



So Cal Surveys, LLC

Survey Report

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Independent Marine Survey Services

Formosa 51

Eagle



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Introduction

SCOPE OF SURVEY

Acting at the request of Pirate Sailing, LLC attending surveyor did attend onboard the Formosa 51 *Eagle* beginning 08 Sep 2020 where an in-water survey was conducted at Long Beach, CA. The Hull Identification Number (HIN) FBB007160379 was not verified from the transom. A sea trial was performed with the surveyor. An out-of-water inspection of underwater machinery and the exterior of the hull's wetted-surface were performed. The reason for the survey was to ascertain the physical condition and value of the vessel. AC and DC power were used to check operation of the electrical systems were specified in this report only. No reference or information should be construed to indicate evaluation of the internal condition of the engines or the propulsion system's operating capacity. Electronic equipment was checked for "power up" only.

This vessel was surveyed without removal of any parts including fittings, tacked carpet, fastened boards or panels, anchors and chain, fixed partitions, instruments, clothing, spare parts, loose gear, miscellaneous material in the bilges and lockers, or other fixed or semi-fixed items. Locked compartments or otherwise inaccessible areas would also preclude inspection. The owner is advised to open all such areas for further inspection. Further, no determination of stability characteristics or inherent structural integrity has been made and no opinion is expressed with respect thereto. This survey report represents the condition of the vessel on the above date and time and is the unbiased opinion of the undersigned. It is not to be considered an inventory or a warranty either specified or implied.

The survey was conducted in a practical amount of time that will limit the depth and detail of the survey. Additional survey services for more in-depth inspections and evaluations are available at an hourly rate.

OF REPORT:

Under no circumstance will this report be photocopied, transcribed, paraphrased, nor quoted in whole or in part, without the specific written permission of So Cal Surveys, LLC.

Each report is an original and is signed at the last page of the body of the report. Any use or reliance upon other than a verified original is prohibited and no duty on the part of So Cal Surveys, LLC or the attending surveyor accrues neither to the user nor to the third parties. This report of survey is submitted for marine insurance underwriting purposes only. Any use or reliance by any party whatsoever, other than a bona fide insurance underwriting concern for the purpose of insuring the subject vessel is prohibited and beyond the scope of the survey and the report and no duty on the part of So Cal Surveys, LLC nor the attending surveyor accrues to the user nor to the third parties.

All findings, recommendations and opinions within this report are based upon the presumption that the subject vessel will be operated, use, and maintained in a manner consistent with those of a prudent mariner and those contained in, but not limited to Chapman Seamanship and Small Boat Handling. The prudent mariner closes all seacocks when leaving the boat unattended. The prudent mariner thoroughly checks the engine, and machinery spaces, and related gear for fluid leaks and fumes before each start-up. The foregoing are included as examples only.

Unless a sea trial was conducted under the supervision of the attending surveyor, the survey was conducted with the vessel in a static state. Observations underway could reveal circumstances not detectable while at rest. The report of survey is a description of what was available to observation on the date of survey only. No predictions as to future durability are made or implied. Use, abuse, neglect and deterioration due to the marine environment can alter the vessels condition substantially in short order. Consequently, the attending surveyor and So Cal Surveys cannot be held responsible or liable for any condition aboard after the date of survey.

It is recommended and understood that all diesel and gas engines be surveyed by a qualified engine surveyor to determine the condition of the engines, gears, pumps, heat exchanger's, coolers, structures, shafts, etc. a sea trial is strongly recommended to determine the functioning of the vessel and systems.

OF SURVEY:

The mandatory standards promulgated by the United States Coast Guard (USCG) under the authority of title 46 United States Code (USC); title 33 and title 46, Code of Federal Regulations (CFR), and the voluntary standards and recommended practices developed by the American Boat and Yacht Council (ABYC) and the National Fire Protection Association (NFPA) have been used as guidelines in the conduct of this survey.

