

I. INTRODUCTION

SCOPE OF SURVEY

Acting at the request of Ivan Goldfarb , the attending surveyor did attend onboard the *1988 O'Day 322 Sloop* , "*EQUILIBRIUM*" beginning on October 6, 2004 at 1:30 P.M., where an "in-the-water-survey" WAS conducted at Sandusky Harbor Marina dock D49 , Sandusky, OH.. The ship's papers were on board and appeared to be in order. The Hull Identification Number XDYG0167K788 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 on November 1, 2004 at Sandusky Harbor Marina. 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 Tramex Skipper and GRP 33 moisture meters. 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. The surveyor and assistant were the only people present at the survey.

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 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.

NOTE: It is recommend and understood that all DIESEL 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.

I. INTRODUCTION

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 O'Day 322 is sloop rig, fin Hydrokeel, spade rudder and keel stepped mast. Her interior offers teak trim throughout, teak and holly sole, port and starboard settees with drop leaf dining table, L-shaped galley to starboard with entrance into aft stateroom. She has a disappearing forward bulkhead that can be closed off to make the V-berth private. Head is aft of chart table portside. Mast height above the waterline is 42'10".

II. GENERAL INFORMATION

GENERAL INFORMATION

FILE NUMBER: **041006G**
SURVEY PREPARED FOR: **Xxxx Xxxxxxxx**

NAME OF VESSEL: **"EQUILIBRIUM"**
TYPE OF SURVEY: **Pre-Sale for Owner**
OVERALL VESSEL RATING: ****** AVERAGE**
ESTIMATED MARKET VALUE: ****** \$34,000.00**
ESTIMATED REPLACEMENT COST: ****** \$94,500.00**
YEAR/MAKE/MODEL OF VESSEL: **1988 O'Day 322 Sloop**
HULL IDENTIFICATION NUMBER (HIN): **XDYG0167K788**
HAILING PORT: **Dayton, OH.**
STATE VALIDATION STICKER NUMBER: **024909 Exp: 3/1/06**
STATE REGISTRATION NUMBER: **OH8525BU**
OWNER'S NAME: **Xxxx Xxxxxxxx**
OWNER'S ADDRESS: **xxxxx Xxxxx Xxxx, Beachwood, Ohio
44122**

PLACE OF SURVEY: **Sandusky, OH.**
PLACE OF SURVEY: **Sandusky Harbor Marina dock D49**
DATE/TIME OF SURVEY: **October 6, 2004 at 1:30 P.M.**
HULL MATERIAL: **FRP (Fiber Reinforced Plastic).**
HULL TYPE: **Full displacement hull, hydrokeel and
spade rudder.**

LENGTH OVER ALL (L.O.A.): ****** 32'2"**
(LOAD) LENGTH WATERLINE (L.W.L.): ****** 26'8"**
BEAM: ****** 10'8"**
DRAFT: ****** 4'2"**
DISPLACEMENT: ****** 10,250#**
PROPULSION SYSTEM: **Sail and auxiliary diesel.**
FUEL TYPE: **Diesel.**

II. GENERAL INFORMATION

FUEL CAPACITY:	19 gallons
AC POWER:	125 volt, 30 amp.
DC POWER:	Yes, 12 volt.
FRESH WATER CAPACITY:	60 gallons
HOLDING TANK:	Yes
INTENDED USE/BUYER:	Recreational
BUYER'S EXPERIENCE:	Not Known.
INTENDED CRUISING AREA:	Great Lakes

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:

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 USCG Documentation**

****** Per Buc Book / Sold Boats.com**

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

HULL CONSTRUCTION

TYPE:

Semi-Displacement with fin keel and spade rudder.

MATERIAL:

FRP (fiber reinforced plastic)

EXTERIOR HULL:

Gray gelcoat with white boot top, and moderate sheer.

PORTLIGHTS:

One (1) opening plastic portlight, port side.

BULKHEADS:

Athwartships reinforcement enhanced by wood bulkheads. Appears serviceable where sighted.

STEM:

Stem was raked with moderate flair.

TRANSOM:

Reinforced, FRP slightly rounded with reverse tumble home design. Molded FRP boarding platform centerline with three step stainless steel swim ladder. Transom step to starboard.

BILGE:

A smooth gelcoat surface was used in the shallow bilge area, condition was generally clean.

