



# **E.B.C.S. Marine Survey**

CONDITION SURVEYS - DAMAGE APPRAISALS

INSURANCE – VOYAGE PREP- FINANCE

## **PURPOSE: INSURANCE UNDERWRITING CONDITION & VALUE**

This vessel inspection and report are intended for the purposes and for the client to which this report is addressed, and not intended for any other person or purpose. This report represents only on the condition of the vessel where at/as was on the date of the inspection only. It provides no guarantee and no prediction of the vessel's condition or use on any later date.

This report is based only on the facts available to the surveyor in attendance and is submitted without prejudice to the right of whom it may concern. The right to amend and/or supplement this report should additional information be made available is reserved. The intended users of this report and appraisal are for the client and those lenders and underwriters considering financing or insuring this vessel for this client only, and is not transferable. Underwriters are not to accept this survey report for any other person, for any reason, except for the named client. Verify via [EBCS@cox.net](mailto:EBCS@cox.net).

**MAKE/MODEL: 1975 Stephens Forward Pilothouse Motor Yacht**

**Survey Date: 11/6/18**

**Report Date: 11/7/18**

### **VESSEL IDENTIFICATION:**

**Name: Chinta Mantis**

**Hull#: M-177**

**DOC#: 565431**

**Location: Fairhaven Shipyard – Fairhaven, MA**

**Vessel type: Power**

**LOA: 86'-0"**

**BEAM: 20'-6"**

**DRAFT: 6'-8"**

**DISP: 168,000#**

**BUILDER: Stephens Marine**





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Survey requested by the Insured: Massachusetts Maritime Academy via Chuck Fontaine

508-889-5821

[cfontaine@matitime.edu](mailto:cfontaine@matitime.edu)

Survey was attended by the vessel's captain, and myself - surveyor at Fairhaven Shipyard – Fairhaven, MA

## **CONSTRUCTION:**

**Hull:** 5056-H116 and 6061-T6 Welded Aluminum plating & frames  
**Thru-hulls:** Bronze with bronze seacocks  
**Rudder:** Custom welded balanced aluminum  
**Decks:** FRP Cored with Closed Cell Foam  
**Cabin:** FRP finished in plain finish gel coat, with faux teak & holly sole

## **MACHINERY:**

**Engines:** Twin GM Detroit 12V-71 N 530 BHP Diesel Engines  
**Engine serial #'s:** Not Observed  
**Hours indicated:** P – 17629 S - 17611  
**Transmissions:** GM 3.0:1 Reduction  
**Propellers & Shafts:** 4 bladed nibril on two piece 2 ½" A22 stainless steel shafts  
**Ventilation:** Natural side venting & electric blowers  
**Generator:** Two 30 Kw Northern Lights Diesel Generators  
**Model #:** P - 3166A-1351A S – Not Observed  
**Serial #:** P – AD 156197 CPK S – Not Observed

**Separate Mechanical Survey Completed:** No

## **TANKS:**

**Fuel:** 6,200 gallons  
**Fuel delivery system:** USCG Approved Type A I rubber hose  
**Water:** 1000 gallons  
**Holding:** 200 gallons



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## **ELECTRICAL SYSTEM:**

**Alternator:** OEM 80 amps  
**Batteries:** 8 - 8D AGM – House  
4 – 8 volt for 32 volt – engine bank  
2 - 24 Series Wet Cell – port generator  
2 - 24 Series Wet Cell – starboard generator  
**Circuit Protection:** Thermo magnetic circuit breakers  
**AC System:** via port & starboard 50 amp shore power inputs  
Thermo magnetic circuit breakers  
via 50' 50 amp cord

## **DECK EQUIPMENT:**

**Anchors:** Two 210 # Forfjord Stockless Anchors  
P - 5/8" X 400' galvanized all chain rode  
S – 5/8" X 600' galvanized all chain rode  
**Windlass:** Ideal 220 volts windlass/capstan

