# Florida Boat & Yacht Surveyors MARINE SURVEYOR AND CONSULTANT

# 2011 Sea Ray 580 Sedan Bridge ''No Name''



INDEPENDENT MARINE SURVEY SERVICE

4267 NW Federal Highway #196 Jensen Beach, FL 34957 (772) 834-1175 Fax (772) 679-3810

## REPORT OF MARINE SURVEY

## OF THE VESSEL

''No Name''

2011 Sea Ray 580 Sedan Bridge

CONDUCTED BY Jeff Hahn and Mark Wallace

Marine Surveyors

PREPARED FOR:

Sample Customer

September 14, 2011

INDEPENDENT MARINE SURVEY SERVICE

# TABLE OF CONTENTS

SECTION		PAGE NO.	
I.	INTRODUCTION	1	
II.	GENERAL INFORMATION	2	
III.	SYSTEMS	5	
	HULL DECK AND SUPERSTRUCTURE	5	
	CABIN APPOINTMENTS	7	
	PROPULSION	9	
	FUEL SYSTEM	11	
	ELECTRICAL SYSTEMS	12	
	FRESH WATER SYSTEM	14	
	SANITATION	15	
	STEERING SYSTEM	16	
	GROUND TACKLE	17	
	ELECTRONICS AND NAVIGATION EQUIPMENT	17	
	BONDING SYSTEM	18	
	SAFETY EQUIPMENT	19	
	OUT OF WATER INSPECTION	20	
	AIR CONDITIONING AND HEAT (AIR CONDITIONING)	21	
	SEATRIAL REPORT	22	
	ENGINE SURVEY SUMMARY	22	
IV.	FINDINGS AND RECOMMENDATIONS	23	
V.	SUMMARY AND VALUATION	25	

## I. INTRODUCTION

#### SCOPE OF SURVEY

Acting at the request of Sample Customer, the attending surveyor did attend onboard the 2011 Sea Ray 580 Sedan Bridge, "No Name" on September 14, 2011 where an "in-the-water-survey" was conducted at . A sea trial was performed. An out-of the water inspection of underwater machinery and the exterior of the hulls wetted surface area was performed. The Hull Identification Number (HIN) US-SERY1111F011 was verified from the transom. The reason for the survey, was to ascertain the physical condition and value of the vessel. 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 will be 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 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 THE UNITED STATES COAST GUARD (USCG), UNDER THE AUTHORITY OF TITLE 46 UNITED STATES CODE (USC); TITLE 33 AND TITLE 46, CODE OF FEDERAL REGULATIONS (CFR), AND THE VOLUNTARY STANDARDS AND RECOMMENDED PRACTICES DEVELOPED BY THE AMERICAN BOAT AND YACHT COUNCIL (ABYC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAVE BEEN USED AS GUIDELINES IN THE CONDUCT OF THIS SURVEY.

The use of the word "appeared" 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: ..... 091411 SURVEY PREPARED FOR: ..... Sample Customer "No Name" Pre-Purchase for Buyer \*\*\*\* EXCELLENT OVERALL VESSEL RATING:.... \$ 2,195,000.00 ESTIMATED REPLACEMENT COST: ..... \$ 2,540,000.00 BUILDER: ..... Sea Ray 2010 YEAR BUILT: ..... 2011 58 Sedan Bridge **US-SERY1111F011** HULL IDENTIFICATION NUMBER (HIN): . . . . . HULL NUMBER: ..... 580DB 555 Sample Customer FRP (Fiber Reinforced Plastic). Planing, Modified-V with hard chines and flared bow. 58' 7" with platform 16' 0" 4'3" DISPLACEMENT: ..... 51,500 lbs. dry weight 18'8" OVERHEAD CLEARANCE: ..... Two (2) inboard engines. FUEL TYPE: ..... Diesel. FUEL CAPACITY: ..... 698 gallons. AC POWER: ..... One (1) 125/250 volt, 50 amp. Marinco Cable Master shorepower electric reel. Operated. One (1) Marinco 125/250 volt, 50 amp. inlet. Appeared serviceable. DC POWER: ..... 12 and 24 volt.

## II. GENERAL INFORMATION

FRESH WATER CAPACITY: 150 gallons.
HOLDING TANK: 68 gallons.
INTENDED USE: Recreational near coastal cruising and offshore cruising.

## II. GENERAL INFORMATION

#### **DEFINITION OF TERMS:**

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

#### APPEARED:

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

#### HULL DECK AND SUPERSTRUCTURE

#### **HULL CONSTRUCTION**

#### MATERIAL:

FRP (fiber reinforced plastic)

#### **EXTERIOR HULL:**

\*B1

Black gelcoat. There were three areas of dull gelcoat approximately fist sized.

