

# MARINE TECHNOLOGIES INC.

Marine Surveyors & Consultants

## 1986 30 Ticon Sailboat



# REPORT OF MARINE SURVEY

OF THE VESSEL

**1986 30 Ticon Sailboat**

CONDUCTED BY

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PREPARED FOR



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**INDEPENDENT MARINE SURVEY SERVICE**

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## I. INTRODUCTION

Acting at the request of [REDACTED], the attending surveyors did attend onboard the 1986 30 Ticon on Thursday May 02, 2024 at [REDACTED] LaSalle, MI. where an "Out of -the-water-survey" was conducted. The vessel's papers were on board and appeared to be in order. The Hull Identification Number (HIN) **ZNY30157C686** was obtained and confirmed with picture and the presented documentation. A sea trial was not performed, and the engine was not started and the transmission was not cycled. An out-of the water inspection of underwater machinery and the exterior of the hulls wetted surface area was performed. The reason for the survey was to determine the physical condition and value of the boat. AC and DC power was used to check operation of the electrical systems specified in this report. No reference or information should be construed to indicate evaluation of the internal condition of the engines or the propulsion system's operating capacity. Electronic equipment was checked for "power up" only.

### **SCOPE OF SURVEY**

This vessel was surveyed without removals of any parts, including fittings, tacked carpet, screwed or nailed boards, anchors and chain, fixed partitions, instruments, clothing, spare parts and miscellaneous materials in the bilges and lockers, or other fixed or semi-fixed items. Locked compartments or otherwise inaccessible areas would also preclude inspection. The Owner is advised to open-up all such areas for further inspection as deemed necessary. Further, no determination of stability characteristics or inherent structural integrity has been made and no opinion is expressed with respect thereto. This survey report represents the condition of the vessel on the above date, and is the unbiased opinion of the undersigned, but it is not to be considered an inventory or a warranty either specified or implied. The survey report is submitted for the sole and exclusive use of the survey purchaser. The survey purchasers specifically agree not to release, nor reveal the survey report, nor any part thereof, to any party who may rely upon the content. Marine Technologies Inc. agrees purchasers can release copies, as required, to financial and insurance concerns for the exclusive purposes of lending decisions and insurance underwriting. This survey is an opinion, so therefore Marine Technologies Inc/John Bommarito cannot be held responsible anyway shape or form of this survey. This survey is not a warranty.

**NOTE: It maybe recommended that the diesel engine aboard this boat be surveyed by a qualified Engine Surveyor to determine the condition of the engines, gears, pumps, heat exchangers, coolers, etc.**

THE MANDATORY STANDARDS PROMULGATED BY THE UNITED STATES COAST GUARD (USCG), UNDER THE AUTHORITY OF TITLE 46 UNITED STATES CODE (USC); TITLE 33 AND TITLE 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.

The use of the word "appears" is intended to indicate that a close or complete inspection was not possible or it was not deemed appropriate at the time of this survey. The deficiencies reported herein reflect the conditions observed at the time the survey was conducted.

Use of asterisks \* in the body of the report will indicate that a finding will be listed in the Findings and Recommendations section pertaining to the asterisked item, following the body of the report.

## II. GENERAL INFORMATION

<b>FILE NUMBER</b>	2024691	<b>LENGTH OVERALL (LOA)</b>	29' - 11''*
<b>SURVEYED PREPARED FOR</b>	[REDACTED]	<b>BEAM</b>	11' - 0'' *
<b>VESSEL NAME</b>	"New Horzion"	<b>DRAFT</b>	4' - 11''*
<b>TYPE OF SURVEY</b>	Condition & Value	<b>BALLAST</b>	4,250 Lbs*
<b>OVERALL VESSEL RATING</b>	AVERAGE/FAIR**	<b>MAST</b>	1 Masts
<b>ESTIMATED MARKET VALUE</b>	\$6,500.00**	<b>BRIDGE CLEARANCE</b>	N/A
<b>ESTIMATED REPLACEMENT COST</b>	\$25,000.00**	<b>WEIGHT</b>	9,600 Lbs*
<b>VESSEL MANUFACTURER</b>	Ticon	<b>NET TONS</b>	N/A
<b>YEAR BUILT</b>	1986	<b>PROPULSION</b>	Single Inboard 11HP Universal Engine W/ Transmission
<b>MODEL</b>	Fractional Sloop	<b>FUEL TYPE</b>	Diesel
<b>HULL IDENTIFICATION NUMBER</b>	<b>ZNY30157C686</b>	<b>FUEL CAPACITY</b>	20 Gals*
<b>SAIL AREA</b>	434ft*	<b>AC POWER</b>	120V 30 Amp
<b>USCG DOCUMENTATION NUMBER</b>	N/A	<b>DC POWER</b>	12 Volt
<b>USCG DOCUMENTED FOR STATE REGISTRATION NUMBER</b>	<b>N/A</b>	<b>BEARTHING</b>	[REDACTED]
<b>LENGTH (@WL)</b>	26.00 Ft*	<b>FRESHWATER CAPACITY</b>	30 Gals*
<b>BUYER'S ADDRESS</b>	N/A	<b>HOLDING TANK</b>	15 Gals* (est)
<b>PLACE OF SURVEY</b>	[REDACTED]	<b>BUYER'S EXPERIENCE</b>	Recreational
<b>DATE/TIME OF SURVEY</b>	05/02/2024	<b>INTENDED CRUISING AREA</b>	Lake Erie
<b>HULL MATERIAL</b>	FRP	<b>INTENDED USE</b>	Recreational
<b>HULL TYPE</b>	Sailboat		

Asterisks \* in this General Information section refers to the source of such information as follows:

\* Per Manufacturer's Specifications

\*\*Refer to Summary and Valuation Section

\*\*\* Per USCG Documentation

\*\*\*\* Per Buc Book

### III. DEFINITIONS

The terms and words used in this report have the following meanings as used in this *Report of survey*:

**APPEARS:**

Indicates that a very close inspection of the particular system, component or item was not possible due to constraints imposed upon the surveyor ( e.g. no power available, inability to remove panels, or requirements not to conduct destructive tests).