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

Introduction

VESSEL DESCRIPTION

The vessel is a ketch rigged sailboat with a single diesel inboard engine, internal ballasted keel and skeg rudder. The vessel has full accommodations with forward and aft cabins, enclosed heads, and full galley. The vessel shows signs of good maintenance and care and has above average equipment and electronics. This vessel is in good operational condition and designed for recreational use.

APPRAISAL METHOD

The BUC guide values this vessel between \$128,000 and \$140,500 when adjusted for location and average condition. The average selling price of similarly equipped vessels of this model over the last five years as listed on Soldboats.com is \$70,400 ranging from \$35,000 to \$127,500. I have estimated the value at \$70,000. The replacement value is estimated at \$1,500,000 based on the new price of similarly equipped vessels.

This surveyor made no actual measurements or calculations during the inspection of the vessel. All reported measurements and capacities were taken from published sources or affixed labeling.

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

APPEARS:

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

FIT FOR INTENDED USE:

Use, which is intended by Survey Purchaser (present or prospective owner).

SERVICEABLE: ADEQUATE:

A particular system, component or item is sufficient for a specific requirement.

POWER UP:

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

EXCELLENT CONDITION:

A particular system, component or item is new or like new.

GOOD CONDITION:

A particular system, component or item is nearly new, with only minor cosmetic or structural discrepancies noted.

FAIR CONDITION:

A particular system, component or item is functional "as is" with minor repair.

POOR CONDITION:

A particular system, component or item is unusable "as is", requires repair or replacement of system, components or item to be considered functional.

General Information

FILE NUMBER.....	20-0908
SURVEY PREPARED FOR.....	Pirate Sailing, LLC
NAME OF VESSEL.....	Eagle
TYPE OF SURVEY.....	Condition and Value
OVERALL VESSEL RATING.....	Average
ESTIMATED MARKET VALUE.....	\$70,000
ESTIMATED REPLACEMENT COST.....	\$1,500,000
HULL IDENTIFICATION NUMBER (HIN)...	FBF007160379
DOCUMENTATION NUMBER.....	610527
HAILING PORT.....	Port Townsend, WA
MAKE OF VESSEL.....	Formosa
MODEL OF VESSEL.....	51
BUILDER.....	Formosa Boat Building Co, Playa Del Rey, CA
YEAR BUILT.....	1979
PLACE OF SURVEY.....	Long Beach, CA
DATE AND TIME OF SURVEY.....	08 Sep 2020
HULL MATERIAL.....	Fiber Reinforced Plastic
HULL TYPE.....	Displacement
LENGTH OVER ALL (LOA).....	50' 10" (per BUC Guide)
BEAM.....	14' 1" (per BUC Guide)
DRAFT.....	6' 2" (per BUC Guide)
DISPLACEMENT.....	52,000 Lbs (per BUC Guide)
PROPULSION SYSTEM.....	Single Inboard
FUEL TYPE.....	Diesel
FUEL CAPACITY.....	75 Gallons (estimated)
AC POWER.....	125 VDC 30-amp
DC POWER.....	12 VDC
FRESH WATER CAPACITY.....	75 Gallons (estimated)
HOLDING TANK.....	20 Gallons (estimated)
RIGGING.....	Ketch



HULL DECK AND SUPERSTRUCTURE

HULL CONSTRUCTION:

The hull is constructed of fiber-reinforced plastic with an internal ballasted keel. The gelcoat above the waterline is in good condition. The interior of the hull is in good condition where accessible. The paint below the water line is in fair condition. Percussion soundings to the hull found no damage or delamination. No blisters or cracks were sighted.



BULKHEADS:

There are full and partial bulkheads constructed of cored fiber-reinforced plastic. Percussion soundings to the bulkheads found no damage to the laminate or core. The tabbing is in good condition and well attached. There is some damage to the bulkhead at the exhaust muffler.

C.1 (see findings and recommendations)

STRINGERS:

The stringers and transverse members are in good condition.