## **SAFETY & USCG REQUIRED EQUIPMENT:**

**Pumps:** 1 – 240 volt crash pump  
**High Water Alarm:** Yes  
**Fire extinguisher(s):**  
Size II BC – crew mess  
Size II BC – pilothouse alcove  
Size I BC – port pilothouse  
Size I BC – Crew stateroom  
Size I BC – port aft salon  
Size I BC – port & starboard aft cabins  
Size II BC - galley  
Twin Bottle fixed engine space system  
**CO Detector:** Observed  
**PFD's** 8 Type I Offshore adult  
5 Type II nearshore  
2 - Type IV Liferings  
1 – Type IV cushion



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## **SAFETY & USCG REQUIRED EQUIPMENT(continued):**

Horn: Single trumpet 12 volt electric  
Bell (>39.4'): Observed  
Flares: 4 handheld red exp. 12/21 & 4 - 12 gauge red aerals exp. 10/21  
First aid kit: Observed  
Oil Placard (26' & longer): Observed  
MARPOL Trash Placard (>26' written plan over 40'): Observed - Plan observed  
USCG Rules of the Road: Observed  
Marine Sanitation Device: Type III MSD in accordance with 33 CFR Part 159

Note: Required systems are present and found to be operational as required by USCG regulations, with exceptions noted.

## **NAVIGATION EQUIPMENT:**

Compass: Ritchie Globmaster 6"  
VHF Radio: Icom IC-M504 DSC with Command Mic II at helm  
Fathometer: via Furuno FCV-588 fishfinder  
GPS: Furuno GP32 WASS GPS  
Radar: via Furuno FR8062 & 4 Kw open array antenna  
Via Furuno RDP 150 CRT & 4 Kw open array antenna

## **MISCELLANEOUS EQUIPMENT: (Not limited to the following items)**

Autopilot: Robertson AP45  
Spotlight: Flybridge mounted remote controlled spotlight  
Trim Tabs: Bennett twin cylinder with helm rocker switches  
Refrigeration: Raritan Icer-ette – aft deck  
Twin Sub Zero refrigerators – aft deck  
Twin Sub Zero 601R stand up units – galley  
Sea Frost freezers forward of crew's mess  
Stove: 5 burner Jenn Air glass cooktop  
Microwave: Panasonic stainless steel – main galley  
Oven: GE – main galley  
Dishwasher: Bosch – main galley  
Bowthruster: via Side Power twin joystick controller  
Washer/Dryer: LG washer & dryer  
Tender: Pierce Airboats 10' RIB HIN: PDK10800J798  
OB Motor: Yamaha F50LA Four Stroke Serial #: 6C1 L 1048428



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## **COMMENTS**

**OVERALL:** "Chinta Manis" is in very good overall condition. It is obvious that she has been well maintained. She is considered a very good insurance and or finance risk.

**BOTTOM:** The entire bottom was inspected at haulout to identify areas of repair, damage, or corrosion. No such areas were detected. There are approximately 3 coats of antifouling bottom paint.

**DECKS:** The weather decks aft of the foredeck have a mechanically fastened application of teak and rubber. The decks are in very good condition with just a few exposed fasteners observed.

**TOPSIDES:** The white Awlgrip topsides are in very good condition with some areas of corrosion and bubbling observed, which is normal and expected of aluminum construction. Those cosmetic problem areas should be addressed as required.

**THRU-HULLS:** Bronze thru-hulls were observed above and below the waterline. All properly bedded, with double clamped hoses in place. The seacocks were exercised and found to be working freely

**PROPELLERS & SHAFTS:** The 4 bladed nibral propellers are in very good condition. The two piece shafts are 2 ½" A22 stainless steel, and were found to be in very good condition. There are Spur line cutters installed. The shafts have a streamline anode installed on each. The Spur line cutters have anodes installed on each.

**CUTLASS BEARINGS:** The cutlass bearings appear to be a brass sleeve with a vulcanized rubber bearing sleeve inside, with set screws securing into the struts. Upward pressure was applied to the propeller blades to observe slack in the bearing. The shaft movement was slight on the port side. The starboard side bearing is deemed to have some wear, but deemed to be in serviceable condition at present. Recommend careful monitoring at future haul-outs, and replace when needed.

**RUDDERS:** Custom balanced rudders were inspected and found to be in good condition, well sealed, and tight in their ports.

