

# ADRIAN J. VOLNEY, INC.

Marine Surveyor-Yacht Consultant

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# GENERAL CONDITION, INSURANCE RISK AND VALUE SURVEY

# GENERAL CONDITION, INSURANCE RISK AND VALUE SURVEY

of the vessel

# "Sweetie"

а

# 2019

**Marlow 66 Explorer CB** 

## CONDUCTED BY

Adrian J. Volney Marine Surveyor

Adrian J. Volney Inc.

## PREPARED EXCLUSIVELY FOR:

**Client Name** 

March 14, 2024



## **REPORT OF SURVEY** Adrian J. Volney, Inc.

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#### March 14, 2024 File: 2478007

**General Condition and Value Survey** 

To: Client Name Address City, ST Zip Mobile Phone: Email: (###) ###-#### client@email.com

#### I. GENERAL

Name of Vessel: Hull Number:	"Sweetie" ################
Documentation No:	###### [Last Doc No]
Registration No:	[# #####   Exp: 2/28/2026]
Туре:	66 Explorer CB
Survey Conducted At:	Marlow Marine Sales and Service
Designer:	Marlow Design Team
Builder:	Marlow Explorer Yachts, ROC
Model Year:	<u>2019</u>
	: 64'5" Beam: 19'6" Draft: 4'10" dry
<b>Approx. weight:</b> 84,000	ibs. dry

#### Estimated Fair Market Value: (Approximately \$#,###,###.00)

Market value based on vessel's structurally and mechanically good condition, <u>considered very clean</u>, fixed extra cruising gear on board, top-of-the-line electronics as seen and with all major recommendations complied with as per hull survey and independent mechanical reports.

**Replacement Value:** (Approximately \$#,###,###.00)

**Vessel to be used for:** Private and Pleasure **Navigation Limits:** Inland, Coastal, Offshore Islands, Island Passage Capabilities (*Note:* <u>See Insurance Policy</u>)

#### II. HULL

#### **Topsides:**

Molded fiberglass with sandwich core construction and paint finish. [Petro Blue] Awlgrip.

[Vinylester resin, closed cell foam and vacuum bagged] **Condition:** Sound and clean where inspected.



**Decks & Superstructure:** Molded fiberglass with sandwich core construction and paint finish. [Vinylester resin, closed cell foam and vacuum bagged] Teak decks with teak runner at bow. **Condition**: Sound to the hammer where sounded.



#### **Hull Bottom:**

Molded fiberglass with sandwich core construction and antifouling bottom paint applied. [Vinylester resin, Kevlar, closed cell foam and vacuum bagged] <u>Modified Vee with propeller pockets over twin strut keels.</u> **Condition:** Clean and sound to the hammer where sounded.



Frames & Fastenings: Partial bulkheads and partitions with fiberglass bondings.

#### Interior:

Teak and holly soles, composite bulkheads, maple and satin teak trim and panels, vinyl overheads and silestone counters.

**Comments:** Moisture meter readings tested normal or within acceptable limits where applied to overheads and side panels at random.

((See Recommendations))



Hull Number:

See hull number photo and rubbing on page ......28.....

#### III. FITTINGS & EQUIPMENT

Canvas Covers:	Bench and chair covers at upper bridge, foldout awning
	at aft bridge, and dinghy cover as seen.

Deck Hardware: Stainless steel.

Steering Gear: Hydraulic. <u>Top up master cylinder.</u> (Proven functional)



**Ground Tackle:** 

**Anchor Windlass:** 

(a) 27kg plow type at port bow with chain.(b) 80kg (176 lb) Ultra Fisherman plow with chain.



Two (2) Lewmar V-6 (24) Volt DC vertical type. (Proven functional)



Compass:	Ritchie Powerdamp Plus. (Proven functional)	
Horn:	Electric and air type. (Proven functional)	
Anchor & Running Lights:	24 Volt DC. (Proven functional)	
Life Jackets:	Eight (8) adult type II and Coast Guard (CG) approved.	
Life Rings:	One (1) ring type and CG approved. Four (4) float cushion and CG approved.	
	See Suggestions	
Distress Flares:	CG approved day and night type hand held and V-pistol.	

Distress Flares:CG approved day and night type hand held and V-pistol.Up-to-date until 11/2024 and 4/2025.See Suggestions

 Marine Toilets:
 Six (6) total toilets. (Five (5) Vacu Flush with 24 Volt DC power)

 ((See Recommendations))



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#### Air Conditioning System:

Two (2) Dometic chilled water systems. (Proven functional)

#### Infrared Heat Gun Test Performed as follows:

# Tested all outlets on cool cycle at cabins and throughout vessel at random. All outlets proven between 59.9°F - 70°F

<u>Have heat tested at this time.</u> Clean or replace dust filters.

#### Extra Gear:

- # Enclosed command bridge with day head.
- # Digital safe.
- # Underwater lights.
- # Wireless yacht controller.
- # Hydraulic swim platform.
- # Hydraulic transom door.
- # Extended boat deck hard top.
- # Side Power bow and stern thrusters.
- # Naiad stabilizers with controls.
- # Dometic Sea Exchange 1200 GPD water maker. [Have fully proven before new owner take over]
- # Upgraded crew quarters.
- # Port and starboard bow and stern cable masters.
- # Ocean air privacy shades.
- # Sat TV system.
- # Dinghy with thirty (30) HP outboard.
- # Twin 21.5 kW auxiliary generators.
- # Twin Isoblast shore power conditioners.
- # Two (2) bow and two (2) aft 50 amp shore power inlets and cable masters.
- # Dual Sea Chests cross-connected with clean-outs.
- # Oil change system.
- # Outback 4000 inverter charger.

See Equipment List Section

#### **IV. GALLEY**

Location:

Starboard side up and forward of main salon.



