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Mr. Joe Martin
238 Simpson Road
Barrington, RI 02806

August 16, 2011

Re: 1981 Bristol 455 Sloop "PANDORA"

Dear Mr. Martin:

This letter is an update of a survey performed by me on this vessel in February of 2010. During the past year this vessel has undergone a complete professional refit. Page eight and nine detail the exact refit. Page ten, a Photos page, will validate much of the work as it proceeded along to completion. The final results of the inspection indicate a professional work ethic with little regard for expense. The final inspection took place on the 16th of August, 2011 while afloat at Brewers Cove Haven Marina in Barrington, Rhode Island. You requested the inspection to establish its condition and value as you intend to increase the insurable value.

The survey guidelines are provided, for the most part, by the "N.F.P.A., and A.B.Y.C., Coast Guard Standards, and the "Code of Federal Regulations", as published for pleasure yachts, and the values guideline is the "BUC" book along with current market conditions.



The survey of this vessel is based solely on a careful visual inspection of all accessible portions of its hull and equipment. Certain parts of the hull and structure can be inspected only by removing decking, liners, bulkheads and sheathing. These areas were not inspected. It is my normal practice to conduct a survey which includes a sea trial. The sea trial enables me to make a determination concerning the engines and reduction gears. In order to make a proper inspection of these important components, they must be brought up to operating temperature and run under a load at RPM for a period of time. Inspection and operation of the engine was limited to a visual inspection.

General

The official number is 647275. Pertinent dimensions of the vessel (taken from the vessel) were: the LOA is 45' 6", the beam is 13' 2", and the draft is 4' 11" (board up), The displacement (from book) is 34,660 pounds. This vessel was manufactured in 1981 in Bristol, Rhode Island, by Bristol Yacht Company.

Hull and Structures



The hull is a typical polyester laminate, reinforced with various fiberglass matt materials. Hull stiffeners are made up of heavy duty foam and fiberglass boxed structures through out the entire length of the vessel. Chainplate frames run continuously through the hull sole to ring the chainplate landings together. A very secure structure. The chainplates are in good condition The hull is in overall good condition, sturdy and does not show signs of major damage or repair. The hull finish, between the boot top and gunwale, is dark blue Epoxy paint finish with hand painted white boots and cove trim. The hull freeboard finish is New. There are no abrasions to note. The freeboard section of the hull was

sounded and found to be solid. All through hull fittings are new bronze and properly installed and secure. The shaft log and shaft are in good condition. The hull, below the waterline, was previously inspected and found to be free from and soft spots or delamination. The propeller, propeller shaft are in new condition. Access to the centerboard structure is limited, but what can be inspected looks good. The rudder, and rudder post are in good condition. Excess play was not noted at the rudder. No oxidation was noted. Excess laminate moisture did not exist in any location.



Cockpit and on Deck (Structure)

The topside walk area is fiberglass. The topsides laminate is (balsa cored structure) with plywood backing and is in good condition with no soft areas noted. The cockpit area is self bailing, through scuppers, clean, and the finish is in new condition. The cockpit scuppers and their related hoses and hardware are in good condition. Instrumentation is located on the pedestal and companionway. The overall condition of the cockpit is like new. The appearance from on deck, including the trim, is good. The outside teak wood is brightly finished,

(All around). There is an electric anchor windlass installed. The bow and stern pulpits, stanchions, and cleats are constructed of stainless steel and are properly secured. The life lines and their associated gates are in good condition. The stemhead fitting with rollers is in good condition. The compass reading is correct on the present heading. The lazarette and aft hatches are in good shape. The aft propane locker is properly vented and the hatch is in good condition.



The dinghy lift system is secure. The cockpit (rigid) screen is well secured to the cockpit coaming and is in good condition. The steering pedestal and attachments are secure. The stays ail track is secure. The jib sheet tracks are in good shape and secure. The companionway hatch is in like new condition. The vertical section of the hatch fits nicely and is secure. All mooring cleats are secure. Overall, the foredeck and cockpit are in like new condition.

Spars and Rigging

This vessel is equipped with a masthead sloop rig. The headstay is properly secured. The painted aluminum mast and boom, and boom vang appear in good condition from on deck. The jib furling device is also in good shape. The mast, boom and related hardware show no sign of abuse. The mast steps on the keel. The mast step was not viewable. The standing rigging is properly sized and in good condition. An array of properly sized deck and mast winches also appear in very good condition, but were also difficult to turn because of the cold. The standing rigging adjusters and related locks are all installed and tapped off. The adjustments are not over tensioned. The backstay is attached to the a chainplate which is secured to the transom, and is secure.

