

Bartlett Marine Services & Consulting
MARINE SURVEYOR AND CONSULTANT

1998 Catalina Mark II

Sail Sample



SAMS (Society of Accredited Marine Surveyors), ABYC (American Boat & Yacht Council) Standards Certified

507 Malta Ave. Malta, NY 12020
(518) 859-8660
survey@bartlettmarine.net

Report of Marine Survey

Of The Vessel

Sail Sample

1998 Catalina Mark II

Conducted by
Alan P Bartlett, AMS

PREPARED FOR:

Your Name

7/12/11

TABLE OF CONTENTS

SECTION	PAGE NO.
I. INTRODUCTION	1
II. GENERAL INFORMATION	3
III. SYSTEMS	7
HULL DECK AND SUPERSTRUCTURE	7
CABIN APPOINTMENTS	9
PROPULSION	11
FUEL SYSTEM	13
ELECTRICAL SYSTEMS	13
FRESH WATER SYSTEM	15
SANITATION	16
STEERING SYSTEM	16
GROUND TACKLE	17
ELECTRONICS AND NAVIGATION EQUIPMENT	17
THRU-HULLS	18
BONDING SYSTEM	18
SAFETY EQUIPMENT	19
OUT OF WATER INSPECTION	20
LIQUIFIED PETROLEUM GAS SYSTEM (LPG)	21
STANDING RIGGING	21
RUNNING RIGGING	22
SAILS	22
IV. FINDINGS AND RECOMMENDATIONS	23
V. SUMMARY AND VALUATION	26
VI. PHOTOGRAPHS	30

I. INTRODUCTION

SCOPE OF SURVEY

Acting at the request of Your Name, the attending surveyor did attend onboard the *1998 Catalina Mark II, Sail Sample* beginning on 7/12/11 where an out of the water survey was conducted at Crockers Boat Yard, New London CT. The ship's papers were on board. The Hull Identification Number CTYT07777C989 was verified from the transom. A sea trial was not performed. An out-of the water inspection of underwater machinery and the exterior of the hulls wetted surface area was performed. The reason for the survey, was to ascertain the physical condition and value of the vessel. Moisture readings taken and referenced throughout the body of the report, were taken with the Electrophysics GRP 33 moisture meter, which was calibrated with the manufacturer's test block at the site. AC and DC power was used to check operation of the electrical systems 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 removals of any parts, including fittings, tacked carpet, screwed or nailed boards, anchors and chain, fixed partitions, instruments, clothing, spare parts and miscellaneous materials in the bilges and lockers, or other fixed or semi-fixed items. Locked compartments or otherwise inaccessible areas also preclude inspection and we will not accept responsibility for the condition of components hidden in or by them. 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 dates, and is the unbiased opinion of the undersigned, but it is not to be considered an inventory or a warranty either specified or implied.

NOTE: It is recommend and understood that all engines be surveyed by a qualified Engine Surveyor to determine the condition of the engines, gears and pumps, heat exchangers, coolers, etc.

CONDUCT 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" is intended to indicate that a close or complete inspection was not possible or it was not deemed appropriate at the time of this survey. The deficiencies reported herein reflect the conditions observed at the time the survey was conducted.

Use of asterisks * in the body of the report will indicate that a finding will be listed in the *Findings and Recommendations* section pertaining to the asterisked item, following the body of the report.

I. INTRODUCTION

VESSEL DESCRIPTION

The vessel is a production model, fiberglass auxiliary sloop with fixed wing keel, skeg rudder, wheel steering and diesel auxiliary inboard power, built and designed by Catalina Yachts in 1998. The vessel has a straight raked stem, straight sheer and reverse transom with molded in swim platform. The cockpit is large and the walk around side decks have molded contrasting color (gray) non-skid surfaces. The 3 cabin layout also includes 2 heads and has generous headroom. The engine is located under the companionway steps which hinge up for access to the machinery, with additional access panels located to each side. The tankage is located under the cockpit. Hatches and cabin side windows provide good light and ventilation. The vessel appears to to have had regular use with attentive care and maintenance by experienced and knowledgeable owners who take pride in their vessel.

II. GENERAL INFORMATION

GENERAL INFORMATION

SURVEY PREPARED FOR:	No Name
NAME OF VESSEL:	Sail Sample
TYPE OF SURVEY:	Condition and Value Insurance
OVERALL VESSEL RATING:	**** ABOVE AVERAGE
ESTIMATED MARKET VALUE:	\$179,000
ESTIMATED REPLACEMENT COST:	\$252,500
YEAR/MAKE/MODEL OF VESSEL:	1998 Catalina Mark II
YEAR BUILT:	1998
HULL IDENTIFICATION NUMBER (HIN):	CTYT07777C898 (see picture 1)
HULL NUMBER:	777
HAILING PORT:	Malta NY
USCG DOCUMENTATION NUMBER:	1234567
STATE VALIDATION STICKER NUMBER:	NY exp. 2/28/2010
OWNER:	No Name
OWNER'S ADDRESS:	507 Malta Ave. Malta NY
PLACE OF SURVEY:	Crockers Boat Yard, New London CT
DATE/TIME OF SURVEY:	7/12/11 0900hrs.
HULL MATERIAL:	FRP (Fiber Reinforced Plastic)
HULL TYPE:	Full displacement hull, wing keel and skeg rudder.
LENGTH OVER ALL (L.O.A.):	41'10"
BEAM:	13'10"
DRAFT:	4'10"
DEPTH:	6'10"
DISPLACEMENT:	20500 lbs.
GROSS TONS:	19 GRT