THE TRANSOM:

The transom is in good condition.



DECK CONSTRUCTION:

The deck is constructed of cored fiber-reinforced plastic covered with teak planks. The deck appears in good condition. The teak decking is worn with some exposed screw head. Some the deck sealing is missing.

C.2 (see findings and recommendations)

Systems

HULL-TO-DECK JOINT:

The hull-to-deck joint appears in good condition secured with aluminum fasteners and glue. There is no sign of impact damage to the joint.

DECK FITTINGS:

The metal cleats are in good condition and are secure.

VENTILATION:

Ventilation is natural and mechanical and appears adequate. The blower is not operational.

B.1 (see findings and recommendations)

GRAB RAIL:

The rope lifelines and stanchions are in good condition and secure. Some of the stanchions are not secure.

B.2 (see findings and recommendations)

ANCHOR PLATFORM:

The steel anchor platform is in good condition and secure to the bow.

ADDITIONAL EQUIPMENT AND ACCESSORIES

DINGHY:

The fiberglass dinghy appears in good condition. There is some fiberglass damage to the dinghy.

C.3 (see findings and recommendations)



PROPULSION

Engine:	Type	Serial Number	Model Number	HP Rating	Indicated Hours
	Ford Lehman	D 9548/28	2715E	120	589.8

OBSERVATIONS:

The engine is in good operational condition with signs of regular maintenance. The engine compartment is clean and orderly. There is oil in the bilge.

B.3 (see findings and recommendations)

Systems



ENGINE RUN AND SEA TRIAL:

The vessel was operated off Long Beach, CA in good conditions with the surveyor and 4 other adults onboard. The engine started easily without excessive cranking. The engine appeared to operate normally with no unusual noises or vibrations. There was no smoke sighted during the engine start-u. The transmission shifted easily into forward and reverse with no unusual vibrations. The vessel handled well under power and under sail. The engine stalled during the sea trial due to fuel starvation. The engine was not operated at full throttle.

B.4 (see findings and recommendations)

	RPM	Water Temp °F	Oil Press psi	Battery
Slow Speed 4 kts	1000	195	60	11.5
Cruising speed 7 kts	1600	195	60	11.5

THROTTLE CONTROLS:

The throttle controls operated easily and are in good condition.

ENGINE MOUNTS:

The engine mounts are in good condition and secure.

LUBRICATION:

The engine oil appeared black in color with no indications of water and no grit. There is evidence of an oil leak at the aft end of the engine.

B.5 (see findings and recommendations)

EXHAUST SYSTEM:

The exhaust system is wet with a long section of dry exhaust. The exhaust muffler is corroded with evidence of leaks. The exhaust muffler is located in the closet of the aft cabin. There is evidence of exhaust leaks at the exhaust pipe. There are hoses and wires in contact with the exhaust heat shield on the dry section of the exhaust pipe.

B.6, B.7, B.8, B.9 (see findings and recommendations)

Systems



PROPELLERS AND SHAFTS:

The stainless-steel propeller shaft is in good condition. The shaft seal is in good condition. The 3-blade bronze propeller is in good condition. The cutless bearing is in good condition. The shaft seal is single clamped.

B.10 (see findings and recommendations)

ENGINE ALARMS:

The engine alarms are operational.

COOLING SYSTEM:

The cooling system is fresh-water and is operational. The heat exchangers appear in good condition.

RAW WATER STRAINERS:

The raw water strainer is in good condition and clear of debris.

HOSES AND CLAMPS:

The hoses and clamps are in good condition.

BELTS AND PULLEYS:

The belts and pulleys are in good condition.

TRANSMISSIONS

Trans	Drive Type	Serial Number	Model Number	Gear Ratio
	Borg Warner	1677	10-17-012	2.57

OBSERVATIONS:

The transmission appears in good operational condition and operated normally. The transmission shifted into forward and reverse with no unusual noises or vibrations.

