AZIMUTH MARINE SURVEY LLC

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SURVEY REPORT #103M25

By Request of:

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xxx xxxxxxx, xxxxxxx xxxx xxxxxx
xxx xx xxxxxxx xxxxxx
xxxxxxx, xx xxxxx

Phone: xxx-xxx-xxxx / xxx-xxx-xxxx (Cell) / xxx-xxx-xxxx (fax)
E mail: xxxxxxxxxxxxxxxxxxxxxx

Date: March 23, 24 2008, Sea trial April 17, 2008

Vessel Name: "XXXX X XXXXX"
Type: Motor Yacht
Service Area: Coastal Atlantic Waters
Official #: XXXXXX
Certificate aboard / numbers attached: No/Yes
Hull ID #: XXXXXXXXXXX

Purpose of Survey: Condition and value for purchase.
(Note: this survey is not to be used for transfer to a third party or use other than intended)

Where Surveyed: In drydock @ Seaport Marine, Mystic, Ct. and on seatrial Fisher's Island sound

Attending: Surveyor; On sea trial: Buyers (above), Broker

Broker/Agent: XXXXXXX XXX XXXXX XXXXX / XXXXXX XXXXX
XXXX XXXXXX XXXX XXXXXX
XXXXXXX, XX XXXXX

Phone: (XXX) XXX-XXXX /(XXX)XXX-XXXX - cell
Fax/Email: XXXXXXXXXXXX

Estimated Fair Market Value: $ 250,000
(As she lays)

Estimated Replacement Cost: $ 1,800,000
(New; similar construction)

VESSEL PARTICULARS

Builder: Hatteras
Designer: J. Hargrave
Year Built: 1977
Model: Hatteras 58 Fisherman
LOA: 58' 04"
Beam: 15' 10"
Draft: 4' 09"
Displacement: 63,000 Lbs.
Hull Type: Modified Deep Vee
Material/Color: Fiberglass / White

HULL AND SUPERSTRUCTURE:

Deck: Non skid Fiberglass, Balsa core
Bulkheads: Mahogany veneer plywood
Cabin Sole: Carpet over FRP
Hatches&Ports-Gaskets: Oxidation of aluminum framing and minor deterioration of varnish and veneer noted due to worn gaskets noted. Opening ports and hatches appear good (Note)
Construction Scantlings: Single skin gel coat over multiple layers of resin impregnated fiberglass, hand laid solid glass.
Hull/Deck Joint: Horizontal Plane - external deck flange
Superstructure/Layout: Midship pilot house saloon aft, cockpit deck down and aft. Flybridge over/ Chain locker way forward followed by fwd cabin with over/under berths stbd and stowage port. Fwd of three heads to port. The galley is next aft w/ galley dining table stbd, counter and appliances port. Gen set and mechanicals accessed through galley sole. Up steps to saloon and lower helm station. Down steps and aft to passageway with port and stbd engine rooms. Next aft to port is guest cabin with two singles. Stbd passageway leads to two separate heads w/ enclosed showers. Last aft is the owner's stateroom with port and stbd twin berths.

General Condition: Average condition overall. Structural condition is average to fair and is consistent with a vessel of this age. Photos and a fuller discussion of the below will be found in "Remarks and Recommendations"

- The wetted surfaces were examined visually, with a sounding hammer and moisture meter; they were found smooth and fair. Localized areas showing higher than average moisture content were noted. No delamination or osmotic blisters were noted.
- Transom – High moisture content and "soft" sound from the percussion hammer was noted portside above the exhaust flange and localized in other areas of the transom. A stress crack was noted in the gel coat at the cockpit fwd bulkhead. The crack runs up the inboard seam and across the rail cap port and stbd.
- The topsides - Clean and fair w/ no blemishes to note - higher than average localized moisture content was noted at stbd discharge thru hulls.
- The decks – Secure and in good condition. Deterioration of the core was noted on the fore deck above the chain locker.