II. GENERAL INFORMATION

NET TONS:	17 NRT
PROPULSION SYSTEM:	Sail and auxiliary diesel.
FUEL TYPE:	Diesel.
FUEL CAPACITY:	58 gallons
AC POWER:	1-120 volt AC single phase, 30amp shore inlet
DC POWER:	12 volts
FRESH WATER CAPACITY:	111 gallons
HOLDING TANK:	two at 23 gallons each
INTENDED USE/BUYER:	Recreational near coastal cruising.
INTENDED CRUISING AREA:	Coastal US and Bahamas

II. GENERAL INFORMATION

DEFINITION OF TERMS:

The terms and words used in this report have the following meanings :

ABYC:

American Boat and Yacht Council

APPEARS:

Indicates that a very close inspection of the particular system, component or item was not possible by the surveyor

SERVICEABLE:

Sufficient for a specific requirement, functional.

POWERS UP:

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

EXCELLENT CONDITION:

New or like new appearance, functional.

GOOD CONDITION:

Minor cosmetic discrepancies noted, functional.

POOR CONDITION:

Unusable as is. Requires repairs or replacement to be considered functional.

USE OF *:

Use of * in the body of this report will indicate that a finding will be listed in the "Findings and Recommendations" section pertaining to the * item.

MOISTURE METER READINGS FOR ELECTROPHYSICS GRP33:

FIBERGLASS

WET above 2% (3% indicates near potential for delamination)

MOIST .85% - 2%

DRY below .85%

WOOD

II. GENERAL INFORMATION

DEFINITION OF TERMS:(*continued*)

WET above 23% (moisture induced rot occurs above 20% level)

MOIST 15% - 23%

DRY below 15%

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

HULL CONSTRUCTION

TYPE:

Full displacement with wing keel and skeg rudder.

MATERIAL:

FRP (fiber reinforced plastic)

EXTERIOR HULL:

White gelcoat in good condition with no visible scratches, well maintained.

PORTLIGHTS:

Three fixed, two on the starboard side and one on the port side. No signs of water intrusion.

BULKHEADS:

Plywood bulkheads, tightly fitted to moulded liner. No movement noted.

STRINGERS:

Main engine longitudinal stringers, 4 inches laminated FRP, percussion tested and appears to be solid.

TRANSOM:

Fiberglass with molded swim platform, and stainless steel ladder. "Dry" readings on the moisture meter, hammer percussion test revealed no abnormalities. Good condition

BILGE:

One inch of clear water in the bilge.

CHAIN LOCKER (DRAINAGE):

Drainage overboard.

KEEL EXTERNAL:

Wing shaped keel.

BALLAST (KEEL BOLTS):

Eight 1" stainless steel bolts with washers and backing plates, good condition with no signs of rust.

MOISTURE CONTENT:

The entire hull, from the water line to the sheer, tested in the dry range with the moisture meter, with the exception of one small (3" diameter) spot on the port side over a small ding in the gelcoat this should be repaired. Sounding with a hammer showed no abnormalities or delamination.

***B.1**

A small (3" diameter) spot on the port side hull, over a small ding in the gelcoat, had an elevated moisture reading "moist".

DECK CONSTRUCTION

TYPE:

Molded FRP (fiber reinforced plastic) with white gelcoat and contrasting gray non-skid surface, good condition. Results of the moisture meter testing were in the dry range everywhere. Soundings with the hammer showed no abnormal conditions.

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

DECK CONSTRUCTION(*continued*)

COCKPIT:

FRP, good condition with no cracks and no signs of water intrusion or delamination. Moisture meter results were in the dry range.

HULL-TO-DECK JOINT

TYPE:

Hull has inward turning flange for the deck joint. The deck is thru-bolted every 4" or so with stainless steel 1/4" fasteners. It is reportedly bedded in 5200 elastomeric compound as well. Appears serviceable where sighted.

REINFORCEMENT:

None Sighted.

DECK FITTINGS

STANCHIONS:

Four (4) one inch stainless steel stanchions on each side mounted in a stainless steel base with backing plates. Good condition no movement noted at any stanchion base..

BOW PULPIT (BOW RAIL):

Stainless steel, thru-bolted and backed, serviceable.

CHOCKS AND CLEATS:

Cleats appeared to be stainless steel all sighted were thru-bolted and serviceable.

WINDLASS/GIPSY:

Maxwell RC 10/8 windlass, reported new 2008.