### PORTLIGHTS:

Opening portlights. All were operable. Sealed portlights. Appeared serviceable.

#### **BULKHEADS:**

Athwartships reinforcement enhanced by bulkheads bonded to the hull with FRP (fiber reinforced plastic). Appeared serviceable where sighted.

#### STRINGERS:

Hull stiffness provided by FRP longitudinal stringers. Complete inspection not possible due to limited access. Appeared serviceable where observed.

#### TRANSOM:

Reinforced, FRP transom, fitted with transom door. Appeared serviceable.

#### BILGE:

Bilge area provides the area for most boat systems and tankage. Appeared serviceable.

#### CHAIN LOCKER (DRAINAGE):

The chain locker is forward and accessible through an access in the foredeck. The chain locker drainage is overboard. Fresh water anchor wash down hose bib. Operated.

#### LIMBER HOLES:

Limber holes are of adequate size and clear where sighted.

#### MOISTURE CONTENT:

This vessel's exterior hull was inspected with a Marine Infrared Thermal Camera, a sounding hammer and a moisture meter for the detection of moisture and delamination. No apparent signs of significant moisture intrusion or FRP delamination was detected.

#### **DECK CONSTRUCTION**

#### TYPE:

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

#### **MATERIAL:**

FRP (fiber reinforced plastic).

#### COCKPIT:

Bi-Level Motor Yacht Cruising type cockpit.

#### **HULL-TO-DECK JOINT**

#### TYPE:

The hull to deck joint was of the deck overlap type. Appeared serviceable where sighted.

#### **FASTENERS:**

Stainless steel screw type.

#### HULL DECK AND SUPERSTRUCTURE

#### **HULL-TO-DECK JOINT**(*Continued*)

#### **REINFORCEMENT:**

Stainless steel rub rail surrounds the vessel as protection to the hull to deck joint. Appeared serviceable.

#### **DECK FITTINGS**

#### STANCHIONS:

Welded stainless steel rail system and cable lifelines, runs the forward perimeter of the deck. Appeared serviceable.

#### **BOW PULPIT (BOW RAIL):**

Stainless steel stanchions and rail system. Appeared serviceable.

#### TOE RAILS:

Molded FRP toe rails, part of deck layup.

#### **VENTILATION:**

Provided by portlights and hatches topsides, transom and hardtop.

#### **SCUPPERS:**

Cockpit has scuppers at port and starboard aft corners under engine hatch. Appeared serviceable.

#### WINDLASS/GIPSY:

Lofrans 1500. Operated.

#### **HAWSE PIPES:**

Integrated into anchor windlass.

#### **DECKBOX:**

Transom locker with hatch. Appeared serviceable.

#### HATCHES:

One (1) Taylor Made aluminum and lexan 20" X 20" hatch in forward cabin deck area. Appeared serviceable. One (1) Taylor Made aluminum and lexan 20" X 20" hatch in hardtop. Appeared serviceable.

#### **GRAB RAIL:**

Stainless steel hand rails. Appeared serviceable.

#### LIFE LINES:

There is one (1) one row of life lines, plastic coated stainless wire. Appeared serviceable.

#### **CLEATS:**

Eight (8) stainless steel cleats were thru-bolted. Appeared serviceable.

#### ANCHOR PLATFORM:

Stainless steel anchor plate with integrated bow roller. Appeared serviceable.

#### **DAVITS:**

GHS electric hydraulic FRP swim platform mounted on transom. Operated by wired remote control.

#### OTHER:

GG Schmidt telescoping stainless steel swim ladder. Appeared serviceable.

#### HULL DECK AND SUPERSTRUCTURE

#### **SUPERSTRUCTURE**

#### **MATERIAL**:

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

#### JOINERY STRESS:

None Sighted.

#### CANVAS AND SUPPORT STRUCTURE:

FRP hardtop with canvas material and clear plastic window material. Appeared serviceable.

#### SUPERSTRUCTURE HOUSE TO DECK JOINT:

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

#### **BRIDGE DECK**

#### **MATERIAL:**

FRP (fiber reinforced plastic) molded bridge.

#### TYPE

Bridge provides helm station and crew seating area.

#### COCKPIT:

Bi-Level Motor Yacht Cruising type cockpit.

#### SEATS

White vinyl cushioned seats. Appeared serviceable.

#### WINDSHIELD:

Lower deck: Wraparound glass windshield. Appeared serviceable. Upper deck: Clear plastic curtains. Appeared serviceable.

#### ADDITIONAL EQUIPMENT AND ACCESSORIES

#### GENERAL EQUIPMENT:

\*C1

Norcold cockpit refrigerator. Operated. Cockpit sink. Operated. Uline cockpit icemaker did operate but the door latch pin is missing.

