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CONFIDENTIAL REPORT OF CONDITION AND VALUATION SURVEY for purposes of pre-purchase evaluation

Survey #08/17-XXXX

Survey performed for Mr. XXXX, purchaser,
with the vessel hauled out,
on 8/18/2017



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Society of Accredited Marine Surveyors® - Accredited Marine Surveyor®
American Boat and Yacht Council (ABYC)
International Association of Marine Investigators (IAMI) - Certified Marine Investigator I

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It is the opinion of this firm that, with all deficiencies corrected, this vessel will continue to be suitable for her intended purpose (recreational boating in protected waters).

VALUATION

OPINION OF FAIR MARKET VALUE: \$XX,XXX

With all deficiencies and non-routine maintenance corrected

REPLACEMENT VALUE: \$XXX,XXX

Current like production, equally equipped

NOTE: The valuations are solely a statement of our opinion of the value. We assume no liability for the information used on which this valuation is based. The information came from reported asking prices on Internet sites advertising vessels for sale, reported selling prices from soldboats.com and values given by BUC, ABOS, PowerBoat Guide and NADA. The fair market value, unless otherwise stated, is based on BUC Condition Number 3 -- with the vessel requiring no additional work and normally equipped for her size. A copy of the worksheet used to calculate the fair market value is provided with the original report.

DEFICIENCIES and **NON-ROUTINE MAINTENANCE** (these are items which, in this firm's opinion and in accordance with NFPA and ABYC standards, state and 33 CFR regulations, are necessary to bring this vessel into sound condition and fit for its intended service and/or to ensure the proper operation of systems already installed)

HULL

MAIN DECK:

NOTE:

The port section of the forward deck, by tap inspection and by moisture meter readings, has deteriorated and requires repair, as does an aft section on the port side of the flybridge -- *open up areas and repair, as required.*

MAIN ENGINE(S)

MAIN ENGINE(S):

Stuffing box hose(s) double clamped:

Unable to sight the flexible elements of the stuffing boxes -- *ensure that hose connections are double clamped (where practical, which means that no clamp shall be installed closer than 1/4" to the end of the hose and must fully engage the barb or fitting and no second clamp should be installed if it is cutting into the hose or forcing the hose to be internally cut by the barb or fitting).*

Engine survey performed:

Yes -- *correct any deficiencies found by engine surveyor.*

UNDERWATER APPENDAGES

PROPELLER(S):

NOTE:

Port propeller and starboard propeller have different distances from the aft ends of the struts -- *investigate and correct, as required.*

TANKAGE

FUEL TANK(S):

Shut off valve(s):

Manual -- valves are frozen -- *correct as required.*

Tank(s) secured:

Yes -- not all straps are insulated -- *install insulating material between the securing straps and the tanks (per ABYC H-24.11.6).*

Fuel filler deck plate(s) grounded to the fuel tank(s):

Not sighted -- *ensure that the filler deck plates are grounded to the fuel tanks (per ABYC H-24.16.1 and CFR 183.572).*

INTERIOR

INTERIOR:

Carbon monoxide detector(s):

No -- this vessel has an enclosed accommodation compartment and a gasoline generator and/or inboard gasoline propulsion engine-- *provide a minimum of one marine grade (equipped with a self-wiping sensor) carbon monoxide detector (per ABYC A-24).*

Window leakage?:

Significant leakage and deteriorated wood noted around the aft windows and the aft ends of the aft side windows -- *carve to sound and replace the woodwork, as required, and re-seal the windows, as required.*

DECK & SAFETY EQUIPMENT

DECK AND SAFETY EQUIPMENT

Throwable device(s):

None sighted -- *provide a minimum of one per USCG (CFR 33, Section 175.15) and state requirements.*

Flares (visual distress signals):

Yes -- flares are outdated -- *disposal and replacement required.*

USCG placards:

"Discharge of Oil Prohibited" placard is posted. MARPOL (Garbage) placard not sighted -- *post in the galley facing the waste containment per USCG requirements (CFR 151.59).*

ELECTRICAL SYSTEMS

12V SYSTEMS:

Battery(ies) secured:

Not all -- *secure loose batteries so as to allow no movement (per ABYC E-10.7.4 and CFR 183.420).*

Battery(ies) covered:

Not all -- *fit the three batteries aft of the engines and generator with a minimum of terminal covers (per ABYC E-10.7.7 and CFR 183.420).*

Battery selector (on/off) switch:

Yes -- *the backs of the switches are open to the engine compartment and need protective covers to minimize spark potential -- fit covers over the backs of the battery selector switches (per ABYC E-11.5.1.4.1).*

12V wiring properly terminated:

No -- *wire nuts have been used in some wiring connections for both some of the 12V and 110V connections -- replace wire nuts with butt connectors (preferably waterproof) or terminal strips or make connections in waterproof junction boxes (per ABYC E-11.14.3.6).*

110V SYSTEMS:

GFCI protection:

No GFCI protection sighted for 110V outlets in wet locations (galley, head, engine space, exterior) -- *provide GFCI protection as required (install a GFCI equipped 110V outlet in each wet location OR install a GFCI equipped breaker in the appropriate circuit OR install a main GFCI (isolation transformer) between the 110V power supply and the main breaker) (per ABYC E-11.11.4).*

AC volt meter(s):

No -- *provide AC volt meter (per ABYC E-11.9.3.2).*

Wire type:

Romex, which is solid strand -- *replace with marine grade 110V wiring.*

GENERATOR(S):

Exhaust hose connections double clamped:

No -- *double clamping required (where practical).*

Mechanical survey performed:

Yes -- *unit reportedly difficult to start -- correct any deficiencies found by engine surveyor.*

