

GLADDING MARINE SURVEYING AND CONSULTING, LLC

1738 PICKWICK PLACE-FLEMING ISLAND-FLORIDA-32003

PHONE: 904-945-0511 FAX: 904-215-9243 EMAIL: gladdings@msn.com



SURVEY REPORT VESSEL NAME: xxxxxxxxxxxxx

Prepared by: Bill Gladding AMS® #810

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

INTENDED USE: recreational

SUITABLE FOR INTENDED USE: yes (upon completion of recommendations cited above)

NAVIGATIONAL LIMITS: warm coastal waters of the USA & Caribbean Islands

For regular use in excess of 12 miles offshore suggest carrying Epirb and offshore type lifejackets

VALUATION

Subject vessel was found to be in overall above average condition. Recent sales history, current listings and pricing guides found on May 21, 2017 to use as comparison make a market approach a reliable means for establishing its value. Based upon analysis of the data below it is the opinion of the undersigned the following values should apply:

Current value: \$xxxxxxx Replacement cost: \$551,000 (Bucvalupro.com)

Pricing guides

Abos.com..... \$35,500 to \$42,600

Bucvalupro..... \$75,000 to \$82,500

NADAguides.com..... \$62,050 to \$70,300

(Options not added to guide values unless noted otherwise)

Current listings

Yachtworld.com..... \$75,000 to \$114,900

(4 results – searched 1987 to 1989 models in the USA)

Reported sales

Soldboats.com..... \$60,000 to \$101,000

(8 results – searched April 2015 to present)

APPROVAL

This survey may be used for valuation, insurance or mortgage requirements. This survey checks for compliance with U.S. Coast Guard regulations and American Boat and Yacht Council, Inc.

Recommended Standards and Practices. In addition, the general structural condition of the vessel and suitability for its intended service will be examined. This survey cannot check for latent defects which could not readily be discovered by inspection without removal of machinery, tanks, sheathing, joiner work, upholstery, bulkheads, ceiling, fascia or other fixed material, or disassembly of machinery, plumbing, wiring or other parts components or systems.

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; accordingly, others are not to use this report and not rely upon the contents of this report without payment to the Company of an additional agreed fee based upon the reevaluation of the same factors. The Company shall have no liability for property loss damages, and no liability for punitive damages all of which shall be deemed to have knowingly and voluntarily waived upon use of this report. In the event of dissatisfaction with the conduct of the survey, with errors contained in the report, or by omission of information, the sole and

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maximum remedy shall be limited to the amount of fee actually received for this report which shall be refunded regardless of the number of claims or suits, regardless of whether under theory of tort, contract, warranty, products, outrage or otherwise.

This survey contains opinions and observations based on my skill, experience and training as a marine surveyor and consultant. Under no circumstances shall the report be understood to constitute a representation, guarantee, or warranty expressed or implied of any kind as the condition or soundness for the subject vessel, its hull, engines, machinery, equipment or system or any appurtenances thereof, or the cost of effecting any repairs or modifications. The report of survey is not valid until the fee for the survey is paid in full.

Attorney fees; costs: In any litigation arising out of the contract, the prevailing party shall be entitled to recover reasonable attorney's fees and costs.



William K. Gladding, AMS® #810
Society of Accredited Marine Surveyors
Gladding Marine Surveying and Consulting, LLC

SCOPE OF SURVEY

The vessel was inspected out of the water without making removals or opening parts normally concealed and without making borings to ascertain thickness or condition of structural members. As a result, some areas behind cabinetry and under decks were not reached. Fixtures and appliances were powered up and exercised where indicated. Locker doors and drawers were worked and examined for proper function. Potential leak sources such as portlights and deck hatches were examined for evidence of water stains or other indications of leakage. The hull exterior was inspected visually and sounded with a mallet to locate any voids, delaminating or cracking. The underwater gear and other fittings were inspected and checked for indications of damage, abuse or excessive wear.

