

AquaFacts
YACHT SURVEYORS AND MARINE SERVICES

2002 PDQ 36 - Capella - Sailing Catamaran

"XXXXXXXXXX"

INDEPENDENT MARINE SURVEY SERVICE

Serving Southern Ontario ,
(519) 768-3438

REPORT OF MARINE SURVEY

OF THE VESSEL

"XXXXXXXXXX"

2002 PDQ 36 - Capella - Sailing Catamaran

**CONDUCTED BY
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**SOCIETY OF ACCREDITED MARINE SURVEYORS - S.A.M.S
SURVEY ASSOCIATE - S.A.**

PREPARED EXCLUSIVELY FOR:

XXXXXXXXXX

July XX - 20XX

INDEPENDENT MARINE SURVEY SERVICE

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I. INTRODUCTION

SCOPE OF SURVEY

Acting at the request of XXXXXXXXX, the attending surveyor did attend onboard the 2002 PDQ 36 - *Capella* - Sailing Catamaran, "XXXXXXX" beginning on July XX, 20XX @ 1100 hrs, where an "in-the-water-survey" WAS conducted at XXXXXX Marina, , XXXXXXXX, Ontario, Canada. The ship's papers were on board and appeared to be in order. The Hull Identification Number XXXXXXXXXXXX WAS verified from the transom. A sea trial under power WAS performed. An IN-THE-WATER - UNDERWATER - INSPECTION of the machinery and the exterior of the hulls wetted surface area WAS PERFORMED by the attending surveyor by DIVING. An out-of the water inspection of underwater machinery and the exterior of the hulls wetted surface area WAS NOT 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 CT33 Moisture Meter. 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 would also preclude inspection. Owner or purchaser is advised to open up 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 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.

CONDUCT OF SURVEY:

THE MANDATORY STANDARDS PROMULGATED BY TRANSPORT CANADA, CANADIAN CONSTRUCTION STANDARDS - TP1332, THE SMALL VESSEL REGULATIONS, 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.

II. GENERAL INFORMATION

GENERAL INFORMATION

FILE NUMBER: PD36XX
SURVEY PREPARED FOR: XXXXXXXXXXXX

NAME OF VESSEL: " XXXXXXXX "
TYPE OF SURVEY: Pre-Purchase for Buyer, Condition and Value
OVERALL VESSEL RATING:..... **** ABOVE AVERAGE
ESTIMATED MARKET VALUE: \$ 2XX,000.xx U.S.
YEAR/MAKE/MODEL OF VESSEL: 2002 PDQ 36 "Capella" sloop rigged, sailing catamaran
BUILDER: PDQ Yachts - Whitby, Ontario, Canada.
HULL IDENTIFICATION NUMBER (HIN):..... XXXXXXXXXXXX
OFFICIAL NUMBER: Transport Canada Pleasure Craft Licence No. - XXXXXXXX
OWNER: XXX XXXXX
PLACE OF SURVEY: XXXXXXXX, Ontario, Canada.
MARINA OR YACHT CLUB :..... XXXXXX Marina,
DATE/TIME OF SURVEY: July XX, 20XX @ 1030 hours
HULL MATERIAL: FPR - (Fiberglass Reinforced Plastic)
HULL TYPE: Catamaran (twin hulls)
LENGTH OVER ALL (L.O.A.):..... 36' 5" as per manufacturers spec's
(LOAD) LENGTH WATERLINE (L.W.L.):..... 34' 4" as per manufacturers spec's
BEAM: 18' 3 as per manufacturers spec's
DRAFT:..... 2' 10 " as per manufacturers spec's
PROPULSION SYSTEM: Sail and auxiliary diesel.
FUEL TYPE: Diesel.
FUEL CAPACITY: 55 U.S. gallons as per manufacturers spec's
AC POWER: 120 V AC
DC POWER: 12 V DC
FRESH WATER CAPACITY:..... 85 U.S. gallons as per manufacturers spec's
HOLDING TANK: 35 U.S. gallons as per manufacturers spec's
INTENDED USE: Recreational sailing.

DEFINITION OF TERMS

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).