PUSHPIT (STERN PULPIT):

One inch stainless steel split for center entry from the stern platform. Well mounted with no movement noted.

DECK SURFACE:

The general condition of the non-skid on the deck surface is good.

LIFE LINES:

There are two rows of life lines, plastic coated stainless wire with swage stainless fittings and a boarding gates on each side. Good condition

ANCHOR PLATFORM:

Stainless steel anchor platform with bow roller. Appears serviceable.

DAVITS:

Ocean Marine reported installed 2004, serviceable. Two solar panels mounted on top.

SUPERSTRUCTURE

MATERIAL:

Cabin house and deck are one unit molded FRP (fiber reinforced plastic).

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

SUPERSTRUCTURE*(continued)*

DECK HATCHES:

Six (6) Lewmar opening hatches, no evidence of water intrusion.

WINDOWS/PORTS/DOORS:

Six (6) opening, (three on each side) and four (4) fixed plexiglass (two on each side). No signs of water intrusion.

FITTINGS AND HARDWARE:

Stainless steel hand rails well mounted with no movement noted.

JOINERY STRESS:

None Sighted.

CANVAS AND SUPPORT STRUCTURE:

Blue Sunbrella dodger and bimini . Both in good condition with no repairs visible.

MOISTURE CONTENT:

Moisture meter readings were "Dry" everywhere tested.

ADDITIONAL EQUIPMENT AND ACCESSORIES

GENERAL EQUIPMENT:

Honda 2000 portable gasoline generator new 2008. Not tested
New cockpit cushions reported being made.

DINGHY/TENDERS:

2003 Caribe 10 ft. inflatable with 2005 Nissan 9.8 outboard (RI 9224S exp. 2/28/09) not located at survey site and not inspected.

FENDERS:

Five (5) 10x25 fenders in good condition.

DOCK LINES:

Assorted lengths and sizes sighted. Serviceable.

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:

JOINERY AND FINISH:

The joinery and finish of the oak interior is in good condition.

CABIN BRIGHT WORK:

Satin varnish finish.

INTERIOR BULKHEADS:

The interior teak bulkheads were finely fit where sighted.

WATER INTRUSION SIGNS:

None Sighted.

III. SYSTEMS

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:(*continued*)

STORAGE AREAS:

The cabinets, lockers, drawers, and shelving were well crafted and finely fit where sighted. Clean and dry.

HEADLINERS:

Headliner material in the cabins appeared to be molded fiberglass. Good condition.

DOORWAYS:

Oak plywood heads and cabin doors. Good condition.

FABRIC AND CUSHIONS:

Blue elephant skin pattern, original and in good condition. No tears or stains sighted.

FLOOR AND WINDOW COVERINGS:

Teak and holly cabin sole. The curtains in the salon were of a beige colored fabric and appeared serviceable.

ACCOMMODATIONS:

Six berths, two in the aft cabin, two in the main cabin and two in the forward owners cabin.

HEADS:

Two, one on the starboard side opposite the galley and one forward of the owners cabin.

SHOWERS:

Three, one in each head and one in the stern swim platform. They operated and appear serviceable.

FAUCET FIXTURES:

The faucet fixtures are demand pump 12 volt, in both the head and in the galley. Both operated.

LIGHT FIXTURES:

Eight (8) 12 volt lights throughout the vessel, four in the main cabin, one in the head, two in the V-berth and one in the engine room. All operated.

CABIN SOLE:

Teak and holly very well fitted and oiled.

VENTILATION:

Three Hellafans, one located in each state room and the main cabin. All operated.

CABIN HEATING:

Force 10 propane heater mounted in the main cabin with a 3 inch stainless steel vent through the cabin top, operated.

GALLEY

LOCATION:

On the port side of the main cabin running aft.

SINKS:

Double stainless steel, serviceable with a manual faucet as well as the hot and cold faucet on the pressure water system.

III. SYSTEMS

CABIN APPOINTMENTS

GALLEY(*continued*)

REFRIGERATION:

Adler Barber Cold Machine 12 volt refrigeration in galley. Operated.

STOVE/OVEN:

Seaward Princess propane stainless steel, three burner stove with oven. All burners and oven ignited. .

MICROWAVE:

Sharp new 2007. Powered up.

PROPULSION

MAIN ENGINES

TYPE:

Yanmar 50 hp diesel 4JH2E serial no. 10718

NUMBER OF CYLINDERS:

Four

INDICATED HOURS:

3262.7 on the hour meter.

THROTTLE CONTROLS:

Morse lever/cable type. Both operate stiffly and should be lubricated.

***C.1**

Throttle controls operate stiffly .

EMERGENCY SHUT DOWN:

Cable pull at the helm.

ENGINE MOUNTS AND BED:

The aft engine mounts are rusty.

***B.2**

The aft engine mounts are rusty.

LUBRICATION:

Level and Condition: Level on the engine dip stick is near high and the oil is clean. Filters: Engine mounted spin on/off canister type filters , reported changed 7/9/08.