Test equipment that may be referenced in the report:

- Tramex Skipper or GE Aquant moisture meter
- Flir® One Android infrared camera
- Ideal Suretest AC electrical test meter
- AC electric three light plug in tester
- Check-Line non-contact digital tachometer
- Multi-meter electrical tester
- Assorted hammers and measuring devices

VESSEL GENERAL DESCRIPTIONS

Exterior arrangement – mono-hull type sailing vessel noted the following:

- Hull – displacement type with round bilges, full keel with skeg under rudder and propeller well protected between rudder and keel; curved stem is nearly plumb; curved sheer is relatively level with lowest point amidships; full height plumb wine glass shaped transom overhangs waterline slightly

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- Decks and superstructure – main deck is slightly recessed and runs from bow to stern around the cabins and recessed stern cockpit; superstructure consists of one cabin located between the foredeck and cockpit

Sailing rigging – basic elements as follows:

- Rig type – cutter rigged mast head sloop
- Keel – integral to hull
- Spars – keel stepped aluminum mast with single spreaders and aluminum boom
- Chain plates – stainless flat bars anchored into hull
- Standing rigging – 1 x 19 stainless wire, swaged stainless terminals, stainless toggles & chromed bronze turnbuckles
- Running rigging – braided synthetic
- Sails:
 - Rigged – main sail
 - Bagged – 120 Genoa & stay sail
 - Laid out -none

Interior arrangement – single level noted the following:

- Staterooms – one forward & aft
- Heads – one forward & aft
- Galley – aft end of main cabin stbd side
- Dinette – main cabin
- Saloon – main cabin
- Helm – aft end of cockpit
- Other:
 - Navigation station
 - Large lazarette

Structural elements

- Hull skin material and type cosmetic finish – solid molded fiberglass & gelcoat cosmetic finish
- Hull grid system layout and materials – fiberglass liner tabbed to hull
- Hull deck joint – matching flanges mechanically fastened
- Continuous transverse bulkheads locations and materials – fiberglassed plywood at anchor locker and lazarette
- Decks and superstructure materials and type cosmetic finish – solid & cored molded fiberglass, gelcoat cosmetic finish & natural teak trims

SURVEY FINDINGS

UPGRADES/REBUILDS

Including but not limited to the following:

- Chain plates cleaned, polished and inspected
- Standing rigging replaced including toggles & turnbuckles
- Boom furling installed for main sail
- Waste holding tank replaced
- Air-conditioner installed
- Solar charging systems installed

HULL ABOVE WATERLINE AND RELATED

Structural elements

Condition: above average

Condition of structural elements such as stringers, transverse framing, bulkheads, partitions and other similar type hull supports based upon visual inspection to insure they are maintaining their proper shape and remain securely

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attached, tap tested to insure they are not delaminated or deteriorated and in some cases examined using a moisture meter

Topsides

Structural condition: above average

Structural assessment based upon visual examination of hull's shape for damage, distortions, sagging, hogging or other signs structure is failing or is not adequately supported; moisture testing to locate areas where abnormal readings may indicate deterioration of laminates or cores; and tap testing areas that are suspect as a result of abnormal indications from visual inspection and readings from moisture meter

Cosmetic condition: above average

Cosmetic condition of paint, gelcoat and varnish based upon surveyor's opinion of appearance compared to similar type vessels considering factors such as gloss, extent of oxidation, flaking, discoloration, wear and tear or other factors

Condition other features: above average

- Guards – sheer & hull side (teak with stainless striker)
- Swim platform - none
- Permanently installed means for reboarding – folding stainless ladder

Deck drain systems

Primary drainage system: direct overboard

Other drainage systems: scuppers Condition: above average

Weather decks with in-hull drain systems: cockpit & exterior lockers

The undersigned has witnessed several sinking and flooding events due to clogged deck drains backing up rain water on deck then flooding to hull interior. In order to prevent this type of event from occurring deck drain fittings and piping should be maintained leak free, kept clean and free of debris and hatch seals maintained to prevent water from leaking to hull interior or accumulating on weather decks and spilling to hull interior.