**TRIM TABS:** The Bennett twin cylinder trim tabs are in good condition and have R-4 zinc anodes installed on each.

**BOW THRUSTERS:** The Sidepower bow thruster appears to be in very good condition, and has proper anodes installed.

**GROUND TACKLE:** The port 210 # Forfjord Stockless Anchor has 400' of 5/8" galvanized steel all chain rode. The starboard anchor of the same type and size has 600' of 5/8" galvanized steel all chain rode.



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**WINDLASS:** The Ideal 220 volts windlass/capstan has helm rocker switch controls. It appears to be in very good condition and reported to have been recently rebuilt.

**ENGINES:** The twin GM Detroit Diesel 12V-71N 530 BHP Diesel engines appear to be in excellent cosmetic condition, with clean fluids at proper levels, and signs of recent maintenance. The hour meters show the engine hours to be 17629/17611 hours. The engine space has electric blowers as well as natural ventilation, and is protected by a twin large bottle CO2 fixed extinguishing system.

**TRANSMISSIONS:** The T transmissions appeared to be well maintained, with clean fluids at proper levels.

**SHAFT SEALS:** The dripless shaft seals appeared to be in very good condition with no signs of leaking observed.

**STABILIZERS:** The Vosper stabilizers appeared to be in very good condition with reports of having recently been used and working properly.

**GENERATOR:** The two 30 Kw Northern Lights diesel generators are installed in the same space as the engines, and share the fixed fire protection system. The generators started easily and found to provide heavy load power.

**FUEL TANKS:** The two fuel tank is properly rated for their use. USCG A1 rubber fuel lines run to the engines, fuel fills, and exterior fuel vent fittings. The tanks were visually inspected where possible and found to be in very good condition with no signs of leaks present. The tanks were found to be properly bonded as recommended by ABYC 24.16.1 . There are shut off valves at each tank as recommended by ABYC 24.15.10.3 .

**WATER TANK:** The water tank was found to be in very good condition as could be observed. There are no observable signs of leaking at the tank, plumbing, pump, or faucets. The AC electric water heater was found to be in good outward condition with no leaks observed. The unit was powered up and found to provide heated water via the AC heating coils.

**ELECTRICAL:** The vessels wiring consists of stranded copper wiring for the AC & DC systems. The DC electrical system is properly tied into the vessels electrical grounding system using the engines as a common ground. The electrical systems were tested and found to be working properly with no defects noted. ABYC E-11 recommends that all electrical wiring runs be secured no further than every 18". Wiring runs were found to be neat and well supported, no signs of corrosion were observed. The batteries were found to appropriately housed and secured. The AC inlets are more than 10' from the distribution panel. ABYC 11.10.2.8.3 requires a circuit breaker to protect inlet wires for runs exceeding 10' of conductor length, which were observed. There may have been changes to electrical wiring standards since the vessel was constructed. It is recommended on all vessels that systematic wiring inspections and updates be performed to conform to new standards.

**NAVIGATION LIGHTS:** The navigation lights were energized at the electrical distribution panel and found to be working properly. The set consists of separate port & starboard sidelights, a masthead, anchor, and a stern light.



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**ELECTRONICS:** All electronics were powered up, tested, and found to be working properly.

**CABIN:** The cabin is in very good condition. The interior upholstery shows no signs of wear.

**SAFETY:** The safety equipment required by USCG Regulations was inventoried and deficiencies noted in the previous safety section and in the recommendations to follow. There were no automatic bilge pumps aboard. The only bilge pump is an AC motor driven pump in the engine space. There is a high water alarm that annunciates at the helm, which was also working properly.

**CO DETECTORS:** There are several CO and smoke detectors aboard. NFPA guidelines recommend both for closed spaces occupied by persons.