VENTILATION:

Power blowers with flex tubing, powered up. Natural, flow ventilation provided by cowl vent.

EXHAUST SYSTEM:

Double clamped, flexible hose connected to a waterlock muffler, then double clamped to a flexible hose with double clamped exit at the stern. All the clamps have rust on them and should be replaced.

***B.3**

The stainless steel exhaust clamps to the flexible hose have rust on them.

III. SYSTEMS

PROPULSION

MAIN ENGINES *(continued)*

PROP SHAFTS:

Stainless steel 1 1/4 " diameter. Appears serviceable.

ENGINE ALARMS:

Low oil pressure alarm and coolant over heat warning audible at helm station. Appears serviceable.

STUFFING BOX:

Stuffing box and packing gland, is bronze hex nut type boot is double clamped, the clamps are rusty.

***B.4**

The double stainless steel stuffing box clamps are rusty.

COOLING SYSTEM

TYPE:

Heat exchanger cooling (also called indirect cooling or closed reservoir cooling)

COOLANT LEVEL:

Normal level observed.

HOSES AND CLAMPS:

Reinforced rubber hose double clamped and well routed and supported, where sighted.

BELTS AND PULLEYS:

Belts condition appears serviceable.

SEACOCKS AND STRAINERS:

Raw water seacocks were ball valve type and were operable.

TRANSMISSIONS

TYPE:

Straight drive reduction gear.

MANUFACTURER:

Hurth.

GEAR RATIO:

2:1

FLUID LEVEL AND CONDITION:

Level was low when checked without engine running. Recommend fluid be renewed.

***B.5**

Transmission fluid level was low.

III. SYSTEMS

FUEL SYSTEM

MAIN ENGINE(S) FUEL SYSTEM

FUEL TYPE:

Diesel.

NUMBER OF TANKS:

Two (2), total capacity 58 gallons (38 gal. in the factory installed tank and 20 gal. in the 2005 installed poly tank).

MANUFACTURING LABEL:

The ABYC required lables were sighted on the fuel tanks.

FILL PIPE LOCATIONS:

Starboard side decks marked for fuel.

FILL PIPE GROUNDED:

The forward factory fill installed pipe is grounded and double clamped. The added fill pipe is not grounded or double clamped.

***A.1**

The newly added (2005) fuel fill pipe is not grounded and has only one clamp.

FUEL LINES AND FITTINGS:

Grade USCG type A1 from the tank to the Racor and from the filter to the engine.

SHUT-OFF VALVE:

Located in the engine room.

FUEL FILTERS:

Dual Racor primary fuel filters added 2005, serviceable.

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (D.C. SYSTEM)

VOLTAGE:

Lead acid battery powered 12 volt system.

BATTERIES:

Two 4D house batteries located under the port side cockpit, access from the galley. One dedicated battery located in the forward cabin dedicated to the windlass.

BANKS:

(2) banks

MAIN BATTERY SWITCHES:

Main engine battery rotary type switch located on aft bulkhead in the galley.

PANEL:

Catalina panel (see picture 2)

BREAKERS/FUSES:

Breakers. Serviceable.

III. SYSTEMS

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (D.C. SYSTEM)(*continued*)

TYPE CONNECTORS:

Wire nut connectors found on the wire from the solar panel.

***B.6**

Wire nut connectors are on the wire from the solar panels to the batteries.

ROUTING/SUPPORT:

The solar panel and generator conductors coming to the batteries, under the cockpit, are not supported

.

***A.2**

The solar panel and generator conductors coming to the batteries, under the cockpit, are not supported every 18 inches.

CHARGING SYSTEM:

Two solar panels installed 2004 (Solar Pro- 75 watt) and Amp Air Pacific 100 wind generator installed 2004. The solar panels were charging.

CHARGING SYSTEM (BATTERY CHARGER):

Promatic 30-3, Professional Marine battery charger located on the bulkhead over the batteries, operated.

CHARGING SYSTEM (ALTERNATOR):

Alternator on main engines. Did not test

ELECTRICAL SYSTEM (A.C. SYSTEM)

SHORE POWER INLET:

One Hubbell 30 amp 120 volt single phase. Located on the transom (see picture 3).

SHORE POWER:

50 foot long, 120 volt/30 amp. Serviceable.

AC SOURCE SELECTOR SWITCH:

Located in the stern lazarette adjacent to the inlet.

MAIN BREAKER:

Located on the Catalina electrical panel in main cabin

BRANCH BREAKERS:

Four individually switched branch breakers on the main electrical panel (see picture 2).

ROUTING:

Well routed and supported where sighted.

OUTLETS:

Various A.C. outlets available throughout yacht, appear adequate and conveniently located. GFCI (ground fault circuit interrupter) outlets sighted and tested in the galley but not in the two heads.

***A.3**

The AC outlets in the two heads are not GFCI.

III. SYSTEMS

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (A.C. SYSTEM)(*continued*)

POLARITY:

Polarity light on the AC panel. Tested

GENERATORS AND INVERTERS

DC/AC INVERTER:

Xantrex 1000 inverter, new 2007, operated.

