



SOCIETY OF ACCREDITED
MARINE SURVEYORS®



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Ref: WCD27611

PURPOSE: Condition and Valuation

Date: 01/01/13

YACHT NAME: My Boat

HOME PORT:

Survey Certified For:

Boat Owner
1354 Seaside Dr.
Watertown, MA

YEAR: 1998

BUILDER: Beneteau

MODEL: 411, Sloop

HULL IDENTIFICATION NUMBER (HIN): BEYXXXXXXX

US DOCUMENTATION NUMBER: XXXXX

TONNAGE NET: 14

LOA:	BEAM:	DRAFT:	DEPTH:	DISPLACEMENT:
41'8"	13'0"	4'9"	5.8'	17,500 lbs.

This survey was conducted at Wilmington Marine Center, Wilmington, NC while the vessel was in the water, and hauled out with the owner present.

This vessel is registered for Recreation.

MARKET VALUE: \$150,000.00

SCOPE OF SURVEY:

This survey is a visual inspection of the vessel its structure, systems, and rigging. It does not cover possible latent defects which could not be readily discovered by inspection without removal of machinery, tanks, sheathing, joiner work, upholstery, bulkheads, ceiling, fascia, fiberglass or metal covering, fasteners, or other fixed material, disassembly of machinery, plumbing, wiring, or other parts, components or systems. Unless specifically stated, no test borings have been made, and no destructive or invasive testing has been performed.

GENERAL CONDITION: Very good, when the recommendations are accomplished. This report should be considered as an entire document. No single section is meant to be used except as part of the whole. It is current to the named client, underwriters, or lenders for 30 days of undisturbed lay-up or the vessels first use.

HULL COMPOSITION AND STRUCTURE:

HULL MATERIAL: FRP (Fiber Reinforced Plastic)

FRAMES/STRINGERS: FRP Grid liner.

FASTENINGS: Stainless steel.

WEATHER DECKING: Cored FRP.

INTERIOR DECKING: Hardwood over plywood.

SUPERSTRUCTURE: Cored FRP.

BULKHEADS: Plywood

HATCHES: Cored FRP, Aluminum framed polycarbonate.

PROPULSION MACHINERY:

No certified or factory engine surveyor was present the day of survey.

MAKE: Westerbeke

MODEL: 42BF?UR

SERIAL: 40253D-802

REPORTED HOURS OF USE: 1794 on meter.

Engine was not test run or sea trial preformed.

EXHAUST SYSTEMS: Wet out transom above waterline.

COOLING SYSTEMS: Coolant/ raw water heat exchange.

SEA STRAINER: Vetus plastic basket type inside above waterline.

GAUGES: Water temperature, Volts, fuel level, Hours of use, tachometer, and has audio alarms.

ENGINE MOUNTS: Adjustable vibration isolators bolted to FRP longitudinals in good condition.

HOSE CLAMPS: Adequate stainless steel.

HOSES: Are in good condition.

FUEL LINES: Are of approved type and in good condition.

PRIMARY FUEL FILTERS: (2) Racor 500 FG.

OIL FILTERS: Spin on cartridge.

THROTTLE AND CLUTCH CONTROLS: Push/pull cable with single lever Volvo control head.

TRANSMISSION: HTM-90

Model:	BW-7, 70043	Ratio:	2.47
Serial #:	089003013		

SHAFT PACKING GLANDS: Volvo lip seal.

ENGINE SPACE VENTILATION: Adequate for this installation.

GENERATOR: Northern Lights/Lugger.

MODEL: M673D.3 **FUEL:** Diesel

KW: 5 **VOLTAGE:** 120

SERIAL NUMBER: 6732-29837C

REPORTED HOURS OF USE: 666

SOUND SHIELD: OEM

PRIMARY FUEL FILTER: Racor 500 FG

BATTERY: House Bank. Has a main disconnect switch.

EXHAUST SYSTEM: Wet out hull side above water.

STEERING: Pull/Pull cable on Whitlock/Lewmar steering system.

Always test the steering before leaving the dock.

PLUMBING SYSTEMS:

FUEL SYTEMS:

TANKS: (1) Aluminum, 34.5 Gallons.

TANK GAUGE: .125

PUMPS: Engine lift pump.

HOSE: Rubber.