#### **ACCESSORIES:**

Overhead cockpit lights and courtesy cockpit foot lights. Operated.

#### FISHING EQUIPMENT

#### **ROD HOLDERS:**

Two (2) stainless steel gunwale mounted rod holders in cockpit coaming. Appeared serviceable.

## **CABIN APPOINTMENTS**

#### INTERIOR DESCRIPTION:

#### **INTERIOR BULKHEADS:**

The interior bulkheads were fit well where sighted.

#### WATER INTRUSION SIGNS:

None Sighted.

#### CABIN APPOINTMENTS

#### **INTERIOR DESCRIPTION:**(Continued)

#### STORAGE AREAS:

The cabinets, lockers, drawers, and shelving fit well where sighted.

#### **HEADLINERS:**

Headliner material in the cabins appeared to be a light colored vinyl. Appeared serviceable.

#### DOORWAYS:

Sliding glass door from cockpit to salon with privacy curtain Appeared serviceable. Cabin and head wood doors. Appeared serviceable.

#### FABRIC AND CUSHIONS:

Appeared Serviceable.

#### FLOOR AND WINDOW COVERINGS:

Floor covering is carpet in the cabins with canvas carpet runners. Appeared serviceable. Floor covering is hard wood in galley and aft head. Appeared serviceable. Floor covering is tile in forward head. Appeared serviceable.

#### **ACCOMMODATIONS:**

Three (3) cabins, forward and aft queen berth cabins and upper lower berth cabin. Appeared serviceable.

#### **HEADS:**

Two (2).

#### SHOWERS:

There are stand up shower enclosures in the heads. Operated. Fresh water hot and cold transom shower. Operated.

#### **FAUCET FIXTURES:**

The faucet fixtures and sinks were operable in the anchor locker, transom locker, engine room, cockpit, heads and in the galley.

#### LIGHT FIXTURES:

12 volt cabin lights were operable.

#### SALON FURNISHINGS:

Two (2) salon leather cushioned couches. Two (2) leather cushioned stools. One (1) leather dinette couch with table. Appeared serviceable.

#### AIR CONDITIONING UNITS:

Five (5) Cruisair self contained units.

#### CABIN HEATING:

The Cruisair units are reverse cycle for heat.

#### OTHER:

Beam central vacuum cleaning system. Operated.

#### NOTE

Splendide 2100 XC washer dryer. Operated.

#### **GALLEY**

#### SINKS:

One (1) stainless steel sink. Appeared serviceable.

#### **CABIN APPOINTMENTS**

#### GALLEY(Continued)

#### **REFRIGERATION:**

Two (2) Vitrifrigo galley refrigerator drawers. Operated. Two (2) Vitrifrigo galley freezer drawers. Operated.

#### STOVE/OVEN:

Two (2) burner Kenyon glass stove top. The burners power up.

#### MICROWAVE:

Contoure. Operated.

#### **ACCESSORIES:**

Krups coffee maker. Powered up.

## **PROPULSION**

#### **MAIN ENGINES**

#### TYPE:

Two (2) inboard engines.

#### MANUFACTURER:

MAN model D2848 LE423

#### **SERIAL NUMBERS:**

Port: 630 2592 807 2589. Starboard: 630 2592 810 2589.

#### LABELS AND NOTICES:

The engines required labels appeared to be in place and readable.

#### HORSE POWER:

900 hp at 2300 RPM. (662 kw)

#### NUMBER OF CYLINDERS:

Eight (8).

#### **INDICATED HOURS:**

Port hours 76. Starboard hours 74.

#### THROTTLE CONTROLS:

Electronic throttle and gear controls. Operated.

#### ENGINE MOUNTS AND BED:

Main engine beds are heavy longitudinal stringers inboard and outboard. Engine mounts appeared to be in serviceable condition.

#### **DRIP PANS:**

Engine fluid and loose debris falls into bilge area.

#### LUBRICATION:

Level indication is normal both port and starboard. Note: The surveyor recommends that all engine fluids and filters be renewed.

#### **VENTILATION:**

Appeared adequate.

## **BILGE BLOWERS:**

Two (2) ITT Jabsco power blowers with flex tubing. Operated.

#### **PROPULSION**

#### MAIN ENGINES(Continued)

#### **EXHAUST SYSTEM:**

Raw water cooled with risers and flexible coupling sections double clamped where sighted. Appeared serviceable.

#### LUBE TRANSFER:

Reverso lubrication transfer system. Powered up.

#### **INSULATION:**

Aluminized foam rubber sound deadening insulation was noted in engine room. Appeared serviceable.

#### PROP SHAFTS:

Stainless steel 2 1/2" diameter. Appeared serviceable.

#### ENGINE ALARMS:

Test of port and starboard low oil pressure alarm and coolant over heat warning audible at helm station. Operated.

