Marine Survey, LLC





BASIC DATA

Mortgage/Finance **Damage Appraisal** Maintenance

SURVEY PERFORMED ON BEHALF OF AND FOR THE EXCLUSIVE USE OF:

No structure was disassembled; only visible and accessible systems and components were inspected. No warranty or guarantee is expressed or implied by this report. The surveyor is contracted by and works exclusively for the client. The surveyor will provide an evaluation of the vessel and a list of findings and recommendations for the correction of faults only to the client with the exception of items perceived as potentially dangerous in which case all parties concerned may be notified. No shore power or valid batteries were available

NATURE OF SURVEY: Condition/valuation;

LOCATION OF VESSEL DURING SURVEY:

DATE OF SURVEY: June 21, 2022

NAME OF VESSEL: " Menagerie II"

TYPE OF VESSEL: Fin keel auxiliary sloop

LOA: 29'9"

LWL: 24.25'

BEAM: 10'

DRAFT: 4.9'

DISPLACEMENT: 8,750#

BALLAST: 3,600#

ENGINE TYPE:

Four cylinder flathead gasoline; Universal Atomic Four

BUILDER:

Tartan Marine

YEAR BUILT:

1975

REGISTRATION NUMBER:

mC 8213 LA

HULL NUMBER:

TAR3024940275; this is not on the transom, it has been painted

over

with her

USCG DOCUMENTATION: None

HAILING PORT:

None

VESSEL REGISTRATION ON BOARD:

brought the title and registration

Jim Cukrowicz, A.M.S. Society of Accredited Marine Surveyors (SAMS) U.S. Coast Guard Licensed Master

HULL EXTERIOR

HULL MATERIAL: Fiber glass laid up in a mold

CONDITION OF FINISH: Dull and orange peeled in spots, on the starboard side aft for about six feet long and one foot high are horizontal cracks while on the port side just above the name are a series of vertical cracks six to ten inches in height for about three feet running

At the aft starboard corner are two filled in spots and below the second bow rail stanchion starboard side is a hole dug out about the size of a golf ball

The bottom paint is peeling off as several flakes rained down when struck with the percussion hammer

There is an old patch about four inches across just forward and above the forward end of the keel slightly to starboard

RUB RAIL: The stainless steel rail is of general good condition though pulled away slightly for a few feet where daylight can be seen between the stainless and fiber glass on the starboard side for a short distance

The teak toe rail is broken on the port side

TYPE OF UNDERWATER BODY: Fin keel with a small skeg to help support the rudder with one lower gudgeon about 2/3 of the way down from the top

THROUGH HULL FITTINGS: Very few; there is a fiber glass opening after the rudder at the water line

The exhaust exit is in the hull port side at the water line about even with the mast On the port side of the keel is a bronze grate which faces forward while across from this is the transducer and speedometer wheel and what appears to be a drain plug that has never been removed with an unusual gripping lug. After this is a very small hole in the fiber glass with a small tube which appears to be the galley sink drain

SOUNDING OF BOTTOM: No delaminations or voids were detected, and no blisters were observed

GALVANIC PROTECTION: None seen though there are anodes inside the transom above the cockpit seat level where two anodes are on each side of the rudder head as stops for the tiller

RUDDER: The fiber glass wrapped rudder has one wrap around gugeon about half way up the leading edge and although does not sound really dull over most of the surface, the starboard side reads moist into the wet range and the port side reads into the wet below the gudgeon otherwise high in the dry range of the GgRP 33 moisture meter

SHAFTS AND STRUT BEARINGS: Very little play in the short run of exposed shaft of one inch or one and a quarter inch diameter

PROPELLER CONDITION: The Federal Sailor two blade 12x9 inch has no edge damage though the crown nut is secured with only the rusty remnant of a cotter key

SWIM PLATFORM OR REBOARDING LADDER: There is no platform and the stainless steel ladder had been removed for long term storage; it showed up in a trailer ful of sails and cushions

DECK AND SUPERSTRUCTURE

TYPE OF CONSTRUCTION: Fiber glass laid up in a mold with some core material

SOUNDING OF DECK: The port side deck reads moist to wet at the shroud chain plates. There are unexplained trails of caulk on the starboard side deck. The fore deck forward of the anchor line cap sounds dull and reads as wet. A few various dull areas are at the water and waste deck plates which are also right at the port shroud chain plates. The starboard chain plates shows wet readings for about five feet with various wet readings better and worse. There is a dull sounding area reading into the wet outboard of the jib sheet track and between the aft most two stanchion bases. At the forward starboard corner of the cabin trunk is a 3x 1 ½' patch

NON-SKID SURFACE: Random stippling and grit in the surface; easy to match if it is cut open for repairs

COCKPIT HATCH LATCHES: Simple padlock hasps

COMPANIONWAY: Two large plywood bin boards and a sliding fiber glass hatch which moves easily and has some surface cracks on the port side. There is another set of bin boards secured over the quarter berth

DRAINS: There are two drains at the after end of the cockpit each side though the hoses are not secured and came right away from the drain fittings when touched

DECK HARDWARE: Mooring cleats, through bolted are of normal size and placement for this type vessel

WINCHES: The jib sheet winches are Barient 21 double speed while the aft winches are Merriman two speed units and these two are stiff

TRACKS: The jib sheet tracks are angled about four feet long with their centers about even with the after end of the cabin trunk while the main sheet track crosses the cockpit just ahead of the transom.

