

#13013

May 20, 2013

WILL MARINE SERVICES

PO Box 293

SODUS POINT, N.Y. 14555

1-315-573-4485

REPORT OF MARINE SURVEY OF THE VESSEL



DOWAGER

**PREPARED
EXCLUSIVELY FOR:**

**George Howell
Cayuga Packet Co.
50 Pennsylvania Ave.
Elmira, New York,
14902
607-734-6291**

Current photo

INSURANCE SURVEY CONDUCTED BY:

D. ERIK WILL

Member ABYC, SAMS-AMS

USCG 50 Ton Masters License

TABLE OF CONTENTS

SECTION	PAGE NO.	SECTION	PAGE NO.
I. SCOPE OF SURVEY	2	F. NAVIGATION AND ELECTRONICS	8
II. GENERAL INFORMATION	3	G. SAFETY EQUIPMENT	9
III. SYSTEMS:	5	IV. FINDINGS AND RECOMMENDATIONS	10
A. HULL, DECK AND SUPERSTRUCTURE	5	V. SUMMARY AND VALUATION	11
B. CABIN	6	V.A VESSEL CONDITION RATING STATEMENT	11
C. PROPULSION SYSTEM	6	V.B VESSEL VALUATION STATEMENT.	12
D. ELECTRICAL SYSTEMS	7	V.C SUMMARY	13
E. SANITATION AND WATER	8	V.D SURVEYOR'S CERTIFICATION	13

I. SCOPE OF SURVEY

Acting at the request of Dennis Montgomery on behalf of owner George Howell and with permission from Finger Lakes Boating Center, the attending surveyor did board and inspect DOWAGER the 1931 40th Anniversary Series Matthews 38' Double Cabin Cruiser, May 20, 2013, where she lay blocked over her slip for winter storage in a covered boathouse at Finger Lakes Boating Center in Ithaca, New York. A sea trial was not performed. There was AC and DC power available. An out of the water inspection of underwater machinery and the exterior of the hull's wetted surface area was performed. The hull, deck and superstructures including all accessible frameworks were inspected. Between October of 1998 and spring of 2002 when she was re-launched, Dowager was completely rebuilt by the professionals at the Cayuga Wooden Boatworks in Ithaca, New York. 132 of 132 ribs were replaced with steamed white oak. The horn timber, keel, stem, knee and many planks were all replaced. She was completely refastened with silicon bronze and all fasteners are now less than 11 years old. Due to the complete rebuild and after visual inspection, no fasteners were pulled as part of this survey. For more detailed information see section III A. Hull Deck and Superstructure pg. 5 and to see an excellent photo illustrated article documenting the extensive rebuilding of this beautiful vessel on the internet go to <http://www.cayugawoodenboatworks.com/dowager/htm>. The reason for the survey was to report the condition and value of the vessel for insurance purposes. Present at the time of the survey was Marine Surveyor D. Erik Will.

Note: This is the third time I have had the pleasure of inspecting this vessel. The first Condition and Value Survey was done November 23, 2004, the second January 23, 2009.

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. Buyer/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 date, and is the unbiased opinion of the undersigned, but it is not to be considered an inventory or a warranty either specified or implied.

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 Nation Fire Protection Association (NFPA) have been used as guidelines in the conduct of this survey.

FINDINGS REFLECT CONDITIONS OBSERVED AT THE TIME OF THE SURVEY. The American Boat and Yacht Council "Standards and Recommendations" are defined by reference to "ABYC". These standards were developed in cooperative effort with the National Marine Manufacturers Association, to complement the mandatory standards Promulgated by the United States Coast Guard under the authority of the Federal Boat Safety Act of 1971. The ABYC Standards and Recommendations are considered to be *voluntary*, but are highly suggested by this surveyor.

To all intent, purpose and interest, reports emanating from this office may be adjudged as an evaluated opinion of the attending surveyor. This report is based upon the condition and circumstances as of inspection date and may not be relied upon for any purpose after the above date. If this survey does not discuss a specific item, it is not covered by this survey.