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## **RECOMMENDATIONS (Essential items to be completed):**

**Highly recommend installing several DC powered automatic bilge pumps**

**Liferaft is due for inspection**

**Hydrostatic release for liferaft is expired**

**EPIRB Registration sticker indicates having expired 10/17**

## **MAINTENANCE ITEMS (Advisory information provided as a guide for continued care for the vessel):**

**Address areas of bubbling beneath various areas of painted finish as needed**

**Monitor wear of cutlass bearings and address when required**

**Test fire pump system, inspect hoses & applicators for proper operation**

**End of Notes. Valuation and photos follow**





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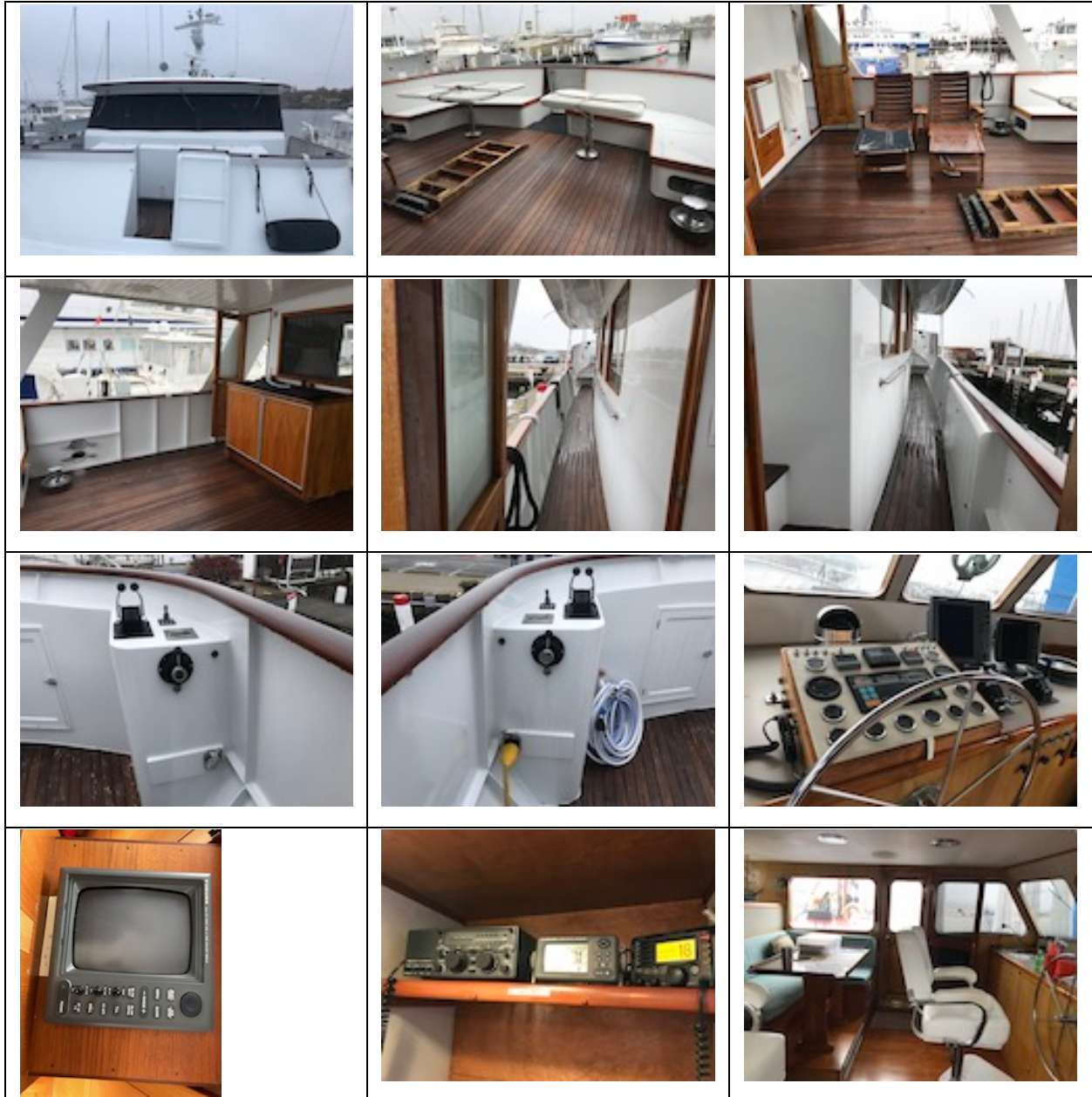
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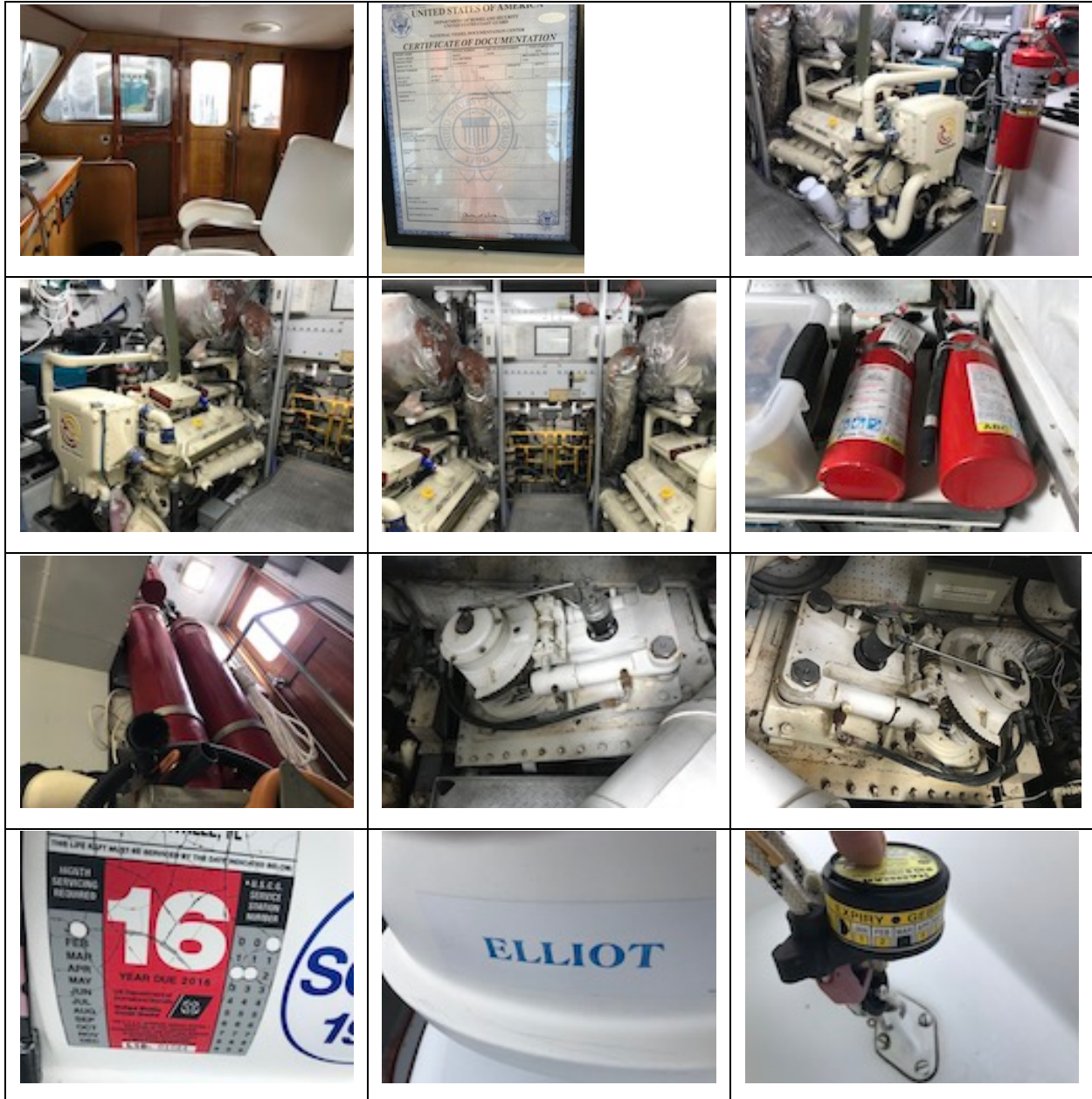