FLUID LEVEL AND CONDITION:

The fluid shows no signs of water or grit.

CONTROLS:

The controls operate easily and are in good condition.

COOLERS:

The transmission coolers appear in good condition.

Systems

FUEL SYSTEM

FUEL TYPE:

Diesel

TANKS:

The steel fuel tanks appear serviceable. The fuel tanks are corroded.

B.11 (see findings and recommendations)

FILL PIPE:

The fill pipe is secure.

FUEL LINES AND FITTINGS:

The fuel hoses are in good condition and are USCG rated A1 and A2. One fuel valve is leaking. The electric fuel pump is not operational.

B.12, B.13 (see findings and recommendations)



VENTS:

The fuel tank vents appear serviceable.

FUEL FILTERS:

The Racor fuel filter/separator is in good condition. The fuel separator was full of water.

B.14 (see findings and recommendations)

RIGGING

STANDING RIGGING:

It is recommended that a rigger be hired to fully evaluate the rigging and inspect all equipment aloft. The standing rigging is stainless steel 1-19 cable. The standing rigging is in good condition with no broken strands. The self-tailing winches are operational and in good condition.

MAST AND SPAR:

The main mast and booms are wood and are in good condition. The mizzen mast is aluminum and in good condition. The goosenecks are in good condition. The bow sprit is in good condition.

MAST STEP AND COMPRESSION POST:

The main mast is stepped on the keel and is in good condition. The mizzen mast-step is an arch constructed of three $\frac{3}{4}$ " wood boards. The mizzen mast step appears undersized to support the mizzen mast.

B.15 (see findings and recommendations)

Systems

CHAIN PLATES:

The chain plates are attached to the hull and are in good condition and secure. There is some corrosion at the chain plates.

B.16 (see findings and recommendations)

TURNBUCKLES:

The turnbuckles appear in good condition.

SAILS:

The sails are crisp and in good condition. The main sail is worn and appears serviceable.

ELECTRICAL SYSTEMS

D.C. ELECTRICAL SYSTEM

DESCRIPTION AND OBSERVATIONS:

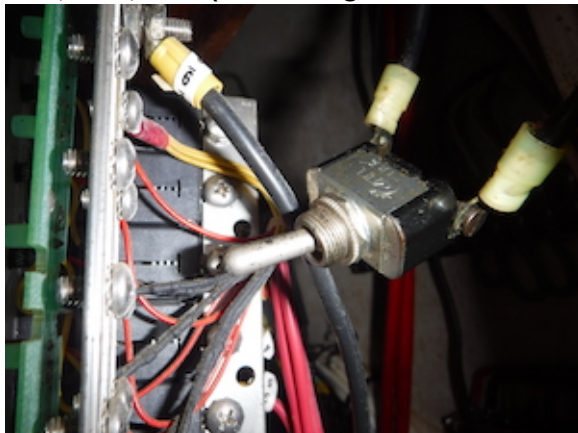
There are six 12-volt flooded batteries that appear in good condition and secure for engine starting and house use. The wiring appears in good condition and properly secured. The house conductor appears to be properly over-current protected. The battery switch is operational. There are loose wires in the lazarett. There are no covers on the battery terminals. There are wires and cables in the center of the aft cabin. There is one loose battery terminal.

B.17, B.18, B.19, B.20 (see findings and recommendations)

PANEL:

The main panel is located in the salon and is operational and properly labeled. The anchor light switch is broken. There is a loose metal switch behind the electrical panel. The electrical panel is not secure.

B.21, B.22, B.23 (see findings and recommendations)



CHARGING SYSTEM:

The Charles 40-amp battery charger appears operational. The engine alternator does not appear operational.

B.24 (see findings and recommendations)

A.C. ELECTRICAL SYSTEM

SHORE POWER:

The 30-amp receptacle is in good condition.

MAIN AND BRANCH CIRCUIT BREAKERS:

The main breaker panel is in the salon and are operational and properly labeled.