CHAIN LOCKER (DRAINAGE):

Drainage overboard, size adequate, access good, location forward bow.

KEEL:

The inner keel mounting area was supported by a floor grid system. The stainless steel keel bolts are reportedly cast into the lead portion and thru-bolted to the reinforced keel stub. Accessibility was good. Appeared serviceable where sighted.

LIMBER HOLES:

Limber holes are of adequate size and clear where sighted.

DECK CONSTRUCTION

TYPE:

Molded FRP (fiber reinforced plastic) with gray gelcoat and non-skid surface.

COCKPIT:

Molded FRP with gray/white gelcoat and non-skid surface.

NOTE:

***C1**

Moisture meter readings were dry and percussion soundings were normal except as noted.

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.

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

DECK FITTINGS

STANCHIONS:

Stainless steel stanchions and cable lifelines, run perimeter of deck from boarding gate to boarding gate port to starboard. Appears serviceable.

BOW PULPIT (BOW RAIL):

Stainless steel stanchions and rail system. Appears serviceable.

TOE RAILS:

2" high aluminum, bolted to deck.

SCUPPERS:

Cockpit and decks drain overboard. No scuppers sighted.

CHOCKS AND CLEATS:

Chocks and cleats were thru-bolted and serviceable.

PUSHPIT (STERN PULPIT):

Stainless steel stanchions and rail system.

GRAB RAIL:

Teak grab rails on cabin house.

ANCHOR PLATFORM:

Yes aluminum platform with anchor bow roller assembly. Appears serviceable.

SUPERSTRUCTURE

MATERIAL:

FRP (fiber reinforced plastic).

DECK HATCHES:

Two opening hatches one (1) 22" square forward over berth, and one (1) 17" over main cabin area, all are lexan plastic with aluminum frames. Appears serviceable.

WINDOWS/PORTS/DOORS:

***C2**

The sides of cabin house has large fixed windows and one venting portlight port and starboard. The entrance door to the cabin is slotted wood with sliding lexan hatch.

JOINERY STRESS:

None Sighted.

CANVAS AND SUPPORT STRUCTURE:

The helm and cockpit areas were enclosed with gray canvas covers with clear plastic window material. The canvas and windows appear to be in good condition.

SUPERSTRUCTURE HOUSE TO DECK JOINT:

Deck house and deck appeared to be molded seamlessly, no joint was observed. Condition appeared serviceable.

MOISTURE CONTENT:

Moisture content readings were dry on the meter, and soundings were good with the hammer.

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

ADDITIONAL EQUIPMENT AND ACCESSORIES

FENDERS:

Four (4) large fenders with lines.

DOCK LINES:

An adequate number of 1/2" braided lines.

AUXILIARY MOTORS:

Evinrude 4. Model E3RERE. Serial # G03620654.

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:

JOINERY AND FINISH:

The joinery and finish of the wood interior was average.

CABIN BRIGHT WORK:

Satin varnish finish. Appeared serviceable.

INTERIOR BULKHEADS:

The interior wood bulkheads were of average fit where sighted.

WATER INTRUSION SIGNS:

Signs of water intrusion were noted under the aft berth portlight and in the area of the starboard forward berth.

STORAGE AREAS:

Adequate.

HEADLINERS:

Headliner material in the cabin is molded FRP. Appeared serviceable.

DOORWAYS:

Wood cabin and head doors throughout vessel. Appeared serviceable.

FABRIC AND CUSHIONS:

Appeared Serviceable.

Note: The general appearance of the cushions and fabrics reflect good care and normal wear and tear for a vessel of this age.

FLOOR AND WINDOW COVERINGS:

Teak and holly cabin sole. The fabric shades in the salon were fabric and appeared serviceable.

ACCOMMODATIONS:

Berth forward, port and starboard settees and berth aft.

HEADS:

One head with hand held shower.

FAUCET FIXTURES:

Faucet and fixtures in the galley and head were demand pump 12 volt. Appeared serviceable.

LIGHT FIXTURES:

12 volt cabin lights throughout the vessel were operable.

III. SYSTEMS

CABIN APPOINTMENTS

INTERIOR DESCRIPTION: *(Continued)*

TELEVISIONS:

Phillips. Serial # 80698569.

STEREO, ETC.:

Yes, AM/FM/Cassette.

