

# **REPORT OF MARINE SURVEY**

# **CONDITION & VALUE**

of the vessel
"EOS"
1978 Tartan 30



### PREPARED EXCLUSIVELY FOR:

CONDUCTED BY:
Michael Grame, SAMS A.M.S.
on
11/04/2022

# Page 2 of 20

# SURVEY REPORT TABLE OF CONTENTS

Major Systems Surveyed	Page No.
SURVEY SCOPE & GENERAL INFORMATION	3
EXTERIOR HULL & BOTTOM INSPECTION	5
TOP DECK & SUPERSTRUCTURE	6
INTERIOR HULL & STRUCTURAL INSPECTION	7
HELM & NAVIGATION ELECTRONICS	8
SAILS & RIGGING	9
PROPULSION SYSTEM	9
STEERING SYSTEM	10
TANKAGE / PLUMBING	11
CABIN & INTERIOR APPOINTMENTS	12
ELECTRICAL SYSTEMS	13
SAFETY EQUIPMENT	14
INSPECTION RECOMMENDATIONS SUMMARY	15-16
CONDITION AND VALUE REPORT SUMMARY	17
CLOSING STATEMENT	18
PICTURES	19-20

#### SURVEY SCOPE & GENERAL INFORMATION

**SCOPE OF SURVEY** 

Report file no.: 22132 Inspection date: 11/04/2022 Date of written report: 11/06/2022

**Conducted by:** Michael Grame, SAMS A.M.S.

**Requested by:** This survey was performed at the request of the owner,

was present during the inspection.

**Purpose of survey:** Assess the overall condition and value of vessel for insurance and valuation

purposes.

**Intended use of vessel:** Pleasure

Vessel surveyed at: , VA 23651

**How survey conducted:** The survey was conducted in the water only. No haul out or bottom

inspection performed.

**Sea Trial Run:** A sea trial was not performed.

**Electrical systems checked:** D.C. power was used to check D.C. electrical systems. There are no

A.C. electrical systems.

**Moisture checks:** The Electrophysics FiberNaut moisture meter was used for moisture readings referenced in this report. All moisture readings are comparative to surrounding areas with terms of normal or relatively dry, relatively moist or relatively wet. If delamination is present with above normal moisture readings, further testing is advised.

#### **VESSEL CONDITION & VALUE**

Condition rating: BELOW AVERAGE CONDITION

Estimated fair market value: \$4,000

Estimated replacement new cost: \$70,000 (BUC Book)

**NOTE:** The overall vessel condition and value was established after a complete inspection

of stated vessel, the results of which are included in this report of survey. The estimated fair market value and replacement cost includes all listed auxiliary equipment. See "Condition & Value Summary" section for additional details.

#### **SURVEY REQUESTED BY:**

Client name:

**Email:** 

Phone:

Address:

City/State/Zip:

#### **VESSEL INFORMATION**

**Vessel Yr/Make/Model:** 1978/Tartan/30

**Vessel name:** "EOS"

**Hailing port:** Wayne, PA

Hull ID number (HIN): TAR30554M78H



Digital picture of hull identification number

Page 4 of 20

#### **VESSEL INFORMATION (cont.)**

State registration no.: MD 3838 AK

**USCG Documentation #:** N/A (State Registered Vessel)

**Registered owner:** John Herrin **Manufacturer/Builder:** Tartan

**Vessel description:** The 1978 Tartan 30 is a masthead sloop with a thru deck stepped mast and wire rigging. It is powered by an Atomic 4 gas engine. It has one stateroom forward and a quarter berth aft on the port side. It has a head with a manual flush toilet and a basic galley. The salon is decent in size with bench seating. It is in below average condition.

#### **VESSEL SPECIFICATIONS**

**Type:** Masthead Sloop

Length overall (L.O.A): 29'11"
Beam: 10'0"
Draft: 4'11"
Displacement lbs. (approx.): 8,750 lbs.

#### **SURVEY INSPECTION COMMENTS**

**Comments:** 

All systems and components inspected and described herein are considered serviceable and/or functional except as indicated in the survey report and recommendations section. Electronic devices and instruments were checked for power up only - not for functionality. If a component is not identified in this report, it was not inspected.