FRESH WATER:

TANKS: (2) FRP 145 Gallons total reported.
TANK GAUGE: NA
PUMPS: Parmax 12 VDC.
HOSE: Polly tube, vinyl.
HEATER: Atwood 6 gallon 120 VAC, Engine heat exchange.
SHORE CONNECTION: None.
SINKS: (3)
SHOWERS: (2) in heads, (1) transom.

GRAY WATER:

TANKS: Sump.
TANK GAUGE: NA
PUMPS: Jabsco diaphragm 12 VDC, Rule 500 12 VDC.
HOSE: Vinyl.
REMOVAL: Overboard.

BLACK WATER:

TANKS: (2) plastic, (size not known)
TANK GAUGE: NA
PUMPS: Gravity drain.
HOSE: Vinyl sanitation.
REMOVAL: Overboard, Deck plate.
HEADS: (1) Jabsco manual, (1) Jabsco 12 VDC.

SEA WATER: None.

UNDERWATER:

HULL: Round bilge semi displacement, Fin keel, Scoop transom, Racked bow. The antifouling coating is in good condition. The hull was sounded with a plastic hammer and appears to be in good condition. There are no visible blisters. Hull topsides were checked with a Wagner non contact moisture meter and found to be within normal ranges.

PROPELLER: 3 blade bronze MaxProp self feathering, right hand/left hand, in new condition.

SHAFT: 1-1/8" stainless steel in good condition where visible.

SHAFT BEARINGS: Solid rubber cutlass in good condition.

STRUTS: FRP.

ANODES: None.

RUDDERS: Spade semi balanced FRP in good condition.

THROUGH HULL FITTINGS: Bronze in good condition.

SEA VALVES: Bronze ball valve in good condition.

ELECTRICAL SYSTEMS:

DC SYSTEM:

VOLTAGE: 12

BATTERIES: (1) Series 24, (4) Series 31 AGM, age and condition not known.

DISTRIBUTION: Panel in cabin.

CIRCUIT PROTECTION: Fuse and trip free breakers.

BATTERY DISCONNECT SWITCHES: (4) single position.

ENGINE DRIVEN CHARGERS: Balmar 100 AMP Alternator.

MONITORS: Volt meter.

AC SYSTEM:

VOLTAGE: 125

DISTRIBUTION: Panel in cabin.

CIRCUIT PROTECTION: Trip Free Breaker.

SHORE CONNECTIONS: (1) 125 Volt 50 AMP

SHORE CABLES: (1) 125 volt 50 AMP, (2) 120 Volt 30 AMP.

INVERTER: None.

BATTERY CHARGER: Sentry 40 AMP, (2) 75 watt solar panels with Pro Star controller.

MONITORS: Reverse polarity light.

BONDING SYSTEM: None.

SHIPBOARD AMENITIES:

GENERAL DESCRIPTION AND CONDITION:

Enclosed head forward with master cabin aft of that. Amidships salon with navigation station to port and galley to starboard aft. Port aft cabin under cockpit. Enclosed head port aft. FRP overhead varnished hardwood bulkheads and cabinets. FRP liner for major interior components. HPL countertops, Varnished hardwood flooring. General condition is good.

AIR CONDITIONER, HEATER:

MAKE: Cruise Air

TYPE: (2) Self contained, 120 VAC.

TOTAL BTU: 28,000.

GALLEY:

REFRIGERATION: Adler Barbour 12 VDC in good condition.

STOVE: Force 10, 2 burner with oven. In good condition. Open ventilation.

OVEN: See Stove.

MICROWAVE OVEN: GE 120 VAC. In good condition.

SINK: Double Stainless steel. **DISPOSAL:** None.

COFFEE MAKER: Bosch 120 VAC in good condition.

ICE MAKER: None.

TRASH COMPACTOR: None.

CANVAS AND COVERS:

Bimini top, Dodger, Main sail cover, Dinghy cover, Winch covers, Cockpit table cover, Helm Cover, Main hatch cover. All in Good condition.

MISCELLANEOUS:

FEDERAL OIL POLLUTION SIGN: Sighted.

MARPOL TRASH PLACECARD: Sighted.

NAVIGATION RULES BOOK: for vessels over 12 meters: None sighted, required

LICENSES AND DOCUMENTATION/REGISTRATION CERTIFICATES: US Documentation, original certificate not sighted.

ELECTRONICS and NAVIGATION: units are working unless otherwise stated.

#1 VHF RADIO: Standard Horizon, Quantum GX5000S at navigation station.