- The interior – few blemishes noted, well kept, clean and in good condition. Engine space plywood hull liner is decayed notably at the upper edges port and stbd around ventilation inlets.
- Bulkheads and tabbing – in good condition overall. Separation is suspected at the aft head transverse bulkhead. Interior seam shows minor separation. No other separation of tabbing, or areas appearing "worked" was noted.
- The vessel has had little use of late. Renewal of electronic gear and a general refit of plumbing systems is indicated.

PROPULSION SYSTEM

General Condition: Very good condition. Both engines have been overhauled 2005. Engines ran well on sea trial, to full rpm, temps and pressures were normal
Number/Type: Two / Diesel
Hours: 2683 / 2574 "by meter" Less than 10 hrs on rebuild reported
Manufacturer: "GM Detroit"
Model: 8V71Ti
Serial Number(s): Not sighted
#Cylinders/HP: 8/435
Year/Year rebuilt: Majored winter 2004-2005
Cooling System: Fresh water heat exchanger
Alarms: Yes
Gauges: Full @ Both helms
Exhaust(s): Reinforced hose
Silencer(s): FRP In-line in lazarette
Reduction Gear(s): Yes – plate painted over – not sighted
Belts/Hoses: Reported new
Shaft(s): 2" Stainless Steel – with spare stowed port ER
Stuffing Box(es): Traditional reported repacked 2005. Port packing oscillates w/ shaft turning. Oscillation is minor. (Note)
Strut(s)/Bearing(s): Single leg to dual leg Bronze / Cutlesses - good
Propeller: 4 bladed Bronze – coated w/ bottom paint – size not sighted. Tapping noise heard in the lazarette may relate to the line cutting spurs on the shaft. (Note)
Controls: Dual lever
Eng. Beds/Mounts: HD stringers/Appear good

MECHANICAL SYSTEMS

General Condition: Good – items not tested are noted as such
Eng.Rm.Ventilation: (2) 32v Blower (33 CFR 183.610)
Insulation: Foam
Steering Stations: Two
Wheel/Tiller: SS wheel
Steering Gear: Hydraulic Mfg – evidence of past leaking noted at the upper helm pump
Emergency Steering: Engines
Rudder(s): Bronze plate
Rudder bearings and plates: In good condition w/ no play or slop noted
Rudder Post Gland(s): Traditional (Note)
Bilge Pump(s)-Manual: Two bronze piston types - one each engine room
Auto: "Rule" 2000 Gph (3) Port ER pump removed (Note)
Mechanical: Jabsco impeller type belt driven from port engine. Manifold for fwd mid and aft bilges located on aft stbd ER bulkhead. Hoses show age (Note) Not tested
Potable Water-Manual: None

Pressure: "AO Smith" 120VAC jet type; "Galley Maid" 32VDC w/ accumulator (Note)
Washdown Pump: "Flo-jet" 32VDC anchor wash"
Air conditioning/Heating: (4) "Cruisaire" inoperative (Note)
Head(s): (3) 32VDC
Holding Tank: None – tanks have been converted to diesel fuel tanks
Macerator: Integral to head pump "Galley Maid" Not tested
USCG Approved: No (33 USC 159) (Note)
Showers: Enclosed in each head
Sump/Pump: (2) "Rule" 1500 aft, (1) "Rule" 2000 fwd – Fwd sump is wired to head dome light (Note)
Anchor Windlass: "Galley Maid" Vertical; separate wildcat and capstan
Trim Tabs: Single cylinder flybridge switch broken – corrosion noted at stbd ram (Note)
Zincs: New
Other: "Oberdorfer" 32VDC fuel transfer pump, "Jabsco" 32VDC waste oil pump. These pumps not tested