CIRCUIT LOAD MONITORS:

The load monitors appear operational.

Systems

OUTLETS:

The outlets appear operational and properly polarized and GFCI protected.

WATER SYSTEMS

FRESH WATER SYSTEM

TANKS:

The stainless-steel water tanks appear in good condition and secure with some corrosion.

WATER PRESSURE SYSTEM:

The Jabsco water pump is operational providing good water pressure to the heads and galley.

HOSES AND CLAMPS:

The hoses and clamps are in good condition.

HOT WATER SYSTEM

TYPE:

The Kuuma 6-gallon water heater appears operational and in good condition.

PRESSURE RELIEF VALVE:

There is a pressure relief valve that appears serviceable.

FITTINGS AND MOUNTING:

The fittings and mounts are in good condition.

SANITATION

BLACK WATER

TYPE:

The manual heads appear operational and in good condition. The aft head did not pump water. The aft head is plumbed directly overboard. There are no vented loops in the water supply hoses to the heads.

B.25, B.26, A.1 (see findings and recommendations)

MSD TYPE USCG SYSTEM:

The Marine Sanitation Device is a type III with the ability to pump overboard with a macerator pump.

DISCHARGE HOSE AND CLAMPS:

The hoses and clamps are in good condition.

HOLDING TANK:

The plastic holding tank is in good condition and secure. There is a notable holding tank odor.

B.27 (see findings and recommendations)

STEERING SYSTEM

TYPE:

The hydraulic steering operates smoothly with no notable play. The hoses and ram appear in good condition. The rudderpost and seal appear in good condition. There is some fluid at the steering ram.

B.28 (see findings and recommendations)

Systems

RUDDER POSITION INDICATOR:

The rudder angle indicator is operational.

THRU-HULLS

THRU-HULL:

The thru-hulls below the waterline are bronze and are in good condition and secure. The thru-hulls above the waterline are plastic and are in good condition and secure.

SEACOCKS:

There is a bronze ball-type seacock on each of the thru-hulls below the waterline that are in good condition and operational. Several seacocks are stuck open, some with corrosion, some with evidence of leaks.

B.29 (see findings and recommendations)

Purpose	Type	Seacock Condition	Thru-hull Condition
Engine Supply	Bronze, Ball	Good, Operational	Good, Secure
Not in Use	Bronze, Ball	Good, Operational	Good, Secure
Refrigerator Supply	Bronze, Ball	Good, Operational	Good, Secure
Head Supply	Bronze, Ball	Corroded, Stuck	Good, Secure
Sink Drain	Bronze, Ball	Corroded, Stuck	Good, Secure
Direct Overboard	Bronze, Ball	Corroded, Stuck	Good, Secure
Head Supply	Bronze, Ball	Corroded, Stuck	Good, Secure
Holding Tank Overboard	Bronze, Ball	Corroded, Stuck	Good, Secure
Sink Drain	Bronze, Ball	Corroded, Stuck	Good, Secure

SAFETY EQUIPMENT

SAFETY EQUIPMENT (US Coast Guard)

PFD'S NUMBER AND TYPE:

There are four type-II Personal Floatation Devices onboard that appear serviceable.

THROWABLE PFD'S:

There is one throwable Personal Floatation Device onboard that appears serviceable.

FIRE EXTINGUISHER'S:

There are three B1 fire extinguishers onboard that appear serviceable.

VISUAL DISTRESS SIGNALS:

The visual distress signals (flares) were not sighted onboard.

A.2 (see findings and recommendations)

Systems

SOUND DEVICES:

The hand-held horn appears operational.

NAVIGATION LIGHTS:

The navigation lights are operational. The upper spreader light is not operational. The anchor light is not operational. The steaming light is not operational.

A.3 (see findings and recommendations)

NO OIL DISCHARGE PLACARD:

The No Oil Discharge placard is posted in the engine compartment.

TRASH DISPOSAL PLACARD:

The Trash Disposal placard is posted in the galley.

