

JAMES CROSS, Certified Marine Surveyor
19 Nooseneck Hill Rd, West Greenwich, RI 02817
Phone (401) 397-5040
Member Association of Certified Marine Surveyors//ACMS-USA.COM
Check us out on the web at www.jimcross.net



Mr. John Dubee
327 Ford Drive
Charlestown, RI 02813

October 12, 2011

Re: 1991 Freedom 45 Center Cockpit

"WHITE CAPS"

Dear Mr. Dubee,

This letter reports the results of an upgrade to a survey that was conducted in 2008. This vessel was reinspected while afloat on the 11th of October, 2011 at Brewer's Wickford Cove Marina, in Wickford, Rhode Island. You requested the inspection to establish its condition and 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 current edition of 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. Inspection and operation of the engine and electronics was not limited.

General

The vessel was built by Freedom Yacht Corp. (Tillotson/Pearson) of Middletown, Rhode Island, in 1991. The hull ID number is FYC45032J091. The Official number is 973426. Pertinent dimensions of the vessel are: LOA 45', the beam is 13' 6", the draft is approximately 5' 2". Displacement, according to the book is, 22,370 pounds.

Hull/Deck and Structures



This vessel was designed and heavily built to withstand years of off shore yacht service. She is an center cockpit cruising sloop rigged for high performance and comfortable cruising.

The hull is a cored polyester laminate reinforced with fiberglass mat and woven roving. The hull is hand laid up fiberglass. The deck is similar, but with some end grain balsa core and plywood core for backing. The finish above the water line is a four year old coat of blue AwlGrip over the original gelcoat, pres-

ently waxed and clean, and has been well maintained. The hull area from the boot top to the gunwale is in excellent condition and blemish free. The hull from the boot top down was not inspected. The lead ballast is properly fitted and secure and makes up the winged keel. The keel attachment is secure.

The floor timbers and sole make up are in good condition and secure. The bulkheads are glass tabbed to the hull. The glass tabbing throughout is excellent. The rudder, rudder post, and all related bushings are in good condition.



The wheel, pedestal, quadrant, cables, and all related steering gear is in excellent well maintained condition and working properly. There is a provision for an emergency tiller, and the tiller was on board.

The topsides are white gel coat with moulded in non skid, and are in good condition with a just few superficial scratches and cracks. No soft spots were noted on the deck. All outside wood surfaces and trim are teak and in very good condition. The bow and stern pulpits and life line stanchions are constructed of stainless steel and properly secured and backed. The life lines and their associated stanchions and gates are in excellent condition. The cockpit area is self bailing, through large scuppers. This area is

clean, and the finish is in excellent condition. There are a few scratches, but they are superficial and typical for this age vessel. Engine instrumentation is located on the pedestal and on the port cockpit seat, within easy reach, while operating under power. The overall condition of the cockpit is excellent. The appearance from on deck, including the teak trim, is better than average. There is a Ritchie compass mounted on the pedestal, the bearing is correct on the present heading. The gusher, a hand operated bilge pump, is installed and operated from the cockpit.



The full cockpit enclosure is equipped with a solid fiberglass hard top. The lazarette is uncluttered and houses fenders, dock lines, PFD's and cleaning material. Engine compartment intake and exhaust vents are also located in the stern section. The fuel and water fills are located (well marked and properly installed) out board of the cockpit.

Main Cabin, Dinette, Galley and Heads

There is proper ventilation to the main cabin area through vents and ports. The main cabin houses the dinette, galley and head. There is a propane range with oven properly gimballed in the galley. A large reefer system with freezer is built in. The reefer system is equipped with a fairly new Grunert refrigeration compressor. The stove, and sink are in good condition. There is a pressure hot and cold water system installed. Closets, lockers and other storage areas are more than adequate through out the vessel. The interior areas are clean and in excellent condition. The jointer work is Cherry and Mahogany.

The jointer work is nicely done and in very good condition with a bright finish. The headliner is a composite of insulated vinyl with trim. The head liner is in good condition. The upholstered sections are also in excellent condition and show only light use. The sole is teak and holly over heavy marine plywood and also in excellent condition.



Access to the bilge is gained through several well designed sole sections which can be removed to reveal, much of the bilge, and the tanks and below deck systems. Good access to the engine is available just behind the companionway ladder.