Sails, Sheets and Halyards

The five sails on board (Main, Yankee, and Genoa, Spinnaker, and Storm Sail) are all upgrades and in very good condition. The dodger was installed during the inspection and appears to be a recent upgrade. The halyards are new condition. The sheets are in new condition. All of the sheets and their associated blocks are in new condition.



The interior joiner work and trim, as evidenced by the photo at left, has been completely replaced or refinished.

This vessel was produced as an off shore cruising sloop, so the materials used during construction, both in and out, are heavy duty. The upholstery shows light use and minimal wear. All hull liners are custom fabricated Teak and Mahogany, (Joiner work). The sole is also Teak with Holey trim. (The joiner work, for the most part, is bright, clean, and in new condi-

tion.

The head liner is clean and moulded into the deck composite with some vinyl. The bulkheads are 1/2 and 5/8 inch plywood. The bulkheads that do not form a part of a liner are



Teak and Mahogany. The bulkheads are tabbed to the hull with roving and matt. The combination of plywood bulkheads, proper glass tabbing, and nicely done joiner work make a very strong and rigid composite unit. The deck and overhead is supported by bulkheads and a compression bulkhead.

The companionway ladder is sturdy, secure, and in excellent condition. There is proper ventilation to the main cabin area through vents and ports. Ports, vents, and hatches are secure and weather tight. All ports and hatch covers

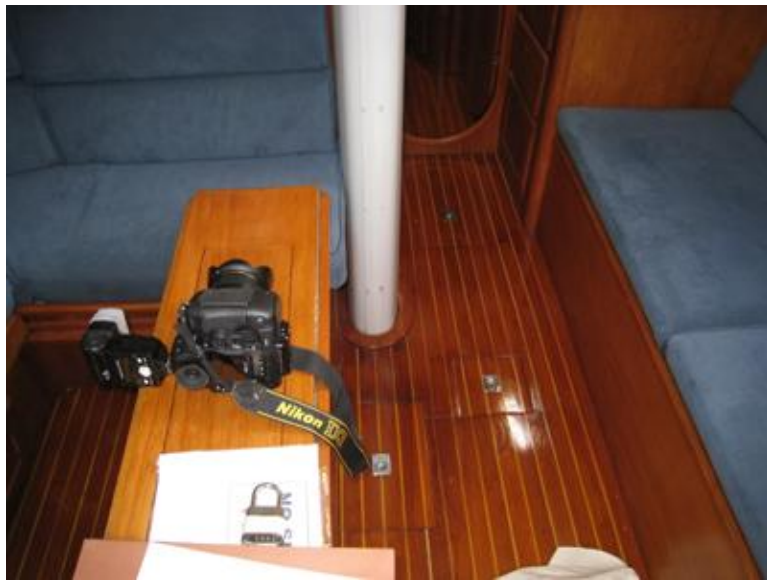
are in good or new condition. No dampness was noted at any location. The main cabin houses the dinette, galley, and navigation station.

Lighting is good throughout the vessel. The dinette table is large and properly secured to the structure. The green upholstery is in good condition. There is adequate locker and drawer space in the main cabin. There is hanging locker and cabinet space between the main cabin and the v-berth. These interior areas, overall, appear as a new vessel would.



Galley

Closets, lockers and other storage areas are more than adequate through out the vessel. The built in reefer and stainless steel sinks are in good condition. There is a pressure hot and cold water system installed. The potable water system was not checked out. The propane stove-oven is fed through proper lines and valves from the tanks, which are properly mounted, secured, and vented to overboard at the stern. The gimballed stove and its related hookup are proper and secure.



Navigation Station/Electrical and Electronics

The navigation station is nicely equipped with the necessary electronics (list on Page 9 and 10) for Coastwise Cruising. The electronics were not checked out as they are all new.



The main AC/DC panel is properly grounded and all AC circuits are properly protected and isolated. A new isolation transformer has been installed as well as a complete bonding system. The AC circuits were not checked out while operating.



Heads

The heads (one forward and the other aft) are in good condition. The heads are equipped with showers, hand basins and an VacuFlush marine toilets. The shower units are an integral part of the inner liner. The shower stalls are good sized fiberglass enclosures. Each shower is equipped with a sump pump and overboard drain. There are macerator units and holding tanks installed.



Forepeak

There is rode storage at the forepeak which is accessed from on deck as is the electric windlass. Excess moisture was not noted in any of the forepeak compartments. The deck hatch to this area is in good shape.

