Hullabaloo

47’ Sea Ranger

Pilothouse Trawler

Boat name:	Hullabaloo (US flagged)
Make/Model/Year:	C&L Marine/ 47’ Sea Ranger/1986
Home Port:	Anacortes, Washington
USCG registration #:	999965
US Customs (CBP) #:	24050149 (2024 - sticker outside pilot house port side)
Washington Park #:	N/A
Chartered thru:	Anacortes Yacht Charters 2415 T Avenue, Anacortes, Washington 98221 800.233.3004/360.293.4555

Hullabaloo

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Hullabaloo

Operations Manual

Welcome aboard ***Hullabaloo***: This manual contains a condensed operating summary for this vessel and its equipment. It is designed to provide a quick reference and answer frequently asked questions. For more detailed operating and service instructions please refer to the individual manufactures manuals which will be found under the stairs leading to the fly bridge.

It is important that you familiarize yourself with the proper operations of the vessel and equipment prior to your departure. Please do not attempt to operate the vessel or any of the on-board equipment until you are thoroughly familiar with their proper operation.

Do not hesitate to ask any questions pertaining to any aspect of the operation of equipment, navigation, or even the best scenery and fishing holes. Thank you and enjoy your cruising of the islands.

A. VESSEL SPECIFICATIONS

Construction:	Sea Ranger
Length:	47’ (plus Swim step)
Beam:	15’ 2”
Draft:	4’ 4”
Year Built:	1986
Engines:	2 diesel - Lehman 135 HP
Cruising Speed:	8 KTS. (approx) @ 1800 RPM
Fuel Capacity:	710 gallons
Fuel Consumption:	~6 GPH
Total Fresh Water Capacity:	280 Gallons
Holding Tank Capacity:	80 Gallons
Generator:	Northern Light 9 KW Onan
Inverter:	2800 watt
Depth Sounder	Garmin (integrated with plotter)
VHF Radio:	2 – ICOM IC-M602 (lower helm) Standard Horizon Eclispe (upper helm)
Plotter:	Garmin GPS Map1243xsv (lower helm) Garmin GPS Map 4212 (upper helm)
Dinghy:	Bull Frog with 15 HP outboard
Stove and Oven:	Propane
Microwave:	AC shore or Inverter
Refrigerator:	AC shore or Inverter
Ice Maker:	AC shore or Inverter
Heat:	Webasto hydronic diesel heater

B. PRE-CRUISE PREPARATIONS

Prior to starting engine for departure, a pre-voyage inspection of the vessel for sea worthiness, and stowing of all loose items should be made. The “check in / check out” inspection should identify any obvious items of concern; however, the charter skipper must take on full responsibility for checking the equipment on the vessel on a regular basis throughout the cruise.

Before each daily startup of the engine, the crankcase oil, coolant, and levels must be checked. A visual inspection of engine room equipment and bilge, checking for excessive belt wear, leaks, loose fittings, safety guards, etc., should be performed. Pay particular attention that the valves to the sea water supply to the engines are open and sea strainers are clear of debris. Check battery and battery cables for tightness or chafe. Use your nose to smell the engine compartment for any sign of fumes. If fumes are detected, ascertain the source and correct the problem if possible. Run the blower or open hatches to help clear fumes from engine compartment before starting engine.

C. ENGINES

Access to engine room is through the main salon cabin sole and the Captain’s cabin aft bulkhead.

PRIOR TO ENGINE STARTING:

Check the engine oil and engine coolant. These need to be done daily. The same procedure should be followed with the gen set.

Engine Oil:	Delo 400 LE 15W 40
Generator Oil:	Delo 30 W
Transmission	ATF

STARTING THE ENGINES:

- Check to see that gears (black) are in neutral and throttles (red) are retarded.
- Start one engine at a time.
  - Turn on key (low oil pressure alarm will sound).
  - Push starter button (alarm will stop when engine starts).
- Check oil pressure gauges.
  - They should read 30 - 40 pounds.
- Check engine exhausts to be sure water is flowing from exhaust outlets.
- Check voltmeter and AMP meter gauges
- ***Allow engines to warm at idle for 5 - 10 minutes before departure.***

Always have throttle (red) in idle position before shifting.