#2 VHF RADIO: Standard Horizon, remote mic at helm.

#3 VHF RADIO:

GLOBAL POSITIONING SYSTEM: Raymarine RN300 at nav station, Magellan Map 410 Handheld.

PLOTTER: Lowrance HDS7m at helm, Raymarine RC435.

RADAR: Raymarine SL70.

DEPTH INDICATOR: Raymarine ST60 with ST60 repeater at helm.

APPARENT WIND INDICATOR: Raymarine ST60

SPEED INDICATOR: Raymarine ST60.

AUTOPILOT: Raymarine SmartPilot ST6002

ANTENNA: VHF, GPS, Raymarine closed array Radar, KVH Tracvision M3.

BRIDGE COMPASS: Plastimo Olympic 135. No Deviation Table.

STEREO: Kenwood AM/FM/CD KDC-HDC-HD548U, 12 VDC with Sirius Satellite radio.

BRIDGE STEREO: None.

#1 TELEVISION: Toshiba 13" LCD 120 VAC.

DVD PLAYER/RECORDER: None.

SATELLITE RECEIVER: KVH Tracvision.

SAFETY EQUIPMENT:

PERSONAL FLOATATION DEVICES (PDF):

LOCATION	QTY	TYPE	CONDITION
Starboard Cabin	2	V	Good
Cabin	1	IV	Fair
Aft Starboard lazarette	2	I	Good
Aft rail	1	IV Horse shoe	Poor
Aft rail	1	IV Lifesling	Good

VISUAL DISTRESS SIGNALS:

TYPE	QTY	EXPIRATION DATE
Red Hand Held	4	Oct. 2011
Orange Smoke Hand Held	2	Oct. 2011
Aerial 12 Gauge Red	4	Oct. 2011
Aerial 12 Gauge Red	4	April 2013

EPIRB: None.

FOG BELL: Sighted.

SOUND DEVICES: Electric Horn.

NAVIGATION LIGHTS: Proper for class and working.

SPOTLIGHT: (2) Hand held, not tested.

FLAMMABLE GAS FUME DETECTOR: None.

CARBON MONOXIDE DETECTION SYSTEM: First Alert in galley, recommend additional units in sleeping quarters.

FIRST AID KIT: Yes.

INFLATABLE LIFE RAFT: None.

DECK RAILS/LIFE LINES: Welded stainless steel tube bow and stern rails, Stainless steel tube stanchions with 1X19 stainless steel wire life lines, Stainless steel tube hand rails.

SWIM PLATFORM: Scoop transom with boarding ladder.

ADDITIONAL SAFETY GEAR: (1) Fire blanket in aft cabin, (1) Forespar MOB strobe light in aft cabin, (1) ACR Rapid Ditch Bag with rations, first aid kit and emergency communication equipment, all serviced 2005.

FIRE FIGHTING EQUIPMENT:

AUTOMATIC ENGINE SPACE SYSTEM: None.

PORTABLE FIRE EXTINGUISHERS:

LOCATION	QTY	TYPE	SIZE	LAST INSPECTION DATE
Aft Cabin	1	ABC	I	09/2009
Salon	1	BC	I	08/2001

The fire fighting system or installation is NOT adequate.

BILGE DRAINAGE:

BILGE PUMPS:

LOCATION	TYPE	VOLTAGE	SWITCHES
Mid bilge	Jabsco Diaphragm	12 VDC	Automatic

MANUAL PUMPS: Diaphragm in starboard cockpit.

ENGINE DRIVE PUMPS: None.

SHOWER SUMP PUMP: Rule 500 12 VDC automatic , Jabsco 12 VDC manual only.

HIGH WATER BILGE ALARM: None.

COCKPIT DRAINAGE: Open transom.

BILGES are clean and free of oil and derbies.

GROUND TACKLE:

ANCHOR: Galvanized steel Rocna 25 on bow roller.

RODE: Chain. (Verify bitter end it secured to vessel.)

SECOND ANCHOR: Galvanized Steel Danforth on Bow rail.

RODE: Chain. (Verify bitter end it secured to vessel.)

WINDLASS:

POWER SUPPLY: 12 VDC

MAKE: Lofrans

MODEL: Tigres, TG 007651

DINGYS AND TENDERS:

DINGHY: Achilles RIB, 2003

HIN:

OUTBOARD MOTOR: Yamaha, F15MSH, 15 HP, 4 cycle gasoline.