SPARS: The mast is an aluminum extrusion with single set of spreaders stepped to the keel; no damage observed. The aluminum boom has some loose screws at the goose neck which is of good condition There is a single winch on the mst for a halyard

RIGGING: Standing rigging is 1x19 stainless wire with swaged terminals and open barrel turnbuckles with no cracks observed

The Harken roller furling turns easily though the line is stiff and dirty

Running rigging, what is present is very dirty and stiff; and all should be replaced.

CHAIN PLATES: These are all stainless steel with the shroud chain plates passing through the deck bolted to partial bulkheads, the back stay plate is bolted outside the transom with five bolts appearing straight. The forestay chain plate is a fitted stem piece and bolted through the fiber glass bow.

HAND RAILS: Four wood grab rails on the coach roof extend most of the cabin length

BOW AND STERN RAIL: Both are fairly stout

LIFELINES: These were removed to the quarter berth and seem to be of good condition

VESSEL'S INTERIOR

CONDITION OF JOINER WORK: Some locker doors are on the verge of coming apart at the joins though none actually failed while opening. There are many water stains on the teak faced plywood lining the inside of the cabin trunk

ACCESS TO INNER HULL SURFACE: Limited with small openings above the keel in the plywood cabin sole. There is some access inside of fiber glass molded in furniture

MEANS OF HULL SUPPORT: decks, soles, some interior furniture, bulkheads and some fiber glass frames

The partial bulkhead of teak ply has some decay at the settee level between the had and main cabin

HAND HOLDS: Wood grab rails run along both sides of the main cabin

BILGE: this was holding some very dirty water which precluded inspection of the keel bolts

HULL/DECK JOINT: This is fiber glassed together

COMPANIONWAY STEPS: Sturdy and well attached

PORTS: two opening portholes and three overhead hatches, the forward one is large enough for escape

CABIN SOLE: Dirty plywood which has some slight deflection underfoot though will decay if the water is not evacuated from the bilge

UPHOLSTERY: This arrived in a trailer and is of good condition

HEAD LINER: Vinyl covered panels with wood batgts between, some vinyl shrinking back from the panel edges

PLUMBING:

WATER TANKS: This is fiber glass built into the hull in the port settee with a four inch inspection port; reported "always contaminated" though no foul odor was noted with opening the inspection port

PIPES: Reinforced plastic hoses and hose clamps

WATER PUMP: 12 volts of an unusual type with no markings

HEAD TYPE: Jabsco manual flush using raw water from outside the boat; the unit appears newer than the boat

HOLDING TANK: There is a bladder tank below the port side of the V-berth with two vents with hoses leading to the bow

GALLEY STOVE: This is an old style two burner wick alcohol (wick alcohol stoves are easier to operate and produce more heat0 there is a rust tain on the cover and the handle came away when opened

C.O. DETECTOR: None, one should be installed in each cabin

SINK DRAINS: Overboard below the water line with ball valves; the valve for the head sink is stuck and the drain for the galley stove is tiny

SHOWER DRAIN: Into the bilge

WATER HEATER: None

SHORE SIDE WATER PRESSURE REDUCTION VALVE: No attachment point for this was observed

REFRIGERATOR: There is an ice box above and after the galley counter top

AIR CONDITIONER: None installed

ELECTRIC SYSTEM

VESSELS SYSTEM: 12 volt D.C.

NUMBER OF BATTERIES AND TYPES: two size 29 wet cell lead acid batteries are sitting in a dedicated battery well enxt to the engine thugh the terminals are not covered and they are not secured against coming adrift in a knock down

MASTER SWITCH: Next to the batteries is a four position rotary vapor proof master

ELECTRIC PANEL Above the quarter berth the newer panel consists of six marked switches and fuses

Next to it is a rule bilge pump switch and fuse

REVERSE POLARITY INDICATOR: None; the aC system consists of an inlet plug at the stern with no breakers there though it is about six feet to a pair of 15 amp breakers in a metal box like a Square D

WIRING: Wire nuts are present in some locations, notably for the bow lights

BATTERY CHARGER: Professional Mariner Pro Sport 20 modern unit

ALTERNATOR: Motorola which is original equipment on Atomic Four engines

OUTLETS: None of the AC outlets are supplied with ground fault interrupters

BONDING SYSTEM: The rigging is bonded to the engine though the keel bolts were inaccessible and the through hull valves are not included in the system

BONDING OF AC AND DC GROUNDS: There is no continuity here

PROPULSION MACHINERY AND GENERATOR

ENGINE MAKE AND TYPE: Universal Atomic Four flathead gasoline model 5101

SERIAL NUMBERS: 193883

TRANSMISSIONS: These transmissions are always connected to Atomic 4s sharing the same oil and this transmission is reportedly locked up which was likely what was felt in trying the shaft bearing.