- Recommendations marked in Red relate to the USCG, the CFR and or state laws and are legal requirements
- Recommendations marked in Green relate to ABYC and/or NFPA standards and other safety issues.
- Recommendations marked in Blue relate to maintenance and upgrades.

The US Power Squadron offers relatively inexpensive boating safety classes for both new and seasoned boaters and will better prepare any boater for use of a power or sailing vessel on open waters. Many Insurance companies offer premium discounts upon successful completion of these classes. Recommend that you check with your local US Power Squadron office for availability of these classes. Some of the topics covered are:

Advanced Power Boat Handling Mariner's Compass

Anchoring Onboard Weather Forecasting
Basic Coastal Navigation Sail Trim and Rig Tuning
Boat Handling Under Power
USCG Regulations & CFR's Knots, Bends and Hitches

Marine Radar Using VHF & VHF/DCS Marine Radio

How to Use a Chart Using a GPS

Surveyed by: True Blue Marine, LLC

#### **EXTERIOR HULL & BOTTOM INSPECTION**

#### **HULL EXTERIOR**

**Construction material:** Fiberglass construction.

**Hull cosmetics:** Fair condition.

**Moisture/Delamination:** Unable to check the entire hull, but the areas inspected were ok.

Stem: Ok. No issues noted.

**Side thru hull fittings:** None.

**Rub rail:** Stainless steel. Good condition.

**Notes:** 

#### **TRANSOM**

**Transom type:** Raked transom.

**Moisture/Delamination:** Moisture levels are normal and no delamination noted.

**Stress cracks:** See notes below.

**Transom thru hull fittings:** None. **Swim platform:** None.

**Swim/ boarding ladder:** Four-step stainless steel foldout ladder. Good condition.

**Notes:** 

• There has been a poorly done repair at the bottom of the transom which is only a cosmetic issue. Also, there are minor gelcoat cracks on the port side of the transom. (Pic #1)

#### **HULL BOTTOM**

**Construction material:** Not inspected. **Bottom paint:** Not inspected. **Moisture:** Not inspected. **Stress cracks:** Not inspected. **Osmotic blistering:** Not inspected. **Grounding damage:** Not inspected. **Strainers/Scoops/Screens:** Not inspected. Transducers: Not inspected. Thru hull fittings: Not inspected. **External drain plugs:** Not inspected.

**Notes:** 

#### KEEL

Keel type:Not inspected.Keel condition:Not inspected.Keel bolts:Not inspected.

**Notes:** 

#### **RUDDER**

**Rudder type**: Not inspected. **Rudder bearing**: Not inspected.

**Notes:** 

#### PROPELLERS & RUNNING GEAR

**Prop**(s) description: Not inspected. Size/ pitch: Not inspected. **Prop manufacturer:** Not inspected. **Prop condition:** Not inspected. **Direction:** Not inspected. Strut(s): Not inspected. **Shaft:** Not inspected. **Cutlass bearing(s):** Not inspected. Shaft seal: Not inspected.

Notes:

**ANODES** 

**Rudder:** Not inspected. **Shaft:** Not inspected.

**Notes:** 

#### TOP DECK & SUPERSTRUCTURE

#### MAIN DECK & FITTINGS

**Moisture/ delamination:** See notes below.

**Anchor platform:** Stainless steel anchor roller assembly.

**Anchor/ chain locker:** Anchor is a galvanized steel plow anchor of approximately 15 lbs. with

approximately 50 feet of chain and 50 feet of rode.

**Deck pipe:** Bronze hawse hole. Good condition.

Windlass: N/A

**Bow pulpit/ rail:** Stainless steel bow rail. Good condition.

**Stanchions/ side rail(s):** Stainless steel stanchions. Good condition and well secured.

**Boarding gate:** Pelican hooks in lifeline.

**Toe rail(s):** Teak toe rails. Good condition.

**Lifelines:** Single uncoated stainless steel lifeline cable. Ok.

**Cleats & fairleads:** (3) 8" aluminum horn cleats. Good condition and well secured.

**Grab rails:** Teak grab rails. Good condition.

Cabin house windows: (2) fixed portlights, (2) opening portlights and (4) fixed acrylic

windows. See notes below.