II. GENERAL INFORMATION

DEFINITION OF TERMS: *(Continued)*

SERVICEABLE: ADEQUATE:

Sufficient for a specific requirement.

POWERS UP:

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

EXCELLENT CONDITION:

New or like new.

GOOD CONDITION:

Nearly new, with only minor cosmetic or structural discrepancies noted.

FAIR CONDITION:

Denotes that system, component or item is functional as is with minor repairs. (MONITOR OFTEN)

POOR CONDITION:

Unusable as is. Requires repairs or replacement of system, component or item 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.

Asterisks * in this General Information section refers to the source of such information as follows:

*** Per Manufacturer's Specifications**

****Refer to Summary and Valuation Section**

****** Per N.A.D.A Book**

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

HULL CONSTRUCTION

TYPE: Sailing Catamaran

MATERIAL: FRP (fiberglass reinforced plastic)

EXTERIOR HULL: White gelcoat with turquoise boot and sheer stripes.

PORTLIGHTS: Eight "Bomar" opening hatches on deck into cabin area, Eight opening ports on sides of deck house into cabin area.

STEM: Almost vertical stems with S.S. plates to minimize docking and anchoring abrasions. - Excellent condition

TRANSOM: Reverse transoms with three built in boarding steps in each hull. - S.S. tubing hand rails are securely fastened to both sides of the steps. A folding, retractable S.S. ladder is securely attached to the port transom. - Excellent condition.

BILGE: Long shallow bilge built into each hull keel sump area. - Dry, clean and clear of debris.

CHAIN LOCKER (DRAINAGE): Both deck chain locker drain overboard on inboard side of each hull.

KEEL: A long shallow, flat bottomed keel is glassed into each hull for lateral stability only - not ballasted. - Good condition internally and externally.

LIMBER HOLES: Limber holes are of adequate size and clear where sighted.

DECK CONSTRUCTION

TYPE: Large wide bridge deck forms the main salon / living area as well as provides hull strength and stiffness.

* **MATERIAL:** [C1] FRP (fiber reinforced plastic) with white gelcoat and molded non-skid surface. Deck was percussion sounded and checked with moisture meter.

COCKPIT: Large comfortable but safe cockpit aft, surrounded by the main hulls on each side, railings aft and the main cabin/hard dodger structures forward and above. A very well laid out and safe area to operate the vessel from in any weather.

HARD DODGER : A FRP "hard dodger" covers the cockpit area. The FRP top is securely attached to and supported by a welded S.S.tubing structure. The S.S. tubing in turn is securely fastened to the vessels hulls and decking. Option plex-glass type glazing material was added to cover the normally screened in areas on the top of the dodger - (an important safety feature to prevent injury when handling the main sail and cover) Structure and support in excellent condition.

HULL-TO-DECK JOINT

TYPE: Hull has outward turning flange for the deck joint. The deck is thru-bolted approximately every 6" with stainless steel fasteners. It is bedded with a elastomeric compound as well. An externally mounted extruded aluminum toe rail finishes and strengthens the joint. Appears dry and serviceable where sighted.

DECK FITTINGS

STANCHIONS: Five tapered 1" dia. S.S. tubing construction stanchions on each side - securely fastened to the deck with welded construction S.S. bases. All are fastened through the aluminum toe-rail with S.S. fasteners. - Excellent condition.

BOW PULPIT (BOW RAIL): Port and starboard hull pulpits are welded 1" S.S. tubing construction securely fastened at 3 points each. - Excellent condition.

TOE RAILS: Anodized, slotted, extruded aluminum toe-rails run the full length of the outboard sides of each hull. Toe-rail is also installed across the stern deck area. Strengthens and finishes the hull to deck joint. Snatch blocks can be shackled to the slots for sail handing etc. - Excellent condition.

CHOCKS AND CLEATS: One large cast aluminum cleat is securely mounted at each corner of the vessel. One cast aluminum open chock is at each stern cleat. The bow has 2 chocks on each S.S. bow plate. One additional S.S. folding cleat is bolted to the toe-rail at midships on each side. - All excellent condition.