#### **ENGINE SHUT DOWN:**

Port and starboard shut down push buttons at helm station clearly marked. Operated.

#### ENGINE SYNCHRONIZER:

Electronic engine synchronization. Operated.

#### STUFFING BOX:

Dripless type.

#### NOTE:

\*B2

There was a water leak from an unknown source in engine room under sliding glass door. It appears to be leaking from floor grid system.

#### **COOLING SYSTEM**

#### TYPE:

Freshwater reservoir type cooling with raw water cooled wet exhaust.

#### **RAW WATER STRAINERS:**

Two (2) Groco bronze alloy with sight glass. Appeared serviceable.

#### **COOLANT LEVEL:**

Normal levels observed. The surveyor recommends changing the fluid with new in accordance with the manufactures suggested specification.

#### **HOSES AND CLAMPS:**

Double clamped where sighted. Appeared serviceable.

#### **BELTS AND PULLEYS:**

Belts condition appeared serviceable. Pulleys appeared free of corosion.

#### SEACOCKS AND STRAINERS:

Raw water seacocks were ball valve type. Operated.

#### **PROPULSION**

#### **TRANSMISSIONS**

TYPE:

Transmission driven by diesel powered internal combustion engine.

MANUFACTURER:

ZF Marine.

**DRIVE TYPE:** 

Straight Drives.

**GEAR RATIO:** 

Transmission tag states 1.767 to 1 ratio.

FLUID LEVEL AND CONDITION:

Normal level indicated on dipsticks. Appeared serviceable. Recommend fluids be renewed.

**CONTROLS:** 

Electronic linkage. Appeared serviceable.

PROP SHAFT:

Stainless steel 2 1/2" diameter. Appeared serviceable.

PACKING GLAND:

Strong Sure Seal self-aligning shaft seals. Appeared serviceable.

COOLER:

Two (2) engine mounted transmission coolers. Appeared serviceable.

#### **FUEL SYSTEM**

#### MAIN ENGINE(S) FUEL SYSTEM

FUEL TYPE:

Diesel.

MATERIAL:

5052 Aluminum.

**NUMBER OF TANKS:** 

Two (2)

TANKS CAPACITY:

698 gallons

SECURED:

Metal straps with chafe protection. Appeared serviceable.

LOCATION:

Fuel tanks are port and starboard, outboard in the main engine room.

MANUFACTURING LABEL:

The ABYC required labels were sighted on the fuel tanks.

FILL PIPE LOCATIONS:

Two (2) fittings starboard side deck marked for diesel.

FILL PIPE GROUNDED:

Appeared to be properly grounded.

#### **FUEL SYSTEM**

#### MAIN ENGINE(S) FUEL SYSTEM(Continued)

#### FILL PIPE FITTINGS:

Fill deck fittings is clearly marked as to fuel type:

## FUEL LINES AND FITTINGS:

Supply lines are copper with copper alloy fittings. Flexible hose to engine connections. Appeared serviceable.

#### **RETURN LINES:**

Return lines are copper with copper alloy fittings. Flexible hose to engine connections. Appeared serviceable.

#### FUEL MANIFOLD VALVES:

Ball type valves, operable.

#### **VENT LOCATION:**

Starboard topsides, flame screens were sighted.

#### SHUT-OFF VALVE:

Located at fuel manifold. Operated.

#### **FUEL FILTERS:**

Both remote mounted Racor filter/water separator type and engine mount spin on/off type. Dual Racor units were plumbed in parallel to facilitate fast easy switch over and maintenance.

#### FILTER/FUEL CONDITION:

Recommend change of fuel water separator filters and spin on fuel filters.

#### FUEL COOLER:

Two (2) engine mounted fuel coolers. Appeared serviceable.

#### **ELECTRICAL SYSTEMS**

#### ELECTRICAL SYSTEM (D.C. SYSTEM)

#### **VOLTAGE:**

Lead acid battery powered 12 volt system.

#### **BATTERIES:**

Seven (7) batteries. Appeared serviceable.

#### MAIN BATTERY SWITCHES:

Three (3) 12 volt Solonoid type switches. Operated. Two (2) 24 volt Solonoid type switches. Operated.

#### PANEL:

Overcurrent Protection: Bus type fuses and circuit breakers.

#### **BREAKERS/FUSES:**

Individually switched branch breakers.

#### **TYPE CONNECTORS:**

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

#### ROUTING/SUPPORT:

Well supported and secured where sighted.

#### **ELECTRICAL SYSTEMS**

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

#### CHARGING SYSTEM (BATTERY CHARGER):

Three (3) ProMariner ProNautic 2425C3 battery chargers. Appeared serviceable. ProMariner ProTech 1210i battery charger. Appeared serviceable. Two (2) Vanner 60 amp battery equalizers. Appeared serviceable.

