# Christian & Company MARINE SURVEYORS

### STANDARD SURVEY

Client: Mr. Removed for Privacy

Date of report: November 13, 2022

Email Address: Our file #: 22 - 20622web

Current owner: Removed for Privacy

This inspection was performed upon the request of the client listed above on November 10<sup>th</sup>, 2022 while the vessel was afloat in Cabrillo Way Marina, San Pedro, CA and on a sea trial. The captain, crew, and clients and attended.

### **Scope of Services**

The vessel was examined by surveyor and/or surveyor's agents from all accessible areas of the interior without removal of secured panels, destructive testing or disassembly. The hull bottom laminate, plating and/or planking was examined by percussion sounding and visual inspection only. No moisture content readings were taken, and no destructive testing was performed. may have used a moisture meter if/when they deemed it useful or if specifically requested by client. Exterior hardware was visually examined for damage and drive components were tested by sight only. The inspection of engines, generators, machinery and related mechanical systems is not within the scope of this survey. Only a brief cursory inspection of the machinery was conducted, and no opinion of their overall condition was formed. Client shall retain the services of a qualified mechanic, engine surveyor or other expert to inspect such engine, generators, machinery and related mechanical systems. Tankage was inspected from visible surfaces only and no opinion was rendered as to their overall condition. On sailing vessels, the rig was not inspected aloft, nor were sails inspected unless they were visible during a sea trial. Client shall retain the services of a qualified rig surveyor or other expert to inspect sails, rigging and equipment. The electrical system was visually inspected where accessible, and electronic and electrical components powered only with permission of or in the presence of the vessel's owner or agent. No in-depth testing or examination of the electrical system or electric schematic was Specifications were taken from published sources, measurements if made, should be considered approximate. The recommendations are based on federal and state regulations, industry standards, and/or surveyor's own personal experience. The market value is based on research of available new/used comparable vessels, with consideration of geographic area where the vessel is located and reported sale prices where available. The surveyor will refer to and may reference CFRs, NFPA and ABYC recommendations (and/or other services) as the surveyor deems reasonable but not all regulations and recommendations will be applied nor should this report be relied upon as full compliance with the aforementioned entities. Every vessel inspection is different, and limitations may alter the scope of this survey, some limitations will be implied in the text of the report and some will be explicitly detailed. A Marine Survey Agreement which is reviewed and signed by the client details the terms governing this marine survey.

### 1974 Tolo Inc passenger power catamaran

### **VESSEL DESCRIPTION**

Builder: Tolo Inc \* Doc. #: Removed Model/type: Power catamaran/passenger HIN: Removed

Year: 1974

Length:63'Engines:Two LuggerDraft:5' \*Weight:UnknownBeam:16' 4"Name:"Removed"

Displacement: 75,000 lb. \*

\* listing specifications Hailing port: Dana Point, CA

### **HULL & STRUCTURE**

Keel & bottom: Molded fiberglass construction, unknown core, not inspected, anti-fouling paint, molded underbody, catamaran

Topsides & transom: Molded fiberglass construction, unknown core, white, catamaran

Decks & superstructure: Molded fiberglass construction, white with gray nonskid paint particle deck surface, bulwarks, foam cored deck where visible in port forward cabin, unknown core elsewhere

Deck hardware: Flybridge safety coils, aft flybridge seating, foredeck safety rails, foredeck seating, anchor roller, bow bit with two chocks, set of stern cleats, three sets of side mooring cleats, set of stern bits

Longitudinals/stringers: Fiberglass reinforcements

Athwartships/bulkheads/frames: Unknown construction material

Layout/interior components: Aft deck is open, engines below hatches, center electrical locker, port forward is cabin with twin berths, starboard forward is head, steps to flybridge to port of center, main salon through centerline door forward, salon has port aft galley, dinette forward, interior ladder to pilothouse forward, cabins on both sides forward with heads forward of cabins, aft on flybridge is boat deck, next forward is seating, forward of seating is enclosed pilothouse with aft and port and forward doors, dinettes aft and helm forward, forward from pilothouse and down centerline steps is foredeck with seating, side decks narrow aft