II. GENERAL INFORMATION

SURVEY PREPARED FOR: George Howell
TYPE OF SURVEY _____ Insurance Condition and Value
NAME OF VESSEL _____ Dowager
BUILT BY _____ The Matthews Co. Port Clinton Ohio
HULL ID NUMBER _____ 11247 found on manufacturer's plate
YEAR BUILT _____ 1931
YEAR RE-BUILT _____ 1998-2002
HULL MATERIAL _____ Mahogany on White Oak
HULL TYPE _____ Displacement
L.O.A _____ 38'
BEAM _____ N/A
DRAFT _____ N/A
DISPLACEMENT _____ N/A
PROPULSION SYSTEM _____ 1988 Westerbeke Model W100
FUEL TYPE _____ Diesel
DC POWER _____ 12 volt
AC POWER _____ 125 volt 30 amp Shore power
INTENDED CRUISING AREA _____ Cayuga Lake, Great Lakes and Tributaries
INTENDED USE _____ Pleasure
OVERALL VESSEL RATING _____ EXCELLENT
ESTIMATED MARKET VALUE _____ *\$230,000
ESTIMATED REPLACEMENT COST _____ **\$500,000

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

* Per Boats equivalent in condition and uniqueness listed in national publications.

** Per Cayuga Wooden Boatworks

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 SERVICE:**

Service for which it was designed and manufactured by the naval architect and or builder.

★ **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.

III. SYSTEMS

A. HULL, DECK, AND SUPERSTRUCTURE



The 1998-2002 rebuilding included replacing all 132 white oak ribs, new epoxy laminated white oak keel, shaft log, horn timber and stem, new mahogany bottom planking on both sides, scarfed topside planking to eliminate all butt joints above the waterline, a new mahogany transom, new cedar tongue and groove deck planking and new painted canvas deck covering. Everything else was refinished. Silicon bronze fasteners were used throughout.

Hull Type: Displacement.

Construction: Mahogany carvel planking fastened with silicon bronze screws to 1.25" by 1.5" white oak frames.

Condition: Excellent. The Hull is extremely fair and true to her lines with no hogging, deformation, loose or "proud" planking. No fasteners or bungs are popped or bleeding. The topside planking is painted a glossy white and shows very little wear and some dirt from storage but no peeling or damage. There are no open seams or even cracked paint over the topside seams attesting to the excellent refit and refastening in 2002 and the favorable conditions in the fresh water boat house where the boat is stored.

The anti fouling bottom paint shows some wear but is in serviceable condition.

No damage or repairs are observed above or below the waterline. The plank seams, stem, keel, horn timber and deadwood appear quite tight with little contraction noticed. The transom is highly varnished with no signs of flaking or peeling varnish. The transom corners are sound and well calked. On the interior there are clearing chains in the limber holes and the bilge is in very good condition. No decay or soft spots were noted.

The engine beds, floors and ribs are all in excellent condition. The butt blocks are beveled and radiused to promote drainage and have adequate space on either side.

Decks: Cedar tongue and groove decking over white oak beams covered with painted canvas.



Condition: The foredeck cedar planking was replaced and new deck canvas was installed from bow to stern as part of the restoration. The deck canvas is well covered with paint and appears to be sealed adequately but there are a few areas where the canvas has detached from the cedar planking below. These areas are not wet or soft. This condition has not changed or advanced since the last survey in 2009 as the boat is kept in a covered boat house winter and summer. *C1

Superstructures: There is a forward cabin, aft cabin, windshield and hard top all of varnished mahogany on white oak with painted canvas on the tops. The hard top covers a highly varnished cockpit that can be enclosed with tan canvas side curtains. **Condition:** The exterior bright work is in excellent condition and has been renewed since the last survey. The only areas showing weather are the trim strips on the aft edge of the hard top and aft cabin that are exposed to the morning sun through the boat house door. *C2

Canvas: Tan acrylic side curtains with clear vinyl window panels. **Condition:** Like new.

B. CABIN



The interior living spaces of this vessel are in show room condition with no peeling or weather damage. All built in furniture, doors and trim are highly varnished and all other surfaces are painted white. The cockpit and cabin soles inside and out are covered with a patterned one piece vinyl with brass trim.

Condition: Excellent condition. Even the most recessed corners are holding paint and varnish.

