

Puffin Owner's Notes

Revised 7 March 2016

Welcome Aboard!

The 2016 charter season will be Puffin's fifth year with San Juan Sailing. Before we became charter boat owners, we were charter guests with San Juan Sailing for 17 years. We've tried to use that experience to outfit Puffin in a way that will hopefully provide an ideal charter vacation.

Why did we select the name Puffin? The tufted puffin is native to Pacific Northwest waters from California to Alaska. Tufted puffins are somewhat rare in the San Juan Islands, as are Island Packet yachts. Like our boat, tufted puffins have incredible storage volume (a puffin was documented carrying 63 fish in its bill). Finally, despite their somewhat rotund appearance (a sailor might say beamy), tufted puffins can fly surprisingly fast (up to 35 knots). Our boat has generous displacement and is relatively beamy herself, but she performs under sail very well, although our top speed is a mere 7.5 knots. Based on these comparisons, we felt our boat and the tufted puffin had a lot in common, so the name seemed fitting.

Puffin is professionally maintained to a very high standard, and we are open to considering new equipment or better ways to set up the boat. We hope you enjoy your time onboard Puffin, but if you have any trouble or suggestions for improvement, please let San Juan Sailing know and we will do our best to address them.

David, Denise, and Christopher Senor



Puffin's interior layout

Puffin is a 2007 Island Packet 370 (Hull No. 70) designed by Robert Johnson and built in Largo, Florida. She carries a cutter rig with roller furling on all three sails (jib, staysail, and main) and the entire rig can be operated without ever leaving the cockpit. She has a full keel called the Full Foil Keel by Island Packet. She draws only 4' 3" but the full keel provides excellent tracking and lateral stability. The IP370 has a beam of 13' 1", and she displaces 21,000 lb dry. The combination of the full keel, generous beam, and substantial displacement make for a very stable and comfortable sailboat in all seas and sail configurations. However, the tall rig (mast height 53' 10") and considerable sail area (814 ft² including the staysail) allow good sailing performance even in moderate wind. For those of you that are interested in such technical details, the sail area-to-displacement ratio is a respectable 17.1 even with a hefty displacement-to-length ratio of 315.



Puffin is fitted with a bow thruster that significantly aids maneuvering in tight spaces. Topsides she is very safe and secure, with wide, unobstructed side decks and substantial bulwarks along the toerail. The foredeck and bow platform are easy to access when docking or anchoring. The primary anchor is a 35 lb Delta with 275' of all-chain rode that is raised and lowered with an electric windlass using foot controls on the foredeck. The secondary anchor is a 33 lb Bruce with 20' of chain and 200' of three-strand nylon rode. Finally, there is a salt water washdown on the bow to help clean up muddy ground tackle.

The cockpit is very roomy and features a teak cockpit table, comfortable closed-cell foam seat cushions, and a Lewmar folding wheel that makes moving around a lot easier when anchored or at the dock. There is ample seating, including the cockpit seats, the coaming, and two taffrail seats that provide a fantastic view all around when the weather is fine. If experiencing Pacific Northwest "liquid sunshine," the wraparound dodger and bimini will keep the crew dry in the cockpit. For those who want the ultimate in warm and dry sailing, there are side and rear panels available on request for a full cockpit enclosure without sacrificing visibility or sail handling. The navigational electronics include networked Raymarine systems with speed, depth, and wind instruments, a 12" chart plotter with radar and automated identification system (AIS) overlay, and an autohelm. An instrument repeater is mounted at the nav station below that provides access to all the data from the various instruments without having to go on deck. A VHF remote microphone is available at the helm to facilitate radio communications while underway. The deep cockpit lazarettes provide plenty of space to stow the lines, fenders, and crab pot. A Magma propane barbecue grill is mounted on the taffrail. All of the lines needed for working each of the three sails are led to the



cockpit. The staysail is self-tending, so only the jib needs to be tacked. As a result, the sails are very easy to manage, even with a short-handed crew.

Puffin has a 56 hp Yanmar 4JH4 diesel engine that will comfortably cruise at 6 knots at about 2200 rpm. The fuel tank holds an ample 75 gallons of diesel providing considerable range. Access to the engine for checking the oil is very easy, through a small door in the galley. Puffin has three AGM Group 27 batteries for the house electrical supply, a dedicated AGM Group 31 battery for the bow thruster, and an AGM Group 27 battery for starting the engine. The three house batteries provide substantial capacity for the electrical systems onboard. In addition, Puffin has a Xantrex inverter that allows the use of AC appliances while away from shore power. She also has a Webasto forced air diesel heating system with vents in the staterooms, salon, and galley for those cool nights in the Pacific Northwest.