Pause momentarily at neutral position when shifting from forward to reverse and vice versa.

STOPPING THE ENGINES:

- Push red stop button.
- After engine shuts down turn off the key.

PREPARING TO LEAVE THE DOCK:

After starting engines:

- Prior to disconnecting power cord from dock pedestal
  - In pilothouse turn Off all AC breakers (lower panel) except Inverter switch.
  - Turn DC refrigerator switch off (upper right portion of panel).
  - Victron energy switch - put in center position.
  - AC panel (lower half of panel) - turn Shore switch (large white switch on left side of AC panel below AC voltmeter) to Off position
- At the dock pedestal
  - Turn 30-amp breaker Off
  - Unplug the 30-amp cord and stow onboard
- AC panel – slide plastic cover up and switch the lower large white switch (DC switch) to On position. Note, AC meter will show no power.
- Switch the Victron Energy switch to the right to Inverter.
  - Inverter on - blue light will appear
- AC panel switches - turn to On position - Spare, Microwave and Cabin Lights

SHIFTING GEAR WHILE UNDERWAY:

- ***Always have throttle (red) in idle position before shifting***.
- Hesitate momentarily at neutral position when shifting from forward to reverse and vice versa.
- Once underway stow fenders and ensure dock lines are secured

WARNING: Never shift the transmission without first throttling the engine back, failure to throttle back could result in damage to the transmission.

ENGINE OVERHEATING:

1. Slow down and shut down the engine that has over heated.
2. If coolant reservoir is at proper level, check engine sea strainer found forward on both engines.
3. ***Before removing the top of sea strainer close thru hull valve to the sea strainer.***
4. Slowly unscrew the wing nuts on the top of the sea strainer remove top and pull basket out for better access. Clean debris in the strainer basket.
5. Once the sea strainer is free of debris, replace basket, secure top and tighten down the wing nuts.
6. ***Open thru hull valve to the sea strainer slowly and check for leakage.*** If leakage occurs close thru hull value and repeat step 6 and reopen thru hull valve.
7. After a check of engine compartments and engine oil levels restart engine.
8. Check for exhaust water flow.

Drifting debris is extremely common and some of these are large enough to do major damage to moving boats. Always use extreme caution while underway and be constantly alert for drifting debris and charted and uncharted rocks just below the surface. “Dead Heads”, large water soaked logs floating just below the surface are quite common in this area.

Most accidents occur during times of low visibility. ***Do not travel at night, in the fog or stormy weather.***

ALCOHOL OR DRUGS DO NOT MIX - NEVER DRINK AND DRIVE!!!

D. FUEL, WATER and the HOLDING TANK

Fill caps are clearly stamped/marked:

- Diesel fills (2) are midship on the port and starboard side decks.
- Water fills (2) are also midship aft on port and starboard side decks.
- Waste outlet is on the port side/stern (cockpit area).
- Key for fill caps is located in a settee drawer in the salon

Never fill the water and fuel tanks at the same time!

- Take strict precautions to avoid allowing water or fuel to enter the wrong tank.

DO NOT REMOVE ANY CAP UNTIL YOU ARE READY TO FILL THAT TANK.

Fuel:

- Fuel level is checked by sight tubes on individual tanks port and starboard in the engine room. Open top and bottom sight tube valves to check proper fuel level.
- ALWAYS FILL FUEL TANKS WITH CLEAN DIESEL ONLY.
- To avoid spills and/or overfilling of the fuel tanks, listen carefully to the sound of the fuel entering the tank. There will be a subtle yet noticeable change in the pitch of the sound as the tank is nearing full. Fill the remainder of the tank cautiously because the penalty for discharge of oil into navigable waters is costly.
- Always have oil soaks or rags close by while fueling too immediately and thoroughly clean up any inadvertent spills or overflow.
- After replacing the fill cap clean any spilled fuel from the deck with soap and water.
- ***Always close top and bottom sight tube valves after checking fuel level.***

Fuel shut off valve is on fuel management panel located aft of generator in the engine room.