#### CHARGING SYSTEM (ALTERNATOR):

Two (2) engine mounted alternators. Appeared serviceable.

#### **OUTLETS:**

12 Volt DC outlets were sighted. Appeared serviceable.

#### OTHER:

\*C2

There is a loose clear plastic fuse cover panel under helm in compartment for electronics.

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

#### SHORE POWER INLET:

One (1) 125/250 volt, 50 amp. Marinco Cable Master shorepower electric reel. Operated. One (1) Marinco 125/250 volt, 50 amp. inlet. Appeared serviceable.

#### SHORE POWER:

Cord: One (1) 50' long 50 amp inlet cord. Appeared serviceable. Cord: One (1) 50' long 50 amp reel cord. Appeared serviceable.

#### AC SOURCE SELECTOR SWITCH:

Switch type: Manual plastic slide type. Operated.

#### MAIN BREAKER:

In the main electrical panel.

#### **BRANCH BREAKERS:**

Individually switched branch breakers.

#### CIRCUIT LOAD MONITORS:

Voltage and amperage analog gauges in the main electric panel for both the AC and DC systems.

#### **ROUTING:**

Well routed and supported where sighted.

#### **OUTLETS:**

Tested OK.

#### **POLARITY:**

The polarity was checked and proved normal.

#### GENERATORS AND INVERTERS

#### TYPE:

Generator driven by diesel powered internal combustion engine.

#### MANUFACTURER:

Onan model 21.5MDKBR-5832E. serial number: G100137303.

## FUEL TYPE:

Diesel.

#### **ELECTRICAL SYSTEMS**

#### **GENERATORS AND INVERTERS**(Continued)

**KILOWATT RATING:** 

21.5 kw.

**VOLTAGE RATING:** 

120/240 AC.

NUMBER OF CYLINDERS:

Four (4).

**INDICATED HOURS:** 

129.2 hours.

LOCATION:

Engine room, centerline aft. Well insulated and sound protected.

FLUID LEVELS:

Coolant normal. Oil normal. Surveyor recommends that all fluids be renewed according to the manufactures recommended specifications.

COOLING SYSTEM:

Freshwater and raw water wet exhaust type. Groco bronze alloy strainer with sight glass. Appeared serviceable.

**FUEL SUPPLY:** 

Fuel System: Engine mounted mechanical pump.

FUEL FILTER:

Remote Racor filter/water separator and engine mount spin on/off type.

LUBRICATION SYSTEM:

Engine mounted mechanical oil pump with spin on/off type filter.

**EXHAUST SYSTEM:** 

Aqua lift type FRP (fiber reinforced plastic). Raw water cooled with FRP canister, flexible coupling sections double clamped where sighted. Appeared serviceable.

**ACCESSIBILITY:** 

Good.

WARNING LABELS:

The required label appeared to be in place and readable.

NOTE:

The generator did operate.

## FRESH WATER SYSTEM

#### FRESH WATER SYSTEM: (POTABLE WATER)

STORAGE TANKS:

One (1).

**CAPACITY:** 

150 gallons

MATERIAL:

Plastic.

#### FRESH WATER SYSTEM

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

#### FILL PIPE LOCATION:

Starboard side deck marked for water.

#### VENT PIPE LOCATION:

Starboard topsides.

#### **PUMPS**:

ShurFlo 12 volt demand diaphragm type water pump. Operated.

#### FILTERS:

In line at pump. Recommend service filter.

#### **HOSES AND CLAMPS:**

Blue and red plastic tubing. Appeared serviceable.

#### DOCK SIDE PRESSURE REGULATOR:

Jabsco pressure regulator in transom locker. Appeared serviceable.

#### OTHER:

Fresh water transom locker hose bib. Operated. Fresh water engine room hose bib. Operated.

#### FRESH WATER SYSTEM (HOT WATER SYSTEM)

#### TYPE:

110 electric. Marine grade.

#### MANUFACTURER:

Kuuma

#### **CAPACITY:**

20 gallons.

#### PRESSURE RELIEF VALVE:

Copper pressure relief valve built into tank.

#### NOTE:

The hot water heater did operate.

#### **SANITATION**

#### **SANITATION (BLACK WATER)**

#### MANUFACTURER:

Sealand Technologies.

#### MANUAL OR ELECTRIC TYPE:

Electric Vacuflush type.

#### **NUMBER OF HEADS:**

Two (2) heads on vessel.

## M.S.D TYPE USCG SYSTEM:

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

#### DISCHARGE HOSES AND CLAMPS:

Thru-hull at engine room location. Seacock is operable.

#### **SANITATION**

#### SANITATION (BLACK WATER)(Continued)

#### **PUMP-OUT LOCATION:**

Port transom corner marked for waste.