Type of Stove:

Five (5) burner electric with oven. (Proven functional)



#### **Refrigeration**:

Sub-Zero large open door refrigerator. U-Line 2115 refrigerator / ice maker at bridge. Two (2) Sub-Zero drawer freezer at aft galley. Two (2) Sub-Zero drawer freezer at forward galley. (All Proven functional)



Hot Water:

Approximately thirty (30) gallon 240 Volt electric. (Proven with power) [See Miscellaneous Notes]



#### V. MACHINERY

Main Engine Location:	Under main salon sole.	
Number & Type:	Twin diesel at 1,136 HP at 2,300 rpms. Comment: Bare Idle - 2415	
Make:	Caterpillar.	
Model No:	Port: C-18 Starboard: C-18	
Serial No:	Port: ######## Starboard: ########	
<b>Reduction Gear:</b>	ZF	
Ratio:	2 • 517	
Model Nos:	ZF-550-1A	
Serial Nos:	Port: ######## Starboard: ########	
Engine Condition:	Appears clean and well maintained. Comment: Last serviced 10/9/2023.	
	See Suggestions	

#### See Mechanical Report performed by:

Independent Marine Mechanic through Caterpillar (Ring Power) of Tampa, FL.

No certified marine mechanic was on board vessel at time of this survey; however, Adrian J. Volney, Hull Surveyor has supplied a brief assessment, which should **not** be considered an engine survey for which <u>a qualified professional mechanic</u> <u>should be hired.</u>

Special Note: <u>To positively identify overall engine condition, both gas and diesel</u> <u>should be surveyed professionally by a marine mechanic</u>. This is an owner's decision <u>engines</u> only. What was observed at this inspection does not qualify as an engine survey and makes no findings concerning the engine. Hull Surveyor, Adrian J. Volney and Adrian J. Volney, Inc. will not be responsible for not bringing attention to the condition of the engine or any future problems or malfunctions that may appear after the date of the survey.

Engine Bed:	Stainless steel and covered to fiberglass stringers.	
Engine Cooling System:	Fresh water.	
Exhaust Line:	Wrapped stainless steel to flex hose to molded fiberglass and raw water cooled.	
Exhaust Silencer:	Molded fiberglass.	
Engine Generator:	Alternator and (24) Volt DC each. (Proven functional)	
Blowers:	Four (4) high volume type.	
Fuel Filters:	Dual 1000 Racor (Parker) each engine and dual 500 for each auxiliary generator.	
Controls:	Electronic.	
Shaft Logs: Stuffing Box:	Boxed fiberglass and flex hose. Dripless type and raw water cooled. ((See Recommendations))	
Propeller:	Nibral five (5) bladed bronze right and left hand with 36" diameter. <u>Tested within limits of acceptability.</u>	
Propeller Shafts:	Stainless steel and three inch (3") diameter. <b>Comment</b> : Both port and starboard observed hard to move in their bearings when turned. [Suggest testing when vessel is resting on keels and chocked at bow. If still hard, check alignment]	
Struts:	Twin strut keels.	
Zincs:	27 total observed throughout hull bottom metal work. <b>Condition</b> : All in good to acceptable condition.	
Bearing to Struts:	Cutless rubber. <b>Condition</b> : Moderate wear; however acceptable.	
Rudders:	Twin spade type and stainless steel. <b>Condition</b> : Good where inspection possible. <b>Comment</b> : No internal leakage seen at seals.	

Bilge Pumps:	Six (6) 24 V (Proven fund	olt DC and automatic. ctional)
Audible High Water Bilge Alarm:	Tested with <u>((See Recor</u>	power. <u>mmendations))</u>
Sea Valves:	90° type. <u>((See Reco</u> r	mmendations))
Engine Hours:		2,301.6
Auxiliary Generator	Starboard:	2,295.3
Engine Hours:	Port:	2,526.9
	Starboard:	2,373.4

#### See Trial Run Data Performed by:

Adrian J. Volney, Hull Surveyor on <u>3/14/2024</u>. An independent sea trial was performed with a mechanical inspector on board from CAT (Ring Power) of Tampa, FL on the day prior to this survey, <u>3/13/2024.</u>

#### VI. ELECTRICAL

Battery Charger:	<ul> <li>(A) 24 Volt Victory Energy 180 – 265VAF-45-65HZ</li> <li>(Three (3) outputs)</li> <li>(B) 12 Volt 40 amp charger</li> <li>(Proven functional)</li> </ul>	
Auxiliary Generator:	#1 Onan Diesel #2 Onan Diesel	
Location:	Mounted at forward engine room to port and starboard.	
Model No:		MDKDR – 1626245 MDKDR – 8116A
Serial No:	Port: Starboard:	########## ###########

Kilowatts:	#1 21.5 #2 21.5
Voltage:	120/240
No. of Cylinders: RPM:	Four (4) each. 1800
Cooling:	Fresh water.
Exhaust Line:	Flex hose and raw water cooled.
Storage Batteries:	Six (6) AGM under crew bed. Six (6) DC 160 at aft lazarette. Four (4) AGM 4-D type at forward bow. See Suggestions
Lighting:	(12/24) Volt DC and 110/240 AC shore and auxiliary. (Proven functional)
Battery Installation:	In secured and covered boxes at aft lazarette at crew quarters and above forward bilge.
Wiring:	Thermo plastic and stranded copper wire. <b>Condition</b> : Appears good where inspection possible.
Circuit Breakers: Ground:	12/24 Volt DC and 110/240 AC. Negative.

#### Important Note:

<u>Identifying the condition of electronic equipment requires an inspection</u> <u>by qualified electronics personnel.</u> This is the responsibility of the owner only. As your hull surveyor, I encourage you to have all of your electronics professionally inspected and proven in good functional order. Your hull surveyor, basically starts or fires up all units on board where possible and may only verify power and basic function to same. Electronic interfacing of one component, to or with the other, is neither carried out, nor is a computer function or evaluation performed. All electronic functions, (including but not limited to) satellite navigation, telephone and TV operation, must be proven by qualified personnel. <u>Hull surveyor will not</u> <u>be held responsible for any of the above</u> and can recommend qualified companies or individuals if needed.

