

MORMAN MARINE SURVEYORS

AMERICAN BOAT AND YACHT COUNCIL  SOCIETY OF ACCREDITED MARINE SURVEYORS® NATIONAL FIRE PROTECTION ASSOCIATION

MARINE SURVEY OF CONDITION

DATE TYPED: September 26, 2016

DATE SURVEYED: September 23, 2016

SURVEY REQUESTED BY: Stan Williams
43635 Cottisford St.
Northville, MI 48167

TELEPHONE: 310-962-8606

TYPE OF VESSEL: Ketch rigged, auxiliary, cruising sailboat, Island Freeport 41



OFFICE: 586.469.3898 SERVICING THE MARINE INDUSTRY SINCE 1963 FAX: 586.469.3906
37790 LAKESHORE DRIVE . HARRISON TOWNSHIP, MICHIGAN 48045



LOA: 41'
BEAM: 13' 2"
DRAFT: 5'
DISPL: 22,000 lbs.

There were no actual measurements or calculations made by this surveyor during the inspection; most measurements and capacities reported were taken from published sources.

HULL NUMBER: XLYC3515M76F

MODEL YEAR: 1976

BUILDER: Islander Yacht
Costa Mesa, CA

DOCUMENTATION: NO1032488
VESSEL NAME: Family Ties

ENGINE: Yanmar 4-cylinder diesel marine engine

ENGINE SERIAL #: E02033-16156

MODEL #: 4JH4-E

HOURS: 544.5

PROP: Unobserved, vessel in water

BORG WARNER VELVET DRIVE TRANSMISSION

MODEL #: 10-18-012

SERIAL #: 16156

RATIO: 2.91:1

SHAFT TYPE: Stainless steel

SIZE: 1"

HULL SHAPE: Round chine, shoal draft, full keel, attached rudder

HULL CONSTRUCTION: Fiberglass reinforced plastic

FASTENINGS: Stainless steel

FRAMES: Fiberglass reinforced plastic, tabbed

STRINGERS: Fiberglass reinforced plastic wood core

BULKHEADS: Plywood

DECKS: Fiberglass reinforced plastic with core

CABINS: Molded with deck

BILGES:

No signs of water, no signs of oil

BILGE PUMPS:

Manual, cockpit mounted Henderson pump

12 Volt Whale Gusher bilge pump with auto/manual switch

BERTHS:

6 Total
2 V-berth
2 Main cabin
2 Aft quarter berth

CANVAS/VINYL COVERS:

Burgundy canvas dodger with enclosure, pedestal cover, and main and mizzen sail covers, good condition
Stainless steel frame for dodger

CARPETING:

Tan and brown nylon carpeting, good to fair condition

COCKPIT CUSHIONS:

Beige vinyl with brown piping, good condition

DRAPERY:

Gray fabric, good condition

ELECTRICAL SYSTEMS:

125 Volt 30 amp shore power system, starboard amidships
4-12 Volt Group-29 batteries, ship's power system
125 Volt 30 amp shore power cord
Fused and circuit breaker ship's power system
Circuit breaker shore power system
GFCI receptacle needed
4-Way battery switch
AC Voltmeter
DC Voltmeter
Professional Mariner 12 Volt Marine Battery Charger
Model #: Pro Nautic 12-30P
Serial #: G63130

The visible wiring appears to meet current ABYC E-11 standards except as noted.

ELECTRONICS:

West Marine VHF Marine Radio
Model: Aurora
Handheld Standard VHF Marine Radio
Model #: Horizon HX851
Horizon Depth Sounder
Model: Depth
Horizon Knotlog to include temperature
Model: Speed

ELECTRONICS CONTINUED:

Handled Garmin GPS

Model #: 2

Engine instruments to include: rpm, water temperature, and oil pressure

Ritchie Compass, pedestal mounted

Model: Powerdamp

Horizon Wind Indicator

Model: Wind

Raytheon Autopilot

Model #: ST6000+

Raytheon 24 Mile Radar Display Unit

Model #: SL70

2 Sets of Motorola Walkie Talkies

EXTERIOR DECKS:

Eggshell Awlgrip paint, good condition

EXTERIOR HULL:

Eggshell Awlgrip paint, good condition

EXTERIOR TRIM:

Starbrite treated teak toe rail, good condition

Burgundy and blue waterline stripes, good condition

Burgundy and blue hull accent stripes, good condition

Reported to be blue bottom paint over epoxy barrier coat, condition unknown

FIRE PROTECTION:

3 Hand held type B-I USCG approved fire extinguishers located:

1 at main cabin

2 at aft cabin

Badger BC automatic fire extinguisher system

Model #: B15HD

The fire extinguishers showed fully charged at time of survey.