#### MACERATOR:

Sealand Technologies mascerator. Operated.

#### **VENT LOOP:**

Saniguard vent filter installed in black water vent loop. Recommend change of filter.

#### **HOLDING TANK:**

Duracast plastic tank.

#### **CAPACITIES:**

68 gallons.

#### NOTE:

The two (2) heads operated.

#### SANITATION (GREY WATER)

#### BASINS, SHOWERS, HOSES AND CLAMPS:

The shower drains to a sump pump for overboard discharge. The basins on this vessel drain overboard.

#### SUMP TANK LOCATION:

Bilge area, aft engine room..

#### MATERIAL:

Plastic. Appeared serviceable.

#### PUMPS:

Rule 2000 GPH remote diaphragm sump pump float switch activated. Operated.

#### NUMBER OF TANKS:

One (1).

#### DISCHARGE:

Overboard thru-hull fitting.

#### STEERING SYSTEM

#### STEERING SYSTEM

TYPE:

Hydraulic.

#### MANUFACTURER:

Sea Star Teleflex.

#### NUMBER OF STATIONS:

One (1).

#### MODEL #:

1.7 Tilt Helm HH5741.

#### LINES AND FITTINGS:

Reinforced flexible hose, with metallic fittings. Appeared serviceable.

#### STEERING SYSTEM

#### STEERING SYSTEM(Continued)

#### PRESSURE/RESERVOIR TANK READING:

Gauge reading 17 lbs.

#### **ACTUATOR CYLINDER:**

Appeared serviceable.

#### MOUNTING:

Tilt type. Appeared serviceable.

#### **RUDDER STOCK:**

Stainless steel rudder stock.

#### RUDDER POSITION INDICATOR:

Digital rudder indicator part of autopilot. Operated. Analog rudder indicator. Operated.

#### UPPER RUDDER BEARING SUPPORT:

Well mounted. Appeared serviceable.

#### PACKING GLAND:

The port and starboard rudder packing glands appeared serviceable.

#### **GROUND TACKLE**

#### **GROUND TACKLE**

#### **ANCHORS:**

One (1) Kodiak anchor. Appeared serviceable.

#### **RODE MATERIAL:**

All chain.

#### CHAIN:

Chain is galvanized 5/16" BBB type for windlass usage.

#### WINDLASS:

Lofrans 1500 anchor windlass with bow foot controls and helm remote control. Operated.

#### OTHER

Windline stainless steel chain stopper. Appeared serviceable. Anchor safety retention wire tie. Plastic coated anchor safety retention wire. Appeared serviceable.

#### NOTE:

Manual anchor windlass handle. Appeared serviceable.

## **ELECTRONICS AND NAVIGATION EQUIPMENT**

## ELECTRONICS AND NAVIGATION EQUIPMENT

#### VHF:

Raymarine Ray 240 VHF radio with Raymarine remote VHF speaker. Operated

#### RADAR:

Two (2) Raymarine units. Operated.

#### GPS:

Two (2) Raymarine units. Operated.

## **ELECTRONICS AND NAVIGATION EQUIPMENT**

#### **ELECTRONICS AND NAVIGATION EQUIPMENT**(Continued)

#### **CHART PLOTTER:**

Two (2) Raymarine units. Operated.

#### **AUTOHELM:**

Raymarine ST 8002 autopilot. Operated.

#### SPEEDLOG:

Speed over ground on GPS. Operated.

#### **DEPTH SOUNDER:**

Two (2) Raymarine units. Operated.

#### **COMPASSES:**

One (1) Ritchie compass. Appeared serviceable.

#### **ANTENNAS:**

All antennas sighted appeared to be well mounted and serviceable.

#### OTHER:

Sea Ray Systems Monitor. Operated.

#### **ELECTRONICS (ENTERTAINMENT)**

#### STEREO SYSTEM:

Sony CDX H910UI AM FM CD player. Operated. Two (2) Sony remote controls. Operated Bose surround sound stereo system. Operated. Boise stereo system. Operated.

#### SPEAKERS:

Six (6) Sony speakers. Operated. Eleven (11) Bose speakers and one (1) Bose subwoofer in cabin. Operated.

#### TELEVISION(S):

Four (4) Sony TVs. Operated.

#### DVD:

Jwin DVD player. Powered up.

#### OTHER:

One (1) Marinco Phone TV inlet. Appeared serviceable.

#### NOTE:

Three (3) DirecTV HD receiver. Powered up.

#### **BONDING SYSTEM**

#### **BONDING SYSTEM**

#### MAIN BONDING CONDUCTOR:

The bonding system is well established where sighted. A separate bonding system was performed and I did use a corrosion meter to establish the level of protection.