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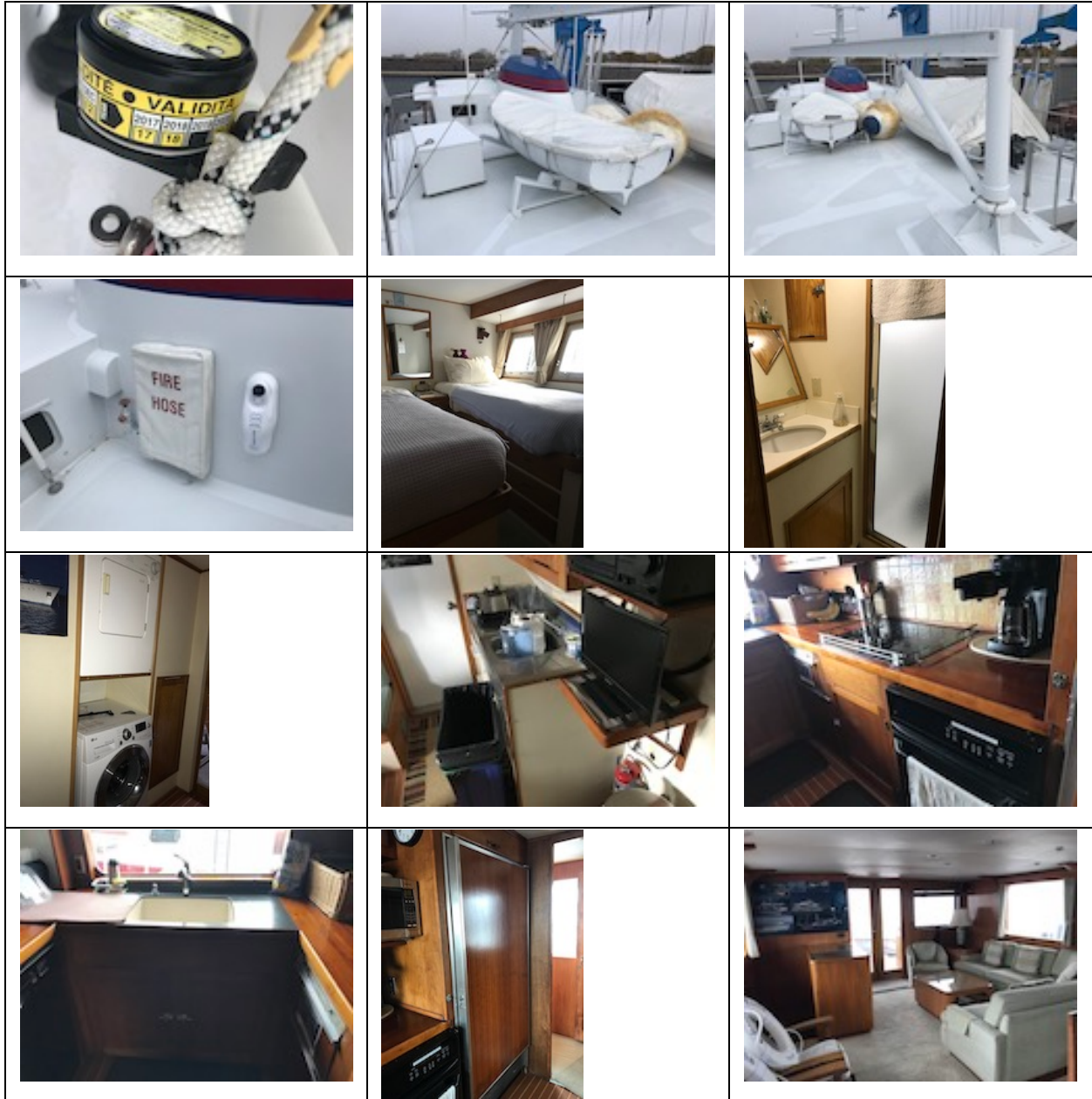
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## **SURVEY LIMITATIONS:**