CONDITION AND DEFICIENCIES:

The overall house keeping for this vessel was average. It reflects the care of a conscientious crew, with good sea keeping skills.

GALLEY

LOCATION:

Starboard side of cabin.

SINKS:

Double stainless steel sink.

REFRIGERATION:

Ice box.

STOVE/OVEN:

The stove is a LPG, Tabsco, two burner with oven. Appears serviceable.

PROPULSION

MAIN ENGINES

TYPE:

Auxiliary power plant is a Yanmar diesel naturally aspirated.

SERIAL NUMBERS:

09936

LABELS AND NOTICES:

All required labels appeared to be in place and readable.

HORSE POWER:

Reportedly 16 horsepower.

INDICATED HOURS:

649.0 hours on meter.

THROTTLE CONTROLS:

Mechanical lever/cable type, at helm station.

EMERGENCY SHUT DOWN:

Shut down pull cable in port lazarette, clearly marked.

ENGINE MOUNTS AND BED:

FRP motor mount blocks with thru-bolted steel motor mounts, and adjustable cushioned feet. Appears serviceable.

III. SYSTEMS

PROPULSION

MAIN ENGINES (*Continued*)

LUBRICATION:

Level and Condition: Level: Full Condition: Dirty. Filters: Engine mounted spin on/off canister type filters. {*IT Surveyor recommends that the oil and filter for the engine be serviced before the vessel is next underway.}

VENTILATION:

Natural, flow ventilation provided by cowl vents.

EXHAUST SYSTEM:

The Aqua lift Vetus type exhaust system was serviceable where sighted.

INSULATION:

Foam.

STUFFING BOX:

Stuffing box and packing gland, was bronze hex nut type boot was double clamped and appeared serviceable. Monitor Frequently for leakage and proper adjustment.

COOLING SYSTEM

TYPE:

Closed reservoir type cooling with raw water cooled exhaust.

RAW WATER STRAINERS:

Under water hull mounted strainers. Appears serviceable.

COOLANT LEVEL:

Normal level observed.

HOSES AND CLAMPS:

Double clamped where sighted. Appears serviceable.

BELTS AND PULLEYS:

Belts condition appears serviceable.

SEACOCKS AND STRAINERS:

Raw water seacock was bronze ball valve type and was operable.

TRANSMISSIONS

TYPE:

Export Standard. Serial # N8656.

FLUID LEVEL AND CONDITION:

Level must be checked in neutral with engine running. Not checked.

PROP SHAFT:

Size: 1" Material: Stainless Steel.

COUPLER (SAFETY WIRE):

Yes, safety Wired.

III. SYSTEMS

FUEL SYSTEM

MAIN ENGINE(S) FUEL SYSTEM

FUEL TYPE:

Diesel.

MATERIAL:

Crosslink Poly

NUMBER OF TANKS:

One (1)

TANKS CAPACITY:

16 gallons.

SECURED:

Yes. Wood framed, bonded to hull. Appears serviceable.

LOCATION:

Fuel tank is to port, accessed from lazette.

MANUFACTURING LABEL:

The ABYC required label was sighted on the fuel tank.

FILL PIPE LOCATIONS:

Port side decks marked for diesel.

FILL PIPE GROUNDED:

Appears to be properly grounded.

FILL PIPE MATERIAL:

*C3

Type A2 USCG approved hose. Appears serviceable except as noted.

HOSE CONNECTIONS, CLAMPS:

Double clamped where sighted, grade USCG type B1. Appears serviceable.

VENT LOCATION:

Port topsides, flame screen sighted.

SHUT-OFF VALVE:

Yes. Ball valves at tank.

FUEL FILTERS:

Yes. Remote mounted Racor filter/water separator type.

NOTE:

Tanks were inspected and appear to be sound. No obvious leakage was noted.

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (D.C. SYSTEM)

VOLTAGE:

Lead acid battery powered 12 volt system.

BATTERIES:

Two batteries, Deep Cycle, in boxes with tie down straps.

III. SYSTEMS

ELECTRICAL SYSTEMS

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

MAIN BATTERY SWITCHES:

Type: Perko rotary selector Number: One (1). Location: Navigation station.

PANEL:

The main electrical panel is at the navigation station.

BREAKERS/FUSES:

At navigation station.