AUXILIARY SAFETY EQUIPMENT

E.P.I.R.B.:

There is no EPIRB sighted onboard.

FIRE ALARMS:

There is no fire alarm sighted onboard.

A.4 (see findings and recommendations)

CARBON MONOXIDE DETECTOR/ALARM:

There is no carbon monoxide detector sighted onboard.

A.5 (see findings and recommendations)

HIGH WATER ALARM:

The high-water alarm is not operational.

A.6 (see findings and recommendations)

BILGE PUMPS

DESCRIPTION:

The Rule 1500 bilge pump is operational from the panel. The bilge pump is not secure. The bilge pump float switch is not operational.

B.30, B.31 (see findings and recommendations)

BONDING SYSTEM

MAIN BONDING CONDUCTOR:

There is no continuity between the shaft zinc and the propeller shaft. The bonding wire to the shaft log is broken.

B.32, B.33 (see findings and recommendations)

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:

The interior is in good condition. The woodwork is in good condition. The upholstery is in fair condition.

The skylights and portlights are operational with good seals. The interior lights are operational. There is a cracked window in the salon. There is a cracked porthole in the aft cabin. The entry door is broken.

Several interior lights are missing or not working. The hatch at the propane locker is damaged.

B.34, B.35, B.36, B.37, B.38 (see findings and recommendations)

Systems

GALLEY:

The galley is in fair condition. The engine-driven refrigerator appears operational. The stainless-steel sink and countertops are in good condition. The propane stove appears operational and in fair condition. The propane tank is stored in the dedicated propane locker.



ELECTRONICS AND NAVIGATION EQUIPMENT

VHF:

The Icom IC-M502 VHF radio is operational.

The Icom IC-M710 transceiver is not operational.

C.4 (see findings and recommendations)

RADAR:

The Raymarine E120 24-mile radar is operational.

The Raymarine C80 radar powers up but shows No Data Source.

C.5 (see findings and recommendations)

GPS/CHARTS:

The Raymarine E120 GPS chartplotter is operational.

The Raymarine C80 GPS chartplotter powers on but does not find the ship's location.

C.6 (see findings and recommendations)

COMPASS:

The 3" Ritchie compass appears operational.

AUTOPILOT:

The Raymarine 6001 autopilot appears operational.

SPEED:

The wind speed/direction vanes are operational. The speed paddle wheel is missing.

C.7 (see findings and recommendations)

DEPTH SOUNDER:

The Raymarine ST60 depth sounder is operational.

INSTRUMENTATION:

The engine instruments are operational. The oil gage lens is missing. The engine temperature gage appears to be not accurate.

C.8, C.9 (see findings and recommendations)

Systems

GROUND TACKLE

WINDLASS/GYPSY:

The manual windless is operational from the bow.

ANCHOR/RODE:

There are CQR and Bruce anchors at the bow that are in good condition and serviceable. There is approximately 30' of 3/8" galvanized chain and 200' of 3/4" nylon line in the chain locker that appear serviceable.

Findings and Recommendations

FINDINGS AND RECOMMENDATIONS

Deficiencies noted under A. SAFETY DEFICIENCIES should be addressed before vessel is next underway. These findings represent an endangerment to personnel and/or the vessel's safety and proper operating condition. Findings may also be a violation of USCG regulations.

Deficiencies noted under B. OTHER DEFICIENCIES should be corrected in the near future so as to maintain standards and to help the vessel to retain value.

The ABYC Standards and Technical Information Reports for Small Craft are the product of a consensus of representatives of government, industry and public sectors. It is intended solely as a guide to aid manufacturers and the marine community in the design, construction, equipage and maintenance of small craft.