The aft head is good sized and has a manual toilet that discharges into a large holding tank, which can be pumped out. There is also a hand wash basin in the head area. Lighting is good throughout the vessel. The dinette table is large and can fold for berthing. There is an auto/manual bilge pump installed. An AM-FM, cassette radio, and appropriate speaker system is installed. The V-Berth is located beneath the forward deck. This area will sleep two. It is clean and nicely upholstered. There is adequate lighting and locker space in this area.

Main cabin continued



Both forward and aft heads are good sized and equipped with showers and marine toilets that discharge into holding tanks, or can be pumped overboard via a proper Y-gate. There are hand wash basin and fiberglass showers installed. No wood rot was noted in this area. The heads are finished in Cherry, Fiberglass, and Teak, and exceptionally clean. (Photos below)

The V-Berth (Photo on next page) is located beneath the forward deck. This area will sleep two. This area is clean and nicely upholstered. There is adequate lighting and locker space in this area. Also housed in the V-berth area are several PFD's and rode storage at the forepeak. The deck hatch to this area is tight to the weather and in good condition.

Sails

There are three sails, a main, 100% furling Genoa, and Spinnaker.



The sails are in good condition.

Running Rigging

The halyards are in good condition. The sheets are in better than average condition. All of the sheets and their associated blocks and gear are in good condition.



Aft-Berth compartment



The Aft-Berth compartment is located beneath the after deck. This area will sleep two. This area is clean and nicely upholstered. There is adequate lighting and locker space in this area. The deck hatches to this area is tight to the weather and in good condition.



Mast, Booms and Standing Rigging

The carbon fiber tapered mast and aluminum boom and related winches and hardware are in excellent condition as can be observed from on deck.



The mast steps through the deck and into a step socket which is secured to the keel makeup. The mast step is properly fitted). All deck hardware, including winches, are properly backed and secured. The head stay standing rigging is properly bonded to the ground plate. The standing rigging hardware is properly sized for this vessel. The winches are properly sized. All deck hardware is properly secured and backed.

Safety Equipment

There are two VHF transceiver installed in the Navigation area. There are a number of 10 Kidde installed. These devices are in good condition. There are PFD's and a proper throw ring aboard in good condition. I did observe signalling equipment and a First Aid kit. There is an adequately sized plow type anchor with appropriate line (3/8 " chain) properly mounted on rollers at the bow. The ground tackle is more than adequate and in good condition. Proper heavy duty backup ground tackle is on board.

Item Specific List

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

Electrical

2. AC/DC Isolation..... Isolation system installed, GFCI is installed
3. AC/DC ground system...DC ground in accordance with ABYC standards, Bronze Dynaplate
AC ground, as originally equipped (Closed loop system).
4. DC control panel..... original, at control station, well maintained. DC wiring is original stranded copper with original harnessing in place.
5. AC control panel..... Breaker panel in original condition.

Fuel system

6. Fuel lines.... Flex line, in good condition, properly secured, US Coast Guard approved type rubber reinforced line.
- 6a. Fuel line shut-off valve..... bronze valve, at tank
7. Fuel tanks..... Aluminum, well secured, sections that can be observed are in good, clean condition, no oxidation noted.
- 7a. Propane, CNG, Alcohol..... Two propane tanks properly stored in vented lazarett, safety devices is in place.

Propulsion system

8. Carburetor back fire flame arrester.....NA diesel engine
9. Exhaust system.....US Coast Guard Approved type rubber, fiberglass silencer, in good condition, with original supports in place.
10. Engine mounts..... secure
11. Engine shaft logs...secure, properly clamped

Hull and Mechanical systems

- 11A. Engine compartment ventilation.....one Coast Guard Approved type 12 volt blower along with appropriate flexible ductwork to hull vent.
12. Rudder shaft logs.... secure
13. Rudder tower.... NA...fiberglass tube to quadrant, all secure
14. Steering gear and controls.... Stainless wheel on binicle, lines and hardware, and quadrant in good condition. new lines and hardware in 2005
15. Overboard fittings...all approved Nylon fittings below the water line, shut-off valves are working. Related hoses US Coast Guard approved type and are double clamped. Overboard fittings above the waterline are in good serviceable condition
16. Backup ground tackle.....Complete equipment is installed.