**FIT FOR INTENDED USE:** Use which is intended by Survey Purchaser (present or prospective owner).

**SERVICEABLE: ADEQUATE:**

Sufficient for a specific requirement.

**POWERS UP:**

Power was applied only. This does not refer to the operation of any system or component unless specifically indicated.

**EXCELLENT CONDITION:**

New or like new.

**GOOD CONDITION:**

Nearly new, with only minor cosmetic or structural discrepancies noted.

**FAIR CONDITION:**

Denotes that system, component or item is functional as is with minor repairs. (MONITOR OFTEN)

**POOR CONDITION:**

Unusable as is. Requires repairs or replacement of system, component or item to be considered functional.

**USE OF \*:**

Use of \* in the body of this report will indicate that a finding will be listed in the "*Findings and Recommendations*" section pertaining to the \* item.

Asterisks \* in this General Information section refers to the source of such information as follows: \* Per Manufacturer's Specifications

\*\*Refer to Summary and Valuation Section

\*\*\* Per USCG Documentation

\*\*\*\* Per Buc Book

## IV. SYSTEMS

### HULL

#### Type:

Sail Boat (displacement); stern cockpit

#### Material:

FRP (fiber reinforced plastic)

#### Exterior Hull:

White gelcoat, with grayish boot stripe with copper bottom paint. The basic and general Appearance of the hull exterior reflects a fare/good maintenance; showed no signs of Delamination or water intrusion no signs of blisters, bottom paint appeared to be in good condition. Used a GRP 33 moisture meter and showed normal for age of vessel.

#### Bulkheads:

Structural bulkheads consisting of FRP with marine plywood. Attachment points to the hull and tabbing in some areas could not be seen. Where accessible the bulkheads and tabbing appeared to show no signs of Delaminating. Some water intrusion appears on wood horizontal wood surface (none structural surface). Used a GRP 33 moisture meter and showed normal for age of vessel.

#### Stringers/Frames:

Constructed of FRP, and they run from the aft bulkhead to the forward bulkhead. Where accessible and tabbing appeared to show no signs of water intrusion and Delamination, normal for age of vessel. Used a GRP 33 moisture meter and showed normal for age of vessel.

#### Transom:

Single skin FRP. Where accessible the transom appeared to show no signs of water intrusion and no signs of Delamination. Used a GRP 33 moisture meter and showed normal for age of vessel.

#### Keel:

Keel has cast/poured lead, appeared to be in good condition. Showed no signs of water intrusion and no signs of Delamination.

#### Bilge:

The bilge is the inner side of the hull and the keel. It runs the length of the boat along the keel and extending both fore and aft from main keep attachment area . Limber holes help transport liquids longitudinally through bulkheads and transverse members. Bilge in need of cleaning. Some water in bilge at time of inspection.

#### Chain/Anchor Locker:

The chain locker is forward bow area, and accessible via an access on the fore deck with drain spot for water to drain. Anchor hatch cover some signs of flexible spot in middle

### DECK

#### Type:

FRP (Fiber Reinforced Plastic). with none skid surface. Showed no signs of Delaminating, possible water intrusion in some areas where deck FG cracking is present –Used a GRP 33 moisture meter showed somewhat above normal reading in some areas ( Low RED readings ) on Meter

**Cockpit:**

FRP (Fiber Reinforced Plastic) showed no signs of Delamination or water intrusion. Used a GRP 33 moisture meter and showed normal of age of vessel.

**Helm:**

Helm station is stern cockpit level this area of the cockpit, provides helm station and crew area, with wheel and instrumentation on binnacle

**HULL-TO-DECKJOINT****Type:**

The gunwale to hull joint appears to be outside flange type joint the deck is a separate molded piece tabbed to the inside of the hull. The hull to gunwale joint is covered by a cap toe rail blot together and rub rail.

**Bedding Compound:**

Appears to be electrometric compound

**Fasteners:**

Stain Steel fasteners

**DECK FITTINGS****Stanchions and Bow Rail:**

Stainless steel stanchions and double lifelines supporting the stainless steel bow rail and stern pulpits system. The system which runs from the bow to stern including cockpit on both sides of vessel.

**Ventilation:**

Ventilation is present in the deck structure.

**Chocks and Cleats:**

Two (2) 5" stainless steel cleats are located on the bow.

Two (2) 5" stainless steel cleats are located port and starboard on the stern.

Two (2) 5" stainless steel cleats are located port and starboard on midship.

All appear to well bedded and securely mounted.

**Deck Surface:**

None Skid gelcoat FRP (fiber reinforced plastic)

**SUPERSTRUCTURE****Material:**

Multiple sections of double skin molded FRP tabbed together to enclose the cockpit and cabin.

**Windows/Ports/Doors:**

Two (2) Plexiglas, cabin door with sliding top.

Two (2) Cabin Top hatches appeared to be in fair condition, with crazing. (no signs of leaking) with hinged screens on both

Eight (8) Opening oval port holes windows port/starboard side. (no signs of leaking)

**Fittings Hardware:**

The superstructure is tabbed to the deck surfaces and the fasteners could not be sighted.

**Joinery Stress:**

No signs of stress in joinery.

**CABIN INTERIOR****Joinery and Finish:**

The cabin area consists of a galley, head's and seating area with storage compartment throughout. The interior is used primarily for living spaces. Some cushions and storage area hatch covers wood boards show signs of water intrusion and were wet .



**Accommodations:**

Forward V-Berth will accommodate two (2) adults. Aft starboard side quarter berth possibly accommodations for two (2). Fold out fold down Dining table with seating

**GALLEY****Location:**

Located along the port side towards aft of the main cabin.