TYPE CONNECTORS:

Round Lugs: Captive type, where sighted. Condition: Appears serviceable.

ROUTING/SUPPORT:

Well supported and secured where sighted.

CHARGING SYSTEM:

Alternator on main engine. Appears serviceable.

OUTLETS:

12 Volt outlets were sighted in the nav station and port cockpit and were of cigarette socket type. Appeared serviceable.

ELECTRICAL SYSTEM (A.C. SYSTEM)

SHORE POWER INLET:

*C4

Number: One (1) Location: Port lazarette. Weather Protected: Yes. Rating: 125 volt; 30 amp.

SHORE POWER:

Cord: One (1) 50' long Vinyl. 30 amp.

MAIN BREAKER:

Yes in the main electrical panel at the Navigation Station.

BRANCH BREAKERS:

Number: Three (3) individually switched branch breakers. Location: Main A.C. panel.

OUTLETS:

Various A.C. outlets available throughout yacht, appear adequate and conveniently located. GFCI (ground fault circuit interrupter) outlets sighted at head. Appear serviceable.

POLARITY:

Indicator: One (1) for the 30 amp circuit. At electrical panel in galley.

FRESH WATER SYSTEM

FRESH WATER SYSTEM: (POTABLE WATER)

STORAGE TANKS:

Yes, two (2) plastic tanks.

CAPACITY:

Reportedly 70 gallons.

III. SYSTEMS

FRESH WATER SYSTEM

FRESH WATER SYSTEM: (POTABLE WATER) (*Continued*)

ACCESS:

Access to tanks and valves appears adequate.

LOCATION:

Port and starboard under settee support boards.

INSPECTION/CLEANING ACCESS:

None Sighted.

FILL PIPE LOCATION:

Port and starboard side decks marked for water.

PUMPS:

A ShurFlo 12 volt demand diaphragm type water pump (model 2093-224-313). It is operable and appears serviceable.

FILTERS:

Yes, in line at pump.

HOSES AND CLAMPS:

PVC pipe, and reinforced plastic tubing at various areas throughout vessel. Appears serviceable where sighted.

FRESH WATER SYSTEM (HOT WATER SYSTEM)

TYPE:

110 electric. Marine grade.

MANUFACTURER:

Atwood EHM6-SM. Serial # 106079.

CAPACITY:

6 gallons.

PRESSURE RELIEF VALVE:

*C5

Yes, copper pressure relief valve built into tank.

HEAT EXCHANGER AND PLUMBING:

Engine mounted heat exchanger. Appears serviceable.

SANITATION

SANITATION (BLACK WATER)

MANUFACTURER:

Raritan, manual flush.

MANUAL OR ELECTRIC TYPE:

Manual, not checked for operation.

NUMBER OF HEADS:

One (1)

III. SYSTEMS

SANITATION

SANITATION (BLACK WATER) (*Continued*)

LOCATION OF HEADS:

Port side cabin.

M.S.D TYPE USCG SYSTEM:

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

RAW WATER SUPPLY AND CLAMPS:

Yes, appears serviceable where sighted.

PUMP-OUT LOCATION:

Port side deck, one fitting marked for waste.

"Y" VALVES:

***B1**

Yes. "Y" valve is not locked in the deck pump-out only position. Overboard discharge hose is not secured to tank.

HOLDING TANK:

Plastic

CAPACITIES:

Approximately 20 gallons.

SANITATION (GREY WATER)

BASINS, SHOWERS, HOSES AND CLAMPS:

The basins on the vessel drain to thru-hulls in immediate area of basin.

STEERING SYSTEM

STEERING SYSTEM

TYPE:

Edson pedestal.

PULLEYS, CABLE AND CHAIN CONDITION:

Appeared serviceable where sighted.

EMERGENCY TILLER:

Yes, access under aft helm seat tiller arm was sighted in the lazarette.

GROUND TACKLE

GROUND TACKLE

ANCHORS:

Delta 20# at anchor platform. Spare: Fortress FX16 in port lazarette.

RODE MATERIAL:

5/8" 3 braid marine grade nylon on Delta. 1/2" 3 braid marine grade nylon on Fortress.

CHAIN:

Approximately 8' feet of 5/16" chain attached to each.

III. SYSTEMS

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT

VHF:

Standard Horizon Explorer II. Powers up.
Motorola Talkabout. Serial # 165WDG2J86 & 165WDN5R2W.
Uniden. Serial # 85001454. Powers up.