Decks & superstructure

Structural condition: above average

Structural assessment based upon visual examination of hull's shape for damage, distortions, sagging or other signs structure is failing or is not adequately supported; moisture testing to locate areas where abnormal readings may indicate deterioration of laminates or cores; and tap testing areas that are suspect as a result of abnormal indications from visual inspection and readings from moisture meter

Cosmetic condition: above average

Cosmetic condition of paint, gelcoat and varnish based upon surveyor's opinion of appearance compared to similar type vessels considering factors such as gloss, extent of oxidation, flaking, discoloration, wear and tear or other factors

Exterior soft goods

Condition/appearance: average Wear & tear: light Serviceable: yes

Location & type (installed at time of survey):

- Main sail cover (canvass)
- Cockpit Bimini (stainless & canvass)
- Winch, hatch, outboard covers (canvass)
- Cockpit dodger (stowed/canvass & Eisenglass)

Exterior hardware

Condition/appearance: above average Anchoring & bedding: appeared adequate

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Location & type:

- Bow & stern rails (welded stainless)
- Main deck safety rail (stainless stanchions & vinyl coated lifelines)
- Hand holds (natural teak)

Tie-up gear

Condition/appearance: above average Anchoring & bedding: appeared adequate

Location & type:

- Foredeck (2 x stainless fixed mooring cleats & 2 x bronze fair leads)
- Amidships & aft (4 x stainless fixed mooring cleats)

Rigging sailing

Inspection type – deck level unless noted otherwise

Overall condition – above average

Rigging brand – unknown

Age of rigging as reported by vessel owner – new standing rigging & recently installed boom furling system

Descriptions and/or comments:

- Keel – solid without cracks or other signs of distress
- Centerboard – n/a
- Mast and spars – standing in column without dents, scratches or other signs of damage or abuse
- Mast support:
 - Step – solidly attached
 - Partners – newly installed Spartite®
 - Chain plates – no evidence of damage or abuse
- Hardware & fittings - serviceable
- Standing rigging - new
- Running rigging – appeared serviceable
- Furling systems:
 - Jib & stay sail – appeared serviceable (Harken drum type)
 - Main – appeared serviceable (Profurl boom type)
- Winches:
 - Mast (Lewmar 24)
 - Aft end of main cabin (Lewmar 40 electric & Lewmar 16)
 - Cockpit coaming (2 x Lewmar 43)
- Sail condition – all appeared serviceable

Anchoring gear

Condition/appearance: above average Function: appeared serviceable

Locations/descriptions:

- Anchor pulpit – integral molded fiberglass with natural teak overlay
- Chute(s) – 2 x stainless chutes & plastic rollers

Exterior hatches, portlights and doors

Condition/appearance: above average Function: normal Gaskets and seals: appeared serviceable

Location & type:

- **Secondary egress (escape) – main cabin top**

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- Companionway/main entrance – sectional & sliding (natural teak & molded fiberglass)
- Cabin sides & cockpit – hinged portlights (stainless & glass)
- Cabin top – hinged deck hatches (aluminum & plastic)
- Main deck & cockpit – hinged locker lids (molded fiberglass)

HULL BELOW WATERLINE AND RELATED

Hull below the waterline

Structural condition: above average

Structural assessment based upon visual examination of hull's shape for damage, distortions, sagging, hogging or other signs structure is failing or is not adequately supported; tap testing for purposes of comparing variations in tap sound indicative of previous repairs, delaminating, moisture intrusion or blistering; and moisture testing if hull is sufficiently dried and does not have coatings that interfere with moisture meter function to locate areas where abnormal readings may indicate deterioration of laminates or cores

Cosmetic condition: average

Cosmetic condition based upon surveyor's opinion of hull appearance compared to similar type vessels considering factors such as paint build-up, smoothness of hull, blistering and other features that affect its appearance

Underwater gear

Condition/appearance: average or better Function: appeared serviceable Damage, abuse or excessive wear: none noted

- Propellers – Variprop® 18" three bladed bronze feathering type
- Shafting – 1 1/4" stainless
- Shaft support – stainless mount bolted to keel
- Bearings – 1 x rubber Cutless® type
- Shaft log – integral fiberglass
- Shaft seal – Tides Marine® self-aligning dripless type (spare seal installed)
- Fasteners – appeared secure

Comments:

- **Propeller shaft Cutless® type bearing appeared serviceable but is moderately worn and not aligned well to shaft**

Rudders & linkages

Condition/appearance: above average Function: appeared serviceable Damage, abuse or excessive wear: none noted

- Rudder description – composite fin & stainless stock
- Thru-hull seal – bronze packing gland
- Supports – shoe at bottom, rudder port & bearing at cockpit deck
- Linkages – bronze rack & pinion
- Steering components – rack & pinion steering
- Emergency tiller – not found