FIRE FIGHTING & BILGE PUMPING EQUIPMENT

FIRE FIGHTING EQUIPMENT:

All currently certified:

No -- *have all fire fighting equipment currently certified (or replace) (per NFPA 10 and California State Fire Marshall).*

THROUGH-HULLS

THROUGH-HULLS AND SEA VALVES:

Through-hull(s):

Forward disused through-hull is not accessible -- *ensure that the through-hull is either capped off or fitted with a sea valve.*

ROUTINE/DEFERRED MAINTENANCE ITEMS (these are items which, in this firm's opinion, should have been corrected at the time that they occurred and/or items that should be part of a routine maintenance schedule -- they do not, at the time of this survey, constitute a structural nor safety deficiency; however, if let unattended, they may lead to further deterioration)

HULL

BOTTOM:

Bottom paint:

Anti-fouling bottom paint in need of renewal.

MAIN DECK:

Side deck railing(s):

Aluminum with teak caps -- some stanchions are loose in their bases and some bases are loose (both side forward section, predominantly) -- *tighten loose bases and loose stanchions.*

NOTE:

Awning framework over the cockpit, as well as the starboard side of the swim grid, was recently hit (some railings out of their connectors and some railings bent) by a third party, who has claimed responsibility -- *ensure that the required repairs are completed.*

FLYBRIDGE:

Seat(s):

Bench style and bucket -- removable cushions for the bench seats and the bucket seat at the helm is upholstered -- the arms for the helm seat are very loose -- *correct, as required.*

BILGE SPACE(S):

Engine room(s) and bilge(s) well kept:

No -- standing water and oil residue noted in engine bilge spaces -- *dewater and clean, as required.*

MAIN ENGINE(S)

MAIN ENGINE(S):

Throttle and shift control(s):

Separate levers for each engine at both steering stations -- flybridge shift controls stiff-- *recommend servicing/lubrication at both ends.*

Cooling system(s):

Heat exchanger cooled -- fluid level good in both engines but no anti-freeze sighted in the starboard engine heat exchanger -- *correct, as required.*

Oil level and condition:

Oil is dirty -- *recommend oil change.*

UNDERWATER APPENDAGES

PROPELLER(S):

Prop nuts:

The thinnest of the two propeller nuts has been placed last (furthest away from the propellers) on both shafts, which is incorrect -- *place the thinnest propeller nut closest to each propeller (per ABYC P-6, Ap.6.2).*

Condition:

One blade tip of port propeller is out of true -- *have propeller trued, pitched and balanced.*

PROPELLER SHAFT(S):

Strut(s):

Bronze -- rusting noted in way of bolts -- *remove the bolts, clean up (or replace) and re-bed.*

ZINCS:

Replacement required?:

Yes -- all zincs are coated -- *wire brush or wheel abrade (to remove surface coating) or replace all zincs.*

NOTE:

Discoloration (surface) noted to the bronze rudders and bronze struts -- *have the bonding and zinc systems evaluated by a qualified corrosion expert.*

TANKAGE

FRESH WATER TANK(S):

Tank(s) vented:

Yes -- vent screens partially to fully clogged -- *strong recommendation made to clean or replace screens, as required.*

INTERIOR

GALLEY:

Stove:

Princess three burner electric with oven -- one of the burners is not operational -- *correct, as required.*

HEAD(S):

Shower(s):

Handheld in stall in the midships head -- unable to get the shower to operate -- *investigate and correct, if/as required.*

DECK & SAFETY EQUIPMENT

DECK AND SAFETY EQUIPMENT

Anchor windlass:

Quick 12V and manual (handle not sighted) -- a cleat has been installed nearby so that the load can be taken by the cleat (instead of by the windlass) -- the chain guard has broken off -- *correct, as required.*

AUXILIARY EQUIPMENT

SPECIAL EQUIPMENT:

Windshield wiper(s):

Yes -- wiper blade is in poor condition -- *replace.*

ELECTRICAL SYSTEMS

GENERATOR(S):

Exhaust piping:

Hose -- showing signs of age -- *will require replacement in the foreseeable future.*

ITEMS TO MONITOR (these are items which, in this firm's opinion, are generally the result of normal wear and tear and do not require correction at this time -- they do not, at the time of this survey, constitute a structural nor safety deficiency; however, they will require correction if the condition worsens)

HULL

MAIN DECK:

Deckhouse to deck joint:

Molded -- some stress cracking noted in all deck surfaces and in the deckhouse to deck joint -- *monitor gel coat cracking and repair if conditions worsen.*

RECOMMENDATIONS (these are items which, in this firm's opinion, will enhance the safe operation of this vessel and/or ensure its continued structural condition but are not mandatory and do not affect the insurability of this vessel)

SURVEY INFORMATION

VESSEL INFORMATION:

Registration sighted:

Yes -- the registration shows the vessel as a 1975 model, which is incorrect -- *recommend correcting that information when title changes hands.*

HULL

HULL EXTERIOR:

Hull cosmetics:

Hull cosmetics are in fair condition -- *recommend cut polishing (waxing) hull to preserve finish.*

BILGE SPACE(S):

Bilges accessible:

Not all bilge spaces are readily accessible -- *recommend providing easy access to all bilge spaces for inspection purposes.*

MAIN ENGINE(S)

MAIN ENGINE(S):

Drip pan(s) beneath engine(s):

No -- *recommend installation of drip pans or oil absorb pads.*

Insulation:

None -- *recommend provision of insulation if engine noise is unacceptable.*

GAUGES AND INSTRUMENTATION:

Synchronizer(s):

No -- *recommend provision of an engine synchronizer.*

EXHAUST(S):