Bilges

The entire bilge from forward to aft is clean and free from unessential material. Access to the bilge is gained by removing deck hatches. The bilge and inside surface of the hull are freshly painted with white epoxy. There are a variety of pumps residing in these bilge areas which also appear in new condition. Obviously the fittings, hoses, wiring, discharges, and structures are all part of the recent refit and in new condition.



Propulsion and Controls

Propulsion is by a new Westerbeke 65A fresh water cooled Diesel engine with reduction gear. Engine instrumentation, consisting of a tachometer, gauges, and warning lights, are positioned at the helm for easy viewing while under way. The engine was not tested during inspection. The throttle and shifting levers are in good condition.

The engine intakes salt water via the through hull, strainer, and on to the heat exchanger. The intake and filter are secure, and double clamped. The monel shaft and related hardware are in new condition. The water cooled shaft log is in good shape, properly secured and clamped. The engine compartment is

reasonably clean and free of any unessential gear. The fuel tanks (new) are secured forward, beneath the deck, in the main salon and cannot be completely inspected. The fuel shut-off is easily accessible. The fuel feed lines and fill are in new condition and secure.



The batteries (new 8D) are properly sized, secured and boxed. The breaker panel, at the navigation station, is also in good shape. The electrical wiring and terminals observed throughout the vessel appear in good shape, but

all could not be checked out. Some of the DC circuits were checked manually and those operated. The battery three way switches are in good condition. The refrigeration system and all 120 volt systems were not checked out. Cathodic protection is installed to protect the engines and mechanical devices. A four inch thermally operated engine room blower is installed.



The following list (Page 8 and 9) of additions and upgrades have been verified by this surveyor.

- All through hulls and deck equipment removed from boat.
- Bottom sandblasted; blisters removed; a handful of “soft areas” were repaired; new glass added to bottom of keel and into centerboard trunk, and around prop and rudder;
- Bottom barrier coated with four coats Interlux “2000”, alternating colors of gray and white.
- All through hulls replaced (new) after bottom was barrier coated.
- Bottom painted three coats Micron-Extra – base coat color different from top two coats;
- Hull sanded, primed and painted. New bilge and engine discharges/exhausts added on transom – molded fiberglass.
- All deck holes drilled and cleared of coring – including to ½” all around the hole – and then filled with epoxy slurry using an injection method to fill all voids. Holes re-drilled through pure epoxy – no possibility of water exposure to deck coring now.
- Deck sanded, primed and painted.
- Windlass replaced new.
- Electric winched disassembled, cleaned and serviced.
- Installed new main traveler, new genoa tracks, new blocks for furling.
- Stanchions that were broken or bent were replaced.
- All new navigation lights installed.
- Radar removed from mast. New radar pole installed at rear of boat and the following Raymarine electronics were installed new:
 - o Digital HD radar/chartplotter – two stations – at helm and at nav station;
 - o VHF radio with EIS capability (with cockpit remote unit);
 - o New radio cable installed in mast, along with new VHF antenna;
 - o Wind, speed and depth;
 - o Autopilot
- Two new fuel tanks installed;
- All fuel lines and vents replaced – brought up to ABYC standards;
- Dual Racor filters installed;
- New Westerbeke 65A engine installed with new oversized 165 amp alternator (all engine related parts new);
- 3-blade Maxprop installed;
- New cutlass bearing and dripless stuffingbox installed;
- New charger/inverter (Mastervolt Combi 12/2500) installed – all AC/DC wiring to and from charger/inverter brought up to ABYC standards;
- New refrigerator installed;
- Galvanic isolator installed;
- Large lightning plate installed and mast, all rigging, engine, thru-hulls, and radar pole bonded to lightning plate;
- Lightning diffuser installed at top of mast;
- Unnecessary wiring removed;
- Additional holding tank added;
- Winter cover to be fabricated to protect boat in the off-season;
- Two new water tanks installed;
- Entire fresh water system replaced – all new hoses and fittings (including venting system);

- New 12-gallon hot water heater installed (with mixing valve);
- All chrome items re-chromed (i.e. dorades, dorade flanges, drain covers, etc.);
- Compass removed and serviced

- Centerboard sheaves and pennant replaced, including the fiberglass boxes to house the same;
- New veneer around all windows replaced;

- All new stringers made of mahogany – replaced pine stringers

- All new portlight plexiglass installed (except in head windows which were replaced altogether with new stainless steel units from New Found Metals – these windows will eventually replace all of the other small portlights).
- All standing rigging inspected

- All running rigging replaced

- New stereo and speakers

- Main cabin sole replaced (teak and holly on epoxy coated plywood base – not veneer)

- Two new 8D AGM batteries installed (to complement the three existing 8D AGM batteries);

- Entire interior re-varnished

- Many bilge and sump discharge hoses replaced. All bilge and sump pumps serviced;
- All fasteners and clamps throughout the boat replaced with new stainless steel items (316 stainless steel where appropriate).