#### THRU-HULL FITTINGS:

The thru-hull fittings as well as all sighted underwater fittings are bonded where sighted and show no excessive corrosion.

#### SHAFTS AND SHAFT LOGS:

The propeller shafts are not bonded. The propeller shaft logs appeared to be bonded.

#### **BONDING SYSTEM**

#### **BONDING SYSTEM**(Continued)

#### RUDDER SHAFTS AND SHAFT LOGS:

Rudder shafts and rudder shaft logs appeared to be bonded.

#### **SEA STRAINERS:**

All sea strainers appeared to be bonded.

#### PUMPS AND MOTOR HOUSINGS:

All pumps and housings appeared to be bonded, where sighted.

#### **ENGINES AND GENERATORS:**

Appeared to be bonded and grounded.

#### ZINC (HULL ZINC):

One (1) hull zinc was observed on transom.

## SAFETY EQUIPMENT

#### SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

#### NUMBER AND TYPE OF PFD'S:

Eight (8) Type I-U.S.C.G. approved. Appeared serviceable.

#### NUMBER OF THROWABLE PFD'S:

Two (2) Type IV-U.S.C.G. approved throwable devices. Ring type.

#### FIRE EXTINGUISHERS:

Three (3) dry chemical portable fire extinguishers. Appeared serviceable.

#### **VISUAL DISTRESS SIGNALS:**

Flares were 12 gauge day/night visual distress signals and hand held flares.

#### SOUND DEVICES:

Horn and Bell: Operable.

#### POWER EXHAUST BLOWERS:

Operable.

#### **NAVIGATION LIGHTS:**

All navigation lights were operable.

#### "NO OIL DISCHARGE" PLAQUE:

Found properly displayed.

#### TRASH DISPOSAL PLACARD:

Found properly displayed.

#### WASTE MANAGEMENT PLAN (OVER 40'):

\*B3

No, Vessels over 40' are required to have a written waste management plan onboard.

#### **AUXILIARY SAFETY EQUIPMENT**

#### FIRE ALARMS:

Sea Fire automatic fire alarm with engine override at helm and Sea Fire emergency fire suppression pull handle. Appeared serviceable.

## SAFETY EQUIPMENT

## AUXILIARY SAFETY EQUIPMENT(Continued)

#### BILGE WATER ALARM AND SAFETY SWITCHES:

The two (2) bilge high water alarms did operate.

#### FIXED FIRE EXTINGUISHING SYSTEM:

Sea Fire FE 241 automatic fire suppression system.

#### **SEARCH LIGHT:**

ACR searchlight with URP 102 pointpad remote control at helm. Operated.

#### FUME SNIFFER ALARM SYSTEMS:

Four (4) Fireboy Xintex CO Sentinel carbon monoxide fume detectors. Appeared serviceable.

#### **BILGE PUMPS**

#### LIST:

Four (4) Rule 2000 GPH bilge pumps with Rule-A-Matic float switches. Operated.

#### **OUT OF WATER INSPECTION**

#### **BELOW WATERLINE MACHINERY**

#### PROPELLER(S):

Two (2) bronze alloy, four bladed propellers with no visible damage, size stamped on hub 29.5 LH 35.5 and 29.5 RH 35.5. Both have locking nut and cotter pins. Spares: None sighted.

#### PROPELLER SHAFT(S):

Stainless steel 2 1/2" diameter. Appeared serviceable.

#### PROPELLER SHAFT (LOGS) TUBE(S):

Shaft log and tube is FRP (fiber reinforced plastic). Appeared serviceable.

#### SHAFT BEARING (CUTTLESS BEARING):

Port and starboard cuttless bearings showed no signs of sloppiness or end play.

#### STRUTS:

Two (2) cast bronze single I-beam struts. Appeared serviceable.

#### **RUDDER(S) MATERIAL:**

Two (2) cast bronze.

#### **RUDDER(S) MOUNTING:**

Both rudders are mounted to the hull (typical stem mounting).

#### TRIM TABS:

Bennett hydraulic trim tabs. Operated. Zinc protected.

#### THRUSTERS:

Vetus Bow Thruster. Operated.

#### THRU-HULLS:

Bronze thru-hulls fittings. Appeared serviceable.

#### TRANSDUCERS:

Depth transducer was clear of debris. Appeared serviceable.

#### **OUT OF WATER INSPECTION**

#### **BELOW WATERLINE MACHINERY**(Continued)

#### STRAINERS/SCOOPS/SCREENS:

Main engine pickup strainers and air conditioner strainers are external bronze alloy slotted type. Appeared serviceable.

#### ZINCS:

\*B4

One (1) hull zinc, four (4) swim platform zincs and two (2) trim tab zincs were observed in deteriorating condition.

#### NOTE:

Four (4) underwater lights. Operated.