WATER SYSTEM:

Hullabaloo carries approximately 280 gallons of fresh water. Both tanks are on line. Fill whenever possible. Sight tubes are on each water tank located port and starboard in the engine room. To check the level move the handle at the base of the sight tube to the horizontal position. The water level will be indicated in the tube. Return it to the vertical position.

WATER HEATER:

The water heats from AC supplied by shore power or generator as well as the Webasto diesel heater. The water also heats from the engines while underway, but the switch on the starboard side at the back of the salon must be on Engine Heat.

HOLDING TANK:

After pumping out, add some water to tank and pump that out to help clean tank. ***Holding tank treatment should be added to the tank after it is emptied. See bottle for instructions.***

E. ELECTRONICS

The main breaker for the electronics is located on the DC panel.

VHF RADIO

There are two fixed VHF radios aboard. One is in the pilothouse and the other on the fly bridge. Please refer to Marine Communication brochure for proper use of marine VHF radio.

It is vital that everyone on board is able to perform an emergency call to the Coast Guard, (channel 16) and be able to give an approximate position and description of the vessel. See the Marine Distress Communications panel to the left of the VHF radio in the pilothouse.

If hailing another vessel on channel 16, agree to switch to another channel (such as 67, 68or 72) for further communication:

Non-Commercial - Pleasure Craft Working Frequencies		
09	156.450	Intership/Ship to Shore
67	156.375	Intership (U.S. only)
68	156.425	Intership/Ship to Shore
69	156.475	Intership/Ship to Shore
71	156.625	Intership/Ship to Shore (U.S. only)
72	156.675	Intership (U.S. only)
78A	156.925	Intership/Ship to Shore, some U.S. marinas

GPS PLOTTER

Hullabaloo is equipped with chart plotters in the pilothouse and at the upper helm/flybridge

- Pilothouse - Garmin GPSMAP 1243xsv – nav charts as well as radar
- Upper helm/flybridge - Garmin GPSMAP 4212 (upper helm/flybridge).

The systems include current navigation charts for Puget Sound, the San Juan Islands and British Columbia.

Please refer to the manufacturer's operating manual for instruction in the use of this equipment.

DEPTH SOUNDER

The chart plotters include an integrated depth sounder. **Remember *Hullabaloo draws 4½ feet of water so allow for tide changes*.**

F. ELECTRICAL SYSTEM

DC SYSTEM (12 VOLT BATTERIES)

This system powers lights, pumps, electronics, anchor windlass and engine start. There are two banks of batteries forward in the engine room, the port side bank is engine start batteries, and the starboard side bank is house and inverter batteries.

There are three battery selector switches, one in the pilothouse and two forward in the engine room. The red selector switch located on the forward engine room bulkhead marked “MAIN” should be left in the “ON” position. (i.e. house bank).

A red selector switch located on the forward bulkhead in the engine room marked “inverter” is the inverter switch and should be left in the “ON” position to separate the engine start bank.

The red main generator DC switch is also on the forward engine room bulkhead and marked “Generator.” This switch should be left in the “OFF” position in order to be able to emergency start or charge the generator battery.

The engine start selector switch is located on the engine room forward bulkhead; this switch should be left in the “#2” position unless emergency start is required to parallel the house batteries with the engine start batteries.

In the event of dead start batteries:

The engine start selector switch can be placed in the both position tying the house, inverter and engine start battery’s together providing the additional power needed to start the engines. Once the engines have started switch back to position #2.

The engine start bank located on the portside consists of two 4D batteries. The house and inverter bank located on the starboard side consist of 8 - 6 volt batteries. The generator batter is also a 4D battery located starboard side aft. The main cabin lights operate from the AC breaker marked “Cabin Outlets.”

A wiring diagram follows this section.