Thru-hulls, seacocks, transducers

Condition/appearance: above average Function: normal Damage, abuse or excessive wear: none noted

- Underwater – Threaded bronze fitted with 1/4 turn valves with stainless clamps on hoses connections at the following bilge locations:

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- Main cabin port side settee – **air-conditioner inlet & waste overboard**
- Main cabin aft bilge – **main engine inlet & seachest inlet**
- Topsides – threaded bronze
- Transducers – appeared serviceable

ACCOMMODATIONS, HOUSEHOLD SYSTEMS AND COMFORT SYSTEMS

Interior spaces

Bulkheads, partitions and cabinetry found to be solid and in good condition, locker and cabinet doors and drawers found to be in above average condition and working order. Interior décor was found to be in overall above average condition with less than average wear and tear descriptions as follows:

- Doors – hinged varnished teak
- Decks:
 - Heads & galley – molded fiberglass
 - Main cabin & staterooms – varnished teak & holly
- Cabinetry – molded fiberglass & varnished teak
- Bulkheads and partitions – varnished teak & various others (papered, laminate & molded fiberglass)
- Ceilings – spackled molded fiberglass
- Counters - laminate
- Cushions – vinyl skins
- Natural ventilation – opening appliances
- Powered ventilation – none
- Fixtures and appliances – serviceable

Galley equipment

Condition/appearance: above average Function: normal

Locations/descriptions – Located in galley except as noted:

- Sink (double stainless)
- Range & oven (stainless LPG two burner)
- Built-in icebox (Technautics 12 volt cold plate system)

Sanitary system

Condition/appearance: average or better Function: appeared serviceable

Locations/descriptions:

- Quantity - two
- Manufacturer - Jabsco
- Type – non-macerating manual marine toilet
- Vented loops (if required) – not found
- Y-valves (direct overboard discharge) – main cabin port side settee

Air-conditioning

Condition/appearance: average Function: appeared serviceable

Locations/descriptions:

- Quantity - one
- Manufacturer – Mermaid Air
- Type – self-contained heat pump
- Controls – main cabin (digital programmable thermostat)
- Equipment – main cabin port side settee
- Cooling pump – main cabin port side settee (120 volt centrifugal)
- Test performed – visual inspection only

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TANKS, PUMPS, PIPING AND RELATED

(Capacities listed in this section are based upon published specifications for this model unless stated otherwise)

Fuel

Found the following to be in average condition without significant corrosion or evidence of leakage to level filled where accessible for inspection:

- Tanks – 57 gallons capacity contained in one aluminum tank secured in main cabin bilge
- Fills – port side deck amidships
- Vents – hull side
- Plumbing materials – USCG Approved Type-A hose
- Shut-off valves – tank outlet
- Filters – engine compartment (Racor 500)
- Pumps – Stewart Warner 12 volt electric prime pump
- Level gauges – cockpit

Potable water

Found the following to be in average condition without significant corrosion or evidence of leakage to level filled where accessible for inspection:

- Tanks – 157 gallons capacity contained on one aluminum tank secured in main cabin bilge
- Fills – stbd side deck amidships
- Vents – hull side
- Plumbing materials – plastic hose
- Shut-off valves – not found (manifold in stbd settee)
- Filters – stbd settee (screen for pump)
- Pressure pump – stbd settee (Shurflo 3901-0216)
- Accumulator tank – stbd settee
- Water heater – port side of lazarette (Seaward S-1200 [11 gallons, 120 volts & engine heated])
- Dock water inlet – none
- Level gauges – navigation station

Waste

Found the following to be in above average condition without evidence of leakage to level filled where accessible for inspection:

- Tanks – 25 gallons capacity contained in one plastic tank secured in main cabin port side settee
- Deck fitting – port side deck amidships
- Vents – hull side
- Plumbing materials – PVC hose
- Y-valves – port side settee (overboard & deck fitting)
- Overboard valve – port settee
- Discharge pump – port settee (manual diaphragm type)
- Vented loop (if required) – n/a
- Treatment device – none
- Level gauges – none