SAFETY DEFICIENCIES

FINDINGS	RECOMMENDATIONS
A.1 The aft head is plumed directly overboard.	No person may operate any vessel equipped with installed toilet facilities unless it is equipped with an operable marine sanitation device. 33CFR159.7
A.2 The visual distress signals (flares) were not sighted onboard.	Keep acceptable visual distress signals (flares) onboard while underway per 33CFR175.110
A.3 The upper spreader light is not operational. The anchor light is not operational. The steaming light is not operational.	Make all navigation lights operational per 33 CFR 84 / COLREGS Part C
A.4 There is no fire alarm sighted onboard.	Install a smoke detector or fire detection system.
A.5 There is no carbon monoxide detector sighted onboard.	Install carbon monoxide detection system in each cabin in accordance with ABYC A-24
A.6 The high-water alarm is not operational.	Make the high-water alarm operational.

OTHER DEFICIENCIES

FINDINGS	RECOMMENDATIONS
B.1 The blower is not operational.	Make the bilge blower operational.
B.2 Some of the stanchions are not secure.	Secure the stanchions.
B.3 There is oil in the bilge.	Keep bilge pads under the engine.

Findings and Recommendations

B.4 The engine stalled during the sea trial due to fuel starvation. The engine was not operated at full throttle.	Confirm that the engine fuel system is operating correctly and retest the engine at full throttle for a short amount of time.
B.5 There is evidence of an oil leak at the aft end of the engine.	Clean and monitor the engine for leaks.
B.6 The exhaust muffler is corroded with evidence of leaks.	Repair or replace the muffler.
B.7 The exhaust muffler in is located in the closet of the aft cabin.	Isolate the muffler and exhaust components form the living areas.
B.8 There is evidence of exhaust leaks at the exhaust pipe.	Inspect and repair the exhaust pipe.
B.9 There are hoses and wires in contact with the exhaust heat shield on the dry section of the exhaust pipe.	Keep all wire and hoses well away from the exhaust pipe.
B.10 The shaft seal is single clamped.	Double clamp the shaft seal hose.
B.11 The fuel tanks are corroded.	Closely monitor or replace the fuel tanks.
B.12 One fuel valve is leaking.	Replace the leaking fuel valve.
B.13 The electric fuel pump is not operational.	Make the fuel pump operational.
B.14 The fuel separator was full of water.	Service the fuel separator and filter. Inspect the fuel system to determine the cause of water in the fuel system.
B.15 The mizzen mast step appears undersized to support the mizzen mast.	Monitor the mast step for cracks or warping, or provide additional support to the step.
B.16 There is some corrosion at the chain plates.	Clan and monitor the chain plates for corrosion.
B.17 There are loose wires in the lazarett.	Secure all wires every 18" and provide strain relief.
B.18 There are no covers on the battery terminals.	Install covers on the battery terminals.
B.19 There are wires and cables in the center of the aft cabin.	Protect the wires in the aft cabin with a ridged pole.
B.20 There is one loose battery terminal.	Tighten the nuts on the battery terminals.
B.21 The anchor light switch is broken.	Replace the broken switch.

Findings and Recommendations

B.22 There is a loose metal switch behind the electrical panel.	Secure the loose switch behind the panel.
B.23 The electrical panel is not secure.	Secure the main panel.
B.24 The engine alternator does not appear operational.	Prove operational or repair as necessary.
B.25 The aft head did not pump water.	Prove operational or repair as necessary.
B.26 There are no vented loops in the water supply hoses to the heads.	Install vented loops to the hoses to the heads or keep the valves closed when not in use.
B.27 There is a notable holding tank odor.	Monitor the holding system for leaks.
B.28 There is some fluid at the steering ram.	Monitor or repair the steering ram.
B.29 Several seacocks are stuck open, some with corrosion, some with evidence of leaks.	Exercise, repair, or replace the seacocks.
B.30 The bilge pump is not secure.	Secure the bilge pump.
B.31 The bilge pump float switch is not operational.	Repair or replace the bilge pump float switch.
B.32 There is no continuity between the shaft zinc and the propeller shaft.	Clean shaft and reinstall the zinc.
B.33 The bonding wire to the shaft log is broken.	Repair the bonding wire.
B.34 There is a cracked window in the salon.	Replace the cracked window.
B.35 There is a cracked porthole in the aft cabin.	Replace the cracked porthole.
B.36 The entry door is broken.	Repair the entry door.
B.37 Several interior lights are missing or not working.	Repair the interior lights.
B.38 The hatch at the propane locker is damaged.	Repair or replace the hatch at the helm seat.