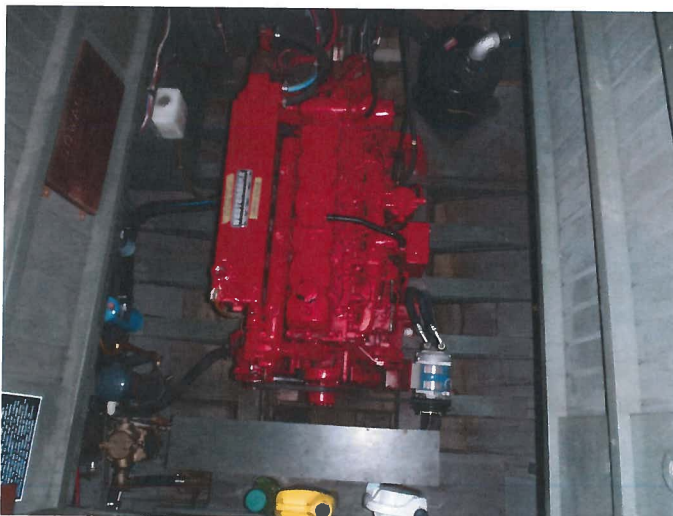
Stove: There is a (3) burner LPG stove by Caloric Marine plumbed with Accuflex LP and Natural gas hose to a

proper propane locker in a cockpit seat with 2 propane tanks dated 5/01 and 5/00. There is a Blue Sea Systems LPG control within reach of the stove.

Condition: The installation, fuel lines wiring and LPG locker comply with ABYC A-1 recommended standard for Marine Liquefied Petroleum Gas Systems and NFPA 302 6-5.11.

Refrigeration: Seafrust control, cold plate, refrigeration unit, heat exchanger and filter system. 110 VAC and engine driven. **Condition:** Not tested due to winterization.

C. PROPULSION SYSTEM



Engine: 1988 Westerbeke m#W100 (6) cylinder diesel spec# HBW 360A s# U1590C805 with closed cooling system. **Condition:** Clean and securely mounted with shock absorbing rubber and steel motor mounts bolted to sound stringers. The crank case is full of very clean lubricating oil. All hoses and belts appear to be in very good condition. The engine space is clean, oil free and well organized.

Engine hours: 381.7 hrs. Only 52.9

hours have been added since January 2009.

Reverse gear: Hurst m# H3W 260A 2R s# 0804223.

Fuel Tanks: (2) Clearly labeled 67 gal, 5052 H-32, .125 thick aluminum fuel tanks by Capeway welding of Plymouth MA, (508-747-6666), properly grounded and tested to 4psi and USCG 33 CFR 183.510(a). Installation of fuel system is in compliance with ABYC H-33.10 standard for Diesel Fuel Systems and NFPA 302 5-2 thru 5-6. **Condition:** Good condition with no evident leaks.

Fuel lines: Fuel supply and return lines are copper tubing or hose labeled USCG Type A1 SAE J1527 and have a clearly marked plenum with shut off valves at the tank end. **Condition:** Good condition well supported and protected.

Fuel fills: (2) Deck fills properly grounded and labeled "Diesel". **Condition:** Good condition.

Fuel filter: Inline Fram fuel filters and water separators.

Exhaust: The exhaust system includes a Westerbeke m# 35245 muffler double clamped to a well supported certified wet exhaust flexible hose labeled SAE J2006R2. **Condition:** Good condition with no evident leaks.

Engine raw water intake: A bronze ball valve thru hull, double clamped and plumbed to a bronze sea strainer with sight glass. **Condition:** Good condition and actuates easily.

Packing gland: (1) Bronze packing gland. **Condition:** Appears to be in very good condition.

Note: There is a corroded ferrous bolt in the shaft log/ stuffing box. Replace with a non ferrous bolt. *B1

Prop: (3) Blade 22RH16 with nut, locking nut and cotter pin. **Condition:** Very good condition with no visible damage.

Prop shaft: Stainless steel. **Condition:** Good condition and true to the eye.

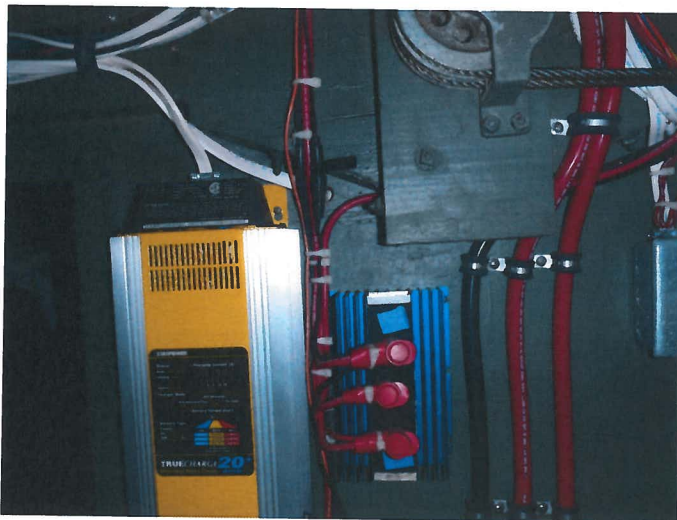
Cutlass bearing: The bearing in the shaft log is in good condition and not showing excess play.