This report is valid at the time of inspection and is not a warranty of the condition of the vessel or associated equipment. This report does not represent a complete record of all information exchanged verbally between the surveyor and client. The surveyor cannot be held responsible for any misstatement. This report is provided for the exclusive and confidential use of the client and his designated agents. Use of this report to gain financing, insurance, or to close in the purchase of the vessel contained in this report, shall thereby stand as acceptance of the terms and conditions contained in these Survey Limitations.

The mandatory standards promulgated by the United States Coast Guard (USCG), under the authority of Title 46 United States Code (USC): Title 33 and 46, Code of Federal Regulations (CFR), and the voluntary standards and recommended practices developed by the American Boat and Yacht Council (ABYC), and the National Fire Protection Association (NFPA), have been used as guidelines in the conduct of this survey, but complete compliance with all such standards is not guaranteed. Findings reflect conditions observed at the time of the survey, and only deficiencies were noted.

The American Boat and Yacht Council "standards and recommendations", are defined by reference to "ABYC". These standards were developed in cooperative effort with the National Marine Manufacturers Association, to complement, the mandatory standards promulgated by the United States Coast Guard under the authority of the Federal Boat Safety Act of 1971. The ABYC Standards and Recommendations are considered to be voluntary, but are highly suggested by this surveyor.

The recommendations are based on the Regulations of the United States Coast Guard (USCG), as well as the voluntary standards and guidelines of the American Boat & Yacht Council (ABYC), and my personal opinion based on knowledge and experience.

This report is a statement of the surveyor's opinions of conditions aboard the vessel at the time of survey, and is based on a visual inspection of accessible areas. There has been no destructive testing, nor any removal of bulkheads, fastened paneling, or any part of the vessel's structure or equipment. Machinery will be visually inspected without disassembly, and tanks inspected only on visibly accessible surfaces and without opening fastened access ports. Oil analysis, compression testing, if desired, should be contracted separately with the marina or a mechanical surveyor. The mechanical observations will be based on years of experience, but will not constitute a mechanical survey. If a mechanical survey is desired, then a suitable mechanical surveyor should be contacted. The rigging was visually inspected at deck level only. The rigging observations in this report do not constitute a rigging survey. If a rigging survey is desired, then a suitable rigging company should be contacted.

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In the course of maintenance, modification or repairs to, the boat, and though the use of the boat, additional conditions will be discovered that were not evident at the time of survey. Discoveries of this nature are a normal aspect of boat ownership. There has been no water testing for leakage at deck hatches and fittings; leakage at these installations is common on new vessels and especially common on seasoned vessels. Interior spaces of any boat are subject to mildew and mold formation, which is hazardous to persons sensitive to these conditions. This hazard can be minimized with a routine of thorough cleaning and proper ventilation of all interior living and storage spaces on the vessel.



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Testing the vessel in the water under load, if performed, shall be referred to with the generic term “Sea Trial”. This term has no bearing on the wind or weather conditions, or body of water upon which the vessel was tested, and provides no guarantee of how the vessel will perform under different conditions, upon different waterways and in different weather conditions.

Acceptance and use of this report by the client acknowledges the client’s understanding that the report has been composed of information that is believed to be true after reasonable investigation and inquiry but is not warranted to be so. The information was obtained without drilling, diving, ultrasonic, cleaning or opening up to expose parts or conditions ordinarily concealed. There were no tests for tightness or soundness conducted other than the conditions noted visually.

Acceptance and use of this report acknowledges the client’s understanding that no determination of stability or structural strength has been made and no opinion is expressed.

Acceptance and use of this report acknowledges the client’s understanding that EBCS Marine, LLC does not accept any responsibility for damage or deterioration not found or discovered during the course of survey, nor for consequential damage, deterioration or loss due to any error or omission.

The Client hereby undertakes to keep the Surveyor/Consultant and its employees, agents and sub-contractors indemnified and to hold them harmless against all actions, proceedings, claims, demands or liabilities whatsoever or howsoever arising which may be brought against them or incurred or suffered by them, and against and in respect of all costs, loss, damages and expenses (including legal costs and expenses on a full indemnity basis) which the Surveyor/Consultant may suffer or incur (either directly or indirectly) in the course of the services under these Conditions.

Notwithstanding the above clause, in the event that the Client proves that the loss, damage, delay or expense was caused by the negligence, gross negligence or willful default of the Surveyor/Consultant aforesaid, then, save where loss, damage, delay or expense has resulted from the Surveyor’s/Consultant’s personal act or omission committed with the intent to cause same or recklessly and with knowledge that such loss, damage, delay or expense would probably result, the Surveyor’s/Consultant’s liability for each incident or series of incidents giving rise to a claim or claims shall never exceed a sum calculated on the basis of two times the Surveyor’s/Consultant’s charges.