Bilge: Clean, holding minimal water

Comments: The vessel was inspected while afloat. The hull bottom was not inspected. There are cracks visible near the hull to deck joints inboard of both hulls at the bow. We were unable to inspect below the vessel including the bottom of the bridge deck, inboard on the hulls and the extent of these cracks. The hull sides and transom were visually inspected and randomly sounded. The vessel recently had a wrap removed from the exterior of the hull. There is a paint line visible eight foot forward of the transom on the starboard hull side. There are numerous areas of color differences, best described as "paint patches". The HIN is painted over and difficult to read, particularly the first three

digits and there appear to be rivets on either side, perhaps for a removed placard. The hull sides and transom are in satisfactory structural condition. The deck and superstructure were visually inspected and randomly sounded. The deck and superstructure are in satisfactory structural and cosmetic condition. There were numerous audible differences noted while percussion testing the deck, most significantly to starboard aft on the foredeck, to starboard aft of the pilothouse and the center and port aft main deck. The deck hardware including safety rails, mooring devices and hatches was visually inspected and most hatches and the port lights were opened and closed. Overall the deck hardware is in satisfactory condition. The starboard swim platform safety rail is detached from the swim platform. The aluminum sheathing on the interior of the bulwarks to starboard forward on the aft deck is pulled away and damaged near the deck. The structural reinforcements including the stringers and bulkheads were visually inspected and randomly sounded. The structural reinforcements appear to be in "as-built" condition. The fiberglass tabbing is loose forward in the outboard locker in the forward cabin. There is no access into the forward bilge spaces, they are filled with foam. There are fasteners through the bulkhead aft in the bilge space below the starboard cabin, the significance is beyond the scope of this inspection. The bilge is holding moderate water; the origin of the water is beyond the scope of this survey. The interior cabin spaces are neat, clean and orderly. The interior of the vessel is in satisfactory cosmetic condition. The hatch into the bilge in the port forward cabin has a loose trim piece, the hatches into both forward bilge spaces were open. These spaces appear to have previously been tanks which have been abandoned. This survey is not a mold inspection. The condition of the coring, in the hull, deck, and elsewhere as applicable, is beyond the scope of this inspection.

**Summary: Satisfactory** 

### MACHINE SYSTEMS

Main engines: Two Lugger model L6125A/IRM310, 460 hp each\*, hours per meters S-5327 and P - 5356

Engine application: Diesel, six cylinders, freshwater cooled, dry exhaust

Serial numbers: S – 1251-1216, P – 1251-1215

Transmissions: ZF IRM 310AL, ratio 1.789/1, starboard serial no. 93.2785, port serial no.

94-07911

External/peripherals: Suitable application, satisfactory install

Engine controls: Micro Commander electronic controls, servos to push/pull cables,

pilothouse, starboard exterior wing and remote

Exhaust systems: Dry system

Propulsion gear/shaft logs: 2" diameter stainless steel propeller shafts, "Nor Scot" (apparently) lubricated dripless shaft seals, two piece shafts coupled in engine rooms

Steering system/rudder ports: Hydraulic system, pumps drive chains aft in both engine rooms, other components not accessible

Ventilation: Natural

Generator: S - 8 Kw Northern Lights tag hard to read, P - 12 Kw Northern Lights, model PX-312 K1, serial no. K07941, hour meters are P – 1194 and S - 878

Through hulls & components: Two sea chests, some bronze valves, not bonded

Seawater systems: Reinforced hoses, PVC tubes, single and double clamped connections

Bilde pumps: Rule 500 submersible/auto aft in both engine rooms. Rule 2000 submersible/auto forward in both engine rooms, Rule 2000 submersible/auto in both forward cabins

**Comments:** The engines and transmissions were visually inspected and tested during a sea trial. This survey is not a mechanical survey, please consult with a qualified technician for greater detail as to the condition of the machine systems. The external surfaces and peripheral components of the engines and transmissions appear satisfactory. The engine controls functioned normally. The exhaust system is properly arranged and installed. There is soot about the starboard engine exhaust blanket in the engine room. Much of the exhaust system is not accessible for inspection. There were no internal sea strainers for either of the engines or many of the other components. Wide open throttle was 2000 rpm per the tachometers and top speed was 13.4 knots in calm sea conditions. The propulsion components were not inspected. The steering system was visually inspected as possible and test operated. The steering system functioned normally. There was no access to inspect the steering components other than the hydraulic motors and the chains attached to them. The rudders are reportedly mounted on the transom. The generators were visually inspected. The port generator was briefly test operated; the owner's representative did not want to continue running the generator as there was very low waterflow. The starboard generator is inoperative. The vessel has two sea chests. Not all of the components served by the sea chest have individual valves. The seawater systems were visually inspected and most components are disconnected. Overall, the seawater systems are satisfactory. The sea chests have unusual valves and they were not fully tested. A seawater hose is connected to a PVC tube to starboard aft in the engine room, the PVC is not well secured or protected. A seawater hose connected to a PVC tube below the starboard aft head is wasted. There are several abandoned seawater pumps in both engine rooms. The electric bilge pumps were visually inspected and we attempted to test operate the pumps. The starboard aft bilge pump is inoperative. The port aft bilge pump is inoperative in the automatic mode.