Steering system: Wheel steering with pulleys, cast quadrant and stainless steel cable to a well supported rudder shaft.

Condition: All parts of the steering system are tight, easily accessible and in excellent condition.

Rudder: Plate and tube construction with a cast stiffener. **Condition:** Excellent condition with no visible damage. The rudder is supported and protected with a cast skeg plate.

D. ELECTRICAL SYSTEMS



All wiring sighted is of Anchor marine grade stranded wire, supported and connected to ABYC standards. The AC outlets are protected with GFCIs throughout and all were tested for proper function and polarity as part of this survey.

AC Distribution: A main breaker and (6) branch breakers.

Shore Power: A 125 volt, 30 amp weather tight inlet and a 50' 10/3, 600 volt shore power cord with weather tight ends. **Condition:** Good condition with no burned contacts.

DC distribution: (16) branch breakers at the helm on (2) well marked Anchor distribution panels.

Battery master switch: (1) Perko vapor proof switch.

Batteries: (2) Exide CDM 4D-P batteries with 1000 CCA and 1200 CA. **Condition:** The batteries are in an excellent installation with a pan to capture any spilled electrolyte, covered with clear lexan and securely bolted down all complying with ABYC E-10.7.

Charging system: There is an engine driven alternator, a True Charge 20+ by Stat Power and a Shure Power battery isolator for charging the ships batteries. **Condition:** The alternator was not tested. The True Charge 20+ is providing a charge.

E. SANITATION AND WATER



Toilets: (2) Wilcox Chriddenden m#51 Type E manual marine toilets. **Condition:** Securely installed but not tested due to winterization.

Toilet raw water intakes: Bronze ball valves, double clamped to certified SAE J2006R2 hose. **Condition:** Good condition and both actuate easily.

Waste Holding Tank: (2) Poly holding tanks with a Saniguard Vent filter and Tank Watch monitor. **Condition:** Clean secure and installed to satisfy USCG 33CFR 159 for type III MSD.

Gray water discharge: Above the waterline through hull fittings. **Condition:** Good condition.

Shower sump: Lovett sump and ignition protected pump wired with Anchor Marine Grade wire. **Condition:** Powers up.

Water Tanks: (2) Stainless steel tanks.

Condition: Well mounted and in like new condition.

Pressure water pump: Par Automatic Multi fixture ignition protected pump with an Itt Jabsco m# 12573-3000 1 liter accumulator tank.

Condition: Powers up.

Water heater: Attwood 10.5 gallon stainless steel m# EHM II-SM s#94550000782 with heat exchanger hoses to the engine and pressure relief valve. **Condition:** Clean, corrosion free and properly mounted with air circulation space below.



F. NAVIGATION AND ELECTRONICS

VHF: Horizon Spectrum with distress safety call. **Condition:** Powers up.

VHF antenna: Shakespeare 5215 24" mounted on the staff.

Compass: Danforth Constellation in brass binnacle. **Condition:** Excellent.

Navigation Lights: Port and starboard side lights, mast head and anchor lights. **Condition:** Working.

SAFETY EQUIPMENT



High water alarm: Rule high water alarm at the helm with float switch in the bilge.

Condition: Working.

Electric bilge pumps: (2) Rule 12 volt automatic bilge pumps with float switches and with monitors at the helm. **Condition:** Both power up.

Manual bilge pump: Brass sucker type mounted in the galley. **Condition:** Not tested.

Back up pump: The Lovett shower sump has an open top and would act as a back up bilge pump.

Condition: Powers up.

Fire Extinguishers: (1) 1A 10BC, 3 lb with gauge, full, at the helm, (2) 5BC with gauges, full.

Anchor: Danforth with chain and nylon rode at the ready in chocks on the bow. **Condition:** All ground tackle is in excellent condition.

Windshield wiper: (1) 12 Volt.

Condition: Working.