LPG/CNG system

Condition/appearance: average Function: normal Damage or abuse: none

- Storage locker – integral fiberglass at stbd side deck

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- Tank quantity and material – 2 x aluminum WC 23.8 (10 lbs lpg each)
- Solenoid valve, regulator, pressure gauge and control – yes
- Leakage test (should hold steady pressure for three minutes) – **Pass**

ENGINES, AND ENGINE AND VESSEL CONTROLS

Engines

Condition/appearance: average Function: normal Damage or abuse: none

- Type/description – four cylinders naturally aspirated diesel equipped with close coupled straight drive marine transmission
 - Mounts – adjustable vibration isolator type
- Location – aft end of main cabin
- Cooling system – closed loop freshwater & raw water cooled heat exchanger
- Mounting:
 - Foundations & beds – molded fiberglass liner
- Cleanliness – average or better
- Fluid levels and condition – visual inspection:
 - Engine oil – full (normal)
 - Engine coolant – full (normal)
 - Transmission oil – full (normal)
- Accessibility - good

Exhaust systems

Condition/appearance: average Function: normal Damage or abuse: none noted

- Exhaust manifolds – freshwater cooled cast iron
- Risers – raw water cooled iron
- Exhaust fittings – n/a
- Muffler – can shaped fiberglass water lock type
- Exhaust outlet – transom/stainless thru-hull
- Straight runs – black rubber hose
- Connecting hoses – black rubber hose
- Hose clamps – double stainless at each connection point

Engine ventilation

Condition/appearance: average Function: normal

Location & type:

- Natural – cabin interior
- Powered – DC blower

Engine controls

Condition/appearance: average Function/ease of operation: normal

- Manufacturer/model - Edson
- Description – single lever type sleeved cable manual type
- Locations – stbd side of cockpit
- Neutral safety interlock (prevents starting in gear) – none

Engine instrumentation

Condition/appearance: average or better Function: appeared serviceable

- Manufacturer – Yanmar & Stewart Warner
- Type – analog electric

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- Locations – cockpit:
 - RPMs
 - Fuel level
 - Oil pressure
 - Temperature
- Alarms - yes

Steering

Condition/appearance: average Function/ease of operation: normal

- Manufacturer/model - Edson
- Locations – aft end of cockpit
- Description – wheel type rack & pinion

EQUIPMENT

Pumps dewatering and utility

Condition/appearance: average or better Function: normal

Bile location, type & description:

- Main cabin bilge – dewatering (Rule 3700 gph)
- Engine room – dewatering (Jabsco 12 volt diaphragm type plumbed to keel sump)
- Cockpit – dewatering (manual diaphragm type)

Rigging utility

Condition/appearance: above average Anchoring & bedding: appeared adequate

Type, location & description:

- Tender davits – transom mounted (welded stainless rigged with manual tackles)
- Outboard crane – aft end port side deck (painted aluminum rigged with manual tackle)

Windlass

Condition/appearance: average or better Function: appeared serviceable

Descriptions (windlass located at foredeck unless noted otherwise):

- Manufacturer/model – Simpson Lawrence Express
- Type – 12 volt horizontal with rope/chain gypsy
- Control locations - foredeck
- Service disconnect – navigation station
- Overcurrent protection – breaker/disconnect
- Test performed – visual inspection

Accessories

Condition/appearance: average Function: appeared serviceable

Description & location:

- Watermaker (PUR MROD-40E)

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ELECTRICAL SYSTEMS

Galvanic corrosion protection

Condition/appearance: above average Serviceable: yes

Descriptions & locations:

- Anodes (zinc unless noted otherwise) – propeller & prop shaft
- Bonding system - none
- Galvanic isolators/Isolation transformers – not found

AC electrical system

Condition/appearance: average or better Function: normal

Locations & descriptions of significant components and features:

- Voltage – 120
- Inlet types & locations – 1 x 30 amps (cockpit aft end port side)
- Inlet circuit protection – main panel
- Main panel:
 - Location – navigation station
 - Instrumentation – power indicator lamp
 - Source selector switches – n/a
 - Reverse polarity indicator - yes
- Tests and examinations:
 - Shoreline output – not checked
 - Generator output – n/a
 - Inverter output - normal
 - AC/DC grounding connection - yes
 - Condition of shore cord - average
 - Condition of shore cord inlet – above average