HAWSE PIPES: One cast aluminum "hawse pipe" opening on port bow hull with cover intact - Good condition. Starboard bow utilizes an anchor windlass (no hawse pipe cover necessary)

DECKBOX: Two large sail or equipment lockers are in the bow of each hull aft of the anchor locker areas. Each has a large opening "Bomar" deck hatch installed to access the lockers - A third deck storage locker is also on the bow at center with a fiberglass molded hatch cover. All in excellent condition.

PUSHPIT (STERN PULPIT): Stern rail is constructed in three separate sections, all constructed of welded 1" S.S. tubing - The two individual outboard sections have 3 attachment points each - Each has a gate in the middle as access to the boarding steps in transoms.- The main center section is a combination railing, full width seat and has the dinghy davits built-in. Securely attached and braced at 5 points. Excellent condition

LIFE LINES: Double vinyl coated S.S. wire lifelines completely surround the vessel, supported on the 10 stanchions and attached to the bow and stern railings. White netting is attached to the lifelines also completely surrounding the deck. All in Excellent condition.

DAVITS: Twin manual block and tackle lifting systems are attached to the permanently installed stern railing that functions as the dingy davits. Excellent design and condition.

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

ADDITIONAL EQUIPMENT AND ACCESSORIES

CANVAS AND COVERS: The cockpit can be completely enclosed with clear vinyl and "sunbrella" marine canvas sections. All appeared clear and serviceable

FENDERS: Three white rib type fenders - good condition.

DOCK LINES: Four "teal" colored dock lines of sufficient size and length were mooring the vessel at the time of inspection. All in excellent condition.

OTHER: A list of miscellaneous equipment that will stay with the vessel upon completion of sale was provided to surveyor. Items on the list but not mentioned in the survey are - A man-over-board pole, one boat hook, one freshwater hose, one cockpit table, cockpit cushions (5), outboard motor bracket for stern railing, mop and scrub brush, vessel equipment manuals in a blue PDQ bag, numerous spare engine parts.

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:

CABIN BRIGHT WORK: Satin varnish finish on all Cherry doors and trim. Excellent condition.

FABRIC AND CUSHIONS: Light colored floral pattern fabrics for berths, dinette and salon cushions. Appears new.

ACCOMMODATIONS: Two double cabins forward in each hull. Table in main salon will serve as a double berth with table dropped. Enclosed pilot berth cabin aft in port hull. Galley at midships in port hull. Head with walk in shower aft to starboard. Navigation station with fold down chart table and main electrical panels at midships in starboard hull.

CABIN SOLE: Teak and holly, very well fitted and finished through out.

STEREO, ETC.: "Jensen" MCD 5110 AM/FM - CD 40x4 - stereo at nav. station - has two speaker in cockpit and two in salon. - Functioned properly.

GALLEY

LOCATION: Port hull at midships -

SINKS: Inboard in port hull galley area - Double, deep S.S. sinks. - excellent condition.

REFRIGERATION: "Alder/Barbour" - Cold Machine - 12 VDC - air cooled compressor/condenser unit mounted to starboard under the main salon settee. Front opening refrigerator cabinet forward to starboard in the port hull galley. - Was operating properly at time of inspection.

STOVE/OVEN: "Force 10" S.S. 2 burner propane stove with oven - excellent condition. - not tested.

PROPULSION

MAIN ENGINES

TYPE: Twin - 2 cylinder, naturally aspirated diesel engines.

MANUFACTURER: Yanmar 2GM20

SERIAL NUMBERS: Port engine S/N XXXXXX Starboard engine S/N XXXXXX

HORSE POWER: 18 hp

INDICATED HOURS: Dual hour meters at helm position. Port XXX.0 Hrs - Starboard XXX.0 Hrs

THROTTLE CONTROLS: "Morse" type single lever per engine- dual controls for port and starboard engines. Operated crisply and properly when vessel was moved in and out of the dock.

EMERGENCY SHUT DOWN: This model of Yanmar diesel utilizes a mechanical pull cable at the engine panel to shut off the engine and fuel. This cable can be utilized as an "EMERGENCY SHUT OFF" without damaging the engines at any speed.