**Radar arch:** N/A

**Hatches:** (1) fiberglass hatch. Ok.

Surveyed for: Surv

Surveyed by: True Blue Marine, LLC

#### MAIN DECK & FITTINGS (cont.)

**Mast step:** Aluminum mast step. Good condition.

**Notes:** 

- The plexiglass fixed cabin windows have some ultraviolet craze cracking in the acrylic lenses.
- The foredeck has elevated moisture levels on the forward most 4 feet of the deck and gelcoat cracking around the bow rail bases. (Pic #2)
- The port side deck has highly elevated moisture levels in a 4 foot area in the midship area where the fuel fill, chain plate covers and stanchion base are located. This area sounds slightly soft in some areas with minor delamination. There are also gelcoat cracks around the chain plate covers. (Pic #3)
- There is another area on the port side deck between the two salon windows that has minor delamination in a 1 foot by 2 feet area.
- There are elevated moisture levels and delamination on the starboard side deck in a 4 foot area midship near the chain plates with minor gelcoat cracks around the chain plate covers.
- There is another area just forward of the starboard genoa track on the starboard side deck that has a crack that was filled in with sealant that has elevated moisture levels and minor delamination.

#### AFT DECK/ COCKPIT

**Construction:** Fiberglass construction.

**Sole:** Nonskid gelcoat.

**Scuppers/ deck drains:** (2) deck drains in aft of cockpit. Fittings and hoses are in good

condition.

**Lighting:** N/A

Canvas: Dodger with stainless steel frame and blue Sunbrella fabric with

isinglass panels. Fair condition.

**LPG system:** None.

**Notes:** 

#### INTERIOR HULL & STRUCTRUAL INSPECTION

#### **HULL INTERIOR & STRUCTURAL COMPONENTS**

**Hull to deck joint:** Good condition. No signs of leakage or separation noted.

**Bilge(s) & bilge pumps:** 500 GPH computerized Rule bilge pump in center bilge and manual

bellows style pump in bilge. Operational.

**Bilge Notes:** Whenever you visit your boat, it is good practice to check the bilge area(s) for higher than normal levels of water and proper functionality of the bilge pump(s) or anything else that could be causing trouble.

**Stringers:** Fiberglass stringer grid system. Good condition where accessible.

Bulkheads: Wood bulkheads.
Stem: Ok. No issues noted.
Inside of transom: Ok. No issues noted.

**Notes:** 

#### ALL THRU HULL FITTINGS

**Sea valves:** Bronze quarter turn ball valves.

**Sea valves condition:** See notes below.

**Sea valves piping:** Ok. **Sea strainers:** None.

**Transducers:** In hull transducer.

**Notes:** 

• The waste overboard discharge seacock is frozen in the open position. Free up or replace as needed.

#### **HELM & NAVIGATION ELECTRONICS**

#### NAVIGATION ELECTRONICS

- Garmin echoMAP 50s Chartplotter. See notes below.
- Apelco 6500 VHF. Transmits and receives well.
- Autohelm Digital Depth. Operational.
- Autohelm Digital Speed. Operational.
- Autohelm Autopilot. Not tested.
- Ritchie Compass. Good condition.

#### **Notes:**

• The Garmin chartplotter does not power up.

#### **ENGINE INSTRUMENTS & CONTROLS**

Throttle & shift controls: Side mount controls with separate shift and throttle.

Engine room blowers: Not working. See Main Engine section notes (page 10).

**Engine status:** Analog gauges (oil pressure, temperature, amps). Unable to test.

**Panel lights:** N/A

**Notes:** 

#### OTHER ELECTRONICS & CONTROLS

**Antenna(s):** VHF antenna at masthead.

**Bilge pump switches:** Operational.

Courtesy lights: None.

**High water alarm:** None installed. See notes below.

**Spotlight controls:** None. Windlass controls: N/A Windshield wipers: N/A

**Notes:** 

• There is no high water bilge alarm installed which is required as per ABYC standard H-22.7.3 which states, "On boats with an enclosed accommodation compartment an audible alarm shall be installed indicating that bilge water is approaching the maximum bilge water level."