DC electrical system

Condition/appearance: average or better Function: normal

Locations & descriptions of significant components:

- Voltage - 120
- Panel locations – navigation station
- Panel instrumentation – volt & amp meters
- Branch circuit protection - breakers
- Primary circuit protection – breakers & fuses

Battery charging devices

Condition/appearance: average or better Function: normal Damage or abuse: none noted

Locations/descriptions:

- AC electric – see inverter section that follows
- Alternators – main engine
- Renewable – solar panels:
 - 3 x Uni-Solar® flexible types
 - 2 x Siemens M75
- Charger controllers:
 - Cockpit locker port side (Sunforce 12 volt 30 amps)
 - Main cabin stbd side settee (Sunforce 12 volt 7 amps)

Inverters

Condition/appearance: average or better Function: normal

Locations/descriptions:

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- Location, make & model – main cabin stbd settee back (Heart Interface Freedom Marine 25)
- Output – AC/2,500 watts @ 120 volts; DC/130 amps @ 12 volts
- Disconnect location – navigation station
- Overcurrent protection location & type – fuse (adjacent to inverter)
- Installation indicated at man panel? – inverter control adjacent to main panel

Storage batteries

Condition/appearance: average or better Function: appeared serviceable Damage or abuse: none noted

- Batteries – maintenance free AGM types secured at the following locations:
 - House – main cabin port & stbd settees (4 x Group 31 size)
 - Engine starting – main cabin stbd settee (Group 24 size)
- Disconnects – navigation station

Battery disconnects or primary circuit protection for high amperage DC systems such as engine & AC generator cranking, windlasses, capstans, bow & stern thrusters and davits should be toggled off when not in use to prevent them from energizing unexpectedly due to failed components or short circuits that can lead to equipment damage or fire while vessel is not in use or unattended

ELECTRONICS AND NAVIGATION EQUIPMENT

Condition/appearance: average Function: appeared serviceable

- Cockpit:
 - Magnetic compass (Gemini)
 - Autopilot (Autohelm ST6000)
 - Chart plotter, radar, depth, wind & speed (Garmin GPSmap 740s)
- Navigation station:
 - SSB (Icom IC-M710)
 - Pactor Modem (SCS PTC-IIe)
 - Chart plotter, radar, depth, wind & speed (Garmin GPSmap 440)
 - VHF (Icom IC-M402)

SAFETY EQUIPMENT

(Items in this section should be considered compliant with applicable sections of Code of Federal Regulations and serviceable unless noted otherwise)

Fire safety equipment

- Fixed - none
- Fixed fire system manual activator – n/a
- Portable handheld USCG Approved Sizes located as follows:
 - BCI – galley & cockpit stbd locker
 - AIIBCI – forward stateroom

Comments:

ABYC recommends compliance with this standard (A-4) for all boats, associated equipment, and systems manufactured after July 31, 2009:

4.5.1 Fire extinguishing equipment (portable or fixed) shall be U.S. Coast Guard approved, and listed or approved by a recognized independent testing laboratory. The installation and use of such fire extinguishing equipment shall be in accordance with the manufacturer's instructions.

4.5.2 Inboard and sterndrive boats with engine compartments shall have either:

4.5.2.1 a fixed fire extinguishing system installed to protect the engine compartment ([see A-4.7](#)), or

4.5.2.2 a single suitably sized clean agent portable fire extinguisher provided and installed in proximity to a port to permit discharge directly into the engine compartment without opening the primary access. ([See Table IV](#) for determination of the minimum portable clean agent fire extinguisher size for this usage).

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Gas detection systems

- CO – not found
- Smoke – not found
- LPG – not found

Emergency bilge pumps and high water alarms

- Dewatering pumps – vessel is equipped with multiple pumps
- Audible alarms – not found

Signaling devices

- Flares - yes
- Hull mounted sound – not found
- Handheld sound - yes
- Epirb – not found

Navigation lights

- Side – bow pulpit
- Steaming – front of mast
- Stern – stern rail
- Anchoring – top of mast

Flotation devices

- Personal & throwable USCG Approved devices located as follows:
 - 9 x Type II adult & 2 x Type V inflatable
 - Lifesling
- Liferafts – Revere Survival Valise

Ground tackle

Condition/appearance: average or better Function: appeared adequate for intended use