We recommend that all fire extinguisher systems aboard be re-certified.

FIRST AID EQUIPMENT:

Johnson & Johnson first aid kit

FUEL SYSTEM:

115 Gallon aluminum fuel tank, grounded with manual shutoff

Racor in-line fuel filter

Appears to meet current ABYC H-33, NFPA Chapter 5 standards and USCG (33 CFR) Subpart J Sec. 183.514 requirements.

GALLEY:

Built-in, gimbaled, stainless steel, propane Kenyon stove with three burners and oven
12 Volt solenoid safety switch
LPG placard
Propane pressure gauge
Overboard regulator tank storage locker
Built-in Daewoo Microwave Oven
Model #: KOR-630A
Stainless steel galley sink

GENERATORS:

None

GROUND TACKLE:

20 lb. West stern anchor with approximately 5/8" x 200' rod

HEADS: FORWARD

Enclosed, manually operated head with holding tank and deck pump out
Vented loop
Overboard Y-valve
Stainless steel head sink with beige countertop

AFT

Enclosed, manually operated head with holding tank and deck pump out
Vented loop
Overboard Y-valve
Stainless steel head sink with beige countertop
Shower stall in head

INTERIOR CONDITION:

Good condition

INTERIOR CUSHIONS/FURNISHINGS:

Tan/brown and gold upholstery fabric at forward cabin, good condition
Beige leatherette U-shaped dinette seating, good condition

INTERIOR TRIM:

Oiled teak bulkheads, good condition
Beige vinyl hull covering, good condition
Beige vinyl headliner, good condition
Oiled teak trim, good condition
Beige laminate countertops, good condition

LIFE SAVING EQUIPMENT:

Handheld air horn	2 safety harnesses
Jack lines	Life Sling System
Radar reflector	4 Heaving cushions
Horseshoe life ring	Handheld flares
Alert/locate signal kit	10 Type II USCG approved PFDs
4 Type III USCG approved children's PFDs	12 Type III USCG approved PFDs
Double life lines with gates	Teak cabin top handrails
Stainless steel double rail, welded, bow pulpit	
Stainless steel double rail, welded, stern pulpit	
All other lifesaving equipment was not aboard at time of survey	

It is suggested by this surveyor that to insure compliance with local marine laws, a USCG courtesy examination is done on all vessels.

MOORING EQUIPMENT:

- 4 Dock lines
- 4 Spring lines
- 4 Cylindrical medium fenders
- 3 Fender boards
- 4 Cleats; 2 at bow, 2 astern

NAVIGATION LIGHTS:

Meets current USCG standards, were working at time of survey
Masthead navigation/steaming lights

REFRIGERATION:

To follow

RUNNING RIGGING:

All lines, sheets and halyards necessary to properly sail this vessel
All halyard and reefing control lines lead aft to cockpit

SAILS:

- Mainsail
- 135% Roller furling genoa
- Light air genoa
- Mizzen

STANDING RIGGING: Inspected from deck
Aluminum mast and boom, deck stepped, painted eggshell white
Single spreader main masthead rig
Stainless steel wire stays and shrouds, continuous
Split backstay
Roller furling headstay system by ProFurl
Lazy Jack main mizzen system
Single spreader mizzen mast

STEERING:
Pedestal wheel cable steering with brake by Edson with Yacht Specialties wheel

THRU-HULLS:
10 Bronze below the waterline ball valves, observed, visually inspected, double hose clamped
2 Transducers

VENTILATION SYSTEM:
Natural only required
12 Volt blower system, was working at the time of survey

WATER SYSTEM:
12 Volt pressure water system by Par
110 Volt Torrid 10-gallon hot water tank with engine take-off system

WINCHES:
2 #26 Stainless steel, Bariant primary cockpit sheet winches
1 #10 Stainless steel, Bariant cabin top winch
1 #10 Stainless steel, Bariant mizzen mast winch

ACCESSORIES:

Sears 7 x 35 binoculars	Aluminum, adjustable boathook
3 Cabin fans	Chart table light
3 Solar deck vents	Desk in aft cabin
Dripless shaft log	Emergency tiller
Opening foredeck hatch	Opening aft deck hatch
Toe rail mounted genoa track	Interior table
Mainsheet traveler	Masthead running light
Masthead VHF antenna	Ship's papers and manuals
Outboard motor bracket, stern rail mounted	Slab/jiffy reefing
Spare lines	Spare engine parts
Pro-Tork spotlight	Mizzen cockpit light
Foredeck light	Turning blocks
Whisker pole	2 Winch handles
Windex	Set of bolt cutters
Hydraulic propeller lock	Johnson 8-hp dinghy motor

ACCESSORIES CONTINUED:

Aft cabin entry from cockpit
Stainless steel pedestal guard with cup holder
Stainless steel, folding, transom mounted swim ladder
Aqua Pro 8' 3" hard aluminum bottom inflatable raft with oars
Mercury 13' 9" inflatable raft with removable bottom
OMC 8 HP outboard engine
Serial #: JBREDS-040215858

THIS SURVEY REPORT WAS CONDUCTED SUBJECT TO THE FOLLOWING CONDITIONS:

This survey is not meant to imply the "condition" of any area that could not be seen because of bulkheads, false soles, molding, liners, or any other area that could not be removed for visual inspection. This survey does not include any destructive testing or core samples.

This survey assumes that there are no hidden or unapparent conditions to the vessel, equipment or devices. The surveyor assumes no responsibility for such conditions, or for engineering, which might be required to discover such factors.

Some of the USCG (33 CFR) Codes, NFPA Codes, and ABYC Recommendations that are in effect today may have been enacted after this vessel was manufactured. The recommendations thought to be necessary for safety have been addressed in this survey. However, complete compliance with current requirements and standards may not have been suggested. ABYC Recommendations are being upgraded all the time, mostly as a result of accidents, injuries, and/or fatalities. There is considerable pressure from safety officials and insurance companies to prevent and eliminate the causes of accidents. New boat builders, following ABYC Recommendations, NFPA Codes, and CFR Codes try to redesign problems that have been identified as causes of accidents. Boats built in earlier years may have system or faults not meeting current Recommendations and Codes. Boats are surveyed to present standards as part of the process of trying to reduce accidents. Please keep in mind that ABYC Recommendations are voluntary; insurance companies use them because there are no other recommendations and/or standards available. Your insurance company may request that you update the findings in this survey so as to lower the risk of having to pay a claim. Compliance is up to you; coverage is up to them.

Information, estimates, and opinions furnished to the surveyor, and contained in this survey, were obtained from sources considered reliable and believed to be true and correct. However, the surveyor can assume no responsibility for accuracy of such items furnished the surveyor.

On all surveys, subject to satisfactory completion of repairs, or alterations, the survey report is contingent upon completion of the improvements in a workmanlike manner.

This survey did not include inspection of any "condition" of the interior of any mechanical equipment or device.

This survey is an unbiased and honest opinion of this vessel's condition on the day of inspection, to the best of my ability; however, no warranty is either issued or implied.

GROUP A ITEMS (IMMEDIATE ATTENTION):

1. A ground fault receptacle is needed first in-line in order to meet current ABYC standards. Also all 110-volt circuits need GFCI'S installed first in-line.
2. The batteries need to have positive terminal protection and secured to the vessel.

GROUP B ITEMS (PROMPT ATTENTION):

- A. There was no waste management plan aboard at the time of survey. Code of Federal Regulations requires this on vessels of this size.

Sec. 151.57 Waste management plans.

This section applies to the following:

- a. Each manned oceangoing ship (other than a fixed or floating platform) of 40 feet or more in length that is documented under the laws of the United States or numbered by a state and that either is engaged in commerce or is equipped with a galley and berthing.
- b. The master or person in charge of a ship under paragraphs (a)(1) and (a)(2) of this section shall ensure that the ship is not operated unless a waste management plan meeting paragraph (c) of this section is on the ship and that each person handling garbage follows the plan.
- c. Each waste management plan under paragraph (b) of this section must be in writing and-
 - (1) Provide for the discharge of garbage by means that meet Annex of MARPOL 73/78, the Act, and Sec. 151.51 through 151.77;
 - (2) Describe procedures for collecting, processing, storing, and discharging garbage; and
 - (3) Designate the person who is in charge of carrying out the plan.

- B. The starboard knee for the mizzen mast chainplate shows high moisture and has dull sounds. This should be opened, inspected, and repaired as needed.