#### **SAILS & RIGGING**

**Mast:** Aluminum thru deck single spreader mast.

Standing rigging/condition: Fair to good condition as viewed from deck. Note\* Standing rigging

inspected from deck level only.\*

**Running rigging:** See notes below.

**Furler:** Harken furler. Furls and unfurls properly. Good condition.

**Boom**(s): Aluminum boom. Good condition.

Sails: Main sail- Fair condition. See notes below.

Genoa- See notes below.

Sail covers:Good condition.Chain plates:Good condition.Backstay:Good condition.Boom Vang:Good condition.Traveler:Good condition.

**Genoa tracks:** Aluminum tracks on side decks aft area. Good condition.

Mast base: Aluminum. Good condition.

**Mast hole opening/ boot:** Fair condition.

Winches: (2) Lewmar size 40 two-speed self-tailing winches.

(1) Barient size 10 winch.

(2) Barient size 8 winches on mast.

#### Notes:

The main sail halyard is missing.

The genoa sheets are missing.

• The genoa sail is heavily ripped near the foot and needs replacement.

#### PROPULSION SYSTEM

**MAIN ENGINE** 

Manufacturer/ type: Universal Atomic 4 four-

cylinder gas engine.

Model number: Universal Atomic 4
Serial number: Could not locate.
Engine hours: Hours unknown.
Raw water hoses: Good condition.

Belts & pulleys: Unable to see with belt guard in

place.

Cooling system(s): Raw water cooled.

**Oil level and condition:** Oil is at the proper level and

appears ok.

Flame arrestors/air filter: Ok.

**Ignition protection:** See notes below. **Engine ventilation:** See notes below.

**Fuel pump(s):** The fuel pump is relatively new and is operational.

**Fuel supply lines:** Proper USCG approved A1-15 fuel hoses. Good condition.



MAIN ENGINE (cont.)

**Fuel filter(s):** Racor S3227 primary fuel filter and inline secondary filter on the

engine.

**Engine mounts:** Ok.

**Exhaust:** See notes below.

**Alternator:** Appears in good condition. Unable to test.

**Engine compression test:** Cylinder #1- 106 PSI

Cylinder #2- 114 PSI Cylinder #3- 103 PSI Cylinder #4- 123 PSI

**Compression variance-** 16.2%. See notes below.

#### **Notes:**

• A compression test was performed and the spark plug for the #2 cylinder had rust on the electrode and had saltwater spraying out of the spark plug hole. This could indicate a cracked cylinder head, bad head gasket, bad exhaust manifold or cracked engine block. Recommend having it checked by a competent marine mechanic. Additionally the compression results are marginal at best with a 16.2 percent compression variance.

- The threads for spark plug #3 in the cylinder head may need to be re-tapped. It was difficult to remove the spark plug and it did not go back in very smoothly.
- The positive terminal post on the engine starter needs a protector rubber boot installed to comply with ABYC standards.
- The sections of exhaust pipe from the exhaust manifold to the exhaust hose is made of galvanized steel and should be replaced with either stainless steel, bronze or cast iron. Galvanized steel is not made to work with high temperatures and the heat combined with dissolved salts can create acids which can corrode the pipe from the inside. The forward section with the barb for the vented loop tee'd into it is already showing signs of corrosion. (Pic #4)
- The engine compartment exhaust blower does not work. It is a federal requirement to have an operational exhaust blower on inboard gas powered vessels. Repair as needed.
- All of the exhaust hoses are only single clamped. It is a federal requirement they be double clamped. Add clamps as needed.

#### **TRANSMISSION**

**Manufacturer:** Universal Atomic 4

**Model number:** The transmission is part of the engine.

**Serial number:** Not seen. **Gear ratio:** Unknown.

**Fluid condition:** Uses engine oil. Ok.

#### **STEERING SYSTEM**

**Type:** Tiller handle.

Lines & fittings: N/A
Pressure/ reservoir tank: N/A
Mounting(s): Ok.

**Rudder gland:** Good condition.

**Steering quadrant:** N/A

Surveyed for:

#### TANKAGE/ PLUMBING

#### **FUEL TANK(S)**

**Number & location:** (1) fuel tank located under port salon settee.

**Tank type & capacity:** Polyethylene 18 gallon fuel tank.

**Fuel supply lines:** Proper USCG approved A1-15 new fuel hoses. Good condition.

**Shut off valve(s):** Opens and closes properly. Good condition.

**Vent line/ location:** Port hull side. **Fill line(s) located:** Port side deck.

Fill pipe condition: Good condition. See notes below.