ENGINE MOUNTS AND BEDS: Substantial FRP engine beds are securely glassed to the hull. Engine mounts are "Yanmar" factory supplied rubber cushions, securely bolted to the beds - Excellent installation and condition.

DRIP PANS: Engine beds form a FRP molded drip pan - good condition and clean.

LUBRICATION: Oil level proper and clean condition on both engines.

BILGE BLOWERS: A 12VDC - 3" inline bilge blower is utilized to evacuated heat and fumes from each engine space.

EXHAUST SYSTEM: A raw water cooled, rubber hose type exhaust system is used, complete with a plastic "Vetus" aqualift type muffler. The exhaust for each engine exit outboard on each hull. All components appeared serviceable where able to be inspected.

INSULATION: Foil covered foam rubber sound deadening insulation was noted in engine room. Appears serviceable.

ENGINE ALARMS: Low oil pressure and High coolant temperature alarms functioned properly when engines were started and shut down.

IGNITION PROTECTION: All electrical components requiring IGNITION PROTECTION were factory original - in good condition.

III. SYSTEMS

PROPULSION

COOLING SYSTEM

TYPE: Freshwater (heat exchanger) cooling system

COOLANT LEVEL: Normal level observed.

HOSES AND CLAMPS: All hoses and clamps found to be in excellent condition.

* **BELTS AND PULLEYS:** [C2] Belts appeared to be factory originals in good condition.

SEACOCKS AND STRAINERS:"Marelon" seacocks - closed and opened stiffly - (normal for Marelon plastic type fittings) - serviceable condition.

"Vetus" brand raw water strainer - plastic housing with clear lid - both clear, clean - good condition

FUEL SYSTEM

MAIN ENGINE(S) FUEL SYSTEM

FUEL TYPE: DIESEL

TANKS CAPACITY: One 55 U.S. gal. diesel tank located under cockpit sole - Unable to be sighted or accessed without major disassembly of the vessel. Material and condition unknown.

FILL PIPE LOCATIONS: Starboard aft deck.

FILL PIPE MATERIAL: USCG A2 hose - excellent condition were able to be sighted.

FUEL LINES AND FITTINGS:Grade USCG type A1. Appears in excellent condition where able to be inspected.

FUEL FILTERS: Two Racor - fuel/water separators - clear bowl - spin on type filters - securely mounted close to each engine. Appear to be freshly serviced.

OTHER: A "Racor" - Lifeguard - Fuel-Air separator is mounted in the fuel tank vent hose in the starboard cockpit locker - Excellent installation.

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (D.C. SYSTEM)

VOLTAGE: 12 V DC

BANKS: Six batteries in three banks - Main house bank is 4 Six volt deep cycle "Pow-R- Surge" batteries, 2 each in series and both sets paralleled. 225 AH each. House bank is securely attached in a dedicated locker at center forward in the cockpit area. Age and condition unknown - Appeared serviceable
Remaining two batteries are one starting battery for each engine. Group 24 "Pow-R-Surge" 805 CA - Age and condition unknown - Cranked engines without hesitation. Both batteries are securely fastened in plastic battery boxes in each cockpit locker.

MAIN BATTERY SWITCHES: "Guest" rotary type switches - mounted close to each cranking battery. - not tested.- appeared serviceable

PANEL: Combined 12V DC and 125V AC main panel manufactured by "Paneltronics".(Florida) is @ the navigation table in the starboard hull walk through area. Main 12 V DC panel has a rotary battery test switch with a analog volt and amp gauge.

BREAKERS/FUSES:One main breaker and 23 branch circuit breaker/switches.

ROUTING/SUPPORT: Well supported and secured where sighted.

CHARGING SYSTEM: Multiple sources for charging derived from an alternator on each engine, three factory installed solar panels on the hard dodger and a 125V AC charger.

* **CHARGING SYSTEM (BATTERY CHARGER):** [A1] 125V AC - "Heart Interface" - Freedom 20 - Combi- 2000 watt inverter/ 100 amp charger - mounted in the machinery cupboard in salon, forward of helm station. Charger was operating properly while survey was being conducted.

CHARGING SYSTEM (ALTERNATOR): Factory installed, engine mounted, belt driven - Yanmar alternators.