- C. There is moisture in the deck core at the following:

- The stern rail stanchion bases.
- The mizzen mast chainplates
- The main mast step area
- The aft lowers on the main mast.

These areas should be opened, inspected, and repaired as needed.

GROUP C MAINTENANCE/RECOMMENDATIONS: THIS SURVEYOR SUGGESTS THESE ITEMS BE ADDRESSED OVER THE OWNERSHIP OF THIS VESSEL:

- i. It is recommended that double hose clamps be added at all below the waterline thru hull fittings.
- ii. It is recommended that all below the waterline thru-hulls have a proper size wooden or foam plug attached to function as an emergency-plugging device.

- iii. The ground tackle shackles should have seizing wire locking the thumbscrews in place in order to insure against equipment losses and/or damage to the vessel.
- iv. The automatic fire extinguisher system needs to be currently certified.

SURVEYOR'S REMARKS

The above captioned vessel was surveyed, while in the water at Detroit Boat Basin, Detroit, MI; with Mr. Stan Williams present, for the purpose of hull condition. Any systems that were not commissioned at the time of survey were inspected but not operated.

BOTTOM:

The bottom was not sounded or inspected because the vessel was in the water.

TOPSIDES:

The topsides were observed where accessible and appeared to be in good condition. This vessel does not meet the ABYC H-41.9 recommendations for unassisted re-boarding of this vessel.

DECKS:

The decks were sounded and inspected and were appeared to be in good to fair condition, showing no signs of delamination but signs of deterioration in the core **see Items Noted**.

INTERIOR:

The interior of the vessel was inspected where accessible and appeared to be in good condition. All frames, partitions and bulkheads were inspected where accessible and found to be in good condition, showing no signs of weakness due to delamination or deterioration of the marine plywood or the fiberglass. The thru-hull valves should be routinely operated to insure that they are functioning properly. All thru-hull fittings below the waterline were noted to be in good condition. The interior stringers were measured, where accessible, for moisture content using a Protimeter Aquant moisture meter. The readings were 110-125 on the meter. This appears to be average to within normal limits for a vessel of this age. All hoses were inspected where accessible and were found to be in good condition. This vessel meets the USCG display regulations for discharge of oil and refuse.

ELECTRICAL:

The visible electrical equipment appears to have been installed according to good marine practices. The visible wiring has been inspected where accessible and appears to be in good condition. The engine compartment was found to have adequate ventilation. The bilge exhaust blower was in working order at the time of survey. The bilge pumps appeared to be in working condition at the time of the survey.

ENGINE:

The engine was inspected and showed no signs of oil or abuse. It was clean and free of grease, showing no signs of oil in the bilge. This surveyor is not a qualified engine mechanic; therefore, it is always recommended that a qualified NAME diesel marine mechanic be retained to ascertain the operational condition of the engine. The stringers were sounded and found to sound good. They were measured for moisture with the moisture meter. They read 110125 on the /Protimeter Aquant meter. This appears to be average to within normal limits for a vessel of this age.

Fuel, holding, and water tanks were inspected where accessible and appear to be sound. No obvious leakage was noted; however, it was not known if the tanks were at full capacity at the time of the inspection. The tanks should be filled with their appropriate liquid and checked under full-tank status, or pressure tested to attest to their conditions.

The general condition appears good structurally, good cosmetically, and has been well maintained.

We, at Morman Marine Surveyors, stand behind our work. If there are any errors or omissions in this survey report, or if there are any perceived or real problems that surface upon delivery, or commissioning of the surveyed vessel, please notify our office immediately. The surveyor should be consulted before any service work is performed, or any expenses incurred. If any work is performed or expenses incurred without our prior knowledge we cannot be held responsible.

This survey was performed for Mr. Stan Williams and is not intended for any other use except those related to Mr. William.

The below signed surveyor represents that he is an Accredited Marine Surveyor, and that he is actively and regularly engaged in the practice of marine surveying and vessel appraisals on a full-time basis. The enclosed invoice reflects my fees for services rendered to date. Although I have exercised due diligence in accordance with generally accepted surveying and appraisal practices, I cannot be responsible for any costs or liability which you might incur. I will, upon your request, make myself available in the future to assist you for whatever related reason and I will, of course, make my notes and files available for that purpose. My fee for any future work will be based upon my then applicable hourly rate.