GENERATOR

- ***Prior to starting the generator turn everything off on the AC panel except Inverter switch.***
    - On the AC panel, Shore power switch should be in Off position
    - Generator switch should be in On position
- To start generator:
    - Hold down preheat toggle switch for 30 seconds, then
    - Press start switch while holding the preheat switch.
- Once the generator starts
    - Release both switches
    - Generator light will appear on panel
    - Victron Energy panel – charger side – bulk light will appear when charging. As the system charges it will change to absorption charging
    - With system charging, turn on desired equipment to be used on the AC panel.
- The generator sea strainer is located aft and to starboard of the generator.
- Generator over heating should be handled the same as the main engine, see Section C - Engine.

INVERTER

Hullabaloo is equipped with an inverter that converts DC electrical power to AC in limited amounts. The inverter charges its own battery when operating on shore power or the generator.

- The microwave, refrigerator, ice maker and AC plugs will all work off the inverter.
- The microwave is for light duty cooking only, such as warming or making popcorn.
- The AC plugs can be used for charging your cell phone battery or other purposes.
- ***Using an electric heater, hair dryer etc. while on batteries will run down the battery very quickly.***

G. CABIN HEAT

Hullabaloo cabin heat is provided by a Webasto hydronic diesel heater. The heater is controlled by a switch in the salon, starboard side below the TV. There are 2 positions for different operating modes:

When NOT cruising: Up position turns the diesel heater on and runs independently. The heater will also heat the hot water tank. Note, the pump and fans will consume electrical power so monitor consumption while on battery power.

When cruising: Down position should be used. The system will circulate hot water via the engines rather than the diesel heater. This will also heat the hot water tank.

Cabin controls: Each cabin has a thermostat to increase or decrease the temperature as desired, or they may be switched off. The heads each have a fan, but the system must be running for them to provide heat (i.e. fans can be turned on whether or not hot water is circulating through the system).

Pilothouse defroster/defogger: The pilot house is set up with a defroster/defogger for clearing the windows. The switch is located on the small panel on the port side of the wheel. The fan control is located up on the port side of the instrument panel.

Flybridge: Heat is also available in the flybridge - the switch for the defroster must be on. The switch is in pilothouse on the small 3 switch panel port side of wheel.

If a thermostat does not display the temperature, replace the 2 AA batteries. Spares are located in the salon settee, port side/forward set of drawers.

H. HEADS

There are three heads on *Hullabaloo* all with vacuflush toilets. Remember vacuflush toilets use fresh water from the water tanks.

Marine heads are complicated mechanisms and the smallest of items can plug the head or the accompanying systems. Even a match stick or a wad of hair can cause problems.

NEVER place anything in the head that has not first been consumed, except for a small amount of MARINE grade toilet paper.

Do not place ANY foreign material into toilet including feminine products, make up tissue, paper towels, cotton balls, baby wipes, non-marine grade toilet paper. These items can clog or damage system requiring costly repairs.

The pumps and other related equipment for the vacuflush toilets are located in the stern lazarette. The macerator pump and thru hull value for pumping overboard are also located in the stern lazarette. The switch for the macerator pump is located on the DC panel in the pilothouse. **The switch should stay in the Off position unless it is being used. Valve in lazarette must be opened BEFORE turning switch on.**

The boat is equipped with macerator and overboard pump. It is **ILLEGAL** to pump wastewater in the US. To discharge the Waste Water Holding Tank in a **LEGAL** discharge area you need to be in Canadian waters, except in no-discharge zones. Always check local and federal regulations before discharging.

- The switch for the macerator pump is on the fuse panel below the lower helm.
- Activate the switch and listen to the sound of the pitch.
- When the holding tank is empty the sound of the pump will change. ***Never operate macerator when the tank is empty.***

Add holding tank treatment after tank is emptied. See bottle for instructions.

There is a Master Circuit Breaker for the vacuflush system is located in the engine room. It is located on the forward bulk head on the starboard side of the access door near the halon fire extinguisher. Each head also has a switch (O = Off; -- = On).