FRESH WATER SYSTEM

FRESH WATER SYSTEM: (POTABLE WATER)

STORAGE TANKS:

Three tanks two-25 gal. and one 50 gal. plus 11 gal. hot water heater-total 111galons.

FILL PIPE LOCATION:

One starboard and two port side deck marked for water.

PUMPS:

Par diaphragm type demand pressure switch type, mounted under the cockpit. Operated

HOSES AND CLAMPS:

Plastic tubing throughout the vessel. Appropriately clamped.

FRESH WATER SYSTEM (HOT WATER SYSTEM)

TYPE:

110 electric. Marine grade.

MANUFACTURER:

Raritan. Condition good. Serial No: HC-9402827 Model No. R-68.

CAPACITY:

11 gallons

PRESSURE RELIEF VALVE:

Yes, copper pressure relief valve built into tank.

HEAT EXCHANGER AND PLUMBING:

Engine mounted heat exchanger. Appears serviceable.

FRESH WATER SYSTEM (WATER MAKING SYSTEM)

TYPE:

Sea Recovery Watermaker- Ultra Whisper 17 gallons/hour rated. SRC 400 UWM- DUWM6615201048 Did not test.

ELECTRICAL CONNECTIONS:

Appears serviceable.

III. SYSTEMS

FRESH WATER SYSTEM

FRESH WATER SYSTEM (WATER MAKING SYSTEM)(*continued*)

SEACOCKS AND THRU-HULLS:

Bronze seacock located next to watermaker under the main cabin starboard side settee.

SANITATION

SANITATION (BLACK WATER)

MANUFACTURER:

Jabsco in good condition

MANUAL OR ELECTRIC TYPE:

Both heads are manual, not checked for operation.

M.S.D TYPE USCG SYSTEM:

Certification Type: MSD U.S.C.G. Type III. (Holding tank)

RAW WATER SUPPLY AND CLAMPS:

Appears serviceable where sighted.

DISCHARGE HOSES AND CLAMPS:

Thru-hulls at individual head locations; double clamped and serviceable.

PUMP-OUT LOCATION:

Forward starboard side deck, and aft port side deck. Both marked for waste.

MACERATOR:

Two macerators located at each tank, with an electrical lock-out on the electrical panel.

"Y" VALVES:

No

HOLDING TANK:

Two Poly/plastic, 23 gallons each. No smell noted.

STEERING SYSTEM

STEERING SYSTEM

TYPE:

Edson pedestal , 30 inch stainless steel wheel in good condition .

PULLEYS, CABLE AND CHAIN CONDITION:

Slight corrosion condition starting on the cables.

***C.2**

Corrosion sighted on the steering cables.

RUDDER POSITION INDICATOR:

On the Raytheon 6000 Autopilot.

III. SYSTEMS

STEERING SYSTEM

STEERING SYSTEM(*continued*)

PACKING GLAND:

Bronze hex nut type packing gland. Appeared serviceable. Monitor frequently.

GROUND TACKLE

GROUND TACKLE

ANCHORS:

Primary, 45 lb.CQR with 250 ft. of 5/16" chain, 40 Bruce with 30 ft. chain and 150 ft line, 23 Fortress with web strap mounted on the stern rail. In good condition, no rust noted.

WINDLASS:

Maxwell RC 10/8 (new 2008) with capstan #J2561. Powered up.

OTHER:

Salt water wash down station in the anchor well, did not operate. Drogue with rode, appears serviceable. .

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT

VHF:

West Marine model 550 no. 6072-64010377, new 2008, with Uniden Wham Mike no. 34001008 Powered up.

RADAR:

RAYTHEON #Z268058001

GPS:

Raymarine C-80 GPS and Chartplotter (AE020200950903) new 2005 mounted on cockpit pod. Autohelm chartplotter, seataalk repeater at the navigation station in main cabin. Powered up.

AUTOHELM:

Raymarine 6000, new 2000. (AA120220490209), Sea Talk handheld remote for auto-pilot no. AA15020990014. Powered up.

SPEEDLOG:

Autohelm STS 50 unit AZ1330570020 Powered up.

DEPTH SOUNDER:

Autohelm depth unit. Powered up.

COMPASSES:

6" Richie binnacle mount compass. Appears serviceable.

ANTENNAS:

VHF antenna mounted at the masthead. Not inspected, appears serviceable. 20 inch diameter radar dome mounted on the mast with 2005 installed Sail Guard. TV antenna mounted just below radar dome, 2005.

III. SYSTEMS

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT(*continued*)

BAROMETER:

Howard Miller mounted in main cabin, operated .

SHIPS CLOCK:

Howard Miller mounted in the main cabin, operated .

ELECTRONICS (ENTERTAINMENT)

STEREO SYSTEM:

Jensen stereo/cassett player/radio no.1006864,new 2002. Powered up.