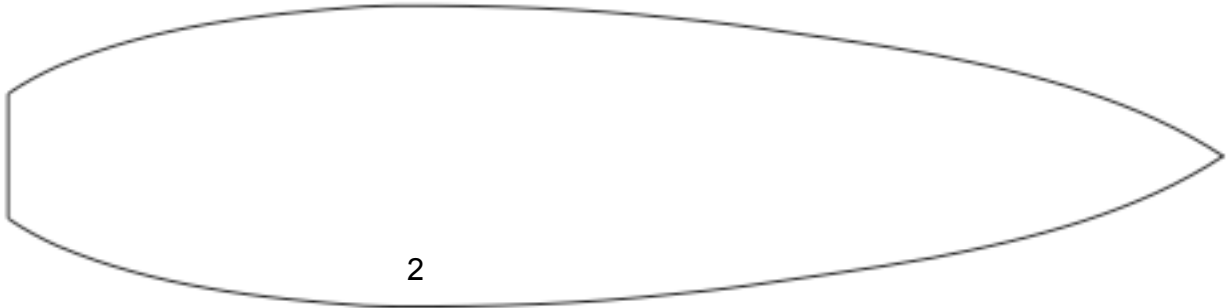
Thank you,



Jack Morman, AMS #674
SAMS Marine Surveyor

DECK FILLS AND FITTINGS: DESCRIPTION (Marked)

1. Waste
2. Fuel (Diesel or Gas)
3. Water

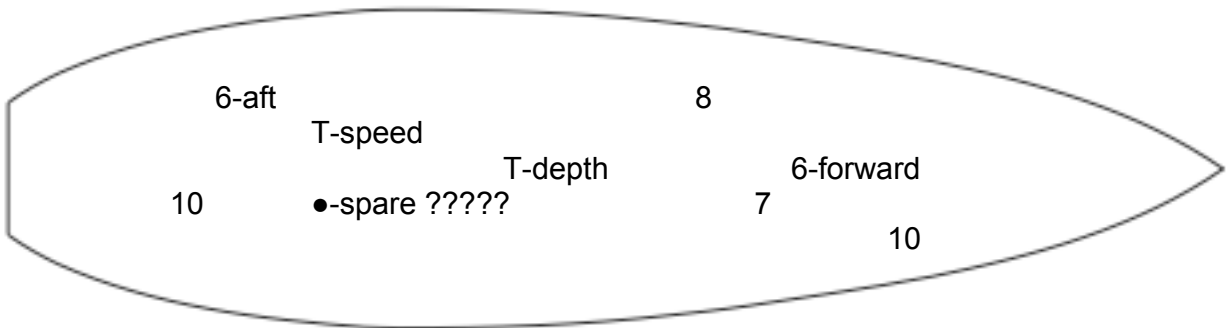


NOTE: All deck fills and fittings should be inspected minimally, annually. All hoses and clamps should also be inspected for deterioration, and replacements made as found.

THRU-HULLS: RELATIVE POSITIONS: DESCRIPTION:

- | | |
|----------------------------|------------------------|
| 1. Engine intake: | 2: Generator intake |
| 3. Air conditioning intake | 4. Macerator discharge |
| 5. Wash-down/Head intake | 6. Head intake |
| 7. Head discharge | 8. Galley discharge |
| 9. Scuppers | 10. Direct head drain |

T=Transducer (s) S=Speed D=Depth



NOTE: All sea valves should be exercised minimally annually and inspected for hose, valve, and clamp deterioration, and replacements made as found. All valves should have an attached soft pine bung for damage control purposes. All valves of this type should be taken down and lubricated minimally of every other year to facilitate

DEFINITIONS

ABYC	American Boat and Yacht Council
AMS	Accredited Marine Surveyors
CFR	Code of Federal Regulations
NFPA	National Fire Protection Agency
SAMS	Society of Accredited Marine Surveyors
USPAP	Universal Standards for Professional Appraisal Practices
USCG	United States Coast Guard
PFD	Personal floatation device
Bristol	A boat or area of a boat that has been maintained in mint or is in better than factory new condition, and is loaded with extras. A rarity.
Excellent condition	A boat in remarkably good; extraordinary; prime; admirable condition.
Good condition	A boat or area of a boat that is ready for no additional work and is equipped normally for her size.
Fair condition	A boat or area of a boat that requires usual maintenance to prepare for sale.
Poor condition	A boat or area of a boat that requires substantial yard work and is devoid of extras.
Restorable	Enough of the boat hull and engine(s) exist for the boat to be made in usable condition.
Marelon	A particular type of plastic thru-hulls.