OUTLETS: 12 V DC Cigarette lighter type outlet at navigation station.- not tested.

NOTE: All 12 V DC electrical equipment and installation appear to meet and /or exceed ABYC standards. - Excellent throughout.

ELECTRICAL SYSTEM (A.C. SYSTEM)

* **SHORE POWER INLET:** [C3] 125 V AC - 30 amp plastic inlet - located in cockpit at bottom of helm chair pedestal.

SHORE POWER:One (approx.) 50' "Marinco" yellow vinyl 30 amp - shore power cord - Serviceable condition

MAIN BREAKER: Combined 125 V AC and 12 V DC main panel, manufactured by "Paneltronics".(Florida) is @ the navigation table in the starboard hull walk through area.

BRANCH BREAKERS:Eight branch breaker/switches.

CIRCUIT LOAD MONITORS: Analog amp and volt meters in panel.

WIRE TYPE (SIZE AND RATING): Size and rating, where sighted, appeared serviceable for intended use. Was well routed and supported.

III. SYSTEMS

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (A.C. SYSTEM) (Continued)

OUTLETS: Various A.C. outlets available throughout yacht, appear adequate and conveniently located. All of G.F.C.I. type - All tested O.K.

GALVANIC ISOLATOR: A "Quicksilver" (18478 A3) galvanic isolator was sighted, properly installed in the 125 V AC wiring in the machinery cupboard by the helm position.

FRESH WATER SYSTEM

FRESH WATER SYSTEM: (POTABLE WATER)

LOCATION: One 85 U.S. gal. polyethylene tank securely fastened under settee in center of main salon area.

FILL PIPE LOCATION: Starboard deck area, forward of hard dodger.

PUMPS: "Jabsco" 12 V DC multi-fixture automatic pressure pump located under main salon settee to starboard.

FRESH WATER SYSTEM (HOT WATER SYSTEM)

TYPE: "Force 10" 6 Gallon water heater with S.S. housing - located in the aft starboard cockpit locker. 125 V AC electric element and engine heat exchanger plumbed from starboard engine only.

PRESSURE RELIEF VALVE: Bronze press. relief valve in tank - not tested.

SANITATION

SANITATION (BLACK WATER)

MANUAL OR ELECTRIC TYPE: "Jabsco" manual pump head - Not tested.

RAW WATER SUPPLY AND CLAMPS: All appeared in good condition were able to be sighted and inspected.

DISCHARGE HOSES AND CLAMPS: Hoses and clamps in serviceable condition were sighted.

PUMP-OUT LOCATION: Starboard aft deck - marked "Waste"

MACERATOR: "Whale" Gulper 220 Diaphragm pump mounted in head cabinet. Utilized for pumping holding tank overboard in areas that allow overboard discharge. - Not tested.

"Y" VALVES: "Jabsco" Y-valve located overhead in the starboard engine space. - Currently "locked" in the -TO HOLDING TANK- position with a nylon wrap tie. - Not tested

HOLDING TANK: 35 U.S. Gal. tank built into hull in aft end of starboard hull. Not able to be inspected.

NOTE: Sanitation System adheres to Canadian and U.S. Great Lakes " No Discharge Zone Regulations"

STEERING SYSTEM

STEERING SYSTEM

TYPE: "Whitlock" steering components used by manufacturer to assemble a cable and conduit steering system to the starboard rudder. Port rudder is operated via a S.S. pipe tie-rod assembly from the starboard rudder. - S.S. wheel is located on the starboard cockpit bulkhead. All cables and conduit in excellent condition were able to be inspected.

RUDDER STOCK: Hollow s.s. rudder posts - appear serviceable

EMERGENCY TILLER: A S.S. tubing - emergency tiller is located in the starboard aft cockpit locker - The tiller can be inserted onto the top of the either rudder post by removing a deck flange. - not tested.

GROUND TACKLE

GROUND TACKLE

ANCHORS: Two S.S. anchor mounts at bows - Starboard has a 35 lbs. CQR brand plow anchor securely fastened to the roller with a S.S. pin and tether.

Port has a 25 lbs. "Universal" plow type anchor securely fastened to the roller with a S.S. pin and tether.