GPS:

Garmin GPS45. Serial # 34501686. Powers up.

AUTOHELM:

Autohelm ST4000+.

SPEEDLOG:

Datamarine Dart.

COMPASSES:

6" Ritchie.

ANTENNAS:

All antennas sighted appear to be well mounted and serviceable.

BAROMETER:

Yes, Located in main cabin.

SHIPS CLOCK:

Yes

LORAN C:

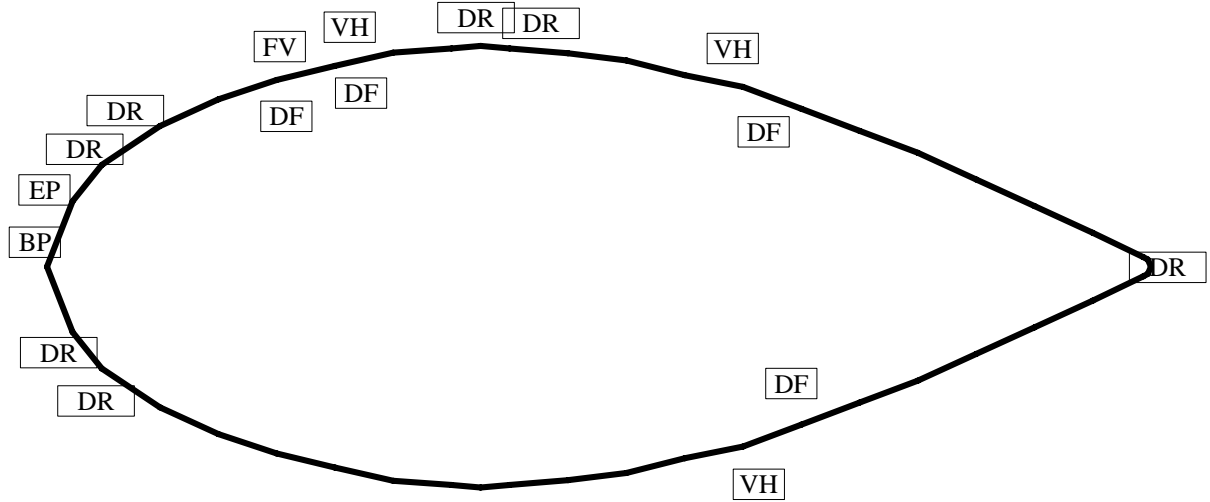
MicroLogic ML-8000. Serial # 00204450-S.

III. SYSTEMS

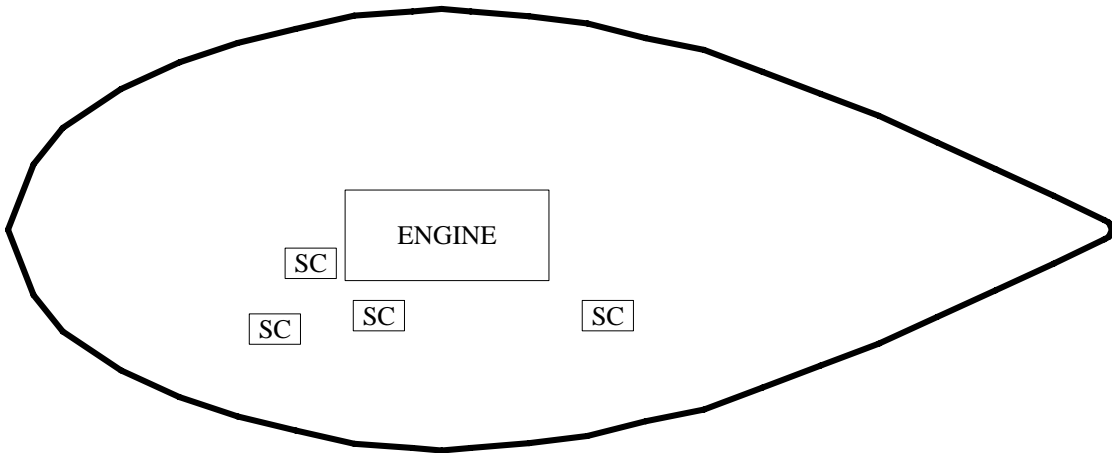
THRU-HULLS

THRU-HULLS:

THRU-HULLS ABOVE WATER LINE (DIAGRAM):



THRU-HULLS BELOW WATER LINE (DIAGRAM):



III. SYSTEMS

SAFETY EQUIPMENT

SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

NUMBER AND TYPE OF PFD'S:

Nine (9) Type III-U.S.C.G. approved.
Two (2) SOSpender type. Not approved.