**Sinks:**

One (1) 2 bowl sink with cold/hot water tap. Sink discharges overboard. Also has manual pump for cold water only.

**Refrigeration/Freezer:**

Two (2) Adler Barbour, appear one is a freezer and one is a refrigerator, both NOT power up

**Microwave:**

One (1) Port Side under settee cushions storage area

**Stove/Oven:**

One (1) model unknown, propane stove/oven. The stove/oven, is gimbaled was not tested

**PROPULSION****MAIN ENGINE****Type:**

One (1) Universal (11 HP), closed water-cooled engine, appeared to be in fair/ good condition, was not tested

**Serial Number:**

N/A

**Hours:**

N/A hours noted from hour meter on gage near the helm area.

**Labels And Notices:**

Manufacturer label plates, where sighted were mounted to the engine,

**Horse Power:**

11 Horsepower \*

**Throttle Controls:**

Mechanical lever/rod-cable type activated at helm station. Throttle controls were observed to operated correctly and smoothly with no indication of binding or chafing.

**Engine Mounts And Bed:**

Bushing mounts mounted to aluminum angle brackets, which are fastened to the main stringer bed. The engine was not started and the transmission was not cycled, therefore movement of the mounts could not be witnessed.

**Belts And Pulleys:**

The belt and pulleys appeared to be in good condition with no evidence of excessive wear or misalignment.

**Drip Pans:**

There are no drip pans under the engine. Possible leaks from the engine oil WERE apparent under engine, .

**Lubrication:**

Fluid level was checked with the engine cold and found to be at the full mark. The appearance of the oil was black and the viscosity appeared normal. No diesel odor was noted. Indicated hours at last oil change not known.

**Exhaust System:**

Raw water injected flexible reinforced marine exhaust hose leading aft to the main exhaust outlet.

**Engine Alarms:**

Visual signals are present at the helm station as well as oil pressure and water temperature warning lights.

**COOLING SYSTEM****Type:**

Closed water-cooled wet exhaust.

**Raw Water Strainers and Seacocks:**

One (1) The seacock is a ball valve, which appears to be securely mounted with no evidence of leaks with a sea strainer.

**Hoses And Clamps:**

Double clamped, re-reinforced rubber hose. Well routed and supported where sighted.

**TRANSMISSION****Type and manufacturer:**

One (1) Universal, appeared to be in good condition, was not tested. Possible Fluid leaks present under trans and engine.

**Gear Ratio:**

N/A

**Fluid Level And Condition:**

The fluid level was observed with a cold engine to be approximately to the full line. The engine was not operated therefore accurate fluid level measurements could not be taken. The condition of the fluid appeared normal with no unusual color or odor detected.

**Controls:**

Mechanical cables and linkages. Cables are safety wired to attachment brackets and operated normal.

**Prop Shaft:**

One (1) Stainless steel 1" shaft coupling.

**Prop:**

One (1) 3 blade fixed prop, appeared to be in fair/good condition, in need of proper cleaning.

**Cooler:**

External engine mounted raw water heat exchanger. No evidence of corrosion or leaks.

**Stuffing Box:**

Hex nut type packing gland with flexible hose stuffing box. noticed no play in shaft and no apparent leaks.

**FUEL SYSTEM****Fuel Type:**

Diesel

**Tanks:**

One (1) Aluminum tank.

**Secured:**

Attached in hull/ engine compartment bulkhead

**Tank fittings:**

The fittings for tank are well fastened with evidence of possible leaks.

**Labels:**

Labels are not visible on the fuel tank.

**Fill Pipe Locations:**

One (1) Deck fills outboard - is marked "Diesel" and appear watertight.

**Fill Pipe Material:**

Stainless steel port connected to rubber fuel hose with hose clamps. All connections sighted were in good condition.

**Return Lines:**

Sighted and found to be in good condition and USCG Type A-1 hoses.

**Fuel Lines And Fittings:**

Appeared well supported, clamped and serviceable where sighted.

**Fuel Manifold Valves:**

Tank selector / shut off supply and return valves. All valves operate freely, and no signs of leaks were detected.

**Vent Location:**

One (1) Starboard side - topsides, flame screens were present but needs to be cleaned.

**ELECTRICAL SYSTEM****DC SYSTEM:****Voltage:**

AGM battery powered 12 volt system.

**Batteries:**

Two (2) 12 volt AGM batteries.

Batteries were showed fully charged. Not Load tested. Vessel navigation station meter checks and showed full.

**Main Battery Switches:**

One (1) marine battery switch.

**Panel:**

Main breaker panel is located at the Navigation Station area. Panel contains branch breaker style for DC electronics.

**Routing/Support:**

Wires were routed and supported were sighted throughout the vessel.

**Charging System (Battery Charger):**

One (1) AC powered battery charger, powers up

**Charging System (Alternator):**

Alternator located on forward portion of engine. The alternator manufacturer and type was not noted due to paint. The alternator belt was checked and appeared satisfactory.

**Terminal Blocks:**

Located behind panel as observed.

**AC SYSTEM****Shore Power Inlet:**

One (1) 30 Amp 120 Volt Plug and receptacle are in good condition. Located on Starboard side of the cockpit area aft.

**Main Breaker:**

One (1) breaker, 30 Amp 120 VAC Service. Service is not to ABYC\*

**Branch Breakers:**

Branch service fuses individually switched and labeled located at the main AC panel at the Navigation station on each power outlet.

**Circuit Load Monitors:**

Circuit load monitors are not present with this system.

**Wire Type (Size and Rating):**

Wires were sighted were adequately sized. Service is not to ABYC

**Outlets:**

One (1) GFI in head

**FRESH WATER****POTABLE WATER****Storage Tanks:**

One (1) tanks (Polymer tanks)

**Fill Pipe Location:**

One (1) both marked "WATER" appeared watertight.