Hose connections double clamped:

Yes -- *recommend staggering clamp heads wherever double clamping is in place and clamp heads are lined up.*

UNDERWATER APPENDAGES

PROPELLER(S):

Condition:

The starboard propeller is original -- *recommend having it trued, pitched and balanced, as well.*

TANKAGE

FUEL TANK(S):

Manufacturer's label(s):

None sighted -- per CFR 183.514, each fuel tank is to have a label that contains (at minimum) the fuel tank manufacturer's name (or logo) and address, the month (or lot number) and year of manufacture, the capacity in US gallons and the material of construction -- *ensure existence of said labels and post if not already in place.*

Fuel filler lines double clamped:

Yes -- *the filler hoses will require replacement in the foreseeable future.*

FRESH WATER TANK(S):

Shut off valve(s):

No -- *recommend providing a readily accessible means of shutting off the fresh water supply in case of piping failure.*

Accumulator tank(s) installed:

None sighted -- *recommend installation if needed to improve water pressure.*

Filter(s):

No filter sighted -- *recommend provision of at least one filter.*

HOLDING TANK(S) (BLACK WATER):

Type(s) of marine sanitation device(s):

Type I -- when operating this vessel on a body of water where the discharge of treated or untreated sewage is prohibited by the EPA under 40 CFR 140.3 or 140.4, the operator must secure each Type I device in a manner which prevents discharge of treated or untreated sewage -- this may be accomplished by: 1) closing the sea valve and removing the handle; 2) padlocking the sea valve in the closed position; 3) using a non-releasable wire tie to hold the sea valve in the closed position; or 4) locking the door to the space enclosing the toilet with a padlock or door handle key lock -- *recommend securing as/if required (per 33 CFR 159.7.2.b).*

WATER HEATER(S):

Inspection/cleaning access:

Limited -- *recommend providing easy access to tank and connections for inspection purposes.*

Drain fixture(s)/plug(s):

Yes -- *recommend plumbing the drain fixture overboard.*

DECK & SAFETY EQUIPMENT

DECK AND SAFETY EQUIPMENT

Anchor(s):

12# Danforth type located at the stern with approximately 6 feet of 1/4" chain and approximately 50 feet of 7/16" three strand nylon -- bow shackles not wire seized -- *recommend wire seizing anchor rhode bow shackles with stainless steel seizing wire.*

First aid kit(s):

No -- *recommend provision of at least one first aid kit.*

ELECTRICAL SYSTEMS

12V SYSTEMS:

12V wiring secured and loomed:

Yes -- *no split loom installed -- recommend bundling the wiring, especially in the engine space, with self-extinguishing split loom.*

BATTERY CHARGER(S):

Operation manual:

Not sighted -- *provide an operation manual for the battery charger (if not already on board).*

Charger(s) in acceptable location(s):

Marginal -- *the battery charger is located on the forward bulkhead in the engine space and may be susceptible to excessive heat -- recommend moving to a more appropriate location (per ABYC A-31.5.5.6).*

110V SYSTEMS:

Shore power splitter(s)/adapter(s):

Yes -- *recommend replacement of plugs with ones that have a locking collar to minimize movement of each plug at each inlet.*

GENERATOR(S):

Hour meter:

None sighted -- *recommend installation of hour meter to facilitate the tracking of routine maintenance.*

FIRE FIGHTING & BILGE PUMPING EQUIPMENT

FIRE FIGHTING EQUIPMENT:

Inspect annually

Annual external examination (physical condition of the extinguisher and the hanger [or bracket] and verification that the pressure gauge or indicator is in the operable range, at minimum) of all extinguishers is strongly recommended.

BILGE PUMPS:

Automatic float switch(es):

No -- *recommend equipping bilge pump with an automatic float switch.*

High bilge water alarm(s) installed:

No -- *recommend installation of at least one high bilge water alarm.*

NOTE:

Recommend evaluation of the bilge pumping system and upgrading, if required.

THROUGH-HULLS

THROUGH-HULLS AND SEA VALVES:

Below LWL hose connections:

Not all below LWL hose connections have been double clamped -- recommend double clamping where not already in place and where practical, which means that no clamp shall be installed closer than 1/4" to the end of the hose and must fully engage the barb or fitting and no second clamp should be installed if it is cutting into the hose or forcing the hose to be internally cut by the barb or fitting.

Above LWL through-hull(s) condition:

Some of the above LWL through-hulls are within six inches of the waterline -- recommend fitting those through-hulls with sea valves.

NOTE:

Recommend exercising all sea valves on a routine basis (monthly).

This vessel was manufactured prior to the enactment of some of the USCG (33 CFR) and state requirements, NFPA and ABYC recommendations that are in effect today. This survey addresses those recommendations thought to be necessary for safety, but it does not suggest complete compliance with current requirements or standards.

SURVEY INFORMATION

SURVEY INFORMATION:

Survey No.: 08/17-XXXX
Date of Survey: 8/18/2017
Date of Report: 8/20/2017
SCOPE OF SURVEY: This survey was performed at the request of the purchaser, who was present at the time of the survey, for purposes of pre-purchase evaluation.
Intended Service: Pleasure
Waters to be Navigated: Protected and near coastal
Where Vessel Can Be Surveyed: Delta Marine Services, Stockton, CA
Person to contact & phone number: Mr. Ron Bishop, broker, 866-200-6777
Survey conducted with vessel: Hauled out

CLIENT INFORMATION:

Client Name: Mr. XXXX
Mailing Address: XXXX
City/State/Zip: XXXX
Cellular Phone: XXX-XXX-XXXX

VESSEL INFORMATION:

Vessel Type: 1974 47' Boatel houseboat
Vessel Name: "Lady Clarice"
Hull ID number: BTL017780674
Hull ID number verification attached: A true digital photograph of the hull ID number of the referenced vessel is incorporated herein.