Fuel fill grounded: Not required on nonmetallic tanks.

Tank(s) grounded: Not required on nonmetallic tanks.

Tank(s) secured:Properly secured.Tank(s) condition:Good condition.

**Sending units:** Mechanical gauge on top of tank. Operational.

**Notes:** 

• The fuel tank fill hose is only single clamped at the tank and it is a federal requirement that fuel fill hoses are double clamped. Add clamps as needed. (Pic #5)

#### FRESHWATER TANK(S) & WATER SYSTEM

**Tank(s) type & capacity:** Polyethylene freshwater tank. Capacity approximately 30 gallons.

**Tank(s) secured:** Properly secured.

**Filter(s):** None.

**Inspection/cleaning access:** Cap on top of tank.

**Tank(s) condition:** Good condition where visible.

Water pump(s): Hand pumps at sink.

**Supply lines:** Vinyl hoses.

**Shut off valve(s):** None.

**Vent(s) location:** Starboard hull side.

**Accumulator tank:** None.

**Notes:** 

• There was no water in the tank. Unable to test the system.

#### HOLDING TANK(S)/ BLACK WATER

**Tank(s) type & capacity:** Polyethylene waste tank. Capacity unknown.

Pump out fitting location:Port side bow area.Vent(s) location:Port hull side.Tank(s) secured:Properly secured.Tank(s) condition:Good condition.

Hoses & plumbing: Ok.

Macerator pump & seacock: There is no macerator pump. See All Thru Hull Fittings section notes

regarding seacock (page 8).

**Notes:** 

#### **CABIN & INTERIOR APPOINTMENTS**

#### MAIN SALON

**Sole:** Varnished wood. Fair condition.

**Headliner:** Good condition. **Bulkheads:** Good condition.

**Doors:** Good condition. All open and close properly.

**Framing trim/woodwork:** Fair condition. **Seating/ cushions:** Good condition.

**Table:** None.

**Hatches:** Good condition.

**Storage compartments:** Ok. **Television:** N/A

**Notes:** 

#### **GALLEY**

Sink(s): Stainless steel sink with hand pump.

**Stove**: Origo 4000 alcohol stove. No alcohol available. Not tested.

Microwave: None.

Coffee maker: None.

Refrigerator/ freezer: None

Icemaker: None.

**Notes:** 

#### **HEAD**

**Sink:** Stainless steel manual pump sink. See notes below.

**Shower:** None. Shower sump pump: N/A

**Toilet:** Wilcox manual flush toilet. See notes below.

#### **Notes:**

- The manual hand pump for the head sink is loose in the counter top.
- The toilet is not pulling in any water when flushing. The pump may need to be rebuilt.
- The head raw water intake hose should have an anti-siphon vented loop installed between the seacock and the pump on the toilet as per ABYC standards which states, "Vented loops (siphon breaks) should be installed when system components are installed below the maximum heeled waterline to prevent backflow onto the vessel and/or to prevent unintentional siphoning of untreated sewage overboard. The vented loop should be installed above the maximum heeled waterline per the manufacturer's recommendations."

#### FORWARD STATEROOM

**Berths:** Mattress cushions are in good condition.

**Lighting:** (2) reading lights on bulkhead. See notes below.

Outlets: N/A

**Storage:** Hanging locker and storage underneath berth. Ok.

#### FORWARD STATEROOM (cont.)

**Television:** None.

**Notes:** 

• The port side reading light on the forward stateroom bulkhead does not work.

#### **QUARTERBERTH**

**Berths:** Mattress cushion is in good condition.

**Lighting:** (1) overhead light. Operational.

Outlets: N/A

**Storage:** Storage under bed. Ok.

**Television:** N/A

**Notes:** 

#### ENTERTAINMENT ELECTRONICS

**Stereos:** Dual AM/FM/CD stereo with (2) speakers in the cabin and (2) speakers

in the cockpit. See notes below.

Satellite receiver: None.

Televisions: None.

**Notes:** 

• The stereo does not power up.