SPEAKERS:

Two in the main cabin and two in the cockpit, all operated .

TELEVISION(S):

Sharp Aquos 20" flat screen new 2005, no.410836074. Magnavox didgital converter U16835221, model#TB100MW9. Powered up.

VCR:

Phillips DVD player no. KXIAO706941647,new 2007, powered up.

THRU-HULLS

THRU-HULLS:

NOTE:

The below the water line thru-hull valves on this vessel were ball valve type and were all operable. All are Marelon and do not need to be bonded, with the exception of the water maker inlet which is bronze.

BONDING SYSTEM

BONDING SYSTEM

MAIN BONDING CONDUCTOR:

The bonding system is well established where sighted. The bonding system is using individual green insulated wire and appeared to be serviceable.

GROUNDING PLATES:

None Sighted.

ENGINES AND GENERATORS:

Engine appears to be bonded and grounded.

RIGGING, DECK FITTINGS, AND MAST:

Bonded where sighted. Serviceable.

III. SYSTEMS

SAFETY EQUIPMENT

SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

NUMBER AND TYPE OF PFD'S:

4 type II, 2 type IV, and 3 inflatables.

NUMBER OF THROWABLE PFD'S:

Lifesling system mounted on the lifeline. Fim-Bouy overboard pole mounted on stern rail.

FIRE EXTINGUISHERS:

A total of four (4). Three mounted in the cabins and one Firefoe engine room automatic fire suppression system. The portable extinguishers were all in the green and dated 2006. The Fire foe fixed system has not been tested since installation in 2005.

***B.7**

The fixed engine room automatic fire extinguisher has not been inspected in the last year.

VISUAL DISTRESS SIGNALS:

(3) hand/held day/night flares, expire date 2010. Serviceable

SOUND DEVICES:

Bell: Operable.

POWER EXHAUST BLOWERS:

Yes, operable.

NAVIGATION LIGHTS:

Tri-color light added to the mast in 2005, operated .

INLAND NAVAGATION RULE BOOK< (12M-39'4"):

On vessel.

"NO OIL DISCHARGE" PLAQUE:

Yes, found properly displayed in engine space.

TRASH DISPOSAL PLACARD:

Yes, found properly displayed in galley area.

WASTE MANAGEMENT PLAN (OVER 40'):

Yes written in the log.

AUXILIARY SAFETY EQUIPMENT

E.P.I.R.B.:

McMurdo 406-GPS EPIRB 2DD405B63581FEO expiration 4/30/10

SMOKE DETECTOR:

None Sighted. Highly recommended by NFPA (302-44 12.3) that all vessels over 26 feet with sleeping space be equipped with a smoke detector.

FUME SNIFFER ALARM SYSTEMS:

The carbon monoxide detector on board was not mounted.

***C.3**

The carbon monoxide detector was not mounted .

III. SYSTEMS

SAFETY EQUIPMENT

BILGE PUMPS

LIST:

One automatic switch Jabsco pump, operated. Two manual diaphragm type pumps.

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY

PROPELLER(S):

Three bladed bronze 18 RH 13. No dents or other visible damage.

PROPELLER SHAFT(S):

Stainless steel 1 1/4" diameter. Good condition no apparent damage.

SHAFT BEARING (CUTTLESS BEARING):

Cuttless bearings showed no signs of sloppiness or end play.

STRUTS:

Cast bronze . Firmly attached to the hull, appears serviceable.

RUDDER(S) MATERIAL:

FRP, percussion sounding with a hammer indicated no abnormalities.

THRU-HULLS:

All clean and serviceable.

TRANSDUCERS:

Depth, clean and serviceable.

STRAINERS/SCOOPS/SCREENS:

Water maker, clean and serviceable.

ZINCS:

Two new shaft zincs were observed, appeared serviceable.

CONDITION OF HULL (WETTED SURFACE)

BLISTERS:

None Sighted.

CONDITION OF BOTTOM PAINT:

The bottom was painted after I inspected the hull, (8/13/09).

NOTE:

The hull was percussion sounded using a hammer below the water line. No abnormalities were noted.
The hull appears sound.

III. SYSTEMS

LIQUIFIED PETROLEUM GAS SYSTEM (LPG)

LIQUIFIED PETROLEUM GAS SYSTEM (LPG)

TYPE:

LPG.

LOCATION:

Port and starboard seat lockers.

MOUNTING:

Up right and secure..

REGULATOR:

Yes, appears serviceable.

PRESSURE GAUGE:

Pressure gauge sited on tank.

VENTILATION:

Yes, overboard.

SHUT-OFFS:

Yes at tank and behind the stove.

LINES AND FITTINGS:

Could not observe if there was a continuous run of copper tubing to the appliance as now recommended by ABYC.

STANDING RIGGING

STANDING RIGGING

MAST:

The mast was stepped. The spars and rigging were observed and inspected from the deck level only.

SPREADERS:

The spreaders appear to be well mounted with serviceable boots.

SHROUDS AND STAYS:

The terminal end swages appear straight with no cracks or rust visible.