**Vent Pipe Location:**

Topsides approximately amidships.

**Pumps:**

One (1) Label damaged as to make – for fresh water, not powers up

One (1) manual pumps, was not tested

**Filters:**

Filters was sighted.

**Hot Water:**

One (1) hot water tank, 6 gallon (est), was not tested.

**SANITATION****BLACK WATER****Type:**

Black water system is a type III, There is 1 holding tank. There were no signs of a leak.

**Pump-Out Location:**

One (1) Locate on deck starboard side midship, the deck plate is marked "Waste" appeared watertight.

**Manufacturer:**

Model unknown, manual hand pump flush.

**Tank:**

One (1) 30 gallon (est)\*

**HEAD****Location(s):**

One (1) Port side, forward midshap cabin.

**Sink:**

One (1) sink with single cold/hot water tap in both heads. Drains directly overboard via thru hull top topsides.

**Showers:**

One (1) head is part of shower, drains in sub pump area.

**STEERING****Type:**

Cable pulley type.

**Manufacturer:**

Edson

**# of Stations:**

One (1)

**Locations:**

One (1) helm station in cockpit. The helm operates freely with no binding or slop.

**Lines And Fittings:**

Appears serviceable where visible. No evidence of chafing or excessive wears.

## **GROUND TACKLE**

### **Anchors:**

One (1) Danforth anchor, (danforth type) secured with a shackle, stored below deck.

### **Windlass:**

N/A

### **Rode Material:**

The anchor rode located at the bow is attached to approximately about 6' of chain and about 100' of line. Line and chain not measured.

## **ELECTRONICS AND NAVIGATION**

### **VHF:**

NONE (0) Present,.

### **Wind/Speed/Depth:**

Three (3) Datamarine, NOT powers up, or actively checked.

### **GPS:**

NONE (0) Present,.

### **Compasses:**

One (1) Danforth, fixed mount located at helm station.

### **Stereo:**

One (1) Make unknown AM-FM with CD player and marine speakers, NOT powers up

### **Autohelm:**

One (1) Belt driven at steering wheel, was not tested

## **BONDING SYSTEM**

### **Main Bonding Conductor:**

The bonding system NOT apparent in vessel.

## **SAFETY EQUIPMENT**

### **Number And Type Of PFD's:**

NONE (0) Present,.

### **Number Of Throwable PFD's:.**

One (1) Observed below deck in vessel.

### **Fire Extinguishers:**

Two (2) ABC - Observed onboard.

### **Visual Distress Signals:**

NONE Observed onboard.

### **Sound Devices:**

NONE Observed onboard.

### **Navigation Lights:**

One (1) white all around anchor light/steaming light located on mast.

One (1) green and red combination running light located on center bow pulpit.

One (1) white starboard side stern pulpit mounted running light.

All lights were tested showing lights worked at time of survey.

### **Inland Navigation Rule Book < (12m-39'4''):**

Not observed on board. Required on vessels over 40' per COLREGS

### **"No Oil Discharge" Placard:**

Observed onboard.

### **Trash Disposal Placard:**

Observed onboard.

## **AUXILIARY SAFETY EQUIPMENT**

### **Life Raft:**

Not observed onboard. A life raft is recommended for voyages offshore.

### **E.P.I.R.B.:**

Not observed onboard. An E.P.I.R.B is recommended for voyages offshore.

### **Smoke Detector / Co2 Detector:**

None observed onboard.

### **First Aid Kit:**

NOT Observed onboard.

### **Bilge Water Alarm and Safety Switches:**

None sighted. Highly recommended.

### **Bilge Pumps**

Two (2) automatic bilge pump mounted in the shaft alley space. The suction hose is placed in the shaft alley space and is operated by a remote float switch. Bilge pump discharge through plastic thru hull fitting. Powered up and operated via float switch Pump turned on  
One (1) Manual pump, was not tested

## **RIGGING/MAST**

### **STANDING RIGGING:**

#### MAST – BOOM

**At the time of survey- NO - Up Mast survey was requested or completed.**  
**VESSEL WAS ON THE HARD with MAST and BOOM stepped with STANDING RIGGING SET IN PLACE**

Mast is Keel Stepped Aluminum design Structure, and Boom is also of Aluminum design. Mast through Deck Seal POOR and appears may have leaks and is aged.

All Standing rigging at deck levels were inspected and appear sound, other than where reported in the following survey, and properly rigged set for use.

Vessel was on the Hard and Rig was NOT tuned at time of survey. Chain Plates were 4 totaling, 2 set for shrouds with Furling system Forestay and Split Backstay. A best as possible at deck level and below deck visual evacuations, and inspections reviewing were preformed.

ONLY three of the vessel chain plates were partly accessible below deck, and no apparent issues were seen at that time by this process.

As best as could be concluded, with Mast stepped ,and Standing Rigging set up for sailing. The following reposted listings were observed during the Survey.

Mast Electronics and Instrumentation Systems NOT OPERATIONALLY Check. Boom was attached to Mast at time of survey, Goose Neck system appears operational. As were Main sail outhaul, Hoists, and Main Sheet systems. Topping Lift and Split back Stay systems appears operational as best as could be seen at time of survey.

All Mast Halyard Sheaves at deck level only, inspected as much as possible (NO LOAD) with running rigging on Mast and Forestay Furled system. No visual issues found at time of survey else were noted in the listing included in Rigging Survey.

Aluminum MAST and BOOM were visually inspected  
**(Ref. A1 Standing Rigging) Findings /Recommendations – Shroud Turnbuckles Cotter Pins ALL in need of proper set and size Stainless Steel Cotter Pins ( Many showed RUST on curret in place cotter pins ) (See Photos A001 and A002)**

**(Ref. A2 Mast Mountings) Findings /Recommendations – Mast Through Cabin Top/Deck Seal POOR and aged Most likely leaking water, Also part of the Mast mounting system with a Keel Step Mast Setup (See Photo A003)**

## **BOOM:**

Aluminum Boom appears to have no issues that were apparent at time of survey  
Gooseneck, Pins, and Sheaves, Running Systems Appeared functional  
NONE were operationally tested as vessel was on the hard NO Sea Trail was Performed .