SHOWERS:

Bilge and Sump pumps should on (should be on at all times) – both located in pilothouse. "Bilge Pump" master switch is to the left of the 12V DC panel. Switch should be in Auto position at all times. The Sump Pump switch is located on the 12V DC panel. Leave switch in the On position.

I. GALLEY

RANGE

Hullabaloo has a Force 10 propane range with oven with igniters. The main breaker is on the DC panel. The gas switch is located on a panel over the left side of the stove.

To light, push oven knob (far right knob) in and turn desired burner knob or the oven knob to light position. Hold in until lit and then turn to desired setting before releasing.

MICROWAVE

The microwave operates off shore power, the generator or the inverter. The main breaker is on the AC panel marked "Cabin Outlets." Leave this breaker in the "ON" position.

REFRIGERATOR & ICE MAKER

The refrigerator operates on the main AC panel (switch below Microwave) or the DC breaker marked "Refrigerator." The icemaker operates off the AC breaker marked "Cabin Outlets."

DISHES AND UTENSILS

The galley is fully equipped. Items are stored based on usage and to maximize the limited storage space. ***Please return items to their proper location.***

J. BILGE PUMPS

There are two bilge pumps located fore and aft of the engine room. The control is to the left of the DC electrical panel in the pilothouse. **It should always be left in the auto position.**

There is a sump pump under the floor deck in the forward cabin. The switch on the DC electrical panel **should be left on**.

K. ANCHORING

Hullabaloo has a main and stern or spare anchor and rode. The main is approximately a 60 lb. Bruce with 300 feet of 3/8" chain. There is a 45 lb. CQR spare anchor on the bow and 200' of ¾" line stored in the lazarette.

The main anchor rode has painted markers or colored zip ties every 25 feet:

• 25 feet = Red	• 125 feet = Yellow (painted)
• 50 feet = Blue	• 150 feet = Yellow
• 75 feet = Blue	• 175 feet = Blue (paint)
• 100 ft = Blue	• 200 feet = Green
• 225 feet = Green (paint)	• 250 feet = Green
• 275 feet = Blue (paint)	• 300 feet = White paint w/ red and yellow ties
• +300 feet approx. 20' of nylon line	

NOTE: Take care when anchoring. Keep fingers, shoelaces, drawstrings, loose clothing or long hair clear of anchor, chain, line, and rollers.

To operate the anchor windlass:

- ***Keep engines running while setting anchor.***
- The anchor windlass switch is on the electric panel in the wheelhouse - large red knob in lower left. It must be in the on position.
- Foot pedals at the windlass raise and lower the anchor (left is Down, right is Up)
- The windlass can also be operated from the pilothouse
- The anchor rode may also be played out manually by releasing the break on the windlass with the winch handle located at the anchor windlass.

Use care to note depth of water and the stage of the tide. Anchoring in shallow water on a high tide can lead to being left high and dry on a rocky bottom when the tidal level falls. Be sure to note your surroundings and any possible hazards or obstacles which the vessel may swing into if the wind or currents change direction.

Inspect all shackles and hardware for proper tightness. Inspect chain and line for excessive wear or fraying prior to setting anchor. It is advised that the position of the boat and the depth of the water be checked frequently, and the boat not be left unattended while anchored for long periods of time.

Anchor bridle: Once sufficient rode has been deployed, set up anchor bridle.

- The bridle is the line with a large hook in the middle
- Run line under bow pulpit
- Place hook on the anchor rode
- Run lines through port and starboard hawse pipes and tie off on stanchions
- Play out additional rode to put tension on bridle
- Short line with hooks on ends are to secure the rode at windlass (hook on chain and tie off on windlass)

Recovering anchor:

- ***Engines should be running while operating windlass.***
- Use care not to damage windlass or anchor platform by placing excess stress.
- Wash down (saltwater) is to the port side of the windlass. Rinse rode to remove mud as it is being retrieved. This will keep it (and the odor) out of the anchor locker which is below deck in a compartment in the forward stateroom.
    - The switch is on a small (3 switch) panel to the right of the main DC panel.
- Once anchor has been recovered, use small line and chain hook to secure anchor to cleat on windlass. This will take tension off the windlass and protect against accidental release of anchor.