ELECTRICAL SYSTEMS

General Condition: Fair
DC-Batteries/Amps: (1) 12v Gp27 emergency battery on flybridge; Two banks of (4) 8v in series for 32v
Boxes: Plastic w/tops no straps
Approved: No (ABYC E 10.7.1 – 10.7.12) (Note)
Battery fluid level: Need water; 32v bank was found with many dry cells, stbd bank was flat at survey, port bank discharged. (Note)
Condition of terminals: Good - Slight corrosion
Engine Alternator/Amps: 50 amps 32v on port engine – stbd alternator output not legible
Charger/Amps: "Sentry" / 32vdc 50 amp operable
"Nautilus" 12v 15 amp on flybridge for emergency battery – not tested
Vapor Proof Switch(es): "Guest"
Circuit Protection: Magnetic breakers & Fuses
Panel Location: Saloon port side
Wiring: Stranded copper
Installation: Well loomed
AC-Shorepower: 50 amp cable 220 and 110 vac
Inverter/Watts: "Heart interface" / 32v/3000 watt – powered up, not load tested
Generator/KW: "Onan" / 15 Kw – operated normally on seatrial
Serial # /Hours: 1760170522 / 42 "by meter"
Location: Under Galley sole
Sound Shielded: Yes
Exhaust: Reinforced hose w/ new lift pot
Ventilation: Blower
RemoteStart: Yes
Cabin Lights: 32vdc & 120vac - good
Navigation Lights: 32v – good
Anchor Light: 32v - good
Searchlight: 32v w/ remote inoperative at survey
Windshield wiper(s): Three – only the port wiper is operational (Note)
Hot Water Heater: "AO Smith" 19 Gallon - 220vac – operational, no apparent leaks
Bonding system / Condition: Yes / many wires found corroded and broken at terminals, Transom strap broken,

port strut

heavy oxidation noted on shaft strut through bolts. The need for review and repair of system in indicated. (Note)

GALLEY EQUIPMENT

General Condition: Fair
Sink(s): Stainless Steel
Refrigeration: "Frigidaire" 120v unit is rusted and showing age - operable
Stove Type: "Modern Maid" 220 vac
 # Burners/Oven: Four w/ oven
***Other:** "Badger" disposal – not tested
Blender built in – not tested

TANKAGE AND PLUMBING

General Condition: Good
 # Fuel Tanks/Capacity: Two / 825 Gals
Material: FRP
Location: Under sole
How Secured: Framing
Accessibility/Condition: Ltd / appears good
Fills/Vents/Overflows: On deck / topside. Stbd fuel fill hoses are poorly clamped with clamps deteriorated and loose. (Note)
Fuel Lines/Clamps: Neoprene - approved
Filters: (2) "Racor" 900 (1) "Racor" 500 and secondary. Stbd engine Racor is positioned over the inboard exhaust manifold. Filters do not have integral drip bowls. (Note)
Shut-off Valve/Manifold: At tanks and stbd E/R
 # Water Tanks/Capacity: Two / 250 Gals
Material: FRP
Location: Lazarette and under sole
How Secured: Framing SS strapping
Accessibility/Condition: Ltd / appears good
Fills and Vents: On deck topsides
Hoses/Clamps: Good
Filters: No
Valves/Manifold: At tanks and pumps
 # Holding Tank/Capacity: None – fwd holding tank has been converted to fuel. It is understood that the buyer has plans to reconvert this tank to a holding tank before the delivery south.
Material: FRP
Location: Under sole fwd
How Secured: FRP bonded
Thru-Hull Fittings/Valves: (11) Bronze ball valves, (3) transducers
Approved: Yes (ABYC H – 27.4, 27.5)
Condition: Working & Stiff (Note)
Clamps/Hoses: Double / reinforced
Tapered Plugs?: At each through hull valve below LWL – No (Note)
Anti-Siphon Loops: No
Raw water Strainers: (7) Bronze
Hose Chafing?: None Observed – most hoses and fuel lines show age. Re plumbing is recommended.

ELECTRONICS/NAVIGATION EQUIPMENT

General Condition: Poor – equipment is either inoperable or missing. A refit here is recommended
Compass(es): "Danforth" 5 inch below, 3 inch on Flybridge. Bubble noted in upper unit (Note)
VHF Radio: (2) "Icom" inoperative at survey
"SEA" SSB – Did not power up at survey
""Kenwood" Ham – Did not power up at survey
Autopilot: "Wood Freeman 500" Did not power up at survey
Speed Log: "B&G" Did not power up at survey
Depthfinder: "B&G" & "Datamarine" Did not power up at survey
GPS/Loran: None observed
Radar: "Furuno" CRT type - Did not power up at survey
Rudder Indicator: Yes - Did not power up at survey
Stereo/Radio: "Magnavox" AM/FM Cassette, CD tower system
Barometer: None observed
Ship's Clock: None observed
Other: "Alpine" cassette player on flybridge - Did not power up at survey