NUMBER OF THROWABLE PFD'S:

Five (5) Type IV-U.S.C.G. approved throwable device.

FIRE EXTINGUISHERS:

Three (3) Type BI (2lbs) dry chemical with gauges. Appear serviceable.

VISUAL DISTRESS SIGNALS:

Day/night visual distress signals are hand held flares. Expiration date: 9/07.

SOUND DEVICES:

Yes, air horn. Operable.

NAVIGATION LIGHTS:

All required lights were present.

"NO OIL DISCHARGE" PLAQUE:

Yes, found properly displayed in engine space.

TRASH DISPOSAL PLACARD:

Yes, found properly displayed in main salon area.

AUXILIARY SAFETY EQUIPMENT

SMOKE DETECTOR:

None Sighted. Highly recommended.

FIRST AID KIT:

Yes

MAN OVERBOARD SYSTEM:

Yes, Life Sling. Appears serviceable.

BILGE PUMPS

TABLE:

Rule 800	forward	float	operable
Whale	aft	manual	not tested

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY

PROPELLER(S):

Yes, one (1) bronze two blade, size stamped 14RH14. Appears serviceable.

III. SYSTEMS

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY (*Continued*)

SHAFT BEARING (CUTTLESS BEARING):

***C6**

Cuttless bearing showed signs of sloppiness or end play.

STRUTS:

Single I-beam strut.

RUDDER(S) MATERIAL:

***C7**

FRP, size 27" x 49". Higher than anticipated moisture readings were noted in the rudder.

ZINCS:

Mounted on shaft. Appear serviceable. Monitor frequently.

CONDITION OF HULL (WETTED SURFACE)

BLISTERS:

None Sighted. Note: Symptomatic evidence of blistering can be obscured by fresh bottom coatings, a dry storage period during which blisters can de-pressurize, bottom sanding, and other conditions or actions. Surveyor has no first hand knowledge of the history of bottom maintenance, blistering repairs, or prophylactic coatings.

CONDITION OF BOTTOM PAINT:

Bottom well painted. Condition good.

LIQUIFIED PETROLEUM GAS SYSTEM (LPG)

LIQUIFIED PETROLEUM GAS SYSTEM (LPG)

TYPE:

LPG.

LOCATION:

Starboard transom LPG locker.

MOUNTING:

Appears serviceable.

REGULATOR:

Yes, appears serviceable, passed leak test.

PRESSURE GAUGE:

Yes

VENTILATION:

Yes, appears adequate.

SHUT-OFFS:

Yes at tank.

LINES AND FITTINGS:

Seamless copper and flex at the gimbaled stove connection.

III. SYSTEMS

STANDING RIGGING

STANDING RIGGING

MAST:

Aluminum

SPREADERS:

Single spreader. Appears serviceable.

SHROUDS AND STAYS:

1/4" 1 x 19. Appears serviceable.

BOOMS:

Aluminum boom.

TURNBUCKLES:

Stainless turnbuckles of the open design appeared serviceable.

TOGGLES:

Stainless steel toggle appeared serviceable.

TANG ENDS:

Appeared serviceable where sighted.

CHAIN PLATES:

Internal chain plates bolted to bulkhead or knees where sighted appeared serviceable.

RUNNING RIGGING

RUNNING RIGGING

WINCHES:

Three Bariant self tailing winches on deck, at the cockpit one #17 and two #21s mid cockpit.

Note: All winches were operated and performed normally. It is recommended that they all be serviced by a professional and then be maintained frequently.

SAIL TRACK:

Two deck mounted sail tracks with cars both port and starboard. Appeared serviceable.

MAIN SHEET TRAVELER:

Harken mainsheet traveler. Appeared serviceable.

HALYARDS:

Halyards were braided and color coded no wire splices were observed.

SHEETS:

The sheets onboard appeared in serviceable condition.

ROLLER FURLING GEAR:

Hood gear appeared serviceable.