**Summary: Satisfactory** 

### **TANKAGE**

Fuel: Two fiberglass (apparently) tanks, one tank forward of starboard and port engine rooms, 1,000 gallon reported capacity per tank

Fill & vent: One deck fill fitting per side aft, labeled "diesel", type of fill and vent hoses not recorded

Feed & return: USCG type A2 and unlabeled flexible hoses, dual Racor filters

Water: Two fiberglass (apparently) tanks, one tank forward of starboard and port engines, one deck fill fitting per side aft and one to port forward labeled "water", 300 gallon capacity \*

Holding: Two fiberglass (apparently) tanks, one tank forward in starboard and port engine rooms, deck fitting to starboard aft labeled "waste", 50 gallon capacity \*

Comments: The fuel system including the tanks, fill, vent, feed and return lines was visually inspected as installed. Where visible the fuel system components are in satisfactory condition. All of the tanks are apparently integral, with very little access for inspection. There are inspection plates, none were removed. The fuel supply hoses are USCG type A2. The condition and age of the fuel (and water) and the integrity of the tanks (fuel, water, holding) and hoses is beyond the scope of this survey. Please consider filling all tanks for a simple, practical test of their integrity. The water pressure system functioned normally. Accuracy of tank level gauges is beyond the scope of this survey. The head seawater supply pump aft in the starboard engine room is not secure. The exterior head has a urinal which had no flushing apparatus. There was no vacuum pressure in the vacu-flush head. Neither of the forward heads flushed. There appears to be modified/abandoned tankage in both forward bilge spaces. No tank diagram was seen and all plumbing was not traced and inspected.

**Summary: Satisfactory** 

### **ELECTRICAL SYSTEMS**

AC system: AC source electric switch, two 50A and two 30A shore power inlets per side aft, 30A shore power cord, 110/220 volt system

DC system: 8D-1400 sealed 12 volt battery in aft deck locker, battery switch in aft deck locker, 4 West Marine Gel 225 8D 12 volt batteries below inboard berth in port aft cabin. three battery switches by batteries, 12 volt system

Wiring: Multi-strand wires

Circuit protection: GFCI outlets, distribution panel in locker on aft deck includes main and branch AC and DC circuit breakers, DC volt and amp meters, 2 sets of AC volt and ammeters, AC 220 volt meters and hertz meter, two main and branch circuit breakers below port and starboard forward cabins' soles

**Comments:** The electrical system including the shore power cord, shore power inlets, batteries, wiring, circuitry components and circuit protection equipment was visually inspected and most components were tested. Overall the electrical system is in satisfactory condition. The condition and age of the batteries is beyond the scope of this inspection. The starboard engine room camera is broken. The face plate for the pilothouse stereo is loose and is secured with tape, it was not tested. We did not test the vhf for function. The command mic vhf did not powerup. There is a questionable depth function on the Lowrance Hook 7 device. The DC voltmeter indicated less than 12 volts during the survey. The pilothouse HVAC control powered up but we heard no function. We did not test the cabin HVAC unit. We could not engage either autopilot. Later we found a switch in the electrical locker labeled to select an autopilot. The forward refrigerator in the galley was a little cold, the aft one was not cold at all (they were only briefly energized). The 50 amp shore power inlet to starboard has heat damage. There is no locking ring on the shore power cord. The 30 amp shore power inlet to starboard is missing most of the fitting. The 50 amp shore power inlet to port has an unusual "ground strap". We only used the starboard 50 amp inlet during the survey. The stove burners did not get hot and the aft burner nob has no handle. Wires are disorganized below the helm.