SERIAL:

SPARS AND RIGGING:

No aloft rigging inspection was performed for this survey.

SPARS:

(1) Aluminum Double spreader, deck stepped, Main mast, with aluminum boom. (1) Aluminum boom vang. (1) Aluminum Spinnaker pole.

RIGGING:

7x19 stainless steel wire standing rigging with Swaged ends.

Double braid rope halyards.

SAIL HANDLING HARDWARE:

- (1) Harkin Genoa Jib roller furling.
- (2) Lewmar #48 Self tailing 2 speed jib sheet.
- (2) Lwemar #40 Self tailing line control on deck.
- (1) ProFurl Jib roller furler.

SAILS:

(1) Roller furling genoa jib in good condition.

(1) Mainsail in good condition.

RECOMMENDATIONS:

These are items that need to be corrected due to Coast Guard requirements, and/or for the safe operation of the vessel.

1. Some of the flares expire this month (Oct. 2011) Replace as needed.
2. USCG requires at least (3) size I fire extinguishers for this class vessel. Install at least (1) additional unit.
3. A reducer used on the AC raw water intake strainer appears to be made of steel and the hose connecting the thru hull to the strainer is dry rotted. Replace hose and reducer as needed.
4. The wires for the Engine compartment light are not secured and they are connected directly to a battery without a circuit protection device. Secure wires and add a properly sized circuit protection device as needed.
5. The refrigeration compressor is wired using compression type wire nuts. ABYC does not recommend the use of wire nuts and recommends using only marine crimp type connectors. Replace wire nuts as needed.
6. The circuit breaker on the bulkhead in the aft cabin is not labeled for use. ABYCV recommends all switches and breakers be labeled for use. Add label as needed.
7. There is no power volt meter on the 120 VAC electrical panel. ABYC recommends the use of a volt meter if the panel supplies an electric motor or a generator is used. This system has both and should have a volt meter. Install meter as needed.
8. The batteries in the port cockpit locker do not have a box or container to hold spilled electrolyte as recommended by ABYC. This recommendation applies to all batteries including sealed AGM batteries. Install a containment box as needed.
9. The automatic bilge pump switch was pinned down by a loose hose in the bilge and would stick in the on position. Repair or replace switch and remove loose hoses from bilge or cover switch to protect from loose equipment.
10. There is no lock out device for the overboard discharge of the head black water. USCG requires a lockout device to prevent accidental discharge of black water. Install a device as required. Check state and local laws concerning the discharge of black and grey water into any waterways the vessel will be operated.
11. USCG requires a copy of the inland rules be carried onboard at all times. No such book was sighted. Keep a copy in a readily accessible location.

CONCLUSION:

There is no apparent structural de-lamination, dry rot, previous damage or repairs. At the time of survey the vessel appears to be a very good marine risk when the above recommendations are complied with.

OBSERVATIONS and SUGGESTIONS:

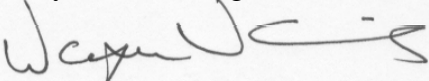
These are items that do not directly effect the safe operation of the vessel, but should be completed to help retain the good condition and value of the vessel.

1. This vessel is equipped with only (1) small electric bilge pump. It is recommended an additional high water pump be installed along with a high water alarm.
2. The engine hatch gas lift is weak and the lower bracket is loose. To prevent the possibility of personal injury it is recommended the gas lift be replaced and the bracket fasteners adjusted.
3. Although the vessel has (1) Carbon Monoxide Detector in the galley it is recommended that additional units be installed in all sleeping quarters.
4. The main engine coolant recovery tank appeared to be leaking at the time of survey. Repair as needed.
5. The generator coolant recovery tank is not secure. Refasten as needed.
6. The mast deck light was not operational at time of survey. Repair as needed.
7. The hull topsides and deck gelcoat are oxidized and chaulky. Compound and wax as needed.

This survey checks for compliance with U.S. Coast Guard, American Boat and Yacht Council, Inc., Underwriters Laboratory, and National Fire Protection Association standards and practices. It does not cover possible latent defects which could not be readily discovered by inspection without removal of machinery, tanks, sheathing, joiner work, upholstery, bulkheads, ceiling, fascia, fiberglass or metal covering, fasteners, or other fixed material, disassembly of machinery, plumbing, wiring, or other parts, components or systems. Unless specifically stated, no test borings have been made, and no destructive or invasive testing has been performed. The undersigned has conducted this survey and issued this report for the sole use of the specified requesting party for an agreed fee based upon the intended use of the report and the legal liability of the undersigned; accordingly, others are not to use this report and not rely upon the contents of this report without payment to the undersign of an additional agreed fee based upon reevaluation of the same factors.