### **(Ref. C1 Boom to Mast Goose neck)Findings: Recommendations-**

**.Main Sail hauling up/ down, and Boom Outhaul System were not tested as no sea trial was performed. No Sails were bent on at the vessel at time of survey.**

### **System appears functional.**

Boom control system lines, Main sheet, outhaul, reefing system, Traveler System, Vang (Mast to Boom) , Topping Lift, were not evaluated for operations as rig was not UP but vessel was on the hard

## **SHROUDS – FORESTAY – BACK STAY**

Vessel equipped with SS wire rigging for Shrouds, Split Backstay and Forestay Furling system.

**(Ref. A3 Rigging) Findings /Recommendations – ALL STANDING rigging Shroud Turn buckles are in NEED of proper sized Cotter Pins or Cotter Rings.**

All Swaging Visually inspected at deck level and appear good. All attaching Turnbuckles appear Good with no visual issues seen, unless noted. ALL in **NEED of proper sized Cotter Pins or Cotter Rings. And Proper Cleaning . Many show signs of Algae growth and in need of cleaning and re inspections.** (See Photos A001 and A002)

## **Chain Plates**

Chain Plate System inspected as much as possible and appear to be in good order. Deck plates in need of re sealing. Possible water intrusion areas.

**(Ref B1 Rigging ) Some Possible Signs of water leaks/ staining/ warping or aging concerns apparent at time of nspection at Shrouds interior area Chain Plates. This is visible on Bottom of Cabinet Wood at Port and Starboard Chain plate area. Does not appear to be any structural degradation.**

(See Photos B001 and B002)

## **RUNNING RIGGING:**

All running rigging lines inspected where possible, and appear many if not all will need replacements, due to aging exposure, and chaffing from use, and many have green Algae on them Other then were noted in Reference below:

**(Ref. B2 Rigging) Recommendations: All running rigging ages with time, environment exposure and normal Usage. Replacement is always suggested whenever any signs of any deterioration become apparent.**

(See Photos B003)

## **POLES:**

Aluminum Spinnaker/ Whisker pole

Pole was visually inspected and appears to have no issues Fitting ends operational.



## **SAIL INVENTORY:**

Sail inventory not inspected during Survey. ON Vessel sails as inventory  
Main Sail, with Slab Riffing (Age and conditions Unknown at time of survey NOT INSPECTED)  
150 Furling Genoa (Age and conditions Unknown at time of survey NOT INSPECTED)  
Functional evaluation of sails, sail running rigging and sail inventory not preformed at time of Survey **as NO SEA TRIAL was preformed.**

**(Ref. C2 Sails) Recommendations: detailed inspection of all sails, and covers by a qualified sail maker.**

## **SKIG & RUDDER SYSTEMS:**

Visual inspection of Rudder attachment, and system appear to be in good order  
With no apparent issues present. Visually appear true and perpendicular to vassal's hull.

**(Ref. B3 Rudder) Findings /Recommendations:**

**RUDDER:** Rudder lower 5 inches on both port and starboard side Moisture Meter Reading showing HIGH, ( IN RED Range of meter) may be in need of draining and repairs after drying out. Possible draining of any possible water in rudder.

2

## **PROP and SHAFT SYSTEM:**

Cutlass bearing was dry at time of inspection, appears to be within norms.

**(Ref. B4 Prop to Shaft Mounting System) Findings /Recommendations**

Vessel is equipped with a 3 bladed fixed Prop appears functional and in need of proper cleaning / polishing.

All Prop Shaft Anodes in need of replacement as does the Vessels Main Anode on bottom of hull aft of keel

See **Reference Photo (B004 and B005 )**

## **WINCHES**

All of Vessels winches were hand operated with **no loading** at time of evaluation. All functional and appear to be in good working order.

Vessel equipped with

2 Cabin Top mounted Winches both Self Tailing Lewmar 16 (Port and Starboard)

2 Cockpit Combings mounted Winches Both Self tailing Lewmar 40 (Port and Starboard)

**(Ref. C2 Winches) Recommendations: All winches be disassembled and check for parts quality with cleaning and greased.**

Winch handle was used to NO LOAD evaluate each Winch operations by hand at time of Survey.

## **PULPIT, STANCHIONS, and LIFELINE SYSTEMS:**

**(Ref. A4 Stanchions s and Life Lines) Recommendations:**

Bow Pulpit appears good with manufactures mounting systems and what appear to be newer lifelines.

However All Stanchions appear to be in need of a Mounting checks (Stanchions to Deck Mounting), Complete system is need of complete inspection with repairs, and or replacements where needed.

**(Ref. A4 Stanchions s and Life Lines) Findings: Recommendations:**

**(Reference Photo (A004)**

Vessels complete Stanchions System Need to be gone over with REPAIRS / REPLACEMENTS where Needed. System is NOT up to Safety Standards at time of survey.

- 1) Bents and Loose: Port Side Amidships Stanchion..
- 2) Stanchions Deck Mount Bases SOME Loose.

**(Ref. C4 Stanchions s and Life Lines) Recommendations: Complete Tuning of lifeline stanchion system tensions) after proper repairs are completed.**

**INSTRUMENTATION SYSTEMS:**

Vessels instrumentation Is As noted in vessels inventory listing.