Horn: Single trumpet 12 volt. **Condition:** Working

Bell: Yes, with cord to helm. **Condition:** Working

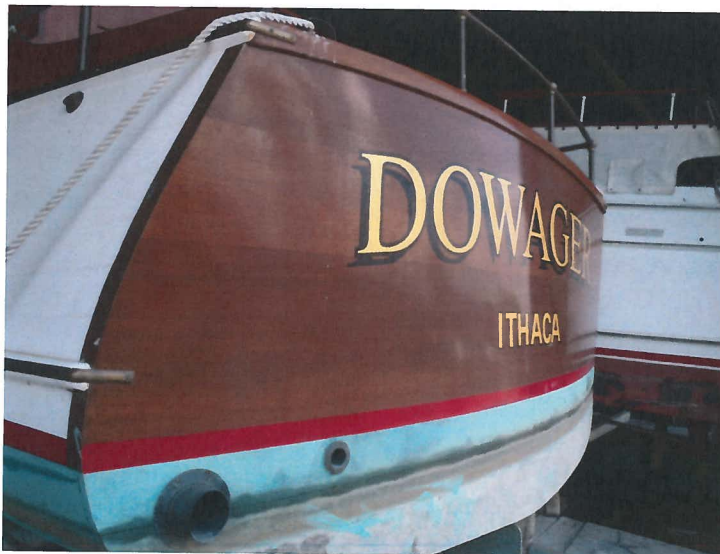
Exterior grab rails: Sturdy grab rails mounted to either side of the cabin tops and hard top for continuous safe passage from the fore deck to the stern.

Automatic fire suppression system: Kidde FE241 automatic extinguisher with gauge, in the engine compartment and with Kidde Fyre Watch system monitor in the cockpit.

Condition: The gauge reads full.

Note: All fire extinguishers and the engine room automatic fire suppression system gauges read full but there are no inspection tags. It is a good safety practice and is recommended by ABYC and the NFPA that all fire extinguishers be tested and tagged on an annual basis. *C3

Additional equipment: Emergency steering gear with tiller. **Condition:** Good condition.



IV. FINDINGS AND RECOMMENDATIONS

*A. SAFETY DEFICIENCIES

There are no "A" Findings

*B. DEFICIENCIES NEEDING ATTENTION

***B1 Pg 7.** There is a corroded ferrous bolt in the shaft log/ stuffing box.

Recommendation: Replace with a non ferrous bolt.

*C. SURVEYORS NOTES AND OBSERVATIONS

***C1 Pg 5.** The deck canvas is well covered with paint and appears to be sealed adequately but there are a few areas where the canvas has detached from the cedar planking below. These areas are not wet or soft. This condition has not changed or advanced since the last survey in 2009.

***C2 Pg 6.** The exterior bright work is in excellent condition and has been renewed since the last survey. The only areas showing weather are the trim strips on the aft edge of the hard top and aft cabin that are exposed to the morning sun through the boat house door.

***C3 Pg 9.** All fire extinguishers and the engine room automatic fire suppression system gauges read full but there are no inspection tags. It is a good safety practice and is recommended by ABYC and the NFPA that all fire extinguishers be tested and tagged on an annual basis.



V. SUMMARY AND VALUATION

A. 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 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 useable 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

EXCELLENT CONDITION

This vessel is structurally better than it was new. It has been fitted with modern hot and cold pressure water, sanitation, refrigeration and electrical systems installed to current USCG regulations, ABYC and NFPA recommended standards.

B. 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:

\$230,000

Two hundred thirty thousand dollars

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:

\$500,000

Five hundred thousand dollars

C. SUMMARY

In accordance with the request of George Howell for a marine survey of DOWAGER a restored 1931 Matthews 40th Anniversary Series 38' Double Cabin Cruiser, for the purpose of evaluating its present condition and estimating its Fair Market Value and Replacement Cost for insurance purposes, I herewith submit my conclusion based on the preceding report. The subject vessel was personally inspected by the undersigned on May 20, 2013, and was found to be an exceptional boat in exceptional condition. She is stored in a covered boat house summer and winter in a fresh water environment which may be the perfect conditions for a wooden boat. Not only was she exceptionally well rebuilt and refinished, every system was upgraded with modern utilities installed to current ABYC standards, NFPA standards and USCG code of federal regulations. All modern improvements are concealed so that the vessel keeps her authentic 1931 appearance. After eleven years of service since her complete rebuild she is still in excellent condition with only minor routine maintenance issues. Due to recently renewed paint and varnish finishes she is actually in better condition than during the last survey in 2009. Mr. Howell's dedication to maintaining this vessel is exceptional.

D. 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:

D. ERIK WILL

Member ABYC, SAMS-AMS #853

ABYC Standards Accredited

USCG 50 Ton Masters License

Hull ID Number 11247





Properly installed beveled and radiused butt blocks



Water Tank



Stem



Fuel Tank



Manufacturers plate



ABYC compliant propane locker