Registration No.: CF 2058 EB
Year Registered: Current
Registration sighted: Yes -- the registration shows the vessel as a 1975 model, which is incorrect -- recommend correcting that information when title changes hands.

HULL

HULL:

Manufacturer/Builder: Bluewater Marine, Mora, MN
Year: 1974
Model: Islander
Type: Cruiser hulled houseboat
Construction material: Fiberglass
LOA: 47'
Beam: 14'
Loaded draft: 3'2" (reportedly)
Loaded freeboard: 1'8" to the bottom of the engine vents

Survey #08/17-XXXX - Mr. XXXX - 1974 47' Boatel houseboat

Displacement: 18,000# approximate dry weight
Last date of dry dock: 1 year ago (as reported by seller)
General construction: Light (for type)

BOTTOM:

Construction material: Fiberglass
Bottom paint: *Anti-fouling bottom paint in need of renewal.*
Blistering: None noted. Maintenance records indicate that prior blisters have been repaired.
Grounding damage: None noted.
Delamination(s): None found (by tap inspection).

HULL EXTERIOR:

Construction material: Fiberglass
Stem: Flared
Rub rail: Aluminum trim -- some prior impact damage noted in way of the starboard forward corner -- seller reports this has been present for many years.
Transom: Slightly flared with teak swim grid bolted on -- the starboard corner of the swim grid was run into by a third party -- see comments under Canvas in the Main Deck section.



Transom gate(s): Opening in the stern railing at the center with a chain gate.
Hull cosmetics: Hull cosmetics are in fair condition -- *recommend cut polishing (waxing) hull to preserve finish.*

MAIN DECK:

Construction material: Fiberglass over plywood
Forward deck: Bow anchor roller installed with wood bowsprit
Engine space hatch(es): In aft deck
Deckhouse to deck joint: Molded -- some stress cracking noted in all deck surfaces and in the deckhouse to deck joint -- *monitor gel coat cracking and repair if conditions worsen.*
Deckhouse access: Sliding door on the starboard side and sliding window aft
Window(s): Fixed and sliding
Port(s)/port light(s): Opening port lights In the forward lower cabin -- no screens sighted
Forward railing(s): Aluminum, with fender holders
Aft deck railing(s): Aluminum with teak caps
Side deck railing(s): Aluminum with teak caps -- some stanchions are loose in their bases and some bases are loose (both side forward section, predominantly) -- *tighten loose bases and loose stanchions.*
Chocks and mooring cleats: Horn mooring cleats
Fenders: Yes
Dock lines: Yes
NOTE:

The port section of the forward deck, by tap inspection and by moisture meter readings, has deteriorated and requires repair, as does an aft section on the port side of the flybridge -- *open up areas and repair, as required.*
Awning framework over the cockpit, as well as the starboard side of the swim grid, was recently hit (some railings out of their connectors and some railings bent) by a third party, who has claimed responsibility -- *ensure that the required repairs are completed.*

FLYBRIDGE:

Construction material: Fiberglass over plywood
Seat(s): Bench style and bucket -- removable cushions for the bench seats and the bucket seat at the helm is upholstered -- the arms for the helm seat are very loose -- *correct, as required.*
Storage: Beneath flybridge dash
Side rails: Coamings
Accessed by: Ladder from the aft deck
NOTE: Section at the aft end of the flybridge, on the port side, has a deteriorated structure (by tap inspection and moisture meter reading) -- see Main Deck Note.

BILGE SPACE(S):

Engine room(s) and bilge(s) well kept: No -- standing water and oil residue noted in engine bilge spaces -- *dewater and clean, as required.*
Bilges accessible: Not all bilge spaces are readily accessible -- *recommend providing easy access to all bilge spaces for inspection purposes.*
Stringers: No deterioration noted by tap inspection (where accessible) -- the stringers in the engine space were the only ones that were accessible.
Limber hole(s): Yes
Bulkheads: No deterioration noted by tap inspection (where accessible).
Inside of transom: No deterioration noted by tap inspection (where accessible).

MAIN ENGINE(S)

MAIN ENGINE(S):

Number of units: Two



Type: Inboard with V-drives
Manufactured by: Chrysler
Serial number(s): Not sighted
Model number(s): 350 (reportedly)
Naturally aspirated? Yes
Horsepower: 250 HP each
Number of cylinders: Eight each
Year: Original
Engine(s) location(s): Aft bilge
Engine space hatch(es): In aft deck
Fuel type: Gas
Fuel pump(s): Engine mounted
Fuel filter(s)/water separator(s): Sierra 18-7945
Hoses and clamps: Serviceable
Belts and pulleys: Good
Engine mounts and beds: Good
Throttle and shift control(s): Separate levers for each engine at both steering stations -- flybridge shift controls stiff-- *recommend servicing/lubrication at both ends.*

Survey #08/17-XXXX - Mr. XXXX - 1974 47' Boatel houseboat

Flame arrestor(s): Yes
Distributor(s) approved type: Yes
Alternator(s) approved type: Yes
Drip pan(s) beneath carburetor(s): Integral
Drip pan(s) beneath engine(s): No -- recommend installation of drip pans or oil absorb pads.
Cooling system(s): Heat exchanger cooled -- fluid level good in both engines but no anti-freeze sighted in the starboard engine heat exchanger -- correct, as required.
Oil level and condition: Oil is dirty -- recommend oil change.
Oil filter(s): Yes
Ventilation: Natural and blower
Insulation: None -- recommend provision of insulation if engine noise is unacceptable.
Stuffing box(es): Limited access
Stuffing box hose(s) double clamped: Unable to sight the flexible elements of the stuffing boxes -- ensure that hose connections are double clamped (where practical, which means that no clamp shall be installed closer than 1/4" to the end of the hose and must fully engage the barb or fitting and no second clamp should be installed if it is cutting into the hose or forcing the hose to be internally cut by the barb or fitting).
Fume detector(s): Scentry CH-405
Accessibility: Fair
Last major overhaul: Unknown
Engine(s) operated: Engines not operated for purposes of this survey.
Engine survey performed: Yes -- correct any deficiencies found by engine surveyor.