RODE MATERIAL: Both anchors have a undetermined length of (approx.) 3/8" chain attached. Starboard anchor has an undetermined length of 1/2" 3 strand attached and port anchor has a undetermined length of 5/8" double braid attached. Both bitter ends are attached to the vessel. All shackles are wired. All rode components appear in very good condition.

WINDLASS: A "Quick" 12 V DC 100 watt vertical shaft capstan is securely fastened to the starboard foredeck. It is operated with a removable hand held remote switch. Operated properly when activated - not tested in an anchoring situation.

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT

VHF: "Standard Horizon" Intrepid - VHF permanently mounted at helm position. - operated properly at time of inspection.

RADAR: "Raytheon" closed antenna - unit mounted at lower mast spreaders - RC 70 C combined Radar / chart plotter screen mounted at helm position. - powered up when switched on - not all functions checked. -

GPS: Raytheon GPS - combined with chart plotter and radar package.

III. SYSTEMS

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT (Continued)

CHART PLOTTER: "Raytheon" GPS and Pathfinder RC 70 C navigation package. Two cards in unit - # 0656 - Lakes Ontario, Erie, St. Claire and # 0085 Lake Huron and Georgian Bay. System appeared to function properly when powered up.

AUTOHELM: Raytheon ST 4000 + Wheelplot - Activated when powered up.

SPEEDLOG: Raytheon - ST 60 Speed Depth combo - Functioned properly on a short trip under power.

DEPTH SOUNDER: Raytheon - ST 60 Depth Speed combo - Functioned properly on a short trip under power.

COMPASSES: Magnetic compass mounted in bulkhead at helm position. Responded to metal object passed close by.

SAFETY EQUIPMENT

SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

NUMBER AND TYPE OF PFD'S: New owner to supply U.S.C.G. approved life jackets or PFD's

FIRE EXTINGUISHERS: Two - 1-A, 10 B,C - fire extinguishers - fully charged - One mounted to port in galley - other mounted in starboard hull close to electrical area.

VISUAL DISTRESS SIGNALS: "Comet" brand - 12 gauge flare pistol - appears serviceable, 12 - 12 gauge aerial flares (manuf. date XX - XXXX)

LIFE RING : A 24" C.C.G. (Transport Canada) approved life ring is mounted at the port stern area. - Good condition.

NAVIGATION LIGHTS: All navigation lights operated and comply with COL. REG.'s

NOTE: Vessel was properly equipped to meet Canadian Standards at time of inspection. - Some safety equipment requirements differ in the U.S.A.

Ensure all equipment is aboard to meet both countries requirements while in their respective waters.

BILGE PUMPS

LIST: Manual "Whale - Gusher" pumps are permanently and securely mounted in the forward storage compartment of each hull. Accessed and operated through the deck hatches. Handles were attached to the pumps. Not tested.

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY

PROPELLER(S): Optional variable pitch, feathering "Maxi-Prop" - brand propellers appear to be installed correctly and functioned properly under power.

TRANSDUCERS: Depth and speed transducers were checked and in excellent condition.

ZINCS: Sacrificial anodes were noted on both outdrive legs and both "Maxi-props" - All 4 in very good condition

OUTDRIVES: "Yanmar" saildrives installed on Yanmar diesels. - Underwater housings were checked for damage and corrosion - Excellent condition.

CONDITION OF HULL (WETTED SURFACE)

BLISTERS: Wetted surfaces were checked and no evidence of blisters present

CONDITION OF BOTTOM PAINT: Black anti-fouling paint was observed well adhered to hull

LIQUIFIED PETROLEUM GAS SYSTEM (LPG)

LIQUIFIED PETROLEUM GAS SYSTEM (LPG)

TYPE: PROPANE

LOCATION: Large dedicated locker at the stern of the port hull. - Accessed from a deck hatch. Sealed from the rest of the vessel. Large openings for drainage overboard above the waterline.

MOUNTING: Two Aluminum OPD type (approx. 10 lbs.) tanks are securely fastened in the propane locker with dedicated FRP circular mounts and tie-down straps.

REGULATOR: Approved regulator - Appears serviceable.