#### **ELECTRICAL SYSTEMS**

#### **D.C. ELECTRICAL SYSTEMS**

**D.C. voltage system:** 12-volt system.

**Batteries:** (2) Duracell SLI27MDP lead acid batteries. **Battery selector switches:** Rotary style (1/2/Both/Off). Good condition.

**Battery monitor:** None.

**Charging system/inverter:** Engine alternator only.

**Distribution panel:** Appears to be in good condition. **Breaker(s)/ fuse(s):** Replaceable fuses at main panel.

**D.C.** usage meter(s): None.

D.C. wiring: See notes below.D.C. electrical ground: Properly installed.

**Notes:** 

- Both batteries need protective rubber boots installed on the positive battery posts to comply with ABYC standards. (Pic #6)
- The terminal block in the battery compartment is loose and needs to be properly secured.
- Both batteries need to be better secured. ABYC standard E-10.7.4 states, "Batteries, as installed shall be restrained to not move more than one inch (25mm) in any direction when a pulling force of twice the battery weight is applied through the center of gravity of the battery."

#### Page 14 of 20

#### SAFETY EQUIPMENT

#### **U.S.C.G REQUIRED**

**Navigation lights:** See notes below.

**Life jackets (PFDs):** (2) Type III and (4) Type II adult USCG approved life jackets.

**Throwable type PFD's:** (1) USCG approved throwable cushions.

**Visual distress signals:** Pack of (4) USCG approved handheld visual distress flares. Expire July

2025.

Sound devices: Portable air horn. Ok. USCG placards: Properly installed.

**Engine/bilge ventilation:** 12-volt blower, not working. See Main Engine section notes (page 10).

Inland Navigation Rule Book: Not required.

**Notes:** 

• The port navigation light and the steaming navigation light are not working. Repair to comply with USCG regulations.

#### FIRE FIGHTING EQUIPMENT U.S.C.G. REQUIRED

**Dry Chemical B-1:** (2) Size B-I Type BC portable fire extinguishers. Good condition and

fully charged.

Fixed/ clean agent: None.

**Note**: Fireboy or other 'clean agent' type fire extinguishers must be weighed to determine true contents. Monitor lights and gauges only show there is pressure available and do not reflect the quantity available. Be sure to maintain an annual inspection and to insure serviceability and meet ABYC and NFPA standards. Keep inspection tag attached as a reminder.

Carbon monoxide detectors: See notes below.

**Notes:** 

• The carbon monoxide detector is in poor condition and its age is unknown. The owner purchased a new unit to install. Install to comply with ABYC standard A-24.7.1 that states, "A carbon monoxide detection system shall be installed on all boats with an enclosed accommodation compartment(s)."

Surveyed for:

#### INSPECTION RECOMMENDATIONS SUMMARY

# Recommendations marked in Red relate to the USCG, the CFR and or state laws and are legal requirements:

- 1. The engine compartment exhaust blower does not work. It is a federal requirement to have an operational exhaust blower on inboard gas powered vessels. Repair as needed.
- 2. All of the exhaust hoses are only single clamped. It is a federal requirement they be double clamped. Add clamps as needed. (Pic #8)
- 3. The fuel tank fill hose is only single clamped at the tank and it is a federal requirement that fuel fill hoses are double clamped. Add clamps as needed. (Pic #5)
- 4. The port navigation light and the steaming navigation light are not working. Repair to comply with USCG regulations.