DECK EQUIPMENT

General Condition: Good
Anchor(s): "Bruce" est. 20 Kg, "CQR" est 50 Lbs, "Danforth" est 35 Lbs
Chain/Rode(s): 9/32" on primary – chain appears undersized (Note); 3/8" chain /3/4" rode secondary
Bow Roller(s): On FRP platform
Bow/Stern Pulpit: 1" Stainless Steel / bulwarks
Stanchions: 1" SS w/ teak cap rail – port gate does not close (Note)
Docklines: Misc. braid 3 strand
Fenders: Medium pneumatic
Covers: None sighted
Swim Platform: FRP – well secured though high moisture content noted around port side brace
Swim Ladder: SS

SAFETY/REQUIRED EQUIPMENT

General Condition: Fair
Throwable Device: Horseshoe
PFD's: USCG Type II (33 USC 175)
VDS: "Olin" kit (33 USC 175) (Note)
Horn/Bell: Dual trumpet / yes
Radar Reflector: "Suggested"
Oil/Pollution Placards: No / No (33CFR151.9) (Note)
Fire Extinguishers: (4) size I ABC dry chemical, ((4) size II
Condition: Gauges in green no rust, 2 to 3 years past last inspection (Note)
Fixed Fire System: (3) "Fireboy" Halon 1301-Automatic system appears to have no power to it. Indication lights at helm do not light. (Note)
Condition: 2 to 3 years past inspection (Note)
CO detector: "Suggested" (Note)

REMARKS AND RECOMMENDATIONS

This older Hatteras 58 was found in overall "average" condition meaning that the vessel appears to be structurally sound though with deficiencies consistent with her age. Systems and equipment appear to be original with consequent wear and a limited refit appears to be necessary. The buyers appear to be well qualified to carry out the intended refit The recent rebuild of her main engines is a significant plus for her estimated value. "PIED A TERRE" was taken underway for sea trial. The vessel performed well, with structural members showing no signs of working while underway.
It bears noting that while the list of deficiencies below is lengthy, the list of "required" items is not. The "recommended" items below do not in general hamper the vessel's ability to function as a yacht, but provide an indication of areas to be addressed in the future if it is hoped that the vessel be brought up to "Bristol" condition.

Moisture content is given on a scale of 0 to 1000 with normal readings around 170 on the bottom due to bottom paint and 50 elsewhere.
Elevated moisture content on the hull noted as follows:

- Transom above both exhaust flanges moisture content 700 port and 750 stbd. Adjacent to the 2nd inboard from port swim platform bracket reading 630 relative. The core appears saturated in these areas. Further exploration and repairs should be considered.
- Foredeck above the anchor chain locker reading 200 (normal is appox 50) and 400 when measured from the underside of the deck. Core is deteriorated as seen at the spill pipe. Repairs should be considered.
- Stbd aft discharge at LWL percussion hammer indicates solid laminate, moisture content 530 relative. Further exploration should be considered.
- Anchor washdown pump supply thru hull stbd fwd. Hull is solid laminate, Reading 530 relative. Dead sound with percussion hammer.

One "dry" void was noted on the bottom mid stbd side. The area is small (2" dia), no action appears warranted.

In as far as may be ascertained from a general inspection, without making extensive removals or opening up to expose ordinarily concealed areas, and without taking borings to determine thickness or soundness of structures and members, or testing for tightness of components. Upon compliance with the following required items, this vessel should represent a sound financial and insurance risk.

Note: The N.F.P.A. National Fire Protection Association, and ABYC (American Boat and Yacht Council), do not represent legal requirements, only safety standards. Non -conformity can affect insurance. U.S.C.G Requirements are law by the Federal Boat Safety Act of 1971.