Forward stateroom

Puffin has two staterooms, one forward and one aft. Both staterooms have queen-size island berths with inner spring mattresses and comfortable pillowtops. The forward stateroom has a hanging locker and two lockers with shelves. The forward stateroom also includes dimmable overhead lights. The aft stateroom has a locker with shelves as well as the nav station with a chart table that converts into a vanity. A removable pass-through allows the nav station to be opened up for communication with the salon while providing privacy for the aft stateroom when closed. Both berths lift on gas-assisted struts to reveal spacious storage areas underneath, perfect for luggage or other large items.

There are reading lights above each berth and fans for those occasional warm nights in the Pacific Northwest.

The head can be accessed from either the forward stateroom or the salon. It features a separate shower stall and Corian countertop on the sink vanity. The holding tank capacity is 55 gallons, and Puffin is fitted with an electric macerator. Reliable tank level information is provided for holding and fresh water with state-of-the-art Maretron ultrasonic tank level gauges. Hot water is provided by a 6 gallon water heater after running the diesel or while on shore power.



Looking from the salon toward the aft stateroom with the nav station pass-through open



Head with separate shower stall



Looking forward from the companionway with the dining table stowed

The salon features a table that folds up against the forward bulkhead when not in use, leaving a lot of open space. When needed, the table can be lowered to seat four with one leaf open or seven with both leaves open. The overhead lights in the salon are controlled with a dimmer switch, all hatches are fitted with OceanAir sun shades and insect screens, and the opening ports have Peek-a-Boo shutters to let in light while ensuring privacy. The solid teak and holly sole is protected with custom-fitted carpets for barefoot comfort on cool days. There is ample storage space behind and beneath each of the settees. The port settee converts into a double berth, and the starboard settee serves as a single berth, giving Puffin a total capacity of seven guests. Puffin is equipped with a Samsung 23" LCD television, with a DVD player at the nav station. There is also a Pioneer AM/FM stereo with a CD player, an iPod adapter, and SiriusXM satellite radio, with speakers in both the salon and cockpit. There is a cell phone booster antenna to improve reception in the islands.

The U-shaped galley features Corian countertops, deep double stainless steel sinks, an extendable spray nozzle on the faucet, a gimballed three-burner Force 10 propane stove with oven, a microwave oven, and a dual-compartment refrigerator/freezer with digital temperature controls and an electric drain pump. Each compartment of the icebox can be configured as either a refrigerator or freezer, making it very versatile. In addition to the appliances, the galley is well-equipped with cookware and supplies to support seagoing gourmet chefs. The water at the tap in the galley is filtered with a Seagull water purifier. Additional countertop space is available by deploying the teak shelf at the aft end of the starboard salon settee. As found throughout the

boat, there is ample storage including a three-level "pantry" outboard of the sinks that can accommodate a large quantity of food and supplies. Puffin has a 160 gallon fresh water tank to support extended cruising.

Puffin is equipped with a 2013 AB Ventus 10VL 10.5' dinghy with a fiberglass hull and Hypalon inflatable tubes. The dinghy seats five adults comfortably and can be hauled safely up a beach by two adults. The 2 hp outboard for the dinghy is mounted on Puffin's



Puffin's galley

taffrail when not in use. The swim platform at the stern makes access to the dinghy a breeze for boarding or mounting the outboard. There is a foldaway boarding ladder and a hot/cold fresh water shower on the swim platform for rinsing off muddy shoes after a hike ashore. A Scanstrut antenna mast is mounted on the transom to collect all the various antennae and raise them up and out of the way so they don't interfere with the taffrail seats or the dinghy outboard bracket.



Swim platform showing the stowed boarding ladder and the hot/cold fresh water shower

The next page provides a description of a number of Puffin-specific features that are frequently encountered by charter guests. The remainder of the owner’s notes is arranged as a quick-start guide for the major systems on board Puffin. For details on the operation of any of the systems, please refer to the IP370 Owner’s Manual or the systems manuals. After using any of the manuals, please return them to their storage location so they will be available for the next charter guest.