Findings and Recommendations

SURVEYORS NOTES AND OBSERVATIONS

FINDINGS	RECOMMENDATIONS
C.1 There is some damage to the bulkhead at the exhaust muffler.	Repair or patch the holes in the bulkhead.
C.2 The teak decking is worn with some exposed screw head. Some the deck sealing is missing.	Repair and reseal the teak decks.
C.3 There is some fiberglass damage to the dinghy.	Repair the dinghy as necessary.
C.4 The Icom IC-M710 transceiver is not operational.	Make the transceiver operational if necessary.
C.5 The Raymarine C80 radar powers up but shows No Data Source.	Make the radar operational if necessary.
C.6 The Raymarine C80 GPS chartplotter powers on but does not find the ships location.	Make the chartplotter operational if necessary.
C.7 The speed paddle wheel is missing.	Replace the missing paddle wheel if necessary.
C.8 The oil gage lens is missing.	Repair or replace the oil gage.
C.9 The engine temperature gage appears to be not accurate.	Test and calibrate the engine gages as necessary.

Summary and Valuation

STATEMENT OF OVERALL VESSEL RATING OF CONDITION

It is the surveyor's experience that develops an opinion of the overall vessel rating of condition after a survey has been completed and the findings have been organized in a logical manner.

The grading condition developed by BUC Research and accepted in the marine industry for a vessel at the time of survey determines the adjustment to the range of base value in the BUC Used Boat Pricing Guide for a similar vessel sold within a given time period as a consideration to determine the market value.

The following is the accepted marine grading system of consideration:

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

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

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

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

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

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

As a result of my investigation as shown in the Systems and Findings and recommendations sections of this Report of Survey, and by virtue of my experience my opinion is an Overall Vessel Rating of:

Average

STATEMENT OF VALUATION

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

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

Buyer and seller are typically motivated.

Both parties are well informed or well advised, and each acting in what they consider their own best interest.

A reasonable time is allowed for exposure in the open market.

Payment is made in terms of cash in US dollars or in terms of financial arrangements comparable thereto; and

The price represents a normal consideration for the vessel sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

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

\$70,000

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

\$1,500,000

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SUMMARY

In accordance with the request for a marine survey of the Formosa 51 for the purpose of evaluating its present condition and estimating its Fair Market Value and Replacement Cost, I herewith submit my conclusion based on the preceding report. The subject vessel was personally inspected by the undersigned on 08 Sep 2020 and was found to be in good condition with above average amount of equipment. The vessel showed signs of good maintenance practices and regular care. The condition of the engine could not be determined and it is recommended that a certified engine mechanic be hired to inspect the engine to determine its condition. Subject to the correction of deficiencies listed under A. SAFETY DEFICIENCIES in section FINDINGS AND RECOMMENDATIONS, the vessel is considered to be suitable for its intended use. All deficiencies listed in section FINDINGS AND RECOMMENDATIONS should be attended to in a timely fashion especially A and B findings. The findings and deficiencies are not unusual for a vessel this size and age and are not extensive enough to affect the estimated fair market value.

SURVEYOR'S CERTIFICATION

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

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

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

I have no present or prospective interest in the vessel that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

My compensation is not contingent upon the reporting of a predetermined value or direction in value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulate result, or the occurrence of a subsequent event.

I have made a personal inspection of the vessel that is the subject of this report.

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



ATTENDING SURVEYOR

Michael R. Dickinson

Accredited Marine Surveyor, SAMS Member