The recommendations, judgments, and conclusion expressed herein represent the opinion of the undersign surveyor who has exercised reasonable care in conducting a routine visual marine survey of the subject vessel. This report contains opinions and observations based on my skill, experience and training as a marine surveyor and consultant. Under no circumstances shall this report be understood to constitute a representation, guarantee, or warranty, expressed or implied, of any kind as to the condition or soundness of the subject vessel, its hull, engines, machinery, equipment, or systems or any part of appurtenances thereof, or the cost of effecting any repairs or modifications. Survey conducted without prejudice.

Wayne V Canning, AMS



Attending Surveyor

REFERENCES FOR COMMON RECOMMENDATIONS

ABYC is the American Boat and Yacht Council

ANSI is American National Standards Institute

CFR is the United States Code of Federal Regulations

ISO is International Standards Organization

NFPA is the National Fire Protection Association

UL is Underwriters Laboratories, Marine Division

Fire Extinguishers, Portable-ABYC A-4.6; 46 CFR 25.

Fixed Fire Extinguishers In Enclosed Engine Compartments-ABYC A-4.7, NFPA 12.B

Fog Bell; ABYC A-23.5, 33 CFR 80, Navigation rule 33, Annex III

Horn ABYC A-23.5. 33 CFR 80

Navigation Light: USCG Commandant Instruction M16672, Navigation Rules, Part C.ABYC A16

Flares-46 CFR 28.145. Water tight container for flares: 46 CFR 180.35-10

Non Metallic Fuel Hoses, fire resistant-USCG TYPE A-1, USC 46-CFR 183.590, UL 1114, ISO 7840 SEA 1527, ABYC H-24 & H-33.6, NFPA 302-5-6.2.2.

Double Clamp Fuel Lines –USC 46-CFR 183.564, ABYC H-24(33), NFPA 302-5-6.3.7.

Support Fuel Lines- NFPA 302-5-6.2.5. ABYC H-24.7

Mark Fuel Fill – NFPA 302-6.3.6., ABYC H-24(33).12.

EPIRB, 46 CFR 28.260

Carbon Monoxide Detection System: ABYC A-24.

Flammable Gas Fume Detector: ABYC, A-14

PFD (lifejackets) 46 CFR 180.25

Master Battery Switch – NFPA 302-7-11.2., ABYC E-9.11.3

Secure Batteries – NFPA 302-7-4.3, 33 CRF 183, ABYC E-10.7

Cover Battery Terminals – NFPA 302-7-4.5., ABYC E-10. NFPA, 7-15.9 Battery terminals shall not be used for more than 1 conductor. Exception: 1 additional connection to a + or – bus or stud for that purpose.

Reverse Polarity Indicator For 120 VAC Shore Power – NFPA 302-8-8.1., ABYC E-8.10

Ground Fault Circuit Interrupter (GFCI) for wet spaces – NFPA 302-8-12.1., ABYC E-8.12. UL 943

Support Electrical Wiring Every 18” – NFPA 302-7-14.6. ABYC E-8.15

Do Not Use Wire Nuts – NFPA 302-8-15.11., ABYC E-8.15.18

Lightning Protection – NFPA 302-2-3., ABYC E-4

Ignition Protected Devices – 33 CFR 183.410, UL 1500, or SEA J1171

Propane Bottle Locker – NFPA 302-6-5.12.1., ABYC A-1.8 ISO DIS9094

LPG Systems- ABYC A-1 & Galley Stoves A-3

CNG Systems – ABYC A-22

Sea cocks – ABYC H-27, UL 1121, ISO WD 9093

Hull Identification Number: 33 CFR 181, ABYC T-10

Toilet, USCG Marine Sanitation Device (MSD) 33 CFR 159, ISO WD 8099

Bilge Alarm, High Water Level. 46 CFR 28.250

Anchor, Ground Tackle: 46 CFR 28.235, ABYC H-40

Boarding Ladder: ABYC H-41

Navigation Rules Book: to be carried Vessels over 12 meter: 33CFR 88.05, COMDTINST M16672.2D