## AUXILIARY GENERATOR ELECTRICAL DIAGNOSTIC INSPECTION & RECORDINGS

<u>PORT</u>			
# Volts under 1/2 Load:	122.9	# Cycles under ½ Load: Normal is 60.	60.00
# Volts under ¾ Load:	121.56	# Cycles under ¾ Load:	59.95
# Amps under ¾ Load (L1):	26.9	# Amps under ¾ Load A/C	37.6 A/C
<ul><li># Temperature at Engine:</li><li># Temperature at Oil Pan:</li><li># Temperature at Exhaust:</li><li># Oil PSI:</li></ul>	See Engine	eter e Inspection Report e Inspection Report prmal at 50 PSI	
# Rpm's under load:	1800 rated.		
# Polarities:	Tested norr	<u>mal when using a three (3) wire outlet an</u>	alyzer.
<u>STARBOARD</u> # Volts under ½ Load:	121.56	# Cycles under ½ Load: <b>Normal is 60.</b>	60.00
# Volts under ¾ Load:	120.99	# Cycles under ¾ Load:	59.75
# Amps under <sup>3</sup> / <sub>4</sub> Load (1):	27.7 (L1)	# Amps under <sup>3</sup> / <sub>4</sub> Load (A/C):	37.4 (A/C)
<ul><li># Temperature at Engine:</li><li># Temperature at Oil Pan:</li><li># Temperature at Exhaust:</li><li># Oil PSI:</li></ul>	See Engine	e Inspection Report e Inspection Report ormal 49 PSI at meter	
# Rpm's under load:	1800 rated.		
# Polarities:	Tested norr	<u>mal when using a three (3) wire outlet an</u>	<u>alyzer.</u>

For detailed information on these engines, see mechanical survey performed by Independent Marine Mechanic through CAT (Ring Power) of Tampa, FL.

### Main Engine Meter Recordings

#### Sea Water Temperature: 75°F at surface

# Port: Rpm cruise meter:	2046	Stbd: Rpm cruise meter:	2046	
# Port: Meter full load:	2300	Stbd: Meter full load:	2331	
# Port: Oil PSI:	65-68	Stbd: Oil PSI:	65-70	
# Port: Temp.at meter:	183-192°F	Stbd: Temp.at meter:	189-194°F	
# Port: Volts:	27.4 - 28	Stbd: Volts:	27.4 - 28	
<ul><li># Port: Temp.at oil pan:</li><li># Port: Temp.at exhaust:</li><li># Port: Temp.at trans:</li></ul>	See Engine Report See Engine Report See Engine Report	Stbd: Temp.at oil pan: Stbd: Temp.at exhaust: Stbd: Temp.at trans:	See Engine Report See Engine Report See Engine Report	
Gps Readings while underway:				
<b>Gps</b> @ 1800 Rpm speed - 15.3 Knots				

Gps	W	1000 Kpm speed -	15.3 KHOIS
Gps	@	1880 Rpm speed -	16.6 Knots
Gps	@	2046 Rpm speed -	20.3 Knots
Gps	@	2300 Rpm Full Load -	23.4 Knots

For detailed information on these engines, see mechanical survey performed by Independent Marine Mechanic through CAT (Ring Power) of Tampa, FL.

#### **VII. FIRE FIGHTING EQUIPMENT**

Portable Extinguisher:	Numerous "Buckeye" and "Kidde" ABC type dry chemical units with various expiration tags. (10/2022) ((See Recommendations))
Built-in System:	"Fire-Boy" clean agent.
Date of Inspection:	No recent. Last tag 5/2021. ((See Recommendations))

*Note:* Gas & Diesel Engine spaces with fixed fire extinguishers. <u>NFPA/ABYC.</u>

A placard shall be affixed at each helm location and shall provide the following Information: "If fixed fire extinguishing system discharges, shut down engines, generator and blowers." A remote discharge indicator shall be installed at each helm location. VIII. TANKS

Fuel:	Diesel.
No. & Capacity:	Single (1) and approximately 3,000 gallons
Shape:	Rectangular and shaped with hull.
Materials:	Molded fiberglass.
Location:	Across the beam at forward engine room. <b>Condition:</b> Appears in <u>good</u> condition where inspection possible; however, is not full and condition of upper seams or fittings above present fuel lines as well as, back side and under tank cannot be guaranteed. Have tank topped up and thoroughly inspected at this time.
Water Capacity:	Single (1) and approximately 500 gallons
Location:	Under MSR sole and under bed.
Material:	Molded fiberglass. <b>Condition</b> : Appears good where inspection possible. <u>Have water tested.</u>
Holding Tank:	Black water located center line under main state room sole forward and approximately

**Note:** To positively identify overall tank condition, whether it be fuel, water, or holding tanks, one must pressure test according to the manufacturer's specifications. This is an owner's decision only. From what was observed at this inspection, all tanks appeared in good condition unless otherwise noted in this report. No fuel oil residue could be observed in bilges at this inspection. Suggest owners and captains determine the actual usable capacity of each tank.

#### IX. COMMENTS

This is to certify that Adrian Volney, the undersigned, at the request of <u>Client Name</u> and for the account of Underwriters and Financial Institutions concerned proceeded on <u>3/14/2024</u> to <u>Marlow Marine Yacht Sales & Service at 4204 13th Street Court West, Snead</u> <u>Island, FL</u> and there did survey the vessel <u>afloat</u> and <u>up on dry dock</u> for the purpose of ascertaining particulars and conditions of said vessel "<u>Sweetie</u>" a <u>Marlow 66' Explorer CB</u> of model year <u>2019</u>.

#### On examination found as follows:

As far as may be ascertained from a general overall examination of said vessel while <u>hauled out</u>, <u>afloat</u>, and <u>on a trial run</u>, without making removals or opening up parts normally concealed, it is the opinion of the surveyor that the hull, machinery, and equipment are in <u>apparent good</u> condition, over and above recommendations, at this inspection.



#### X. RISK STATUS

This vessel appears in <u>good condition</u> for age and type reflecting <u>apparent</u> <u>good care</u> and maintenance by its present owner(s). Vessel meets CG, NFPA, and ABYC standards if the recorded recommendations are complied with as marked with an asterisk (\*) in the body of this report.

#### XI. SURVEYOR'S NOTE

# In my opinion this vessel appears <u>very favorable</u> $\rightarrow$ <u>in compliance with</u> <u>applicable recommendations</u>.