**Summary: Satisfactory** 

### SAFETY AND LIFE SAVING

Portable fire extinguishers: One "restaurant" (non USCG unit) in galley, type A size II, type B:C size I (11/2021 tags) in pilothouse, galley and dinette, type B:C size I (CO2) aft deck

Fixed fire system: Fireboy clean agent (model not visible) annual maintenance tag date 11/21

Flotation devices: Three life floats with strobe lights, life ring with strobe, 65 adult type I. 20 child type I

Horn/distress flares: Eight handheld flares expire 11/22, horn not recorded

Navigational/anchor lights: Separate side lights, stern light, masthead/steaming light, all around/anchor light

Anchor & ground tackle: 40 S Danforth anchor (spare), 60 Kg Bruce anchor, chain rode

Other equipment: High water alarm, smoke alarms, six smoke signals with current 12/23 and 11/22 expiration dates, CO alarms, first aid

Comments: Safety equipment for firefighting protection appears satisfactory. Personal flotation devices appear suitable for near coastal use. Current distress signal flares are aboard; however they expire this month. The horn was not tested. The CO alarms sounded when tested. The smoke alarms were not tested. Garbage and oil placards were seen. A waste management plan was seen. We did not see a copy of the navigation rules. The navigational and anchor lights are properly arranged and installed. We tested the function of the steaming and anchor lights only. The ground tackle including the anchors and rode was visually inspected as installed and appears satisfactory. There is no bail on the anchor roller. The owner's representative stated that the battery dates for the life floats' lights are past. The entire length of the anchor rode was not inspected and should be inspected prior to use.

**Summary: Satisfactory** 

#### ACCESSORIES

Oil placard, oil charge pump on engines (not in use), Glacier refrigeration compressor, water heater, ParMax 82600-0092 freshwater pressure pump and pressure accumulator tank, starboard and port engine room, camera (broken), set of spare propellers, Icom IC-M504 vhf/hailer, West Marine stereo, Furuno GPS navigator, West Marine VHF295, Horizon RAM mic vhf. Lowrance Hook 7 plotter/sounder, pilothouse helm engine instruments include tachometers, oil pressure, volts, temperature, exhaust temperature, hours, trans oil pressure and unknown/unlabeled pressure gauge, two fuel and two water level gauges, Furuno radar, audible engine alarms, two Floscan fuel flow/tachometers, elect iconic compass, Insignia camera monitor, Furuno FCV-1100L color LCD sounder, bilge pump alarm panel, Fireboy smoke alarm panel, AC and DC volt meter, DC ammeter, Micro Commander wired engine remote control, two pilothouse and lower controls, 8 cameras displayed on monitor, windshield wiper (lifted), forward floodlight, AutoNavi autonaA-1500 autopilot, Compu-Course 220 autopilot, Maxwell two direction electric windlass, garbage placard, waste management plan, aft deck sink bait tank, Sea-Land SLI desalinator two aft deck water tank level gauges, BBQ grill, Maytag clothes washer and dryer, exterior head with urinal, vacu-flush head, sink and shower, enclosure Magnum inverter controller, four burner electric stove, two galley refrigerators, microwave/convection oven, double galley sink, Maytag dishwasher, Broan trash compacter, garbage disposal, dumbwaiter, icemaker, Sharp TV with soundbar, PA system, below deck refrigeration (starboard aft salon), blender, bar, dinette, two electric waste macerator discharge pumps, both forward heads include electric heads, sinks and shower fixtures

### SUMMARY

The vessel is a composite fiberglass power catamaran reportedly built in Santa Ana, California. The listing states that the vessel was totally rebuilt in 1995, "INCLUDING A NEW HULL". The listing also states that the vessel "passed her hull exam on August 22, 2022 and her COI is good for another five years". The COI states it expires 23 Aug The COI is for 49 passengers coastwise. The current owners reportedly purchased the vessel in 2014 in Long Beach, California. The listing specification stated that the vessel was refitted in 2012 when it was turned into a 49 passenger COI boat by the current owner. The vessel was last inspected by the Coast Guard in August of 2022, per the owner's representative. The vessel is equipped with two diesel engines, the engines were reportedly installed in 1995. The owner's representative stated that the port transmission was rebuilt in May 2022 by Marine Diesel Services, Costa Mesa, CA. The vessel was last hauled and painted in the last few months at Dana Point Shipyard. The vessel was reportedly modified with ice cutting metal on both bows below the splash quards. The vessel was inspected in its slip and underway in Long Beach Harbor and outside of the break water briefly. The vessel appears to be basically structurally sound and functional. The vessel has deferred maintenance, including the generators, and there are several abandoned seawater components. Upon completion of the recommendations the vessel should be suitable for its intended purpose as a passenger carrying vessel.