TRANSMISSION(S):

Manufacturer: Not sighted
Serial number(s): Not sighted
Model number(s): Not sighted
Gear ratio: Unknown
Fluid level and condition: Not accessible
Coupler(s): Not sighted
Coupler(s) safety wired: Not sighted

GAUGES AND INSTRUMENTATION:

Volt: Yes -- two gauges -- at both steering stations
Hour meter(s): P - 385.2, S - 357.2 -- these are reportedly the original engine hours
Oil pressure: Yes -- two gauges -- at both steering stations
Synchronizer(s): No -- recommend provision of an engine synchronizer.
Tachometer(s): Yes -- two gauges -- at both steering stations
Water temperature: Yes -- two gauges -- at both steering stations

EXHAUST(S):

Discharge location(s): Transom
Piping: Cast metal and hose
Hose connections double clamped: Yes -- recommend staggering clamp heads wherever double clamping is in place and clamp heads are lined up.
Riser(s): In visually good condition

STEERING SYSTEM(S):

Number of steering stations: Two



Steering station location(s): Main saloon and flybridge
 Type: Hydraulic
 Manufacturer: Teleflex
 Lines and fittings: Hose
 Actuator cylinder(s): Visually sound
 Mounting(s): Steering arms inside the transom on top of the rudders and connected with a tie rod between the two rudders
 Rudder stock(s): Visually sound

UNDERWATER APPENDAGES

PROPELLER(S):

Number of propellers: Two
 Manufacturer: Michigan Dyna-Jet
 Number and type of blades: Three fixed each
 Material: Bronze
 Pitch and diameter: 19 X 18 (as stamped)
 Age: P - 1999, S - 1974
 Prop nuts: The thinnest of the two propeller nuts has been placed last (furthest away from the propellers) on both shafts, which is incorrect -- *place the thinnest propeller nut closest to each propeller (per ABYC P-6, Ap.6.2).*
 Condition: One blade tip of port propeller is out of true -- *have propeller trued, pitched and balanced.*
 The starboard propeller is original -- *recommend having it trued, pitched and balanced, as well.*
 NOTE: Port propeller and starboard propeller have different distances from the aft ends of the struts -- *investigate and correct, as required.*



PROPELLER SHAFT(S):

Number of shafts: Two
 Size: 1-1/4"
 Material: Stainless steel
 Cutless (shaft) bearing(s): Serviceable
 Strut(s): Bronze -- rusting noted in way of bolts -- *remove the bolts, clean up (or replace) and re-bed.*
 Surface discoloration noted on the struts and the rudders -- this generally occurs due to

stray current -- see Zincs Note.



RUDDER(S) AND SKEG(S):

Number of rudders: Two
 Type: Spade
 Material: Bronze
 Condition: Good, except for surface discoloration -- see Zincs Note.

ZINCS:

Shaft(s): Yes
 Rudder(s): Yes
 Bonding: Yes
 Replacement required?: Yes -- all zincs are coated -- *wire brush or wheel abrade (to remove surface coating) or replace all zincs.*

NOTE: Discoloration (surface) noted to the bronze rudders and bronze struts -- *have the bonding and zinc systems evaluated by a qualified corrosion expert.*

TANKAGE

FUEL TANK(S):

Number of tanks: Two
 Capacity: 250 USG total (as measured)
 Supply lines: Spec hose
 Shut off valve(s): Manual -- valves are frozen -- *correct as required.*
 Filling line(s) located: Aft coamings
 Tank material: Aluminum
 Tank(s) vented: Yes
 Vent(s) location(s): Hull sides
 Tank(s) grounded: Yes
 Tank(s) secured: Yes -- not all straps are insulated -- *install insulating material between the securing straps and the tanks (per ABYC H-24.11.6).*
 Tank(s) on flat surface: Only on the strips where the straps are secured.
 Tank(s) location(s): Port and starboard sides of the engine space
 Inspection/cleaning access: Fair
 Tank(s) condition: Visually good (where accessible)
 Manufacturer's label(s): None sighted -- per CFR 183.514, each fuel tank is to have a label that contains (at minimum) the fuel tank manufacturer's name (or logo) and address, the month (or lot number) and year of manufacture, the capacity in US gallons and the material of construction -- *ensure existence of said labels and post if not already in place.*
 Fuel filler lines double clamped: Yes -- *the filler hoses will require replacement in the foreseeable future.*
 Fuel filler deck plate(s) grounded to the fuel tank(s): Not sighted -- *ensure that the filler deck plates are grounded to the fuel tanks (per ABYC H-24.16.1 and CFR 183.572).*
 Gauge(s): Yes

FRESH WATER TANK(S):

Number of tanks: Two
Capacity: 70 USG total
Supply lines: Pex tubing
Shut off valve(s): No -- *recommend providing a readily accessible means of shutting off the fresh water supply in case of piping failure.*
Filling line(s) located: Side deck
Tank(s) vented: Yes -- vent screens partially to fully clogged -- *strong recommendation made to clean or replace screens, as required.*
Vent(s) location(s): Hull side
Tank(s) material: Hard plastic
Tank(s) secured: Yes
Tank(s) location(s): Midships tankage space
Inspection/cleaning access: Good
Tank(s) condition: Visually sound
Accumulator tank(s) installed: None sighted -- *recommend installation if needed to improve water pressure.*
Water pump(s): 12V
Filter(s): No filter sighted -- *recommend provision of at least one filter.*
Shoreside fresh water inlet(s): One with pressure reducer installed
NOTE: The label on the outside of one of the tanks states "Waste" but the tanks are plumbed for fresh water.