CAM CLEATS:

Lewmar spinlocks are used extensively. Appeared serviceable.

III. SYSTEMS

RUNNING RIGGING

RUNNING RIGGING (*Continued*)

NOTE:

THE MAST AND RIGGING WAS OBSERVED AND INSPECTED FROM THE DECK LEVEL ONLY. Due to the fact that the vessel is over 10 years old and the age and service of the present rigging is unknown; I recommend further inspection by a qualified rigger to determine the condition of the rigging and renew, replace or service any rigging as required.

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

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS

RECOMMENDATIONS

B.1 (PAGE 14)

"Y" valve is not locked in the deck pump out only position.

Investigate further and lock the handle in deck only position or remove handle.

Hose for overboard discharge is not secured to holding tank. (see image 100_0014) This will allow waste discharge into port lazarette if tank is full.

Further investigate and repair as necessary.

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS

RECOMMENDATIONS

C.1 (PAGE 6)

Stress cracking was noted in the vicinity of the starboard sail track (see images 100_0006 - 0007), forward of the cabin house deck joint (see images 100_0008 - 0009) and in the cockpit aft of the helm (see image 100_0012). Small area forward of the starboard deck sail track sounds as if it is delaminated (see image 100_0005). Moisture readings were acceptable in all areas.

Further investigate and repair and reseal as necessary.

C.2 (PAGE 7)

Teak trim around fixed windows port and starboard is loose in places. (see images 100_0010 - 0011)

Further investigate and repair as necessary.

IV. FINDINGS AND RECOMMENDATIONS

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS

RECOMMENDATIONS

C.3 (PAGE 11)

Fuel fill hose is showing signs of deterioration at the tank connection. (see image 100_0015)

Further investigate and repair as necessary.

C.4 (PAGE 12)

Shore power inlet has two loose fasteners.

Further investigate and repair as necessary.

C.5 (PAGE 13)

There is no hose connected to the over flow valve on the hot water tank and in the event of over flow it will flood onto the plywood support.

Investigate further and safely dispose of hot water discharge from the pressure relief valve.

C.6 (PAGE 18)

Cuttless bearing showed signs of sloppiness.

Further investigate and repair as necessary.

C.7 (PAGE 18)

Higher than anticipated moisture readings noted in the rudder. (see image 100_0001)

Further investigate and repair as necessary.

NOTE: It is recommended that all below the water line thru-hulls have a proper sized wooden plug attached to function as emergency plugging device.

V. 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 the survey has been completed and the findings have been organized in a logical manner.

The grading of 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 values in the **BUC USED BOAT PRICE 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 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 AND FINDINGS AND RECOMMENDATIONS** section of this **REPORT OF SURVEY**, and by virtue of my experience, my opinion is

OVERALL VESSEL RATING:

AVERAGE

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, 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 (subject to the satisfactory results of a sea trial):

******\$34,000.00**

Thirty Four Thousand Dollars and Zero cents

2. 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:

******\$94,500.00**

Ninety Four Thousand Five Hundred Dollars and Zero cents

V. SUMMARY AND VALUATION

SUMMARY:

In accordance with the request for a marine survey of the "EQUILIBRIUM" , 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 October 6, 2004 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 RECREATIONAL on the GREAT LAKES. 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.