### **Overall Summary: Satisfactory**

Standard form key: We use subsection and overall ratings to summarize conditions found, based upon their appearance. Ratings include: Not examined, Not applicable, Faulty, Marginal, Satisfactory, Good, Excellent.

### **VALUES**

ACTUAL CASH VALUE

VALUE

XXX

N/A

N/A

The actual cash value is the value that our research approximates the selling price of this vessel should be, at the time and place of our inspection. Consideration is given to vessel's condition, geographic location, published listings and guides, comparable sales and listings, and market conditions. The new replacement value is the cost of this or a similar, new vessel, comparably equipped. The investment is the reported investment including purchase price and significant upgrades. No values include maintenance costs, storage or tax. The most relevant data found while researching the value is included below. We primarily use market value analysis methodology for determination of value.

**Explanation of value opinion:** The value is based on the soldboats.com reported sale prices and the yachtworld.com listings below. The vessel is unique, it has a COI and three cabins, which could make it useful as a private vessel. There are many more private, "yacht-like" comparables than there are commercial vessels in the comparables. The Custom Tri-Kat that sold for \$555,000 in Florida is comparable to the surveyed vessel, but it does not have a current COI, is newer and has bigger engines. The A.F. Theriault vessel is also comparable but is newer. The 1988 65' Corinthian Excursion boat is similar in age and size, but is an open layout without the cabins. The two listings in Martinique (\$414,460), Puerto Rico (\$300,000) and Miami (\$439,000) are also similar vessels.

Length					Listed	
ft	Boat	Year	Sold Date	Sold Price	Price	Boat Location
63	Lagoon 630 Motor Yacht	2016	14-Jun-22	2,122,133	2,413,801	North Haven, New S
68	Sunreef Supreme 68	2017	13-Jun-22	2,538,568	2,590,376	Bodrum , Turkey
65	Custom Malcolm Tennant Power Cat	2008	13-Jun-22	1,080,000	1,299,000	Georgetown, SC, US
63	Lagoon 630 Motor Yacht	2016	4-Jun-22	1,191,573	1,606,033	Limassol, Cyprus
63	Lagoon 630 Motor Yacht	2016	27-May-22	1,606,033	1,637,117	Saint-Martin, Saint N
63	Lagoon 630 Power Yacht	2016	27-May-22	1,842,000	1,738,880	Martinique
67	Sunreef Supreme 68 Power	2017	26-May-22	2,590,376	2,590,376	Majuro, Marshall Isla
67	Trawler 67' Canadian Design Power Cat	2008	24-May-22	517,039	517,039	Hong Kong, Hong Ko
65	Corinthian Excursion	1988	24-May-22	375,000	429,900	George Town, Caym
63	Cooper Marine 63C	2015	13-Apr-22	1,100,000	1,150,000	Hilton Head Island, S
60	A. F. Theriault & Son Custom Catamaran	2000	11-Apr-22	800,000	950,000	Fort Lauderdale, FL,
64	Lagoon 630 Motor Yacht	2019	6-Apr-22	1,813,263	2,279,531	Zanzibar, Tanzania
60	Horizon Power catamaran	2012	8-Feb-22	1,775,000	1,800,000	Tortola, British Virgi
65	Lagoon 67	2021	7-Feb-22	3,108,451	3,521,875	DUBAI, United Arab
60	Custom Tri-Kat 49 Passenger Catamaran	2002	28-Jan-22	555,000	699,000	Cortez, FL, USA
65	Commercial 149 Passenger	1999	28-Nov-21	499,000	495,000	Lahaina, HI, USA

## 1974 Tolo Inc passenger power catamaran

60	Horizon PC	2014	18-Nov-21	1,900,000	1,995,000	Fort Lauderdale, FL,
63	Lagoon Lagoon 630 MY	2018	15-Nov-21	2,200,000	2,395,000	Hollywood, FL, USA
63	Lagoon 630 MY	2018	15-Nov-21	2,200,000	2,395,000	Hollywood, FL, USA

