it is my considered opinion that upon compliance with the recommendations stated above, it would be in satisfactory condition for the intended use of its designer and builder.

VALUATION:

The definition of "Fair Market Value" as used in this report is that as issued by the Machinery & Technical Specialties of the American Society of Appraisers-July 25, 2010.

The" Fair Market Value" "is, "an opinion, expressed in terms of money, at which a property would change hands between a willing buyer and a willing seller, neither under any compulsion to buy or sell, and both having a reasonable knowledge of relevant facts, as of a specific date." Implicit in this definition is the consummation of a sale as of a specified date and of the passing of title from seller to buyer under conditions whereby:

- a. Buyer and seller are typically motivated.
- b. Both parties are well informed or well advised, and acting in what they consider their own best interest.
- c. A reasonable amount of time is allowed for exposure in the open market.
- d. Payment is made in terms of cash in US dollars or in terms of financial arrangements comparable thereto, and
- e. The price represents a normal consideration for the vessel sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

The valuation offered in this report is based on the vessel's apparent condition on the date of the survey and assumes that the vessel's engines and/or other installed equipment not proven during the survey inspection are in fact operational. Discoveries made as a consequence of additional testing/inspection procedures may significantly lower this valuation. Also, there is no warranty given, or implied, of the future useful life of engines or machinery described herein. Valuations are developed by using some or all of the following resources; commercially published used boat price guides(BUC, NADA, Boats & Harbors, Soldboats.com, Yacht World, etc.), commonly accepted Marine depreciation schedules, and consultations with knowledgeable boat brokers not involved with this specific transaction. The "ESTIMATED REPLACEMENT COST" indicates the retail cost of a new vessel of the same make/model with similar equipment offered by the same manufacturer or comparable vessel with the same equipment.

Report Summary

- A. Comparable Sales Market Approach:
- 1. The current NADA provides a value range for the vessel of approx. \$155,400.00
- 2. The current BUC ValuePro provides a value range for an average condition of approx. \$162,500.00
- 3. The current Power Boat Guide provides a value range for the vessel of approx. \$149,000.00
- 4. The following were the only verified sales found of the same make, model and year vessel between Jan. 2017-Oct. 2018 found on SoldBoats.

a. Vessel Year: 2004 Location: NY Sold Date: 08/17 Sale Price: \$162,000.00 b. Vessel Year: 2004 Location: MI Sold Date: 03/18 Sale Price: \$156,000.00 c. Vessel Year: 2004 Location: MD Sold Date: 05/18 Sale Price: \$158,500.00

5. Calculations:

a. NADA Average: \$155,400.00
b. BUC Book Average: \$162,500.00
c. PBG Average: \$149,000.00
d. Sold Boats Average: \$158,800.00
Average Valuation: \$156,400.00

B. Cost Approach Method:

If the Cost Method of appraisal is considered using the Martin Scale with research indicating the same make and model vessel would now cost \$714,000.00 new, this 14-year-old vessel in 2018 would be worth approximately \$350,000.00. Based upon the Soldboats, BUC and NADA data the Cost Approach Method of appraisal is not considered the most accurate. We will, therefore, rely on the Comparable Sales/Market Approach Method. Therefore, consideration of the reliability of the data, the extent of the necessary adjustments and condition of the vessel the:

Estimated Fair Market Value is: \$159,000.00

Estimated Replacement Cost is: \$714,000.00 (Per internet research)

Report Summary

SURVEYOR CERTIFICATION

Acting on behalf of Sun Coast Marine Surveying & Consulting, LLC, the undersigned surveyor certifies that to the best of his or her knowledge and belief: I have made a personal inspection of the property that is the subject of this report. The statements of fact in this report are true and correct. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions at the time of inspection and are my personal, impartial and unbiased professional analyses, opinions and conclusions. I have not performed services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment. I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved. I have no bias with respect to the property that is the subject of this report or to the parties involved with the assignment. My engagement in this assignment was not contingent upon developing or reporting predetermined results. My compensation for completing this assignment was not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client or seller, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of the report content including the appraisal. No one provided significant appraisal assistance to me.

REPORT SUBMITTED WITHOUT PREJUDICE

Sun Coast Marine Surveying and Consulting LLC

9. Chet Stephens

By:

Senior Surveyor
J. Chet Stephens, SAMS-AMS