NO SEA TRIAL WAS PERFORMED as result NO Vessel INSTRUMENTATION SYSTEM

operation was dynamically checked. **(Ref. C5 Rigging) Findings /Recommendations:**

**Recommend a complete evaluation be performed on all instrumentation system for operation and calibrate where needed.**

**ADDITIONAL EQUIPMENT AND ACCESSORIES**

Canvas:

Helm Cover Canvas – Very Poor condition, needs replaced. See Photo C001

A5-Pro-Pane Locker:

One (1) located in compartment in stern cockpit area, Not to ABYC spec. Not Secured properly See Photo A005

A6 -Battery Tied downs not attached Battery NOT secured : Recommendations: (Reference Photo (A006 and A007) Battery need to be safely seared

Deck Cracks :

C6 -Numerous Deck Cracks which can and may lead to water leaking into vessels decking.

(Ref C Findings /Recommendations: Repair and seal ( NOT SOME repairs have already been completed on the Port Aft Deck by cockpit combing

See Photos C002, C003, C004 and C005, NOTE moisture Meter Reading indicate deck

Mid Ranges Reading where cracking is present and LOW where cracks were repaired

.Ref Photo C005

A7-Helm Steerage System Binnacle Below Cockpit Floor Pulley

Wiring Rubbing On Pulley will chaff through possible shorting of wiring See Photo A008

Main Solon Cushions and Support Storage Wood

Port and Starboard Main Solon cushions were wet in areas along with storage cushion s upport wood show water stain areas See Photos C006 and C007

B5 -Engine and Trans Vessel floor/Soul Area

Oil and Trans Fluids apparent on floor/ bulge under Engine / Trans

Indicates possible engine or trans leaking. ENGINE WAS NOT STARTED nor was

TRANSMISSION engaged for testing. Vessel was on the Hard See Photos B006

## **OUT OF WATER INSPECTION**

### **BELOW WATERLINE MACHINERY**

**NOTE:** An Out of the water inspection was conducted survey was conducted.

## **V. SEATRIAL REPORT**

**NOTE:** A seatrial test was not conducted. The engine was not started and the transmission were not checked. The fluids were checked on cold engine and appeared normal and in good condition.

## **VI. ENGINE SURVEY**

**NOTE:** The attending surveyors are not marine engine mechanic. The engine was not operated.

## **VII. RIGGING**

**NOTE:** The attending surveyor was Rob Burgman conducted Rigging survey.

## RIGGING FINDING & RECOMMENDATIONS

Deficiencies noted under “**SAFTY**” should be addressed before the vessel is next underway. These findings represent an endangerment to personnel and/or the vessel’s safe and proper Operating condition. Findings may also be in violation of U.S.C.G regulations.

Deficiencies noted under “**OTHER DEFICIENCIES**” should be corrected in the near future So as to maintain standards and to help the vessel to retain it’s value.

Deficiencies will be listed under the appropriate heading:

**A> SAFTY DEFICIENCIES**

**B> OTHER DEFICIENCIES NEEDING ATTENTION**

**C> SURVEYORS NOTES AND OBSERVATIONS**

REFERENCE #	FINDING	RECOMMENDATION	CFR	ABYC
<b>A1</b>	((Ref. A1 Standing Rigging) Findings /Recommendations – Shroud Turnbuckles Cotter Pins ALL in need of proper set and size Stainless Steel Cotter Pins ( Many showed RUST on curret in place cotter pins	SEE PICTURE A001 and A002		
<b>A2</b>	((Ref. A2 Mast Mountings) Findings /Recommendations – Mast Through Cabin Top/Deck Seal POOR and aged Most likely leaking water, Also part of the Mast mounting system with a Keel Step Mast Setup	SEE PICTURE A003		

<p><b>A3</b></p>	<p>(Ref. A3 Rigging) Vessel equipped with SS wire rigging for Shrouds, Backstay and Forestay Furling system.</p> <p>All Swaging Visually inspected at deck level and appear good. All attaching Turnbuckles appear Good with no visual issues seen, unless noted</p>	<p>Findings /Recommendations – ALL STANDING rigging Shroud Turn buckles are in NEED of proper sized Cotter Pins or Cotter Rings. ALL in NEED of proper sized Cotter Pins or Cotter Rings. And Proper Cleaning . Many show signs of Algae growth and in need of cleaning and re inspections.</p> <p>SEE PICTURE A001 and A002</p>		
<p><b>A4</b></p>	<p>(Ref. A4 Stanchions s and Life Lines) Recommendations: Bow Pulpit appears good with manufactures mounting systems and what appear to be newer lifelines. Vessels complete Stanchions System Need to be gone over with REPAIRS / REPLACEMENTS where Needed. System is NOT up to Safety Standards at time of survey. 1) Bents and Loose: Port Side Amidships Stanchion.. 2) Stanchions Deck Mount Bases SOME Loose.</p>	<p>However All Stanchions appear to be in need of a Mounting checks (Stanchions to Deck Mounting), Complete system is need of complete inspection with repairs, and or replacements where needed</p> <p>SEE PICTURE A004</p>		
<p><b>A5</b></p>	<p>A5-Pro-Pane Locker: One (1) located in compartment in stern cockpit area, Not to ABYC spec. Not Secured</p>	<p>SEE PICTURE A005</p>		

A6	A6 -Battery Tied downs not attached Battery NOT secured	<p>Recommendations: (Reference Photo (A006 and A007) Battery need to be safely seared</p> <p>(A006 and A007)</p>		
A7	A7-Helm Steerage System Binnacle Below Cockpit Floor Pulley Wiring Rubbing On Pulley will chaff through possible shorting out of wiring	<p>Repair Wire Mounting away from Pulley</p> <p>SEE PICTURE A008</p>		
B1	<p>Chain Plate System inspected as much as possible and appear to be in good order. (Ref B1 Rigging ) Some Possible Signs of water leaks/ staining/ warping or aging concerns Apparent at time of inspection at Shrouds interior area Chain Plates at bulk heads. This is visible on Bottom of Cabinet Wood at Port and Starboard Chain plate area. Does not appear to be any structural degradation.</p>	<p>Re-inspect in details removing what is needed to assure structure is good. Repair as is needed.</p> <p>SEE PICTURE B001 and B002</p>		
B2	<p>(Ref. B2 Rigging) All running rigging lines inspected where possible, and appear many if not all will need replacements, due to aging exposure, and chaffing from use, and many have green Algae on them Other then were noted in Reference below:</p>	<p>Recommendations: All running rigging ages with time, environment exposure and normal Usage. Replacement is always suggested whenever any signs of any deterioration become apparent.</p> <p>SEE PICTURE B003</p>		