# Recommendations marked in Green relate to ABYC and/or NFPA standards and other safety issues:

- 1. The waste overboard discharge seacock is frozen in the open position. Free up or replace as needed.
- 2. There is no high water bilge alarm installed which is required as per ABYC standard H-22.7.3 which states, "On boats with an enclosed accommodation compartment an audible alarm shall be installed indicating that bilge water is approaching the maximum bilge water level."
- 3. The positive terminal post on the engine starter needs a protector rubber boot installed to comply with ABYC standards.
- 4. The sections of exhaust pipe from the exhaust manifold to the exhaust hose is made of galvanized steel and should be replaced with either stainless steel, bronze or cast iron. Galvanized steel is not made to work with high temperatures and the heat combined with dissolved salts can create acids which can corrode the pipe from the inside. The forward section with the barb for the vented loop tee'd into it is already showing signs of corrosion. (Pic #4)
- 5. The head raw water intake hose should have an anti-siphon vented loop installed between the seacock and the pump on the toilet as per ABYC standards which states, "Vented loops (siphon breaks) should be installed when system components are installed below the maximum heeled waterline to prevent backflow onto the vessel and/or to prevent unintentional siphoning of untreated sewage overboard. The vented loop should be installed above the maximum heeled waterline per the manufacturer's recommendations."
- 6. Both batteries need protective rubber boots installed on the positive battery posts to comply with ABYC standards. (Pic #6)
- 7. The terminal block in the battery compartment is loose and needs to be properly secured.
- 8. Both batteries need to be better secured. ABYC standard E-10.7.4 states, "Batteries, as installed shall be restrained to not move more than one inch (25mm) in any direction when a pulling force of twice the battery weight is applied through the center of gravity of the battery."
- 9. The carbon monoxide detector is in poor condition and its age is unknown. The owner purchased a new unit to install. Install to comply with ABYC standard A-24.7.1 that states, "A carbon monoxide detection system shall be installed on all boats with an enclosed accommodation compartment(s)."

#### Recommendations marked in Blue relate to maintenance and upgrades:

- 1. There has been a poorly done repair at the bottom of the transom which is only a cosmetic issue. Also, there are minor gelcoat cracks on the port side of the transom. (Pic #1)
- 2. The plexiglass fixed cabin windows have some ultraviolet craze cracking in the acrylic lenses.
- 3. The foredeck has elevated moisture levels on the forward most 4 feet of the deck and gelcoat cracking around the bow rail bases. (Pic #2)
- 4. The port side deck has highly elevated moisture levels in a 4 foot area in the midship area where the fuel fill, chain plate covers and stanchion base are located. This area sounds slightly soft in some areas with minor delamination. There are also gelcoat cracks around the chain plate covers. (Pic #3)
- 5. There is another area on the port side deck between the two salon windows that has minor delamination in a 1 foot by 2 feet area.
- 6. There are elevated moisture levels and delamination on the starboard side deck in a 4 foot area midship near the chain plates with minor gelcoat cracks around the chain plate covers. (Pic #7)
- 7. There is another area just forward of the starboard genoa track on the starboard side deck that has a crack that was filled in with sealant that has elevated moisture levels and minor delamination.
- 8. The Garmin chartplotter does not power up.
- 9. The main sail halyard is missing.
- 10. The genoa sheets are missing.
- 11. The genoa sail is heavily ripped near the foot and needs replacement.
- 12. A compression test was performed and the spark plug for the #2 cylinder had rust on the electrode and had saltwater spraying out of the spark plug hole. This could indicate a cracked cylinder head, bad head gasket, bad exhaust manifold or cracked engine block. Recommend having it checked by a competent marine mechanic. Additionally the compression results are marginal at best with a 16.2 percent compression variance.
- 13. The threads for spark plug #3 in the cylinder head may need to be re-tapped. It was difficult to remove the spark plug and it did not go back in very smoothly.
- 14. The manual hand pump for the head sink is loose in the counter top.
- 15. The toilet is not pulling in any water when flushing. The pump may need to be rebuilt.
- 16. The port side reading light on the forward stateroom bulkhead does not work.
- 17. The stereo does not power up.

#### CONDITION & VALUE REPORT SUMMARY

#### **DECLARATION:**

<u>Rating of vessel condition</u> 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 condition ratings are as follows:

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

<u>Estimated fair market value</u> was determined by cross referencing data from Soldboats.com, BUC, ABOS, NADA, Powerboat Guide and other brokerage listings or local dealers. Adjustments are then made for condition or equipment as necessary. The estimated fair market value is for the vessel in its current condition prior to any repairs or maintenance upgrades made.

<u>Estimated replacement cost</u> was determined using information obtained from BUC, ABOS, or local dealer prices using the same or similar make and model with similar equipment options.

□ RATING OF VESSEL CONDITION...
 □ ESTIMATED FAIR MARKET VALUE...
 □ ESTIMATED REPLACEMENT COST NEW...
 \$70,000 (BUC Book)

☐ INTENDED USE OF VESSEL... Pleasure

**SUITABILITY FOR INTENDED SERVICE:** Vessel will be suitable for its intended purpose upon completion of all recommendations marked in **Red** (if any) which relate to the United States Coast Guard, the U.S. Code of Federal Regulations, and/or state laws and legal requirements, and by the completion of all recommendations marked in **Green** which relate to the American Boat and Yacht Council and/or the National Fire Protection Association standards and other safety issues.