#### **CONDITION OF HULL (WETTED SURFACE)**

#### **BLISTERS**:

None Sighted.

#### CONDITION OF BOTTOM PAINT:

Bottom well painted. Condition good.

## AIR CONDITIONING AND HEAT (AIR CONDITIONING)

#### AIR CONDITIONING AND HEAT (AIR CONDITIONING)

#### TYPE:

Unitized self contained reverse cycle type.

#### MANUFACTURER:

Cruisair.

#### NUMBER OF UNITS:

Five (5).

#### THRU-HULL STRAINER:

Groco bronze alloy with sight glass. Appeared serviceable.

#### RAW WATER COOLING PUMP:

Two (2) 110 AC electric pumps. Operated.

#### **DRIP TRAYS:**

One for each unit. Appeared serviceable.

#### CONDENSATE DRAIN:

Drains to sump tank.

#### NOTE:

\*B5

The air conditioners did operate except the forward cabin air conditioner unit displayed error message "HI PS".

#### SEATRIAL REPORT

#### **OBSERVATIONS**

#### **OBSERVATIONS:**

- 1. The engines started without excessive cranking.
- 2. The engine exhaust appeared normal.
- 3. The cooling water exhaust appeared adequate and normal.
- 4. The engine instruments operate within normal operating limits at idle, cruising speed and at wide open throttle.
- 5. Manufacturer's recommended max RPM is 2300. The engines reached 2365 RPM port and 2363 RPM starboard at wide open throttle. The vessel achieved a maximum speed of 33.9 knots.
- 6. The steering system operated normally.
- 7. The throttles operated normally.
- 8. The transmissions operated normally/smoothly.
- 9. The backdown test was satisfactory.
- 10. There were no excessive vibrations noted.
- 11. There were no oil or coolant leaks observed. (On main engines or in exhaust water)
- 12. The trim tabs operated normally.
- 13. The engine RPM was confirmed with a laser tachometer.
- 14. The engines temperature was 189 degrees F port engine and 187 degrees F starboard engine.
- 15. A magnet was dropped into transmission and no metal particles were extracted.
- 16. The engine oil pressure was 81 psi for port engine and 78 psi for starboard engine.

#### **ENGINE SURVEY SUMMARY**

#### ENGINE SURVEY

#### OTHER:

The results of the laboratory oil analysis will be sent under separate report.

## 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:**

#### **B.1 (PAGE 5) EXTERIOR HULL:**

FINDINGS	RECOMMENDATIONS
There were three areas of dull gelcoat	Further investigate and repair with like kind
approximately fist sized.	materials in keeping with accepted marine repair
	practices as necessary.

#### **B.2 (PAGE 10) NOTE:**

BIE (THEE TO) TO TE!	
FINDINGS	RECOMMENDATIONS
There was a water leak from an unknown source	Investigate further. Repair as necessary. Full
in engine room under sliding glass door. It	service by an expert.
appears to be leaking from floor grid system.	

**B.3 (PAGE 19) WASTE MANAGEMENT PLAN (OVER 40'):** 

FINDINGS	RECOMMENDATIONS
Vessels over 40' are required to have a written	Comply with USCG regulations for Trash
waste management plan onboard.	dumping and plan. There is a large fine imposed
	here for non compliance.

#### **B.4 (PAGE 21) ZINCS:**

FINDINGS	RECOMMENDATIONS
One (1) hull zinc, four (4) swim platform zincs and	Replace with new marine grade zincs.
two (2) trim tab zincs were observed in	
deteriorating condition.	

#### **B.5 (PAGE 21) NOTE:**

FINDINGS	RECOMMENDATIONS
The forward cabin air conditioner unit displayed	Further investigate and repair as necessary.
error message "HI PS".	

# IV. FINDINGS AND RECOMMENDATIONS

## C. SURVEYOR'S NOTES AND OBSERVATIONS:

## C.1 (PAGE 7) GENERAL EQUIPMENT:

FINDINGS	RECOMMENDATIONS
Uline cockpit icemaker did operate but the door	Replace as necessary.
latch pin is missing.	

## **C.2 (PAGE 13) OTHER:**

FINDINGS	RECOMMENDATIONS
There is a loose clear plastic fuse cover panel	Replace as necessary.
under helm in compartment for electronics.	

## 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:	
	EXCELLENT

## 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:

#### \$ 2,195,000.00

Two Million One Hundred Ninety Five 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:

#### \$ 2,540,000.00

Two Million Five Hundred Forty Thousand Dollars and Zero cents

## V. SUMMARY AND VALUATION

#### **SUMMARY:**

In accordance with the request for a marine survey of the "No Name", 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 **September 14, 2011**. 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:	
	Jeff Hahn and Mark Wallace