L. DINGHY

The dinghy is a hard bottom 10' Bull Frog with a 15 HP Yamaha 4-stroke outboard. It is provided for transportation to the dock when moored or anchored out and for fishing. Please **USE CAUTION WHEN BEACING** on gravel, rocks and barnacles as they can damage the bottom.

- The dinghy can be lowered to the water with the davit.
- The switch for the davit on the electrical panel (same switch as Anchor Windlass).
- The controls for the davit are on the motor itself
- ***BE SURE THE TRANSOM DRAIN PLUG IS IN AND TIGHT.***

Many small harbors have underground obstructions and rocky bottoms, so take care not to run aground or strike rock or the bottom with the motor.

M. ENTERTAINMENT

TV & MOVIE

An HD TV and Blu-Ray player are provided for your enjoyment. There is also an HDMI adapter you may use to connect your computer to the Blu-Ray player. A variety of movies are located in the drawer under the TV.

Stereo

Hullabaloo has a stereo receiver mounted on the fly bridge stairway. An iPod/iPhone cable is in the compartment next to it. Turn on the Accessory switch on the DC panel.

SiriusXM satellite radio is also available. If it needs to be reset contact AYC and they can let me know.

Speakers are located throughout the boat and can be switched via the controller. The switches are labeled (the speakers in the forward and mid-cabin on a single switch).

Note: If the system is on, but there is no sound turn the Accessory off and then back on.

N. RETURNING TO PORT & CHECK IN:

Upon returning to port for Check-In you need to:

- Top off the fuel (2 fill port - starboard and port on steps of walk-around)
- Fill water tanks (2 fill ports - starboard and port, aft area of walk-around)
- Empty the holding tank (see Section D)

DOCKING PROCEDURES

When preparing to dock, begin early so you are not rushed and forget something important:

- Determine in advance side of the vessel you will be docking and prepare accordingly.
- Hang 3 – 4 fenders per side at the appropriate height and location.
- Place lines at the cleats on the appropriate side, locate and prepare boat hook.
- Alert crew and have them in position to assist you.
- Stow loose gear so as too not hinder moving about the boat.
- Always approach the dock as slowly as possible, while maintaining maneuverability.
- Secure the boat with proper forward, aft, and spring lines to allow the vessel to ride easily and securely while moored.

CONNECTING TO SHORE POWER

- Prior to connecting to dock pedestal
    - In pilothouse turn Off all AC breakers (lower panel) except Inverter switch.
    - Turn DC refrigerator switch off.
    - Victron energy switch - put in center position.
    - AC panel - turn battery switch (left side of AC panel) to Off position
- At the dock pedestal
    - The 30-amp breaker should be Off
    - Plug the 30-amp cord into pedestal, then turn breaker switch on
- AC panel – with Generator (and house battery) switch (left side of AC panel) in Off position, slide plastic cover down and switch AC/Shore switch to On position. AC Meter should show AC power.
- Wait 15 to 30 seconds, then switch the Victron Energy switch to the left.
    - Blue light for “mains” will flash.
    - Flashing will stop and will indicate charging (bulk, absorb or float)
- Turn AC panel switches to On position for Water Heater, Spare, Microwave, Cabin Lights, and Refrigerator (for AC power to frig)
- If the breaker trips, start over and turn switches on slowly and 1 at a time

O. GENERAL TIPS

Taking proper care of *Hullabaloo* helps ensure her continued availability for your next Pacific Northwest adventure. If you have any concerns or feel something needs to be addressed, please advise your Check-In host.

- Extra storage is located under the settees in the salon.
- Never use countertops for cutting, please always use the cutting board.
- Please keep things tidy and return anything you use to its proper place.
- **NO SMOKING** inside the boat. Thank you for your cooperation.
- Check shoes and feet for tar and creosote from beach or dock.