### 1974 Custom 49 Passenger COI catamaran

62'

### \$449,000

\$2,961/monthPayment Calculator

Dana Point, CA 92629

Sell a boat like this

**DETAILS** 

Year

1974

Make

Custom

Model

49 Passenger COI Catamaran

Class

Commercial

Length

62'

Fuel Type

Diesel

Location

Dana Point, CA 92629

**Hull Material** 

Composite

Offered By

Private Seller

### **DESCRIPTION**

1974 Custom 49 Passenger COI catamaran

49 Passenger vessel

This money maker has a current COI for 49 Pax and 10 crew. Contact seller at 949-488-2828. See a virtual tour of Lily: https://www.dolphinsafari.com/lily-for-sale/

Lily just passed her hull exam August 22 2022 and her COI is good for another 5 years.

Custom Pech Alu Power Catamaran

US\$414,460 \*

65 ft / 2000

Caribbean, Martinique

Hackshaw Boats Brokerage & Marine Services

### **Custom Power Cat 63**

### US\$300,000 \*

63 ft / 1998 Fajardo, Puerto Rico TMC

### **Prout International Panther 64**

### US\$1,625,000 \*

64 ft / 1997 Lighthouse Point, Florida, United States Rick Obey Yacht Sales

### Mick Jarrod PowerCat Sportfisher

### US\$439,000 \*

60 ft / 1998 North Miami Beach, Florida, United States Yacht Search

### RECOMMENDATIONS

These recommendations are the surveyor's ideas and suggestions for addressing deficiencies with damaged or suspect components or systems found during survey or general improvements. The primary recommendations address safety items, structural issues, operational issues or deficiencies which the surveyor determines are of greater importance or more expense than secondary deficiencies. For instance, items that pose a risk to passenger safety or immediate property damage are listed under primary deficiencies and cosmetic concerns are addressed under secondary deficiencies. Most of the recommendations have been addressed in the comments and usually they are discussed at the time of the inspection.

### **PRIMARY**

- 1. Replace the expired batteries for the life floats' lights.
- 2. Provide and install a bail on the anchor roller.
- 3. Assure the vessel has all legally required carriage items including a suitable sound signaling device and a current copy of the navigation rules.
- 4. The fuel supply hoses are USCG type A2 hose. These are not designed for hoses that are normally holding fuel. Replace these hoses with USCG type A1 or A1-15 hoses designed to hold fuel.
- 5. Properly secure the head pump which is unsecured aft in the starboard engine room.
- 6. Properly secure and protect the PVC seawater pipes located aft in the starboard engine room to prevent damage from mechanical contact.
- 7. Service and prove both forward heads functional, neither of them flushed with their buttons.
- 8. Determine why the DC voltmeter registered less than 12 volts during the survey, assure the batteries and charging system are suitable for continued use or address as necessary.
- 9. We could not engage either autopilot, service and prove at least one autopilot properly functional.
- 10. The aft galley refrigerator did not get cold and the forward refrigerator got slightly cold, but they were only energized briefly. Service and prove the refrigeration system properly functional.
- 11. Replace the 50 amp shore power inlet to starboard, it has heat damage.
- 12. Provide and install a locking ring on the shore power cord, currently there is none.
- 13. Replace the 30 amp shore power inlet to starboard if it is to be used, most of the inlet is missing.
- 14. Service and prove the stove functional, none of the burners got hot and the aft burner knob has no handle.
- 15. Remove the starboard engine exhaust blanket, inspect to determine the source of the soot on the blanket, eliminate any leaks, remove soot to allow detection of any future weeps or leaks.
- 16. Provide and install sea strainers for all components including the engines and the generators.

- 17. Service and prove both aft bilge pumps functional in the automatic and manual modes, the starboard aft bilge pump is inoperative and the port bilge pump was inoperative in the automatic mode.
- 18. Service and prove the starboard generator functional, it is inoperative.
- 19. The port generator had low water flow and was only run briefly, service the port generator and prove it properly functional.
- 20. Provide and install valves for all seawater takeoffs at the sea strainers.
- 21. Modify the HIN on the transom so it is legible.
- 22. Determine the significance of the cracks at the hull to deck joint on the inboard side of both hulls at the bow, address appropriately.
- 23. Determine the significance of the audible differences on deck including to starboard aft on the foredeck, to starboard aft of the pilothouse and center aft on the main deck, address appropriately.
- 24. Properly secure and attach the safety rail on the starboard side of the swim platform.
- 25. Determine the cause and significance of the loose fiberglass tabbing forward in the locker outboard in the port forward cabin, eliminate the cause and repair appropriately. Consider further inspections for similar or related problems.