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## **SURVEYORS CERTIFICATION:**

**I certify to the best of my knowledge and belief:**

**The statements of fact contained in this report are true and correct. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions and conclusions. I have no present or prospective interest in the vessel that is the subject of this report, and I have no personal interest or bias with respect to the parties involved. My compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulate result, or the occurrence of a subsequent event. I have made a personal inspection of the vessel that is the subject of this report.**

**This report should be considered as an entire document. No single section is meant to be used except as part of the whole.**

**This report is submitted without prejudice and for the benefit of whom it may concern. This report does not constitute a warranty, either expressed, or implied, nor does it warrant the future condition of the vessel. It is a statement of the condition of the vessel at the time of survey only.**

## **ATTENDING SURVEYOR:**



Date 11/6/18

SAMS – Accredited Marine Surveyor





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## **DECLARATION:**

Rating of vessel condition was determined upon completion and review of all reported survey information including recommendations and comparing vessel to the same or similar age models. Possible vessel ratings are as follows:

<b>EXCELLENT:</b>	Essentially as new or Bristol in appearance.
<b>ABOVE AVERAGE:</b>	Has had above average care with no obvious defects or limitations
<b>AVERAGE:</b>	Ready for sale but needs some maintenance or repairs, updates or cleaning
<b>BELOW AVERAGE:</b>	Needs significant maintenance, repair or service

## **VALUATION DATA**

Estimated fair market value was determined by cross referencing data from Soldboats.com, NADA, brokerage listings, and survey database. Adjustments are then made for condition or equipment as necessary. The fair market value is for the vessel in its current condition prior to any repairs or maintenance.

Estimated replacement cost was determined using available information obtained by NADA, brokerage listings, builders quotes, and or survey database.

Estimated Fair Market Value as of the date of Survey: \$ 500,000.00 USD

Estimated Replacement Cost as of the date of Survey: \$ 190,000.00 USD

Intended Use of Vessel – Recreation – Coastal and Near Coastal and Ocean Waters

Rating of Vessel Condition – Above Average

Suitability For Intended Service – Vessel is considered fit for its intended use.

Values are dependent on the limiting conditions and assumptions noted in the report. These values are statements of opinion. No guarantee can be given that these opinions of value will be sustained or that they will be realized in an actual transaction.

Valuation data taken from Soldboats.com, Yachtworld.com listings, boattrader.com, and survey database show similar vessels of similar age ranging from \$235,000 to \$745,000.

1969 78' Stephens \$235,000 AK	1977 80' Broward \$364,000 FL	1974 74' Stephens \$389,000 WA
1979 68' Stephens \$495,000 FL	1977 80' Bertram \$699,000 RI	1976 82 Admiral \$745,000 Spain



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## **Experience:**

**June 2009 – Present      Owner/Operator EBCS Marine**

- SAMS Accredited Marine Surveyor
- USCG Licensed Master of 100 Ton Vessels
- Marine Surveyor Performing Professional Marine Surveys Since 2007
- Ritchie authorized service center

**Performing marine compass adjusting & repairs since 1983**

**June 2007 – June 2009      Staff Marine Surveyor – Travelers Insurance**

- Licensed Claim Handler – Technical Specialist:

### **Duties:**

- Inspect & document damages
- Prepare or process repair estimates
- Prepare & submit damage assessment/estimates
- Large loss & Fire loss assessments/negotiations – Damages in excess of \$250,000
- Underwriting Surveys

**Sept 2000 – June 2007      Service/Project Manager – Hinckley Yacht Services, Inc.**

- Average Annual Project Sales \$2.5 Million

**June 1990 - June 2000 Marina Manager for Standish Boat Yard, Inc.**

**June 1987 - June 1990      Ship's Officer for Texaco Marine Services, Inc.**

**Duties: Third and Second Mate**

**Sept. 1979 - Sept. 1983 United States Coast Guard**

**Duties: E1 – E5 Honorable Discharge Sept. 1983**

**Education:      Bachelor of Science in Marine Transportation, May 1987**

**Massachusetts Maritime Academy - Graduated 15th in Class**

## **Organizations:**

**SAMS**

**American Boat & Yacht Council**

**Tiverton Yacht Club Board of Directors**

**Chairman Marina Committee**

**Member Sail Training Committee**

**Adult Sailing Instructor**

**Massachusetts Maritime Academy Alumni Association**