<p><b>B3</b></p>	<p>(Ref. B3 Rudder) Findings /Recommendations: <b>RUDDER:</b> Visual inspection of Rudder attachment, and system appear to be in good order With no apparent issues present. Visually appear true and perpendicular to vassal's hull. Rudder lower 5 inches on both port and starboard side</p>	<p>Moisture Meter Reading showing HIGH, ( IN RED Range of meter) may be in need of draining and repairs after drying out. Possible draining of any possible water in rudder.</p>		
<p><b>B4</b></p>	<p>(Ref. B 4 Prop to Shaft Mounting System) Findings /Recommendations Cutlass bearing was dry at time of inspection, appears to be within norms. Vessel is equipped with a 3 bladed fixed Prop appears functional and in need of proper cleaning / polishing.</p>	<p>All Prop Shaft Anodes in need of replacement as does the Vessels Main Anode on bottom of hull aft of keel See  <b>SEE PICTURE (B004 and B005 )</b></p>		

<p><b>B5</b></p>	<p><u>B5 -Engine and Trans Vessel floor/Soul Area</u> Oil and Trans Fluids apparent on floor/ bulge under Engine / Trans Indicates possible engine or trans leaking. ENGINE WAS NOT STARTED nor was TRANSSMISSION engaged for testing. Vessel was on the Hard</p>	<p>Recommend a complete cleaning of areas and a detail inspecting for leaks while system is working.</p> <p style="text-align: center;">SEE PICTURE B006</p>		
<p><b>C1</b></p>	<p>(Ref. C1 Boom to Mast Goose neck)Findings: Recommendations- Main Sail hauling up/ down, and Boom Outhaul System were not tested as no sea trial was preformed. No Sails were bent on at the vessel at time of survey.System appears functional.</p>	<p>Boom control system lines, Main sheet, outhaul, reefing system, Traveler System, Vang (Mast to Boom) , Topping Lift, were not evaluated for operations as rig was not UP</p> <p>Bend on Sails and check all for proper operations before taking vessel out for a sail.</p> <p>Repare or replace all that is needed for proper operations of these systems</p>		
<p><b>C2</b></p>	<p>Sail inventory not inspected during Survey. ON Vessel sails as inventory Main Sail, with Slab Riffing (Age and conditions Unknown at time of survey NOT INSPECTED) 150 Furling Genoa (Age and conditions Unknown at time of survey NOT INSPECTED) Functional evaluation of sails running rigging, sail inventory not preformed at time of Survey</p>	<p>NO SEA TRIAL was preformed.</p> <p>(Ref. C2 Sails) Recommendations: detailed inspection of all sails, and covers by a qualified sail maker.</p>		



<p><b>C3</b></p>	<p>All of Vessels winches were hand operated with <b><u>no loading</u></b> at time of evaluation. All functional and appear to be in good working order.</p> <p>Vessel equipped with 2 Cabin Top mounted Winches both Self Tailing Lewmar 16 (Port and Starboard)</p> <p>2 Cockpit Combings mounted Winches Both Self tailing Lewmar 40 (Port and Starboard)</p> <p><b><u>and check for parts quality with cleaning and greased.</u></b></p> <p>Winch handle was used to NO LOAD evaluate each Winch operations by hand at time of Survey.</p>	<p>(Ref. Winches)</p> <p>Recommendations: All winches be disassembled, inspected, cleaned and re greased as per manufacture.</p>		
<p><b>C4</b></p>	<p>(Ref. C3 Stanchions s and Life Lines)</p> <p>Recommendations: Complete Tuning of lifeline stanchion system tensions) after proper repairs are completed.</p>			
<p><b>C5</b></p>	<p>Vessels instrumentation Is As noted in vessels inventory listing.</p> <p>NO SEA TRIAL WAS PERFORMED as result NO Vessel INSTRUMENTATION SYSTEM operation was dynamically checked. (</p>	<p>Ref. C5 Rigging) Findings /Recommendations: Recommend a complete evaluation be performed on all instrumentation system for operation and calibrate where needed.</p>		

<p><b>C6</b></p>	<p>Numerous Deck Cracks which can and may lead to water leaking into vessels decking.</p>	<p>(Ref CFindings /Recommendations: Repair and seal ( NOT SOME repairs have already been completed on the Port Aft Deck by cockpit combing NOTE moisture Meter Reading indicate deck Mid Ranges Reading where cracking is present and LOW where cracks were repaired</p> <p>SEE PICTURE C002, C003, C004 and C005,</p>		
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## VIII. SUMMARY AND VALUATION

It is the surveyor's experience that develops an opinion of the OVERALL VESSEL RATING OF CONDITION once the survey has been completed and the findings have been organized in a logical manner.

The grading of condition, developed by BUC RESEARCH, and accepted in the marine industry, for a vessel at the time of survey, determines the adjustment to the range of base values in the BUC USED BOAT PRICE GUIDE, for a similar vessel sold within a given time period, as a consideration to determine the Market Value. The current BUC value is \$5,800. - \$8,200. ABOS vessels listed from \$6,650. to \$10,950. The Boattrader.com website also list comparable boats around \$8,500.

The following is the accepted marine grading system of condition:

"EXCELLENT (BRISTOL) CONDITION", is a vessel that is maintained in mint or Bristol fashion - usually better than factory new -loaded with extras - a rarity.