HOLDING TANK(S) (BLACK WATER):

Number of tanks: LectraSan system installed for the toilet so that waste is treated before being pumped overboard
Type(s) of marine sanitation device(s): Type I -- when operating this vessel on a body of water where the discharge of treated or untreated sewage is prohibited by the EPA under 40 CFR 140.3 or 140.4, the operator must secure each Type I device in a manner which prevents discharge of treated or untreated sewage -- this may be accomplished by: 1) closing the sea valve and removing the handle; 2) padlocking the sea valve in the closed position; 3) using a non-releasable wire tie to hold the sea valve in the closed position; or 4) locking the door to the space enclosing the toilet with a padlock or door handle key lock -- *recommend securing as/if required (per 33 CFR 159.7.2.b).*
Lines: Sanitation hose
Shut off valve(s): No
Discharge line(s) located: Overboard after treatment
Waste treatment system(s) installed: Lectra-San

WATER HEATER(S):

Number of heaters: One
Manufactured by: Mor-Flo -- not original
Capacity: 10 USG (reportedly)
How powered: 110V
Supply lines: Pex tubing
Tank(s) secured: Yes
Tank(s) location(s): Midships tankage space
Inspection/cleaning access: Limited -- *recommend providing easy access to tank and connections for inspection purposes.*
Tank(s) condition: Visually sound (where accessible)
Pressure relief valve(s): Yes
Drain fixture(s)/plug(s): Yes -- *recommend plumbing the drain fixture overboard.*

Tankage only inspected visually, not pressure tested.

INTERIOR

INTERIOR:

Style:

Contemporary



Berths:

Two



Wet bar(s):

Yes

Curtains:

Yes -- blinds

Heating/Air conditioning:

Portable 110V heater

Smoke detector(s):

Yes -- operational

Carbon monoxide detector(s):

No -- this vessel has an enclosed accommodation compartment and a gasoline generator and/or inboard gasoline propulsion engine-- *provide a minimum of one marine grade (equipped with a self-wiping sensor) carbon monoxide detector (per ABYC A-24).*

Flammable(s) stored inside cabin:

None sighted

Cabin lamp(s):

12V and 110V

Flooring:

Carpeting installed throughout.

Upholstery:

Cloth

Condition:

Fair to good -- there is water staining in the paneling at the carpet level -- see Window leakage comments.

Window leakage?:

Significant leakage and deteriorated wood noted around the aft windows and the aft ends of the aft side windows -- *carve to sound and replace the woodwork, as required, and re-seal the windows, as required.*



GALLEY:

Stove:

Princess three burner electric with oven -- one of the burners is not operational -- *correct, as required.*



Refrigeration:

Roper RT14BKXFW00 110V with freezer -- not original

Water system:

Pressurized hot and cold

Sink(s):

Twin stainless steel

Storage:

Very good

Toaster:

Black&Decker two slice

Microwave:

General Electric

Coffee maker:

Mr. Coffee 12 cup

HEAD(S):

Number of heads:

Two



Toilet(s):

Electric in the midships head; Sani-Pottie self contained unit in the forward head

Type(s) of marine sanitation device(s):

Type I

Shower(s):

Handheld in stall in the midships head -- unable to get the shower to operate -- *investigate and correct, if/as required.*



DECK & SAFETY EQUIPMENT

DECK AND SAFETY EQUIPMENT

<i>Anchor(s):</i>	Fortress FX-37 located at the bow with approximately 150 feet of 3/8" chain 12# Danforth type located at the stern with approximately 6 feet of 1/4" chain and approximately 50 feet of 7/16" three strand nylon -- bow shackles not wire seized -- <i>recommend wire seizing anchor rhode bow shackles with stainless steel seizing wire.</i>
<i>Anchor windlass:</i>	Quick 12V and manual (handle not sighted) -- a cleat has been installed nearby so that the load can be taken by the cleat (instead of by the windlass) -- the chain guard has broken off -- <i>correct, as required.</i>
<i>Life jacket(s):</i>	Seven adult Type II in aft cabin locker -- in fair condition
<i>Throwable device(s):</i>	None sighted -- <i>provide a minimum of one per USCG (CFR 33, Section 175.15) and state requirements.</i>
<i>Bell(s):</i>	Yes
<i>Horn(s):</i>	12V
<i>Flares (visual distress signals):</i>	Yes -- flares are outdated -- <i>disposal and replacement required.</i>
<i>First aid kit(s):</i>	No -- <i>recommend provision of at least one first aid kit.</i>
<i>Inland Navigation Rule Book (12M-39'4" or longer):</i>	Yes
<i>USCG placards:</i>	"Discharge of Oil Prohibited" placard is posted. MARPOL (Garbage) placard not sighted -- <i>post in the galley facing the waste containment per USCG requirements (CFR 151.59).</i>
<i>Running lights:</i>	Operational
<i>Anchor light:</i>	Operational

AUXILIARY EQUIPMENT

SPECIAL EQUIPMENT:

<i>Boarding ladder(s):</i>	Yes -- hinged ladder bolted onto the swim grid
<i>Compass(es):</i>	3" Aqua Meter at the lower helm and 3" Ritchie at the upper helm
<i>Chart plotter(s):</i>	Garmin 3006C GPSmap
<i>VHF radio(s):</i>	Standard Horizon Intrepid+ and Standard Horizon ECLIPSE+
<i>Boat hook(s):</i>	Yes
<i>Windshield wiper(s):</i>	Yes -- wiper blade is in poor condition -- <i>replace.</i>
<i>Thermometer/barometer/hygrometer(s):</i>	Yes
<i>Shoreside telephone system(s):</i>	Yes, with Marinco phone/cable inlet
<i>Loud hailer(s):</i>	Ray Jefferson Model 310
<i>Television(s):</i>	15" Magnavox flat screen
<i>DVD player(s):</i>	Samsung
<i>Stereo(s):</i>	Pioneer MVH-X380BT digital media receiver
<i>Other:</i>	Standard MST60 cassette player -- not connected

Electronics only tested for powering up, not accuracy. 110V systems not tested.

ELECTRICAL SYSTEMS

12V SYSTEMS:

<i>Batteries:</i>	Three Bond deep cycle RV batteries stored in acid proof battery boxes but not secured nor covered One Bond Special lead acid stored in acid proof battery box with a battery box cover but not secured One battery in acid proof battery box in the forward locker for the anchor windlass
<i>Battery(ies) secured:</i>	Not all -- <i>secure loose batteries so as to allow no movement (per ABYC E-10.7.4 and CFR 183.420).</i>
<i>Battery(ies) covered:</i>	Not all -- <i>fit the three batteries aft of the engines and generator with a minimum of terminal covers (per ABYC E-10.7.7 and CFR 183.420).</i>
<i>Battery selector (on/off) switch:</i>	Yes -- the backs of the switches are open to the engine compartment and need protective covers to minimize spark potential -- <i>fit covers over the backs of the battery selector switches (per ABYC E-11.5.1.4.1).</i>
<i>Battery isolator(s):</i>	Yes
<i>Distribution panel:</i>	Yes
<i>Breaker(s)/fuse(s):</i>	Yes -- breakers and fuses
<i>12V wiring secured and loomed:</i>	Yes -- no split loom installed -- <i>recommend bundling the wiring, especially in the engine space, with self-extinguishing split loom.</i>
<i>Anti-chafe protection:</i>	Yes (where sighted)
<i>12V wiring properly terminated:</i>	No -- wire nuts have been used in some wiring connections for both some of the 12V and 110V connections -- <i>replace wire nuts with butt connectors (preferably waterproof) or terminal strips or make connections in waterproof junction boxes (per ABYC E-11.14.3.6).</i>
<i>Charging system:</i>	Alternators and battery chargers (see Battery Charger section below)

BATTERY CHARGER(S):

<i>Make:</i>	Newmar
<i>Operation manual:</i>	Not sighted -- <i>provide an operation manual for the battery charger (if not already on board).</i>
<i>Output status indicator(s):</i>	An ammeter has been installed for the output current.
<i>Charger(s) in acceptable location(s):</i>	Marginal -- the battery charger is located on the forward bulkhead in the engine space and may be susceptible to excessive heat -- <i>recommend moving to a more appropriate location (per ABYC A-31.5.5.6).</i>

110V SYSTEMS:

<i>Shore power inlet(s):</i>	Two Marincos 30 AMP
<i>Shore power cord(s):</i>	One 30 AMP
<i>Shore power splitter(s)/adapter(s):</i>	Yes -- <i>recommend replacement of plugs with ones that have a locking collar to minimize movement of each plug at each inlet.</i>
<i>AC source selector switch(es):</i>	Yes
<i>Main breaker(s):</i>	Yes
<i>Distribution panel(s):</i>	Yes
<i>Reverse polarity indicator(s):</i>	Yes
<i>GFCI protection:</i>	No GFCI protection sighted for 110V outlets in wet locations (galley, head, engine space, exterior) -- <i>provide GFCI protection as required (install a GFCI equipped 110V outlet in each wet location OR install a GFCI equipped breaker in the appropriate circuit OR install a main GFCI (isolation transformer) between the 110V power supply and the main breaker) (per ABYC E-11.11.4).</i>
<i>AC volt meter(s):</i>	No -- <i>provide AC volt meter (per ABYC E-11.9.3.2).</i>
<i>110V wiring secured and loomed:</i>	Yes (where sighted)
<i>Anti-chafe protection:</i>	Yes (where sighted)
<i>110V wiring properly terminated:</i>	No -- wire nuts have been used in some wiring connections -- see 12V comment.
<i>Wire type:</i>	Romex, which is solid strand -- <i>replace with marine grade 110V wiring.</i>

GENERATOR(S):

Number of units: One



Year: Original
 Manufacturer: Onan
 Serial number(s): Tag illegible
 Model number(s): Tag illegible
 Hour meter: None sighted -- *recommend installation of hour meter to facilitate the tracking of routine maintenance.*
 Location(s): Aft bilge/engine space
 Type of installation: On tray
 Fuel type: Gas
 Kilowatt rating: 8.5 KW
 Drip pan(s) beneath motor(s): Yes
 Cooling system(s): Heat exchanger
 Exhaust discharge location: Transom
 Exhaust piping: Hose -- showing signs of age -- *will require replacement in the foreseeable future.*
 Exhaust hose connections double clamped: No -- *double clamping required (where practical).*
 Muffler(s): Onan Aqualift
 Ventilation: Natural and blower
 Accessibility: Good
 Last major overhaul: Unknown
 Generator set(s) operated: Not operated for purposes of this survey.
 Mechanical survey performed: Yes -- unit reportedly difficult to start -- *correct any deficiencies found by engine surveyor.*

INVERTER(S):

Number of units: One
 Year: Unknown
 Manufacturer: Micronta
 Input (volts/AMPS): 12V
 Output (volts/AMPS/watts): 110V
 Status indicator: Yes -- indicator light installed.
 Location(s): Midships storage locker
 NOTE: Inverter is not connected.