Entire bottom was sandblasted to remove paint and blisters.

Deck holes drilled and cleared of coring – including to ½” all around the hole – and then filled with epoxy slurry using an injection method to fill all voids. Holes re-drilled through pure epoxy – no possibility of water exposure to deck coring now.

Every through-hull replaced – this photo represents some of the ones that were replaced. topsides sanded – bottom barrier coated after necessary hull repairs were effected. painted deck and painted hull

main sole removed and tanks removed. In lower right, you can see the centerboard sheave replacement taking shape.

New mahogany stringers installed (replaced pine stringers).

new head windows. These will eventually replace all the small ports (12 in total).



This Photos page will help to verify the extent of the re-fit of this vessel. The photos indicate fresh epoxy barrier coated bottom with new bronze through hull fittings, new sole supporting structure, new topside finish, new hull finish , new deck fittings , ans new folding three blade propeller.

Item Specific List

1. Coast Guard Safety and Signalling package..... Complete all new

Electrical

2. AC/DC Isolation.....Isolation system is installed, GFCI installed (new)
3. AC/DC ground system....DC ground in accordance with ABYC standards.
AC ground is in accordance with ABYC standards (closed loop system)
4. DC control panel..... original, DC wiring is original stranded copper with original harnessing in place.
5. AC control panel.....original, DC wiring is original stranded copper with original harnessing in place.

Fuel system

6. Fuel lines.... Flex line, in good condition, properly secured, US Coast Guard approved type rubber reinforced line. (All new)
- 6a. Fuel line shut-off valve.....observed
7. Fuel tank..... New
- 7a. Propane safety devices.....installed
- 7b. CO detection devices.....observed

Propulsion system

8. Carburetor back fire flame arrester..... NA
9. Exhaust system....All components recently upgraded.
10. Engine mounts..... secure
11. Engine shaft logs..... secure, properly clamped

Hull and Mechanical systems

- 11A. Engine compartment ventilation....Coast Guard Approved type 12 volt blower along with appropriate flexible ductwork to hull outlets.
12. Rudder shaft logs.... secure
13. Rudder quadrant.....good condition
14. Steering gear and engine controls.... operational
15. Overboard fittings..... all bronze fittings below the water line(Recent upgrades)
16. Backup ground tackle.....observed

Boat Detail Sheet from "BUC" International included for value considerations, only.

BRISTOL BOAT COMPANY, BRISTOL, RI

Model Year 1981 Hull Material Fiberglass
Model BRISTOL 45.5 Hull Configuration Keel-Centerboard

Length Overall 45' 3" Draft 4' 11"
Length On Deck Beam 13' 3"
Boat Type Sailboat-Cruising | Sloop Rig Weight 34660 lbs.
Engine Type Inboard

Single 60D
Westerbeke
Ballast 15000

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

Current Retail Value Range \$134,000-\$147,500
100th edition.

Fair Market Value Adjusted for Bristol Condition in the North Atlantic
\$164,000-\$180,000

Replacement Value \$804,500

All prices in US Dollars.

Berths



Pictured at left are the two large berths. These areas are nicely finished and in good shape, structurally. There is adequate lighting and ventilation in these areas. The sole in these areas is properly supported, nicely finished and in overall good condition. Safety Equipment

There is a VHF radio installed in the Navigation area. There are a number of small dry chemical fire extinguishers installed. I did not observe signalling equipment and a First Aid kit. Proper ground tackle is installed, along with appropriate backup ground tackle. A complete Coast Guard Safety and Signalling package is on board.

Conclusion

This survey can not be construed to guarantee or warrant the condition or operational condition of the vessel as the engine was not operated.

This vessels (hull, deck, interior, mast, and standing rigging) is in overall like new condition. Due to its very good condition, inventory of fairly new sails, and electronics, this vessel is valued at \$260,000. to \$275,000. in this market.

RECOMMENDATIONS:

None, as this vessel has been completely refitted, and is in like new condition with all required safety and fire fighting equipment aboard.

Cordially

James Cross, Certified Marine Surveyor
JC/pam