PRESSURE GAUGE: Pressure gauge was observed. - good condition.

SHUT-OFFS: Manual shut off at tank in addition to 12 V DC - solenoid mounted at regulator area and electrically switched from galley area below.

OTHER: A S.S. "Force 10" barbecue is mounted on the starboard stern rail - This BBQ is a stand alone unit (not connected to ship's propane system) with its own small spin on propane fuel tanks. External surfaces of BBQ are NORMALLY tarnished due to heat. Appears to be in serviceable condition - NOT tested.

NOTE - ENSURE SMALL PROPANE CYLINDERS ARE HOUSED IN THE VENTED PROPANE LOCKER AND NOT IN THE ACCOMMODATION SPACES ***

III. SYSTEMS

SEATRIAL AND UNDERWATER INSPECTION REPORT

INTRODUCTION

INTRODUCTION: The vessel left the dock in the XXXXXXXX harbor under power - Fri. July XX, 20XX with the current owner (seller) at the helm. Weather was warm and sunny. Vessel was tethered to a mooring ball sheltered behind the nearby break wall to facilitate inspection of the underwater hulls and machinery. The attending surveyor snorkeled in clean, clear water, inspecting the wetted surfaces of the hulls, keels, skegs, rudders, outdrives and all underwater fittings for damage, corrosion and evidence of blistering. Engines, transmissions and the associated controls were observed for proper operation while underway.

All mechanical systems utilized (engines, transmissions and associated system and controls, steering, depth and speed instruments) functioned normally and properly while underway.

The underwater surfaces were thoroughly inspected for cracks, blisters, corrosion and evidence of damage or previous repairs. All underwater machinery was in "like new" condition.

OBSERVATIONS

- OBSERVATIONS:** 1. The engines (2) started immediately upon cranking.
2. The engine exhausts appeared normal.
 3. The cooling water exhaust appeared adequate and normal.
 4. The engine instruments operated within normal operating limits at idle and cruising speed.
 5. The steering system operated normally.
 6. The throttles operated normally.
 7. The transmissions operated normally/smoothly.
 8. There were no excessive vibrations noted.
 9. There was no oil or coolant observed in exhaust water.
 10. The anti-fouling paint was well adhered and in good condition.
 11. A minor accumulation of marine growth (fuzz) was noted at the waterline area and easily rubbed off to allow inspection.
 12. The underwater surfaces showed NO signs of blistering, cracks or impact.

STANDING RIGGING

STANDING RIGGING

MAST: "Selden" anodized aluminum airfoil section - double spreader - deck stepped rig - Was observed with mast stepped and fully rigged. No obvious problems sighted from deck level.

MAST STEP: Cast aluminum mast heel fitting on the spar attached to a S.S. plate securely affixed to the cabin top structure. - Excellent condition.

SPREADERS: Aft swept, aluminum air foil sections - Appeared in good condition as observed from deck level.

SHROUDS AND STAYS: 1x19 S.S. wire - excellent condition where able to be observed from deck level.

BOOMS: "Selden" anodized aluminum spar section. -

TURNBUCKLES: Chrome over bronze - open body design - appeared serviceable.

TOGGLES: Stainless steel toggles on all shroud and stay ends appeared serviceable.

CHAIN PLATES: Substantial S.S.flat bar, securely bolted to outside of each hull, No evidence of movement or corrosion. Not able to be observed internally due to cabinetry liners. - Appeared to be in excellent condition.

RUNNING RIGGING

RUNNING RIGGING

WINCHES: Three "Harken" self tailing winches control all running rigging. Two large #46, 2 speed winches are mounted outboard of cockpit area for sheet winching and the third #16 single speed is mounted in the cockpit to port on the forward vertical cabin bulkhead. All excellent condition.

TRACKS AND CARS: Two "Harken" T - tracks and cars are mounted inboard on the cabin top for headsail sheeting - excellent condition.

III. SYSTEMS

RUNNING RIGGING

RUNNINGRIGGING(Continued)

TOPPING LIFT: Double braid to end of boom from mast head.- appeared serviceable.