REQUIRED NOW:

1. Assure that a minimum of two serviceable (no rust, gauge in green) USCG-approved type B-I (or one type B-II) handheld ABC fire extinguishers are mounted in prominent locations (46CFR28.155). ABYC recommends annual servicing and tagging.
2. Assure the proper operation of the "Fireboy" automatic system and override switch at the helm
3. Assure a minimum of (3) visual distress signals are aboard that have future expiration dates. (consider SOLAS standard) (46CFR28.145)
4. Assure oil and garbage pollution placards are posted.

5. Install metal drip bowls under all Racor fuel filters. Additionally it is strongly recommended that the stbd M/E filter be relocated so that it is not positioned over the exhaust manifold.

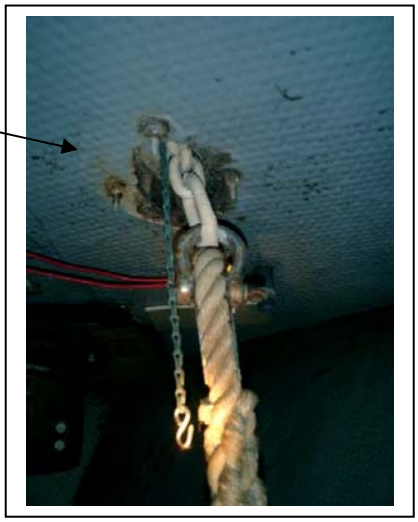
AT OWNER'S DISCRETION / IN NEAR FUTURE:

Hull and superstructure

6. Suggest replacement of window slide gaskets and repairs to stbd aft window sealant. Regular pressure hose test to all ports and hatches to check watertight integrity and examine rubber gaskets for cracking.

7. Consider further exploration of transom core condition.

8. Suggest repairs to foredeck. Epoxy filling void around spill pipe will prevent further moisture intrusion.



9. Consider removal and rebedding of the thru hull fittings noted above: anchor wash down intake and aft LWL discharge.

10. Monitor depth and width of hairline cracks in gel coat aft at the fwd cockpit bulkhead.

11. Further examination of the aft head bulkhead should be undertaken as convenient. Removal of the headliner will be necessary to evaluate the condition of the partial bulkhead to deck head tabbing. At present deck creaking is the only symptom, along with a minor crack in the aft head interior panel seams. This presents as an annoyance only.

Propulsion system

12. It is reported that the engines were realigned after the rebuild. However the port stuffing box was seen to oscillate slightly with the shaft turning. Suggest monitor the gland, consider a check on alignment.

13. Suggest checking clearances on the line cutting spurs at next haul out. These have been suggested as the source of tapping heard underway at low rpm.

Mechanical systems

14. Thru-hull valves should be operated monthly to assure good operating condition. They all should be serviced as necessary at each haul-out.

15. Repair trim tabs as necessary to assure proper operation, replace flybridge trim tab switch.

16. Suggest dropping rudders at next haul out to evaluate the condition of the bronze shafts (see #17 and #21 below). Repack glands before remounting rudders.

17. Repair 32vdc fresh water pump as necessary. Pump runs with overide switch, pressure gauge shows pressure, pump does not pressurize the system.

18. Repair / re commission Air conditioning system

Electrical systems

19. 8 volt batteries were found with many dry cells. The batteries appear to be old, and may not hold a charge. Consideration should be given to replacement of both banks.

20. Batteries should be secured in their boxes so as to prohibit movement of greater than one inch in any direction (ABYC E 10.7.1 – 10.7.12).

21. Rewire fwd head sump pump. It is at present wired to the head dome light.

22. Repair/replace windshield wipers as necessary.

23. Repair and replace bonding wires and connections as necessary. Consider review of the entire system. There is still debate as to weather or not to bond a vessel. It is clear that if bonded, the system must be well maintained. A failing bonding system will much hasten the decline of a vessel's underwater bronze fittings.
    - Shaft strut through bolts show particularly heavy oxidation. Consideration should be given to pulling one or two of these bolts for closer evaluation of their overall condition at the next scheduled haul out.