HOURS: There is no meter

ENGINE INSTRUMENTS: Oil pressure, water temperature and amp gauge

ENGINE AND TRANSMISSION CONTROLS: Removed from the cockpit; missing

VENTILATION OF ENGINE COMPARTMENT: There is a downward facing clamshell vent aft in the cockpit though the vent hoses may need replacing

REPAIR AND MAINTENANCE ACCESS:

EXTERIOR APPEARANCE OF ENGINES: Rusted exterior

BACKFIRE FLAME ARRESTORS: This is clean for the down draft carburetor which appears to be newer

COOLING SYSTEM TYPE: Raw water from outside the boat

COOLING SYSTEM CONDITION: There are some cracks on the hose at the after port hose on the manifold, the alternator belt looks good and the water pump is shaft driven though will need a new impeller after nine years in the same position

EXHAUST SYSTEM TYPE: This is a dry stack with metal and (probably asbestos) where passing through next to the mast where water is injected to cool the hose through the hull port side

ENGINE MOUNTS: The adjustable shock mounts are secured to fiber glass beds which sound good

ENGINE ALARMS: No battery power available

FLUID LEVELS: Engine oil is full and dirty which is the same fluid as in the transmission

ENGINE FUNCTION: Not operated at this time

ENGINE ROOM INSULATION: Fiber glass which is a bit ratty from catching on the engine parts when the box is removed and replaced

GENERATOR: None

FUEL SYSTEM

Most hose manufacturers now recommend hose replacement every five years which is more important since the introduction f ethanol into fuel mixtures as this accelerates the deterioration of the hoses from inside

FUEL TYPE: Gasoline, there is no odor of fuel inside the vessel and reportedly it had been operated lately with an outboard fuel tank due to a leak in the Tartan installed tank. The tank and all fuel lines should be replaced

AUXILIARY FUEL FILTERS: Fram Special Marine which is ancient tech, usually full of wet cardboard and rust

STEERING SYSTEM

TYPE OF STEERING: Wheel on pedestal with pull/pull cables to a disc. This is stuck which may be as easy as removing all the hoses jammed against the disc and tied up with light line

FASTENING COMPONENTS: Could not get a good view of cable terminals

EMERGENCY STEERING: A tiller was located in the quarter berth though not fitted

AUTOMATIC PILOT: None

CANVAS AND COVERS: The main sail cover seems to be serviceable There is a UK main and roller furling genoa which seem to be nearly new The storm sail is of good condition

The older sails do not need to be carried aboard when the boat is used Sails and cushions were stored away from the boat so are of good condition

SAFETY AND NAVIGATION EQUIPMENT

HORN/WHISTLE: There is a brass bell stowed in the galley

BELL: (20M& up, 65.5'):

PERSONAL FLOTATION DEVICES: Removed for nine year lay up

THROWABLE PFD'S: Aboard was a tafrail bracket for a horse shoe buoy which was brought aboard after the survey and a float cushion was in the cockpit locker

FIRE EXTINGUISHERS: No valid units were aboard

AUTOMATIC FIRE FIGHTING SYSTEM FOR ENGINE ROOM: None

RADIO: no VHF radio was observed aboard

DEPTH SOUNDER: Exterior bulkhead mounted horizon speed and depth gauges

NAVIGATION: No electronic navigation was aboard

SPOTLIGHT: None

RADAR: None

COMPASS: The removed compass was seen below the boat with most of the fluid

missing

NAVIGATION LIGHT PLACEMENT: Placement conforms to CFR though there

was no power to test them

DISTRESS FLARES: None observed

BOOK OF NAVIGATION RULES (39.4' or greater): Not required

GROUND TACKLE: Forward appearing to be the main anchor was a Danforth type anchor of c. 13# with c. 100-15- feet of 3/8' laid nylon. Before leaving the owner was seen to be bringing aboard a 20# CQ R which will be better when rigged with ½" nylon line

FIRST AID KIT: None aboard

TOOLS: None aboard

DISCHARGE OF OIL STICKER: This is on the engine box hatch

WASTE MANAGEMENT PLACARD: Not observed and one must be installed

BILGE PUMPS: The electric bilge pump was not seen due to the dirty bilge water The Guzzler seems to have too much hose coiled up which may be jamming the steering

HIGH WATER ALARM: None observed

A. The immediate recommendations are to be considered as essential requirements of the United States Coast Guard. Failure to comply with USCG Code of Federal Regulations might possibly result in a summons if the vessel is boarded.