" ABOVE AVERAGE CONDITION", has had above average care and is equipped with extra electrical and electronic gear.

" AVERAGE CONDITION", ready for sale requiring no additional work and normally equipped for her size.

"FAIR CONDITION", requires usual maintenance to prepare for sale.

"POOR CONDITION", substantial yard work required and devoid of extras.

"RESTORABLE CONDITION", enough of hull and engine exists to restore the boat to usable condition.

As a result of my investigation, as shown in the SYSTEMS AND FINDINGS AND RECOMMENDATIONS section of this REPORT OF SURVEY, and by virtue of my experience, my opinion is

OVERALL VESSEL RATING:

**AVERAGE/FAIR CONDITION**

## STATEMENT OF VALUATION

1. The "FAIR MARKET VALUE" is the most probable price in terms of money which a vessel should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus.

Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- a. Buyer and seller are typically motivated.
- b. Both parties are well informed or well advised, and each acting in what they consider their own best interest.
- c. A reasonable time is allowed for exposure in the open market.
- d. Payment is made in terms of cash in u.s. dollars or in terms of financial arrangements comparable thereto; and
- e. The price represents a normal consideration for the vessel sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Therefore, after consideration of the reliability of the data, the extent of the necessary adjustments and condition of the vessel, it is your surveyor's opinion that the "FAIR MARKET VALUE" of the subject vessel is:

**\$ 6500.00**

***Six Thousand Five Hundred Dollars***

2. The "ESTIMATED REPLACEMENT COST" indicates the retail cost of a new vessel of the same make/model with similar equipment offered by the same manufacturer. "ESTIMATED REPLACEMENT COST" of the subject vessel is:

**\$25,000.00**

***Twenty Five Thousand Dollars***

## **HULL IDENTIFICATION NUMBER**



I certify that the picture of the Hull Identification number which appears above on the document was personally taken by the undersigned on the date indicated below. The Hull Identification Number is in agreement with the vessel's papers.

## **SURVEYOR'S CERTIFICATION**

I certify that, to the best of my knowledge and belief:

The statements of fact contained in this report are true and correct.

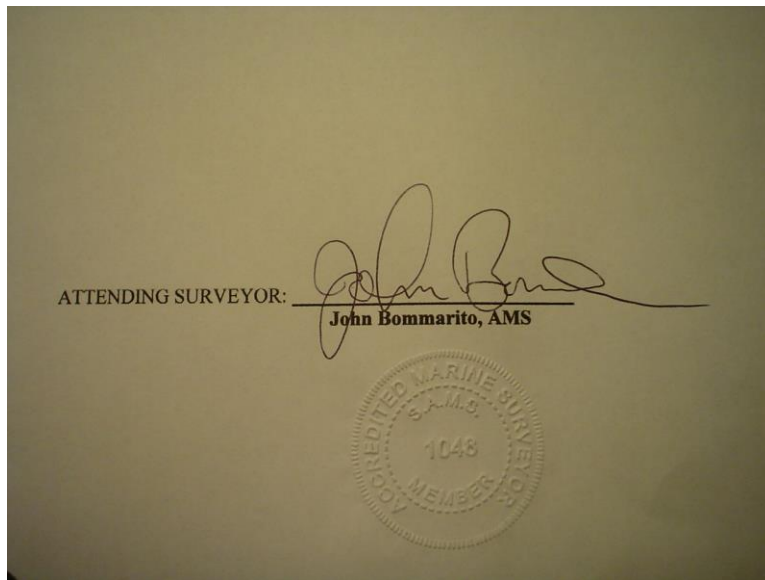
The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions.

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 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 is submitted without prejudice and for the benefit of whom it may concern.



John Bommarito, AMS

**Member of S.A.M.S and ABYC & Coast Guard Aux.**

**Marine Technologies Inc.**  
**22331 Oakwood St.**  
**Woodhaven, MI 48183**





**PICTURE A**



**PICTURE B**



**PICTURE C**



**PICTURE D**





**PICTURE A001**



**PICTURE A002**



**PICTURE A003**



**PICTURE A004**



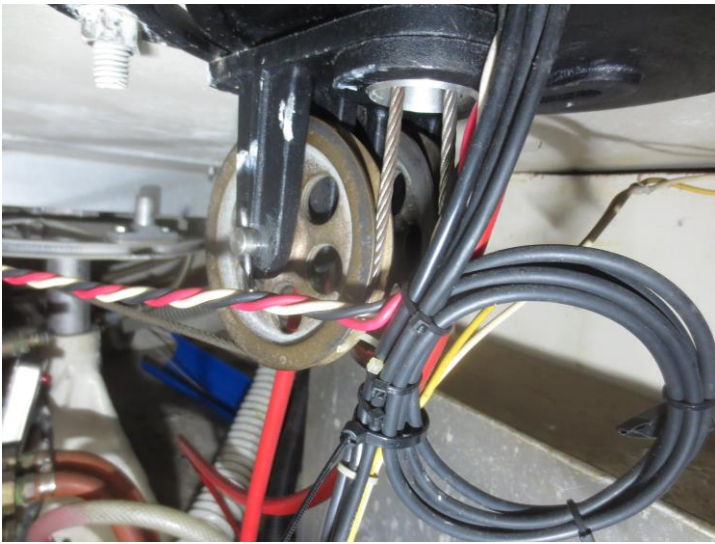
**PICTURE A005**



**PICTURE A006**



**PICTURE A007**



**PICTURE A008**



**PICTURE B001**



**PICTURE B002**



**PICTURE B003**



**PICTURE B004**



**PICTURE B005**



**PICTURE B006**



**PICTURE C001**



**PICTURE C002**



**PICTURE C003**



**PICTURE C004**



**PICTURE C005**



**PICTURE C006**



**PICTURE C007**