The lay of the wire is smooth and firm with no proud yarns or rust.

BOOMS:

Aluminum boom painted the same as the mast, in good condition .

TURNBUCKLES:

Stainless turnbuckles of the barrel design appears serviceable with no rust or cracks.

TOGGLES:

Stainless steel toggles in good condition .

CHAIN PLATES:

Internal chain plates extending through the deck and bolted to the hull (see picture 4), appear serviceable no signs of water intrusion.

III. SYSTEMS

RUNNING RIGGING

RUNNING RIGGING

WINCHES:

Two Lewmar 54 primary, two Lewmar 40 secondary and one Lewmar 16 mounted on the deck.

SAIL TRACK:

Main sail reefs internally in the mast

BLOCKS:

Schaefer and Harken

REEFING SYSTEM:

Stowaway for main and roller furling for headsail. Appeared serviceable.

HALYARDS:

The braided halyards aboard appear to be appropriately sized, clean with no signs of chafing and serviceable.

SHEETS:

The braided sheets onboard appear to be appropriately sized, clean with no signs of chafing and in serviceable condition.

ROLLER FURLING GEAR:

Schaefer model 3100, serviceable (see picture 5). Anderson uni-directional winch for the jib roller.

SNAP SHACKLES:

The hinge and swivel on the snap shackle show no signs of fatigue or rust.

SAILS

SAILS

MAINSAIL:

Doyle Mainsail new 2009 in like new condition .

HEADSAIL:

125% Genoa on the roller furler, 1998 cleaned and restitched in 2007.

SAILS: (INVENTORY):

Other sails: #2 UK 85% jib new 2007. Checked in bag, appears like new.

ATN storm sail new 2005. Checked in bag, appears like new.

Asymmetrical spinnaker with dousing sock and telescoping wisker pole, not on board the vessel.

NOTE:

The sails were not hoisted or inspected in detail.; only for their presence on board and general appearance.

IV. FINDINGS AND RECOMMENDATIONS

Deficiencies noted under "SAFETY" should be addressed before vessel is next underway. These findings represent an endangerment to personnel and/or the vessel's safe and proper operating condition. **Findings may also be in violation of U.S.C.G. regulations.**

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

Deficiencies will be listed under the appropriate heading:

- A. SAFETY DEFICIENCIES
- B. OTHER DEFICIENCIES NEEDING ATTENTION
- C. SURVEYORS NOTES AND OBSERVATIONS

A. SAFETY DEFICIENCIES:

A.1 (PAGE 13) FILL PIPE GROUNDED:

FINDINGS	RECOMMENDATIONS
The newly added (2005) fuel fill pipe is not grounded and has only one clamp.	<i>Ground and double clamp the fuel fill pipe (ABYC H-33.11.7 and H-33.15.5).</i>

A.2 (PAGE 14) ROUTING/SUPPORT:

FINDINGS	RECOMMENDATIONS
The solar panel and generator conductors coming to the batteries, under the cockpit, are not supported every 18 inches.	<i>Support electrical wires every 18 inches, minimum. (ABYC E-11.14.6.8)</i>

A.3 (PAGE 14) OUTLETS:

FINDINGS	RECOMMENDATIONS
The AC outlets in the two heads are not GFCI.	<i>Install GFCI outlets in the two heads (ABYC E-11.13.3.5)</i>

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.1 (PAGE 7) MOISTURE CONTENT:

FINDINGS	RECOMMENDATIONS
A small (3" diameter) spot on the port side hull, over a small ding in the gelcoat, had an elevated moisture reading "moist".	<i>Further investigate and repair as necessary.</i>

B.2 (PAGE 11) ENGINE MOUNTS AND BED:

FINDINGS	RECOMMENDATIONS
The aft engine mounts are rusty.	<i>Clean and periodically coat with a rust preventer.</i>

IV. FINDINGS AND RECOMMENDATIONS

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.3 (PAGE 11) EXHAUST SYSTEM:

FINDINGS	RECOMMENDATIONS
The stainless steel exhaust clamps to the flexible hose have rust on them.	Replace with new marine grade full stainless steel clamps.

B.4 (PAGE 12) STUFFING BOX:

FINDINGS	RECOMMENDATIONS
The double stainless steel stuffing box clamps are rusty.	Replace with new marine grade full stainless steel clamps.

B.5 (PAGE 12) FLUID LEVEL AND CONDITION:

FINDINGS	RECOMMENDATIONS
Transmission fluid level was low.	Flush the transmission fluid and refill.

B.6 (PAGE 14) TYPE CONNECTORS:

FINDINGS	RECOMMENDATIONS
Wire nut connectors are on the wire from the solar panels to the batteries.	Replace with ring or captive spade type mechanical wire connectors ABYC E-11.14.5.4

B.7 (PAGE 19) FIRE EXTINGUISHERS:

FINDINGS	RECOMMENDATIONS
The fixed engine room automatic fire extinguisher has not been inspected in the last year.	Have the engine room fixed automatic fire extinguisher inspected. ABYC recommends all fire extinguishers to be inspected once a year by a qualified fire extinguishing service facility.