**NOTE:** Recommendations marked in **Blue** which relate to maintenance and upgrades should be thoroughly reviewed to bring the vessel up to current standards and/or improve the value of the vessel.

### **COMPARABLE SOLD VESSELS (Data from Soldboats.com)**

Length	Make/Model	Year	Listed Price	Sold Price	Boat Location	Days Active
30 ft	Tartan 30 sloop	1978	\$9,000	\$4,000 (12/2021)	Sausalito, CA	206
30 ft	Tartan 30	1977	\$9,500	\$6,000 (9/2021)	La Salle, Mi	48
30 ft	Tartan 30	1977	\$13,900	\$12,900 (7/2021)	Bayfield, WI	38
30 ft	Tartan 30	1978	\$8,500	\$5,000 (3/2020)	Scituate, MA	977

# **CLOSING STATEMENT & SIGNATURE:**

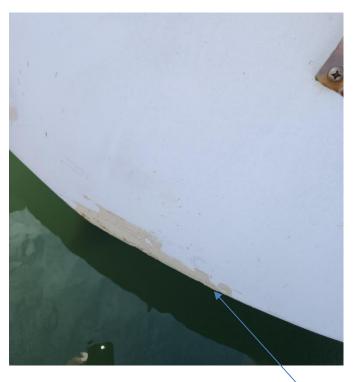
This report is submitted in confidence for the exclusive use of without prejudice to the rights and/or interests of other concerned parties and may not be used for any other purpose or relied upon by any other person.

#### ATTENDING SURVEYOR:

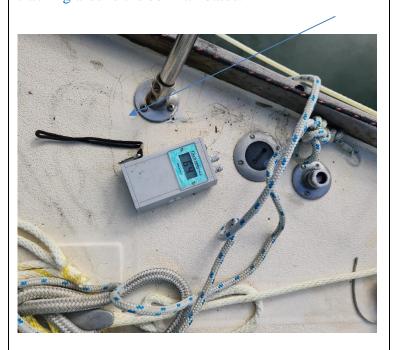
Michael Grame, SAMS A.M.S.

A.M.S #1294

**Pic #1** There has been a poorly done repair at the bottom of the transom which is only a cosmetic issue. Also, there are minor gelcoat cracks on the port side of the transom.



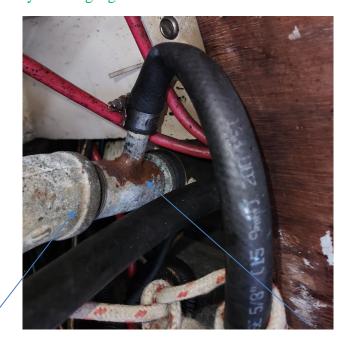
**Pic #2** The foredeck has elevated moisture levels on the forward most 4 feet of the deck and gelcoat cracking around the bow rail bases.



Pic #3 The port side deck has highly elevated moisture levels in a 4 foot area in the midship area where the fuel fill, chain plate covers and stanchion base are located. This area sounds slightly soft in some areas with minor delamination. There are also gelcoat cracks around the chain plate covers.



**Pic #4** The sections of exhaust pipe from the exhaust manifold to the exhaust hose is made of galvanized steel and should be replaced with either stainless steel bronze or cast iron. Galvanized steel is not made to work with high temperatures and the heat combined with dissolved salts can create acids which can corrode the pipe from the inside. The forward section with the barb for the vented loop tee'd into it is already showing signs of corrosion.



**Pic #5** The fuel tank fill hose is only single clamped at the tank and it is a federal requirement that fuel fill hoses are double clamped. Add clamps as needed.



**Pic #6** Both batteries need protective rubber boots installed on the positive battery posts to comply with ABYC standards.



**Pic #7** There are elevated moisture levels and delamination on the starboard side deck in a 4 foot area midship near the chain plates with minor gelcoat cracks around the chain plate covers.



**Pic #8** All of the exhaust hoses are only single clamped. It is a federal requirement they be double clamped. Add clamps as needed.