Locations/descriptions:

- Primary anchor – 45 lb CQR, chain lead & laid nylon (at ready)
- Back-up anchor – 20 kg Bruce, chain lead & laid nylon (at ready)
- Back-up anchor – conventional, chain lead & laid nylon (cockpit stbd locker)

Additional required (non-safety)

- Pollution placards (Vessels 26 feet and over with a machinery compartment) – engine room
- Marpol Trash Placard (Vessels 26 feet and over) – not found
- Written trash disposal plan (Vessels 40 feet and over) – not found
- Navigation rules (Vessels 39.4 feet and over) – not found
- Vessel identification locations:
 - HIN – upper stbd transom corner
 - Name – not found
 - Registration # - not found

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SUMMARY REMARKS AND NOTES

Items on the following lists are grouped in several categories according to the source of their advice. Items in bold face are also listed in the Recommendations section at the beginning of this report and should be addressed on a priority basis. The remaining items on the lists that follow will likely not interfere with the safe and reliable function of the vessel but may improve its utility and/or convenience.

REGULATORY AND/OR STATUTORY DEFICIENCIES

Items on this list may not affect vessel safety but if ignored may result in fines and/or penalties:

1. Put aboard the following as required by Code of Federal Regulations:
 - a. Marpol Trash Placard
 - b. Written Trash Disposal Plan (<http://www.gladdingmarinesurvey.com/pdf/uscgwaste.pdf>)
 - c. Copy of Navigation Rules

STANDARDS DEFICIENCIES

ABYC Standards and Technical Information Reports are advisory only; their use is entirely voluntary. They are guides to achieving a specific level of design or performance, and are not intended to preclude attainment of desired results by other means:

2. Install isolation valves on or near main engine where water heater hoses attach so they can be turned off when the engine heat is not needed to make hot water to avoid possible leakage and loss of main engine coolant that may result in overheating damage of the main engine.
3. A galvanic isolator was not found installed on AC shore power system; suggest installation of isolator to provide measure of protection against galvanic and stray current corrosion when shore power is in use.
4. **30 amps shore power inlet fitting has been replaced with 50 amps type without matching upgrades to vessel wiring and overcurrent protection; recommend reinstallation of 30 amps inlet fitting to avoid overloading system or employing marine electrician to perform necessary upgrades to continue use of 50 amps inlet system.**
5. **House bank batteries have several connections made to ungrounded terminals that are not furnished with overcurrent protection; recommend installation of appropriately sized breakers or fuses to insure all circuits are adequately protected.**
6. **Install CO/smoke alarm in main cabin.**
7. **Install a level switch in the keel sump that sounds audible alarm when excess water is present in bilge.**

SUGGESTED REPAIRS AND/OR CHANGES

Items based upon surveyor's observations or experience that may improve the vessel's reliability, utility or longevity:

8. Vented loop installed on main engine raw water system may spit water occasionally; suggest replacing with type that has drain line to direct leakage away from engine and other components.
9. "Rode Management Module" is missing from anchor windlass; replace with new.

(End of report photo pages to follow)

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PHOTOS



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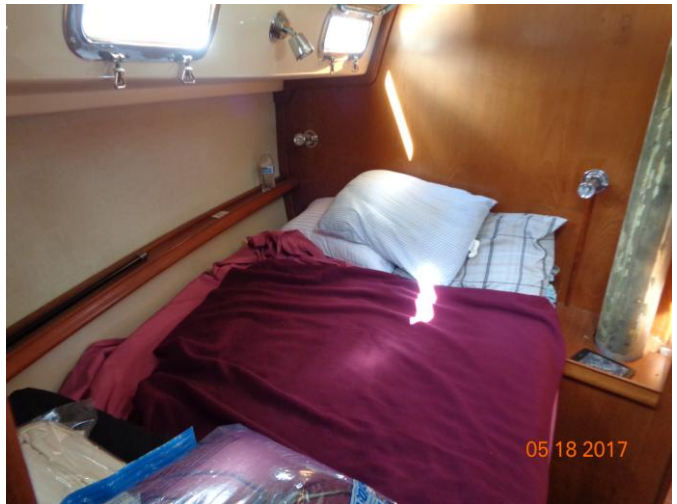
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