The comments, notes, suggestions, and /or recommendations in this report are made in accordance with accepted marine practice, USCG regulations, ABYC (American Boat & Yacht Council Safety standards for small craft), and /or NFPA (National Fire Protection Association standard 302 inclusive.) <u>The USCG regulations</u> <u>are mandatory</u>. The ABYC & NFPA standards are voluntary, <u>but compliance with</u> <u>these standards may be required by various insurance companies, lending</u> <u>institutions, etc.</u>

#### XII. STATE OF FLORIDA REQUIREMENTS

Effective October 1, 1994, boaters are prohibited from discharging raw sewage into fresh water or within coastal salt water limits. Coastal salt water limits are defined as nine (9) nautical miles on the Gulf Coast and three (3) nautical miles on the Atlantic Coast. On all vessels, MSD's now in use that are capable either of flushing raw sewage directly overboard or of being pumped into a holding tank shall set the valve to direct all waste to the holding tank. The valve directing the sewage shall be secured with a tie, lock, or strap.

NOTE: Have holding tank pumped out, flushed, and disinfected at this time. Prove pump out. [No documentation of recent pump out]

#### XIII. EXTRA EQUIPMENT ON BOARD VESSEL AS SEEN AT TIME OF SURVEY

#### **OPTIONAL EQUIPMENT ON BOARD VESSEL AS WELL AS GENERAL INVENTORY**

#### **MISCELLANEOUS COMMENTS FOLLOW:**

#### **Condition & Value**

Hours: Engine - Port 2,301.6 / Strbd 2,295.3 | Generator - Port 2,526.9 / Strbd 2,373.4

#### TENDER

Engine tilt and trim | Navigation lights | Bilge pump | Battery – (All Proven Functional) Center console and seating in good condition.

Zincs on tender and motor (2&3) in good condition.

#### HULL DECK AND SUPERSTRUCTURE

- # Hull deck and cockpit fiberglass in good condition.
- # Topsides and rub rail in good condition.
- # Deck rails (wood and metal) in good condition.
- # \*Aft deck chrome railing missing lock-down catch. ((See Recommendations)) \*
- # Teak decking along with wood rail trim below all in good condition.
- # Glass windows and seals as well as all hatches and portholes (hinges and latches) in good condition.
- \*Two (2) portholes) port and starboard sides of master suite showing water stains on wood. (See photo). ((See Recommendations)) \*
- # All external bright work in good condition | Minor rust stains on various metal parts.
- # \*Port fuel fill hatch amidships is stuck closed. [Have freed up and serviced]
- # \*Chrome railing around starboard engine is loose. (See photo) [Re-secure at all ends]
- # All flat o-rings on exit doors in good condition.
- # Bottom paint as well as 27 zincs all in good condition.
- # Two (2) large thru-hulls to engine room intakes are clear.
- # Stabilizer fins, as well as propellers and rudders all in good condition.
- # Four (4) underwater lights must be proven. [Daylight prevented a positive inspection]

#### **CABIN APPOINTMENTS**

- # All canvas covers as well as interior and exterior furniture in good condition.
- # All interior wood flooring, doors, and cabinetry in good condition.
- # All headliners, power window shades, mats, and fabrics in good condition.
- # Fire Magic stainless grill in good condition.
- # \*Upper deck slide-out LP gas bottle cradle under gas grill is stuck. [Free up and lubricate slides]
- # \*Door stop magnet on aft door in crew quarters does not align. [Service as needed and prove]

#### FRESH WATER SYSTEM

- # Water pressure (Proven Functional)
- # No odor to potable water.
- # \*Water heater is functional but hot water is slow to reach upper levels.
- # \*All six (6) toilets, showers, and sinks (Proven Functional or with Power) ((See Recommendations)) \*
- # \*Some sinks are slow to drain. [Investigate further]
- # GE Washer / Dryer (Proven Functional)
- # <u>Pumps</u>: Macerator | Shower sump | Six (6) bilge (All Proven Functional)

#### **ELECTRICAL SYSTEMS**

- # Air conditioners (Proven Functional) [Prove heat]
- # U-Line refrigerator 49.5°F / Freezer 33.4°F (Both Proven Functional)
- # \*Helm freezer is clogged with ice. [Have serviced] ((See Recommendations)) \*
- # Sub-Zero refrigerator 41.0°F / Freezer 36.0°F (Both Proven Functional)
- # U-Line double freezer 4.5°F & 1.0°F (Proven Functional)
- # U-Line in crew quarters refrigerator 50°F / freezer 14°F (Both Proven Functional)
- # U-Line wine cooler 35.1°F | U-Line freezer 28.8°F | U-Line ice maker (Saw ice)
   21.1°F (All Proven Functional)
- *# \*Kenmore freezer in crew's quarters requires washing and disinfecting.*

- # Dacor five (5) burner electric stove and oven (Proven with Power)
- # Sharp microwave (Proven Functional)
- # Fisher Paykel dish washer (Proven with Power)
- # Cuisinart coffee maker in good condition.
- # \*Garbage disposal requires service.
- # Furman power conditioner (Proven with Power)
- # Power Sure Shade behind helm station (Proven Functional) (<u>loose pipe end</u> –
   <u>See photo</u>) [Repair]
- # All power window shades (Proven Functional)
- # Power bed lift in forward stateroom (Proven Functional)
- \*Power engine room door (Proven Functional) [Check for saltwater leaks from outside causing rust and corrosion on inside mechanical parts] ((See Recommendations)) \*
- # Power TV lift in salon (Proven Functional)
- # <u>Samsung TVs</u>: Two (2) 32" and one (1) 21" (All Proven with Power and no signal)
   | One (1) 42" (Proven with Power) | One (1) 26" (Check batteries in remote and test)
- # Tracvision (Proven with Power)
- # Two (2) Sonos routers | Two (2) Luxul AMS 4424P Ethernet switches (All Proven with Power)
- # HP Envy 4520 printer (Proven with Power)
- # Interior and exterior lighting (Proven Functional) [Check dimmers]
- # Engine room lights and blowers (Proven Functional)
- \*Power hydraulic swim platform leaking oil at compressor in double berth closet. [Crew quarters] (See photo) ((See Recommendations)) \*

#### **GROUND TACKLE**

- # Two (2) plough type anchors with chain and rode at bow.
- # Both electric windlasses (Proven Functional)