C. SURVEYOR'S NOTES AND OBSERVATIONS:

C.1 (PAGE 11) THROTTLE CONTROLS:

FINDINGS	RECOMMENDATIONS
Throttle controls operate stiffly.	Lubricate the throttle cables and investigate linkage.

C.2 (PAGE 16) PULLEYS, CABLE AND CHAIN CONDITION:

FINDINGS	RECOMMENDATIONS
Corrosion sighted on the steering cables.	Clean the corrosion off the cables and lubricate.

IV. FINDINGS AND RECOMMENDATIONS

C. SURVEYOR'S NOTES AND OBSERVATIONS:

C.3 (PAGE 19) FUME SNIFFER ALARM SYSTEMS:

FINDINGS	<i>RECOMMENDATIONS</i>
The carbon monoxide detector was not mounted .	<i>Mount the carbon monoxide detector according to manufactures instructions. ABYC recommends all vessels with sleeping quarters have installed CO detectors.</i>

V. SUMMARY AND VALUATION

STATEMENT OF VALUATION:

1. The "**FAIR MARKET VALUE**" is the most probable price in terms of money which 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:

- a. Buyer and seller are typically motivated.
- b. Both parties are well informed or well advised, and each acting in what they consider their own best interest.
- c. A reasonable time is allowed for exposure in the open market.
- d. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- e. 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 using the data from BUC, NADA, and various on-line services, and after consideration of the reliability of the data, the extent of the necessary adjustments and condition of the vessel, it is your surveyor's opinion that the "**FAIR MARKET VALUE**" of the subject vessel is:

\$179,000

One Hundred Seventy Nine Thousand Dollars

2. The "**ESTIMATED REPLACEMENT COST**" indicates the retail cost of a similar new vessel of the same manufacturer.

\$252,500

Two Hundred Fifty Two Thousand Five Hundred Dollars

V. SUMMARY AND VALUATION

SUMMARY:

In accordance with the request for a marine survey of the Sail Sample, 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 7/12/11. Subject to correction of deficiencies listed in section IV A. (Safety), the vessel is considered to be suitable for its intended use. Other deficiencies listed should be attended to in a timely fashion.

V. SUMMARY AND VALUATION

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, and are my personal, unbiased professional analyses, opinions, 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 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 No Name.

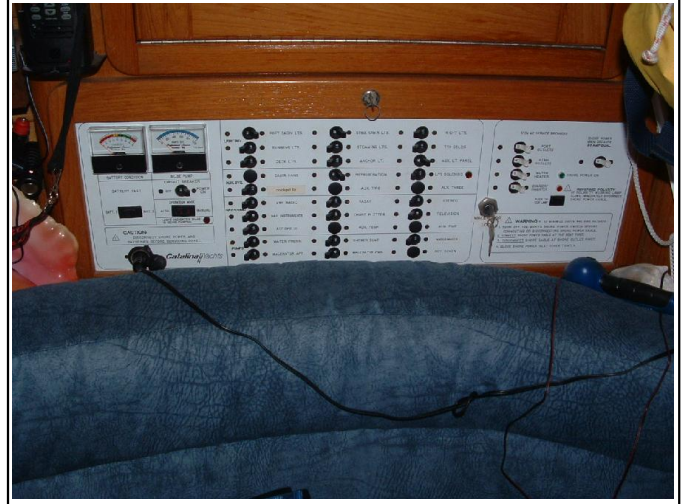
ATTENDING SURVEYOR: _____

Alan P. Bartlett, AMS

VI. PHOTOGRAPHS



HIN CTYT0777C989



Electrical Panel

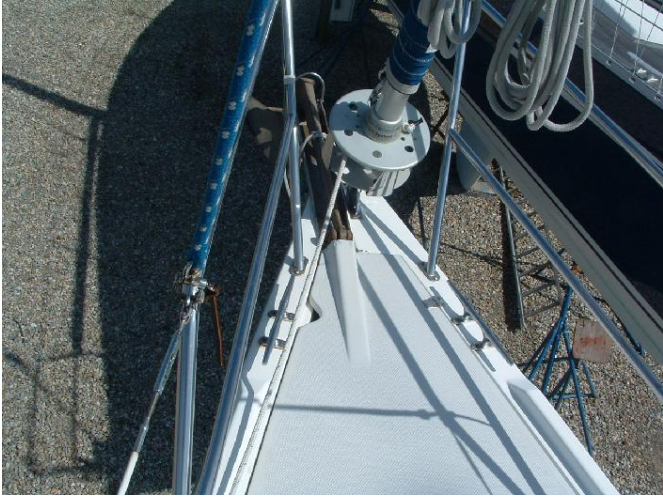


Shore Power Inlet



Starboard Chain Plate

VI. PHOTOGRAPHS



Schaefer Roller Furling



Interior Electronics



Mast Step



Upper Mast