Current emergency signaling equipment must be aboard as well as fire fighting equipment to meet CFR 9ABYC will recommend more extinguishers than USCG

A waste management placard must be installed

The emergency signaling flares must be up to date though there is a newly approved electronic flare now available that only requires changing batteries every year

The HIN must be restored to the starboard side of the transom as per CFR

B. The following recommendations are considered safeguards in regards to the safety of the vessel, crew and passengers.

The steering wheel needs to be freed up then fit the tiller to see if it is even useful as a back up

Put a cotter key in the crown nut after the propeller

The starboard shroud chain plate has on offset along the bulkhead to which it is attached where it appears to be welded slightly out of alignment with an angled strut going up inside the locker to spread the load against the deck. There is also some cracking and lifting of the fiber glass on the inside of this bulkhead (at the forward end of the starboard settee. A naval architect should be consulted to ascertain if there is strength here to support the rig as it is now this is an unconventional fix to say the least. The bulkhead should probably be replaced.

The bulkhead next to the mast on the port side is showing some decay along a narrow band at the level of the settee where water has followed the chain plate in and the water has followed the bulkhead to the seat level where it has not always dried.

The hoses for the cockpit drains must be pushed on all the way and re-secured with hose clamps; with these hoses coming off rain water can sink this boat

Never allow swimmers in the water near the vessel while connected to shore power or while the generator is running; take similar precautions when an inverter is present. Do not allow guests to swim in the marina; electric shock drowning is real.

C. The following recommendations are to be considered standards of Marine Practice, endorsed by the ABYC and NFPA (some of these recommendations may not have been in effect when this vessel was constructed).

Fire fighting equipment must be carried aboard with current dates

A carbon monoxide detector must be installed in each sleeping cabin as well as smoke alarms

The AC and DC electrical grounds should be bonded together

Batteries must be secured in place, tied down with the positive terminals covered with insulating boots

Exhaust hoses must be double clamped; many of the hose clamps now employed are rusty

D. The following are recommendations to be considered as suggestions to the owners and are identified as optional purchases, repairs, and refinements.

Work the bilge drain plug out of the side of the hull above the keel starboard side Get this bilge dried out and keep it clean Dry this boat out inside

The batteries are non viable as each was less than one volt, sitting for nine years

Running rigging should be replaced; it might clean up but there appears to be some pieces missing

Replace the fuel tank and all hoses including bonding wires which are most important on a gasoline powered vessel

The wet portions of the deck can be excised and repaired with epoxy resin and glass cloth; the surface is easy to match as it is not molded in

Some cabinet doors may need to be reglued as some joints are opening up

The owner reported that the transmission did not work though could not be tested as the shift levers and cables were removed out of the cockpit. A boatyard worker remarked later that at one time the transmission had trouble and it was because the hardware securing the cables was pinched and bent by the table.

The engine cooling impeller has certainly taken a set after nine years static and will need replaced; it is very accessible

Re-bed all the port lights, portholes and deck hardware

SUMMARY AND EVALUATION

This 1975 Tartan 30 has been left sitting for nine years as reported and needs a good cleaning up as well as the many items in need of attention mentioned in the categories above. The newer suit of sails and hardware are likely worth more than the value of the boat as it sits. The roller furling is by Harken and continues to feel good when turned. The cushions are all of good condition as seen coming out of the trailer. "Menagerie II" appears to have been painted and may not polish and wax well; it need a good paint job, the bottom paint was flaking off as it was struck with a percussion hammer and needs to be taken down to a bare hull and roughed up. The port toe rail needs to be replaced and the gold ball divot at the second bow rail stanchion starboard side needs to be repaired where the paint is badly cracked on the fore deck; it's a project boat.

Someone with slight fiber glass and minor wood working skills could restore the decks of this vessel which seems fine in the cockpit and most of the cabin exterior. Recommended is "Fiberglass Boat Repair& Maintenance" from Weest System, Inc. Bay City, MI

Finding comparative values for this boat would be futile as vessels listed for sale do not come with a list of deficiencies and NADA boat valuations have no provisions for condition.

BUC Value Pro lists six levels of condition with this one level classified as "Restorable" showing a value of \$3,400 which should be tempered to reality by rounding down to \$3,000 because in AVERAGE condition this vessel with the gasoline engine would only be worth approximately \$10,000.

Replacement cost of this vessel with one built new today would be approximately (as per BUC Value Pro) \$145,000.

Signed without prejudice,

Jim Cukrowicz, A.M.S.

Society of Accredited Marine Surveyors

Former U.S.C.G. Licensed Master