#### ELECTRONICS AND NAVIGATION EQUIPMENT

- # Ritchie Powerdamp Plus compass in good condition | Compass light (Proven Functional)
- # Garmin: One (1) Depth | Two (2) Nav Screens | One (1) Autopilot (All Proven Functional)
- # Two (2) CAT engine data screens (Proven Functional)
- # Yacht Controller (Proven Functional)
- # Fore and aft thrusters | Trim tabs | Roll Stabilizers (All Proven Functional)
- # FLIR | Radar (All Proven functional)
- # ICOM IC-M506 VHF radio | Both engine room cameras (All Proven Functional)
- \*ACR spotlight bulbs (one (1) of two (2) bulbs) and motion is functional.
   [Replace non-functional bulbs]
- # Helm red light | Three (3) windshield wipers | Horn (All Proven Functional)

#### SAFETY EQUIPMENT

- # Engine ignition alarms (Proven Functional)
- # \*Majority of audible high-water alarms (Proven Functional) ((See Recommendations)) \*
- # \*Fireboy engine shutdown system (Proven with Power) ((See Recommendations))
- \*Check and replace all carbon monoxide alarms <u>where tested non-functional.</u>
   (<u>(See Recommendations)</u>) \*
- \*Install smoke alarms throughout vessel at this time. <u>Suggest a minimum of three (3)</u>.
   <u>((See Recommendations))</u> \*
- # LP gas detection system (Proven with Power)
- \*Six (6) "Buckeye" and "Kidde" ABC type fire extinguishers full, mounted Tag 5/2021.
   <u>((See Recommendations))</u> \*
- # Eight (8) adult type II life jackets | One (1) throwable life ring.
- # One (1) small Revere life raft inspection date 12/2012. [Have serviced and updated]
- # <u>Flares</u>: Four (4) red aerial Exp. 4/2025 | Four (4) red hand Exp. 11/2024
   One (1) smoke Exp. 4/2022 | Five (5) red hand Exp. 3/2022 | One (1) launcher gun with six (6) red aerials Exp. 3/2022. [Have outdated flares updated]
- # Missing EPIRB. See Suggestions
- # Ship's bell in good condition.

#### XIV. RECOMMENDATIONS TO BE COMPLIED WITH AT THIS NEW OWNERSHIP

<u>Determination of the value and condition of this vessel is based upon the owner's</u> <u>compliance to all of the recommendations sited here.</u> Furthermore, no guarantees are made by Adrian J. Volney, Hull Surveyor, concerning the evaluations and repairs done by other professionals on this vessel. This includes, but is not limited to, engine surveys, electronics evaluation, and tank condition. Obtaining these evaluations by qualified personnel is the owner's responsibility and the results of their findings is solely their responsibility.

#### Coast Guard

\* Document "A Waste Management Plan" on board vessel with new owner take over. See information sheet accompanying survey report.

#### **Electrical/Electronics**

<u>If not performed at this time, have an electronics evaluation done by a person</u> <u>qualified to do so</u>. All of the recommendations made should be complied with. Adrian J. Volney, Hull Surveyor, cannot be held responsible for the quality of said findings nor the results of any work done.

\* Transom audible high water alarm tested non-functional at lower bilge. Investigate and put back into working order.

#### **Mechanical**

<u>If not performed at this time, have a mechanical survey done by an independent</u> <u>marine mechanic.</u> All of the mechanics recommendations should be complied with. Adrian J. Volney, Hull Surveyor, cannot be held responsible for the quality of said mechanic's findings nor the results of any work done.

\* Have all recommendations complied with as per independent mechanical inspection through: Caterpillar Diesel Services of Tampa, FL.

\* Toilet at master state room to port side tested non-functional. Service light is on. Pump to vacuum system keeps running once system turned on. Investigate and service accordingly.

\* Missing toggle bolt lock to port side transom door hand rail. Could be dangerous to crew or personnel while at sea.

\* Heavily rusting hose clamps to discharge bilge pump at transom. See at hose elbow connection etc. <u>Replace all rusting clamps at this time.</u>

\* Loose strut to exhaust riser to starboard engine. See outboard of engine aft. Have properly secured.

\* Slight diesel leak to lower on/off valve to diesel tank sight gauge. See at forward engine room bulkhead. <u>Have leak cured.</u>

\* Port engine intake raw water pump or, connection leaking heavily. Clamps to hose now rusting. Numerous areas surrounding pump now showing rust and corrosion. <u>Cure leak as needed.</u>

\* Light but definite seal leak noticed while underway to starboard shaft stuffing box. Adjust accordingly or replace seal as and if needed.

\* Noticeable leak to hydraulic master cylinder to swim platform pump and system. Cure leak, **service as needed and fully prove swim platform.** 

#### <u>Safety</u>

\* Have at least three (3) or more smoke detectors installed on vessel that is listed to UL217 (as per NFPA update for vessels 26' or larger with sleeping accommodations). Install and maintain according to manufacturer's instructions.

\* Have all portable and fixed fire extinguishers serviced and tagged for <u>2024-2025</u> to meet NFPA and ABYC standards. <u>This is a yearly procedure</u>.

#### Shipwright/Other

\* Noticeable rusting observed to many components directly around transom bilge and aft lazarette area. No obvious leaks were seen at this inspection or while underway. It is possible that on past cruising, water entered through transom door. <u>See advice through Marlow service and cure leaks.</u>

#### XV. MISCELLANEOUS OBSERVATIONS

Recommendations not considered life threatening or severe enough to warrant immediate attention but should be addressed at new owner's convenience.

#### **Mechanical**

# Ice maker / refrigerator upper bridge is frozen in. Adjustable knob is broken off. Have this unit serviced accordingly.

# Exercise all sea valves under water line at this time. <u>A few discovered hard to</u> move by bare hand.

# Rusting internal backing plate and screws to diesel fill latch port side. Have cleaned up and replace screws as needed.

#### # Clamp Maintenance

- Replace forward clamps to dripless shaft stuffing box port side.
- Noticeable rusting to starboard clamps especially aft as well as cooling hose clamps to smaller hoses. [Replace all clamps as needed]

#### # Rail Maintenance

- Loose hand safety rail to starboard engine at outboard lower foot.
- Loose or disconnected inboard rail at elbow. [Have the above properly re-secured]

# Light oil weep at NAIAD master cylinder located at forward engine room to port. Investigate and service as needed. (Note: Stabilizers functioned well at sea trial)

#### **Shipwright/Other**

# Lower drawer to forward state room bed pulls out while underway. Investigate and cure.

#### # Open Port Maintenance

Evidence of open port leaks seen as follows:

- Port side master state room center window. See at bottom side aft.
- At starboard side master state room at forward open port lower aft end.
- Check seals to these open ports and replace if needed.