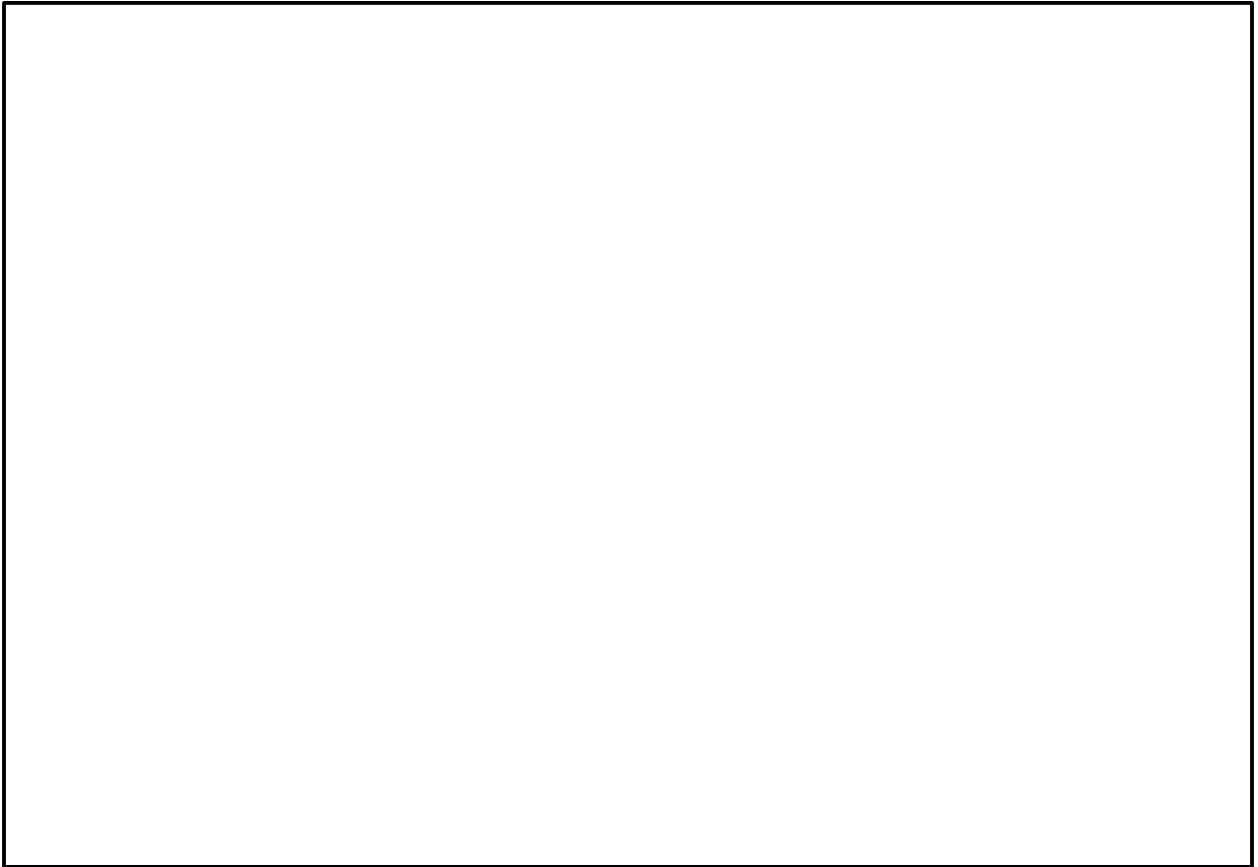
This report is submitted without prejudice and for the benefit of whom it may concern.

ATTENDING SURVEYOR: _____
John C. Roesch, SAMS-SA

WATERS EDGE MARINE SURVEY
MARINE SURVEYOR AND CONSULTANT

1988 O'Day 322 Sloop

EQUILIBRIUM



MEMBER OF SOCIETY OF ACCREDITED MARINE SURVEYORS

201 W. Water Street Sandusky, OH 44870
(419) 609-0852 Fax (419) 609-9850

REPORT OF MARINE SURVEY

OF THE VESSEL

"EQUILIBRIUM"

1988 O'Day 322 Sloop

**CONDUCTED BY
John C. Roesch**

**ASSISTANT
Pamela J. Roesch**

PREPARED EXCLUSIVELY FOR:

Ivan Goldfarb

October 6, 2004

MEMBER OF SOCIETY OF ACCREDITED MARINE SURVEYORS

TABLE OF CONTENTS

SECTION	PAGE NO.
I. INTRODUCTION	1
II. GENERAL INFORMATION	4
III. SYSTEMS	6
HULL DECK AND SUPERSTRUCTURE	6
CABIN APPOINTMENTS	8
PROPULSION	9
FUEL SYSTEM	11
ELECTRICAL SYSTEMS	11
FRESH WATER SYSTEM	12
SANITATION	13
STEERING SYSTEM	14
GROUND TACKLE	14
ELECTRONICS AND NAVIGATION EQUIPMENT	15
THRU-HULLS	16
SAFETY EQUIPMENT	17
OUT OF WATER INSPECTION	17
LIQUIFIED PETROLEUM GAS SYSTEM (LPG)	18
STANDING RIGGING	19
RUNNING RIGGING	19
IV. FINDINGS AND RECOMMENDATIONS	21
V. SUMMARY AND VALUATION	23