Upgrades performed by owner since purchase

1. Awlgrip Paint Job and new Cockpit Enclosure, Mar 2003, cost \$11,000
2. New Grunert Refrigeration Compressor, May 2004, \$4,200
3. 8D Lifeline AGM Batteries (house) 765 Ahr, 1 AGM Starting, June 2005 \$2,500
4. Additional 60 lb. COR Anchor, June 2005: \$ 950
5. AB Hard Bottom Dingy with 15 HP Yamaha, May 2004 \$5,500
6. Replace old generator set with new Panda 6KW with aluminum mounting bracket,
June 2005 \$16,000
7. Replace Steering Cable, Repack Rudder Post, June 2005 \$1,500
8. 406 MHz EPIRB (McMurdo), June 2007 \$ 600
9. Replace Inverter/Charger with new Magnum Energy 2500 Watt w/Remote Panel,
in 2007 \$2,200
10. Replace Sony AM/FM Stereo Casset with new 10 CD Changer 2008 \$ 300

Equipment added in 2010: New Furuno 4KW radar with chart plotter.



Propulsion and Mechanical Systems

Propulsion is by a 75 HP turbo charged fresh water cooled Yanmar diesel engine with Hurth reduction gear, coupled to a monel shaft and then to a three blade feathering propeller. The shaft and shaft log, are in good condition. The engine and gear appear in good condition, very clean and well maintained. Ventilation to the engine spaces is adequate. The exhaust (most can be inspected) system is cast and rubber, heavy duty, and in good condition. The system clamps are now all doubled and have had recent service. All through hull fittings including the valves are secure. The engine controls and cables are smooth operating. The engine compartment bilge is epoxy painted, sound and sturdy. The bilge in this area is clean. There are adequate bilge pumps installed and working in



this area. There is no oil in the bilge. All fuel and water tanks are in good condition as can be inspected. The fuel lines, including a Racor filter are approved type and in good condition. The flex fuel line appears to be a recent upgrade. The fuel fills, vents and shut-off are in good order.

The gen set is a new Panda 6.5 KW and is in good shape. The bow thruster and related hardware appear in good condition.

Electrical, Electronics, and Navigational Equipment



The batteries appear fairly new and are in good condition and properly connected to the approved three-way switches and then on to the custom breaker panel. The batteries are properly secured and covered below the salon sole. The wiring and terminals that could be observed are in good condition. As part of the recent upgrades, all of the electrical wiring has been properly harnessed. The shore power system overall is in good condition as are the cables. The automatic battery charger was not checked out. The navigation equipment and electronics, was checked out and all is working. The electric anchor windlass is in excellent condition and secure. The Auto pilot hardware is properly installed and appears in good condition. All of the electronics devices were checked out.



Piping, Tanks, and Systems

The water heater is in good condition and properly secured. Only portions of the surface can be observed of both aluminum fuel tanks, which appear in good condition. The water tankage is adequate for cruising. The water fill over flows into the bilge, via the inside surface of the hull. Only portions of the surface can be observed of the two built-in water tanks. The surfaces that can be inspected look good.



A fuel shut-off is installed and working. The fuel fill, feed lines, and vents are of the approved type and properly installed and grounded. There is a proper sea water strainer installed just aft of the engine cooling intake.

Boat Detail Sheet from (BUC) International for reference only.

FREEDOM YACHTS INC, MIDDLETOWN, RI

Model Year 1991 Hull Material Fiberglass Sandwich

*Model FREEDOM 45 WING Hull Configuration Keel
Length Overall 44' 6" Draft 4' 11"*

Length On Deck Beam 13' 6"

Boat Type Sailboat-Cruising | Sloop Rig Weight 26000 lbs.

*Engine Type Inboard
Single 75D Yanmar 4JH2HTBE*

Ballast 9500

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 \$153,000-\$168,000

101st edition.

*Fair Market Value Adjusted for Bristol Condition in the North Atlantic
\$186,500-\$205,000*

Replacement Value \$646,000

All prices in US Dollars.

© 2011 BUC International Corp. All rights reserved.

Conclusion

This report can not be construed to guarantee or warrant the condition or operational condition of the vessel as the engine, systems, and electronics were only checked out visually. A sea trial was not conducted.

This vessel is in overall excellent condition.

It is unusual to find a vessel of this age that does not have a list of items needing attention.

I feel the value of this vessel would be approximately \$220,000.00 in today's market. The replacement cost for a new vessel is approximately \$600,000.

Recommendations: All recommendations from previous survey have been complied with. There are no new recommendation as this vessel is in suburb condition and is ready to go.

Cordially,



James Cross, Certified Marine Surveyor

JC/pam



Cockpit, looking aft