#### XVI. SUGGESTIONS TO ENHANCE, INCREASE SAFETY AND VESSEL EFFICIENCY

#### **Electrical/Electronics**

# Have all engine and house batteries independently load tested for overall condition and life expectancy. Replace as and where needed. Dates not seen.

#### **Mechanical**

# Have engines, gears, and auxiliary generators serviced at this time. Log all work from here on. [See mechanical report]

# Have outboard of port engine repainted where rusting and corrosion now setting in through water leaks.

#### Safety

# Have put aboard vessel, spare anchor complete with required chain and nylon rode.

# Have put aboard vessel at least one CG approved life sling for if and whenever needed over and above float cushions and life ring.

# Have put aboard a good quality EPIRB for all offshore cruising.

#### Shipwright/Other

# Have all rusting areas at aft lazarette repainted after necessary cleaning and preparation.

References on following page.....

#### REFERENCES

The following list covers most of the important governing and testing bodies in boating relating to standards and guidelines.

ABS	American Bureau of Shipping 45 Eisenhower Drive, Paramus, NJ 07653-0910 1-201-368-9100
ABYC	American Boat and Yacht Council, Inc. 3069 Solomon's Island Road, Edgewater, MD 21037 1-410-956-1050
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19130
NFPA	National Fire Protection Association 470 Atlantic Avenue Boston, MA 02210
SAE	Society of Automotive Engines, Inc. 400 Commonwealth Drive Warrendale, PA 15096
UL	Underwriters Laboratories, Inc. 207 East Ohio Street Chicago, IL 60611
USCG	United States Coast Guard Department of Transportation Commander Fifth Coast Guard District Federal Building, 431 Crawford Street Portsmouth, VA 23705
USSA	United States Sailing Association Box 209 Newport, Rhode Island 02840-0209 1-401-849-5200

Conditions of Acceptance on following page.....

#### CONDITIONS OF ACCEPTANCE

This report is submitted in good faith by Adrian J. Volney, Inc. and constitutes a description of the condition of the vessel as observed by the surveyor at the time of the inspection.

Unless otherwise mentioned, a visual inspection only has been performed without removal of panels, furniture or fixed equipment as described in this report.

All conclusions and opinions concerning this vessel that are set forth in this report were prepared by the surveyor whose signature appears on this report.

It is to be understood that the surveyor and Adrian J. Volney, Inc. assume no responsibility for any defects not reported and shall not be held liable for errors and omissions nor for any defects which may emerge at a later date.

No changes to any part or content of this report shall be made by anyone other than the surveyor, and the surveyor shall have no responsibility for any such unauthorized changes.

This report is for the exclusive use of the person or organization on whose behalf the report was prepared. This person or organization may copy and distribute the report as needed to conclude a purchase, settle a claim, obtain repair estimates, financing and insurance. The rights to the use of this report may not be sold or transferred to a third party without written permission by the surveyor. Adrian J. Volney, Inc., reserves all rights to this report and its contents and the distribution of same contents.

This report does not warrant (expressly or implicitly), or guarantee the condition of the above vessel, or its parts. Any liability shall not exceed the amount of the cost of the appraisal itself paid by the customer. You and your assigns hereby exempt and release the undersigned surveyor and Adrian J. Volney, Inc. from any and all liabilities, claims, demands, actions or causes of action whatsoever arising out of any damage, loss or injury to the vessel or to any person.

This report is not to be used for any purpose unless payment in full has been received by Adrian J. Volney, Inc. The use of and payment for this report implies an acceptance of all the above mentioned conditions.

#### DISCLAIMER

Surveyor cannot be held responsible for damage or defects (hidden) where the eye cannot see through acts of God in the past; for example: hurricanes, tornadic activity such as water spouts, excessive wind damage, hail, and lightning strikes, etc.

**INSERT IMAGE OF HULL RUBBING** 

**INSERT PHOTO OF HULL NUMBER** 

#### XVIII. REPORT CONDITIONS AND WAIVER

This report is issued subject to the condition that it is understood and agreed that neither this office nor any surveyor or any employee thereof, is under any circumstances whatsoever to be held responsible in any way for any error in judgment, default or negligence, nor for any inaccuracy, omission, misrepresentation or misstatement in this report, and that the use of this report shall be construed to be an acceptance of the foregoing conditions.

The market and replacement values cited in this report is based on the average selling price of a vessel of this type and size, according to material at hand, considering all extras and accessories fairly depreciated. These values are intended for insurance and financial evaluation and are not intended to influence the purchaser or non-purchaser of a vessel.

This survey is based on the facts presented and discovered and based on the undersigned's opinion, with no warranty either specified or implied. This survey is issued without prejudice to the rights of whom it may concern.

Safe and happy boating always,

Aderian g. vorneg

Date: March 14, 2024

Adrian J. Volney, President Adrian J. Volney, Inc. Active Memberships: ABYC, NFPA, SNAME, BOAT US, TBM

(The following pages contain useful information for all boat owners and are not a part of the survey, but are included as a service to our valued customers)

# **Definition of BUC CONDITION**

#### BUC CONDITION defines a boat that is ready for sale requiring no additional work.

We are not referring to the average boat that needs work. We specifically refer to the condition to which dealers and private individuals usually prepare their vessel in order to culminate the sale at what they determine to be the best market price-to-reconditioning ratio.

## A Boat In BUC CONDITION has:

A clean bilge and clean bottom, free of dry rot, fittings, shafts, struts, wheels, rudders and other hardware in good condition. Deck, superstructure joiner work and hull are tight and free of leaks. Paint, varnish and gel coats are clean and smooth, free of wrinkles, cracks, gouges, not requiring excessive waxing or buffing. All electronic and mechanical accessories are in good operating order including tanks and lines, its head, ventilation, wiring, lighting and flotation meet the local or federal standards that could influence its selling price.