### **SECONDARY**

- 1. Several seawater pumps are disconnected in both engine rooms, determine their necessity and address as desired.
- 2. There was no way to flush the urinal, if it is designed to be flushed, service and prove it functional.
- 3. The vacu-flush head in the aft head had no vacuum pressure, service and prove it properly functional.
- 4. Tanks below both forward cabins have apparently been abandoned, determine their prior function and address if/as necessary.
- 5. The face plate on the pilothouse stereo will not stay attached, address as desired.
- 6. Assure that the Command Mic vhf functions properly, it did not power up.
- 7. There was questionable depth function on the Lowrance Hook 7, service and prove it functional.
- 8. The pilothouse HVAC controller powered up but there was no function of the system, we did not test the cabin HVAC unit. Service and prove the HVAC units functional as desired.
- 9. The 50 amp shore power inlet to port has an unusual ground strap, address appropriately.
- 10. Wiring is disorganized below the pilothouse helm, organize, bundle and secure wires, comply with ABYC recommendations.
- 11. The main valves on the sea chests are unusual and were not tested, services necessary and prove them properly functional.
- 12. There was very limited access to inspect steering components, access, inspect and maintain steering components appropriately.
- 13. Replace the wasted seawater hose connected to a PVC tube below the starboard aft head.
- 14. We did not determine the designed wide open throttle rpm for the engines. they turned to 2000 per the tachometers. Assure the engines turn to designed wide open throttle rpm or address as necessary.

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- 15. The port generator was slightly difficult to start, determine the cause and address appropriately.
- 16. There are numerous "paint patches" and a paint line visible to starboard on the hull sides, address the cosmetic deficiencies as desired.
- 17. The trim for the hatch into the bilge in the port forward cabin is loose, properly install this trim.
- 18. There are fasteners through the bulkhead visible aft in the starboard forward cabin bilge, the purpose of the fasteners is beyond the scope of this survey. Address as desired.
- 19. The aluminum "sheath" is pulled away from the deck to starboard forward on the aft deck, address and return this to its original condition.
- 20. Repair or replace the starboard engine room camera, it is broken.
- 21. The following components were not tested or inspected; all navigational lights, smoke alarm, hull bottom and components below the waterline and below the bridge deck, the below deck refrigerator to starboard aft in the salon, the PA system to starboard aft in the salon, either macerator pump, trash compactor, dishwasher, garbage disposal, dumb waiter, ice maker, TV and soundbar, clothes washer and dryer, water heater, microwave oven, Espar diesel heater, windlass, davit, bait system, desalinator, inverter, all functions of entertainment devices and all functions of navigational electronics (powerup and basic functions were tested).

This survey sets forth the condition of the vessel and components, as specifically stated only, at the time of inspection, and represents the surveyor's honest and unbiased opinion. No part of the vessel was disassembled or removed and no assumptions should be made as to the condition of concealed components. Specifics were obtained from sources available at the time of inspection and are believed correct, but are not guaranteed to be accurate.

I/we certify that, to the best of my/our 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/our personal, unbiased professional analyses, opinions, and conclusions. I/we have no present or prospective interest in the vessel that is the subject of this report, and I/we have no personal interest or bias with respect to the parties involved. My/our compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event. I/we have made a personal inspection of the vessel that is the subject of this report. This report should be considered as an entire document. No single section is meant to be used except as part of the whole. This report is submitted without prejudice and for the benefit of whom it may concern. This report does not constitute a warranty, either expressed, or implied, nor does it warrant the future condition of the vessel. It is a statement of the condition of the vessel at the time of survey only. submitting of this report creates no liability on the part of Christian & Company or the individual surveyor.

Christian & Company, Marine Surveyors, Inc.

Kelh Chirtian

November 13, 2022

Date

By: Mr. Kells Christian, Surveyor

S.A.M.S. - A.M.S. # 301