MAIN SHEET TRAVELER: Factory installed "Harken" I-beam type traveler securely attached aft to top of hard dodger. - Control lines to outboard ends. - Excellent condition.

REEFING SYSTEM: "Jiffy Slab" system - lead to and operated from cockpit - not tested - appeared serviceable.

HALYARDS: Color coded double braid - Appeared serviceable where able to be inspected.

ROLLER FURLING GEAR:"Furlex 300 S" unit properly mounted on forestay - not tested.

ROPE CLUTCHES : Three banks of three "Spinlock" XTS rope clutches - one bank at each winch. - Appear serviceable - not tested.

SAILS

SAILS

MAINSAIL: Factory supplied original Dacron fully battened mainsail - not tested. - appeared serviceable.

HEADSAIL: Factory supplied original Dacron roller furling genoa - not tested - appeared serviceable.

SPINNAKER :A optional "cruising spinnaker" (double sheets attached) with "snuffer" sock launch and retrieval system was observed stored in the forward starboard deck locker. Inspection revealed the multicolored sail to be in Excellent condition. The seller said it had only been used twice.

SAIL COVERS: "Sunbrella" marine canvas sail cover (original) - appears serviceable.

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 Transport Canada, Canadian and/or 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 its 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:

FINDINGS

RECOMMENDATIONS

A.1 (PAGE 6)

A POSITIVE (+) terminal strip on the "Freedom 20" inverter/charger controller is NOT COVERED as required. The exposed terminal has the potential to cause a short or ground incident from metal objects being stored in the starboard cockpit locker. Metal objects in contact with this terminal could cause a Fire or Explosion.

Terminal strip MUST be COVERED with a NON-CONDUCTIVE cover.

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS

RECOMMENDATIONS

C.1 (PAGE 4)

One area (10" x 2") on deck exhibited minor crazing in the gelcoat - Port side of the starboard forward fixed port light, in the mast step area. Area showed a slightly elevated moisture content immediately adjacent the cracked area only. (less than 10 % -) It had rained heavily the previous night and owner wetted deck prior to inspection in the A.M. Percussion sounding indicated the structure was sound and solid. Cracking appears to be a defect in the gel-coat only or stress cracking in the high load area of the mast step.

*The crazing of the gelcoat should be investigated by a Marine Fiberglass Repair Specialist to determine the cause and extent of problem.
Repair as / if advised.*

C.2 (PAGE 6)

The sea water pump v-belts on both engines were loose.

Properly tension both sea water pump drive belts.

C.3 (PAGE 6)

Due to the location chosen for the 125 VAC shore inlet, the plastic weatherproofing cover has been broken off.

Replace shore power inlet with a more robust approved S.S. 125 V AC 30 amp shore power inlet.

V. SUMMARY AND VALUATION

STATEMENT OF OVERALL VESSEL RATING OF CONDITION:

It is the surveyor's experience that develops an opinion of the **OVERALLVESSEL RATING OF CONDITION** after the survey has been completed and the findings have been organized in a logical manner.

The grading of condition for a vessel at the time of survey, determines the adjustment to the range of base values in the N.A.D.A. 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 condition:

"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 had above average care and is equipped with extra electrical and electronic gear.

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

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

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

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

As a result of my investigation, as shown in the **SYSTEMS, FINDINGS AND RECOMMENDATIONS** section of this **REPORT OF SURVEY**, and by virtue of my experience, my opinion is

OVERALL VESSEL RATING: **ABOVE AVERAGE**

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, 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:

\$ 2XX,000.xx U.S.

Two Thousand Dollars and Eight cents

V. SUMMARY AND VALUATION

SUMMARY:

In accordance with the request for a marine survey of the "XXXXXXXX", for the purpose of evaluating its present condition and estimating its Fair Market Value, I herewith submit my conclusion based on the preceding report. The subject vessel was personally inspected by the undersigned on July XX, 20XX and was found to be a well constructed, appointed and comfortable vessel. The vessel is very capably captained and well-kept. Subject to correction of deficiencies listed in section IV A. (Safety), the vessel is considered to be suitable for its intended use. Other deficiencies list should be attended to in a timely fashion.

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 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: _____

Craig D. Morley