## An Engine or Motor In BUC CONDITION is:

In good working condition with no oil or water leaks and meets standard compression test. Starter, coils, magneto, spark plugs, and wiring must be free and clean of corrosion. Shafts, bearings and other moving parts are to be free and true with no excessive vibration and show evidence of lubrication. Propellers are to be free of nicks and have true pitch. Water pump, gas lines, fittings, hoses, strainers, gaskets are tight and free of leaks and jet and outboard fittings functioning properly. Paint should be free of scorching or blisters due to overheating. Carburetor and other peripherals should be properly tuned and functioning in good order.

**GFCIs: Protect Yourself from Electric Shock** 

The shock hazard that results from faulty 110 V AC electrical equipment is especially dangerous around water. Wet shoes or bare feet, perspiration, wet decks, and water in the bilge are the worst possible conditions for coming in contact with electricity. Add to this worn or abused electrical drills /sanders/buffers or damaged power cords and the result could be lethal. Any piece of electrically powered equipment, portable or installed, can develop an internal fault if a wire comes in contact with the cabinet or case, making It electrically charged.

An especially dangerous setting that has claimed lives in the past is working with a power tool from a float or dinghy or grabbing a wet dock line with a power tool or cord in the other hand. Plugging into a GFCI virtually eliminates the shock hazard. To go one step further in case you have to plug in where there is no GFCI available, replace old power tools with modern double insulated" models that eliminate risk of fatal shock from the tools. Better yet, try cordless tools. They are safest of all, convenient to use, and eliminate the charged extension cord which seems to have a Labrador Retriever's affinity for getting overboard.

The value of a GFCI is that it protects against shock in a way that a standard breaker (or fuse) cannot. A GFCI senses the current flow in both the hot and neutral wires. It compares the flow in the wires and detects an imbalance such as your body accidentally providing an electrical path. When it detects an imbalance of 5mA (mill amperes), it opens the circuit (turns it off) before any harm is done.

Boating safety standards call for GFCIs in certain locations on boats. The American Boat and Yacht Council (ABYC) standard has called for the use of GFCIs in boats since 1977. So does the National Fire Protection Association (NFPA) standard which states:

"Ground-fault circuit-interrupters (GFCIs) may be used on any single-phase AC circuit and shall be used for all receptacles in the head, galley, and machinery spaces and on weather decks." In other words, any place where a person is likely to contact water and electrical equipment simultaneously is a good place for GFCI protection. ("Shall" in safety standards language means mandatory to comply with the standard.)

A circuit breaker that incorporates a GFCI is sometimes installed in an electrical panel board in place of a standard (non-GFCI) type of breaker. Or a GFCI can be added to a circuit In addition to the already installed breaker. A GFCI-type receptacle can be installed in the bulkhead replacing the old receptacles innards. Each receptacle on that same circuit will be protected by the one GFCI. They are inexpensive, as electrical equipment goes, with prices ranging from \$23.95 for a receptacle mount type.

If they are so good, why not use them everywhere in a boat? The gadgets are so sensitive that they are intolerant of worn wiring and damp conditions typically found in boats. Very minor current leaks, that may not present a serious shock threat, can trip a GFCI-a nuisance that most skippers don't want to contend with. Minor leaks, however, should be located and corrected. With 120v/6OHz current, the level necessary to prevent a male adult from releasing his grip (let-go current) is 8-9 mA (A GFCI trips at 5 mA). It only takes about 6 mA for an adult female and less for children. For this reason, the receptacle mount and portable type are more practical for boats. The handiest type for working around a boat is a portable, plug-In model that you can use in any receptacle. That way, you know the tool or extension cord being used is protected. It senses only what you plug in, not the less-than-perfect boat wiring. It is available at BOAT/U.S. Marine Centers and through the Boating Equipment Catalog.

Insist on GFCI's to be standard equipment in the head, galley, machinery spaces, and on deck in a new boat and consider adding them on older boats. When BOAT/U.S. underwriters pointed out to a manufacturer that their boats were lacking GFCI breakers, their engineers reflected and said thanks for the reminder. "It is a good idea" they said, that they had simply overlooked

Through the kind cooperation of BOAT/U.S. Seaworthy Magazine, January, 1992

#### ENFORCED AS OF AUGUST I, 1990

#### A WASTE MANAGEMENT PLAN IS REQUIRED BY THE U.S. COAST GUARD ON ALL SHIPS OVER 40 FEET IN LENGTH\* THAT AT ANYTIME OPERATE OUTSIDE THE TERRITORIAL SEA (3-MILE) LIMIT.

#### \*Length means horizontal distance between the foremost part of a ship's stern to the aftermost part of its stern, excluding fittings and attachments.

#### THE LAW

- Each manned oceangoing ship\* of 40 feet or more in length, that is documented under the laws of the United States or numbered by a state and that is engaged in commerce or is equipped with a galley and berthing is required to carry a Waste Management Plan.
- 2. The master or person in charge of a ship shall insure that THE SHIP IS NOT OPERATED unless a Waste Management Plan is on board the ship and that each person handling garbage follows the plan.
- Each Waste Management Plan must be in writing and provide the discharge of garbage by means that meet Annex V of MARPOL 73/78, the Act to Prevent Pollution from Ships.
- 4. Describe procedures for collection, processing, storing, and discharging garbage.
- 5. Designate the person who is in charge of carrying out the plan.

\*Oceangoing ship under Annex V of MARPOL is a ship operated under the authority of the United States or operated at anytime seaward of the outermost boundary of the territorial sea of the United States.

#### ACCEPTABLE WASTE MANAGEMENT PLANS

#### \* PLAN 1

Vessel Name

Person in Charge

#### SOLID WASTE MANAGEMENT PROCEDURES:

ALL the garbage generated on the vessel is put in **a** garbage bag and disposed of in the trash containers at the harbor at the end of each trip (or is given to the tender vessel to take to shore for disposal). All crew members have been oriented to the requirements of the Annex V by the captain and all new crew are specifically shown in the MARPOLV Placard and told to keep all refuse stowed on board. Passenger orientation to the vessel includes being shown the location of the trash receptacles and being informed of refuse discharge laws.