Tankage and plumbing

24. Current regulations require the installation of a holding tank or other MSD. Consult local regulation for Discharge or No Discharge zones. It is understood that conversion is planned to convert the forward tank back to a holding tank before the vessel heads south.

25. Consider pulling the through hull valve feeding the washdown pump (located under fwd cabin sole. This will assist in evaluating both the condition of the FRP lay up here (spoken of on page 7 of this report), and the condition of the underwater bronze fittings as the bonding system is compromised (see #17).

Galley equipment

26. Refrigerator and stove are both showing age and wear and tear with areas of oxidation on their surfaces. Consider replacement.

Electronics/Navigation equipment

27. Recondition flybridge compass

28. Refit electronics as desired. Replacement or repairs is needed to all equipment

29. Repair/replace searchlight.

Deck equipment

30. Consider re evaluating port chain size. Replace as necessary

31. The Isinglass of the cover is faded and opaque – consider replacement.

Interior

32. Stbd weather door does not open and AC distribution panel door does not stay closed. Replace latches as necessary.

33. Master's stateroom door and guest cabin doors do not close, the hinges may have shifted or bent or door warped overtime. Repair as necessary.

34. Replace saloon window gaskets, repaint aluminum window frames, repair teak veneer paneling below. Frames have oxidized, leaking has deteriorated the paneling (see page 2).

Safety equipment

35. Carbon monoxide is a potentially deadly gas produced any time a carbon-based fuel, such as gasoline diesel, propane, charcoal or oil, burns. On board sources include gasoline and, to a

lesser degree, diesel engines, generators, cooking ranges and space and water heater. Carbon monoxide is called the “silent killer” for good reason: exposure to low levels of the odorless, colorless gas can result in symptoms that mimic seasickness such as nausea, headache, dizziness and drowsiness. The installation of marine grade carbon monoxide detectors in all enclosed cabin areas is thus strongly recommended. And, ventilation of fresh air into cabins, even when air conditioners or heaters are running, is essential.

36. Suggest carrying soft wood tapered plugs at each underwater through hull fitting in case of fitting failure.

DEFINITION OF TERMS:

The following is this surveyor's marine grading system of condition and is applied to general condition of the vessel as well as to the sub headings in the body of the report. Consideration is given to the age of the vessel.

“EXCELLENT (BRISTOL) CONDITION" is a vessel that is maintained in mint or Bristol fashion.

"VERY GOOD CONDITION" has had above average care and is equipped with good quality gear in good condition.

"GOOD CONDITION" is ready for use, requiring little additional work and normally equipped for her size.

"AVERAGE CONDITION" requires usual maintenance.

"FAIR CONDITION", substantial yard work, repair or replacement required and/or devoid of extras.

"POOR CONDITION" an extensive re-fit is necessary to be safely usable.

SURVEY LIMITATIONS and SCOPE:

1. Parts of most vessels cannot be examined due to inaccessibility, Some removal procedures add greatly to the time involved and, consequently to the cost. Therefore such procedures are not performed unless specifically requested or recommended. Engine surveys and oil analysis are separate surveys and are recommended. Surveyors do not: Test the vessel, hull or tanks for tightness or leaks; 2: Unload cluttered holds or lockers; clean bottoms; operate the vessel. It is pointed out that where wood decay is involved, it is not unusual for repairs to uncover previously hidden additional decay.

2. We recommend surveyor attendance underway to test gear under working conditions. The vessel was examined in the water and / or drydock (see page one for details). The hull, deck, and house were sounded for structural integrity. Sole boards were lifted and accessible drawers and lockers were opened for inspection. Machinery, electrical and electronic equipment were operated except as noted.

- Attendance underway: _____Declined ____JRS____Accepted

3. The report is confined to the surveyor's opinion as to the general physical condition and estimated value of the vessel. It does not include a determination as to the seaworthiness of the vessel, nor does it include stability tests necessary to determine such limitations, nor does it attempt to itemize waters unsuitable for the vessel's use.

Signed without prejudice,

Jeffrey R. Stone: Society of Accredited Marine Surveyors (SA; Y, SC)
Master, 1600 Gt. Oceans
Member ABYC
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