FIRE FIGHTING & BILGE PUMPING EQUIPMENT

FIRE FIGHTING EQUIPMENT:

<i>Portable fire extinguisher(s):</i>	One Type B:C Size I dry chemical A:B:C in the midships storage locker -- certification tag outdated One Type B:C Size I dry chemical A:B:C in the midships hallway -- this extinguisher was manufactured 12 years ago (or more) One Type B:C Size I dry chemical A:B:C at the helm -- this extinguisher was manufactured 12 years ago (or more) One Type B:C Size I dry chemical B:C in the forward cabin -- this extinguisher was manufactured 12 years ago (or more) -- gauge shows "Recharge".
<i>Automatic fire quench system in engine space(s):</i>	One Halon 1301 in the engine space with no certification tag.
<i>All currently certified:</i>	No -- <i>have all fire fighting equipment currently certified (or replace) (per NFPA 10 and California State Fire Marshall).</i>
<i>Inspect annually</i>	<i>Annual external examination (physical condition of the extinguisher and the hanger [or bracket] and verification that the pressure gauge or indicator is in the operable range, at minimum) of all extinguishers is strongly recommended.</i>

Per CFR 25 SUBPART 25.30 (1) -- When the date on the inspection record tag on the extinguisher(s) shows that 6 months have elapsed since the last weight check ashore, then such extinguisher is no longer accepted as meeting required maintenance conditions until re-weighed ashore and found to be in a serviceable condition and within required weight conditions.

BILGE PUMPS:

<i>Bilge pump(s):</i>	One Rule 1100 GPH 12V centrifugal -- the intake is located in the aft engine bilge and the discharge is located in the transom above the LWL
<i>Pump(s) operational:</i>	Bilge pump motor powered up.
<i>Automatic float switch(es):</i>	No -- <i>recommend equipping bilge pump with an automatic float switch.</i>
<i>Manual:</i>	Yes -- portable
<i>High bilge water alarm(s) installed:</i>	No -- <i>recommend installation of at least one high bilge water alarm.</i>
<i>Shower sump pump(s):</i>	Yes -- not tested
<i>NOTE:</i>	<i>Recommend evaluation of the bilge pumping system and upgrading, if required.</i>

THROUGH-HULLS

THROUGH-HULLS AND SEA VALVES:

<i>Through-hull(s):</i>	Engine raw water intakes located in the aft bilges; piped with hose; bronze ball valves installed -- valves are operational -- internal strainers and external screens installed Generator set raw water intake located in the aft bilge; piped with hose; bronze ball valve installed -- valve is operational -- internal strainer and external screen installed Toilet flush water intake located in the midships bilge; piped with hose; bronze ball valve installed -- valve is operational -- external screen installed Forward disused through-hull is not accessible -- <i>ensure that the through-hull is either capped off or fitted with a sea valve.</i>
<i>Below LWL hose connections:</i>	Not all below LWL hose connections have been double clamped -- <i>recommend double clamping where not already in place and where practical, which means that no clamp shall be installed closer than 1/4" to the end of the hose and must fully engage the barb or fitting and no second clamp should be installed if it is cutting into the hose or forcing the hose to be internally cut by the barb or fitting.</i>
<i>Below LWL external strainer(s)/screen(s) condition:</i>	Serviceable
<i>Above LWL through-hull(s) condition:</i>	Some of the above LWL through-hulls are within six inches of the waterline -- <i>recommend fitting those through-hulls with sea valves.</i>
<i>NOTE:</i>	<i>Recommend exercising all sea valves on a routine basis (monthly).</i>

ABYC "Seacocks, Thru-hull Connections and Drain Plugs" Standard H-27 requires, in part, that all sea valves be of the lever activated type. Gate valves are not recommended, as they jam easily and open/closed status is difficult to visually

discern. In addition, it is recommended that all below LWL hose connections be double clamped, but only if the nipple/hose barb is long enough to support the second clamp.

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Unless otherwise specifically requested and provided for and noted in the survey report, this survey report is founded on a comprehensive inspection, including percussion testing of the accessible portions of the hull and deck and including visual evaluation of the fluids, belts and hoses of the propulsion machinery (where accessible), subject to the following listed exceptions: permanently attached bulkheads, ceilings, paneling and other portions of the vessel's structure are not opened up; permanently mounted machinery, tanks and equipment are not dismantled to expose portions of the vessel ordinarily concealed; propulsion machinery, auxiliaries, electrical and electronic circuits and equipment, tanks, tenders, plumbing systems and fittings, miscellaneous equipment, sails and rigging are not operated, sea trialed, tested or opened for internal examination; borings and nondestructive test procedures are not conducted to determine thickness or internal condition of structural members.

Included in the assessment of the values of the vessel is all that belongs to the vessel and may be presumed to be the property of the owner, including (but not limited to) the hull, machinery, equipment, sails and rigging, tenders, furnishings and all that is on board for the purpose of the use of the vessel, excepting only that which, in customary usage, is considered the personal property of the owner or crew or which is specifically excepted at the time of survey. The market value quoted is the best estimate of the price that a willing buyer would pay to a willing seller, both parties having reasonable access to the relevant facts, neither party under any compulsion to buy or sell, and under market conditions at the time and place of survey.

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