#### \* PLAN 2

Vessel Name \_\_\_\_

Person in Charge

#### SOLID WASTE MANAGEMENT PROCEDURES:

#### If the vessel is outside of 12 miles from shore:

All the garbage with the exception of food materials and paper is put in a garbage bag to be hauled to the dockside trash receptacle at trip's end. Food materials and paper generated in the galley are collected in a bucket (or in a paper bag or cardboard box) and the bucket emptied over the side (or the food-filled bag or box is thrown overboard) by a crew member.

#### If the vessel is within 12 miles of shore returning to shore:

ALL refuse materials are put In a garbage bag and at the end of the trip are hauled up to the dockside trash receptacle.

**CREW EDUCATION:** At the beginning of each session all crew members are reminded of the refuse discharge laws and shown the MARPOL V Placard. Crew is told that it is vessel policy to stow all garbage materials on board except for food and paper when the vessel is outside of 12 miles. The captain informs all new crew and passengers of the rules governing the vessel including refuse laws and refuse handling.

#### IS THERE A DIFFERENCE BETWEEN #2 DIESEL FUEL AND MARINE GRADE DIESEL?

**YES!** #2 fuel oil has low specifications defined by the petroleum industry.

#2 diesel fuel contains certain amounts of water, carbon and gum residues, sulfur, paraffin wax and other impurities which are not removed in the refining process. These factors either atone or combined with Florida's climate can cause substantial problems in the operation of diesel powered yachts.

**WATER** is present in all diesel fuel. In addition to the moisture that remains through the refining and shipping process, additional water accumulates from condensation and improper storage. Moisture causes corrosion, algae growth, clogged filters and ultimately injector nozzle deterioration and complete engine failure.

**SULFUR** content has also increased in #2 diesel fuel through the use of lower grade of crude oil used to produce #2 diesel fuel. The increased sulfur content enhances corrosion which leads to increased engine wear. High sulfur in #2 diesel fuel is evident in the transom soot that appears on the transom of a yacht.

**ALGAE** forms with three elements that are present in #2 diesel fuel. These elements are air, water and a low grade fuel such as #2 diesel. Florida's climate and the low specifications for #2 diesel becomes a "Breeding Ground" in which severe diesel algae growth develops. Once the algae growth begins filters clog and Engine performance becomes affected.

# WHAT IS THE ALTERNATIVE TO #2 DIESEL?

**MARINE GRADE DIESEL FUEL** is the answer to the yacht owners problem. Marine Grade Diesel is defined by the petroleum industry as a high grade filtered fuel with highest specifications known as Marine Gas Oil. Marine Grade Diesel (M.G.O.) is coalesced to remove 100% of any water present and filtered to 2 1/2 microns to remove any contaminate matter, This filtration process allows only the highest grade of fuel to be dispensed. This process guarantees the customer that no water or contaminate matter exists. By eliminating the water content, corrosion, clogged filters and injector nozzle deterioration is minimized.

Marine Grade Diesel (M.G.O.) also contains several additives which meet the higher specifications required. Marine Grade Diesel (M.G.O.) contains a sulfur neutralizer which allows the engine to perform more efficiently and is recognized by reduced transom soot and an overall increase in performance.

Marine Grade Diesel (M.G.O.) also contains a microbioside which prohibits diesel algae spores from growing and developing serious problems inside the fuel tank which leads to clogged fitters and injector problems. The added protection of a microbioside and continued treatment will eliminate the possibility of diesel algae.

Marine Grade Diesel (M.G.O.) achieves a cetane rating of 45 which is several points higher than most #2 fuel oils sold at marinas and fuel oil companies, the 45 rating is recommended by most major marine engine manufacturers to assure the best operational performance from the engine.

Marine Grade Diesel (M.G.O.) meets the highest standards set by petroleum industry through filtration, coalescing, and additives, Marine Grade Diesel offers the boat owner the highest quality fuel available. The difference between #2 fuel oil and Marine Grade Diesel (M.G.O.) can be compared to boating in the desert or boating in Florida's beautiful waterways.

#### THERE IS NO COMPARISON!

Helping the boating public always. -Through the kind cooperation of Longboat Fuel Company of Sarasota, Fuel Specialist

## **Typical Power Consumption of Electrical Loads (12 Volts)**

Anchor light.1.0 ampAnchor windlass.80-300 ampAutopilot.1-30 ampsBilge blower.2.5 ampsBilge pump.5,0 ampsCabin fan.1.0 ampCabin light (Incandescent)1.5-3.5 ampDepthsoundar.0.1.0.5 ampFluorescent light.0.7-1.8 ampSpotlight.10.0 ampsSpotlight.0.1 ampLoran.0.1 amp	Radar Refrigeration (typical) Running lights (port, starboard, and stern) Sat-Nav Spreader lights SSB (receive) (transmit) Strobe light Stereo/tape deck VHF (receive) (transmit) Wind speed Indicator	3.0 amps .0.2-0.8 amp .8.0 amps .1.5-2.0 amps 25-35 amps 0.7 amp .1.0 amp 0.7-1.5 amps 5.0-6.0 amps
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Note: Inverters and microwave ovens are absent Item this list. That's because modern inverters consume mere milliamps of power, while a microwave's energy consumption varies with the size of the unit and the way it is used.

## Daily Power Requirements (12 Volts) Of A Hypothetical Cruising Boat Anchored Off A Bahamian Beach

#### Equipment

#### Rating

6 lights	1.5 amps each
I refrigeration compressor	5 amps
Masthead navigation lights	.1.5 amps
2 tans	.1 amp each
VHF radio, tape deck, etc	2 amps total

Hours of Use	Total Load
(in 24 hours)	(in 24 hours)
2 hours each – 12	18 amp-hours
10 hours	50 amp-hours
8 hours	. 12 amp-hours
5 hours each =10	10 amp-hours
5 hours total	<u>10 amp-hours</u>

#### **TOTAL 100 amp-hours**

#### Notes:

1. Power consumption will vary enormously according to the boat's intended cruising area; refrigeration and tan usage in northern climates will be a fraction of that in the tropics.

2. Large items of occasional and short-term use, such as an electric anchor windlass, can in most instances be ignored, since they have little impact on the overall picture. On the rare occasions where sustained use is required, as in breaking out a deeply embedded anchor, the engine can be run during operation to provide a charging backup.

Through the kind cooperation of Professional Boat Builders Magazine, August/September, 1992

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