Please note that smoking is not permitted onboard Puffin and no pets are allowed.

Contents

Important Puffin-Specific Features.....	6	Refrigerator/Freezer.....	19
Preparing to Get Underway.....	7	Lights and Flashlights.....	20
Starting the Engine.....	8	Salon Table.....	20
Stopping the Engine.....	9	Salon Berth.....	21
Bow Thruster.....	10	Electrical System.....	21
Sailing.....	10	TV and Stereo.....	22
Communications.....	12	Cabin Heat.....	24
Docking.....	12	Head and Holding Tank.....	24
Connecting to Shore Power.....	13	Shower.....	26
Anchoring.....	14	Cockpit Canvas.....	27
Dinghy and Outboard.....	17	Miscellaneous.....	27
Stove/Oven/Microwave/BBQ.....	18	In Case of Emergency.....	28

Important Puffin-Specific Features

The items on this page are those that charter guests have had recurring questions about, so we collected them here to provide a quick overview of Puffin-specific systems. For more details, please read the pages referenced in the owner's notes.

Battery Management

- Puffin has three house batteries that provide an ample 300 A-hr of capacity. However, Puffin also has a lot of electronic systems that require a lot of power to operate. The systems that draw the most current may not always be obvious. **See p. 22.**
- Puffin's batteries can be charged while motoring or while connected to shore power. However, depending on the state of charge in the house batteries, it can take more than 3 hours under power or more than 10 hours on shore power to fully charge the batteries. **See p. 21.**
- If charging the batteries with the alternator while the engine is running, the engine must be running at least 1200 rpm. The output of the alternator is not optimum at lower RPM, and the batteries will not charge effectively if the engine is just idling. **See p. 22.**

Handling Characteristics

- Puffin handles well under sail or power, but she is a heavy displacement, full-keel boat, and her handling characteristics reflect that fact. She will track very straight, both ahead and in reverse. You cannot turn Puffin in idle reverse with the wheel; use the bow thruster to control your direction in reverse. Also use the thruster to help make tight turns when moving forward. **See p. 12.**
- As a heavy displacement boat, Puffin will carry way even when shifting into neutral. **See p. 12.**
- Use short bursts on the bow thruster, not continuous operation, to avoid overheating the thruster motor. **See p. 10.**
- Keep in mind that Puffin is a cruising yacht, not a racing boat. She will move in light air, but don't expect light, fin-keel type performance. **See pp. 10-11.**

Shower Sump Operation

- Be sure the shower sump breaker is turned on at the electrical panel before showering or using the sink in the head. Both drain to a sump below the sole at the forward end of the salon. The sump will quickly overflow if the sump pump is not turned on or is not operating properly. **See pp. 26-27.**

Miscellaneous

- Take care with the teak cockpit table and the teak surface on the salon dining table. Use koozies, hot pads, and placemats as necessary to avoid damaging the teak. **See pp. 20-21.**
- Make sure all ports and hatches remain closed while underway. **See p. 7 and p. 10.**
- Do not take the Peek-a-Boo blinds off the windows. When docked or moored, the portlights can be opened if desired, but leave the Peek-a-Boo blinds attached. **See p. 28.**

Preparing to Get Underway

- Ensure that the battery and bilge pump switches below the port salon settee are in the proper positions (marked by green dots)
- Ensure that the DC breakers on Puffin's electrical panel are in the proper positions
 - ▶ Breakers with green dots are always on
 - ▶ Breakers with yellow dots are on as needed
 - ▶ In addition to the breakers with green dots, when underway, the following breakers must be turned on
 - Electronics
 - Radar
 - Autopilot
 - VHF
 - ▶ Ensure that the Water Pressure breaker is turned off when motoring because the engine will mask the sound of the pump running and it is possible to accidentally leave a faucet open, drain the water tank, and burn up the water pump
 - ▶ Similarly, ensure that the Ice Box Drain, Macerator, and Anchor Pump breakers are off while motoring to avoid inadvertently burning them up while running dry
- Disconnect shore power
 - ▶ Turn off AC breakers and the "Shore Main" breaker onboard Puffin
 - ▶ Turn off the breaker at the dock
 - ▶ Disconnect the shore power cable at the dock first, then onboard Puffin
 - ▶ Keep the shore power cable ends out of the water
 - ▶ Coil the shore power cable into its bag and store in the port cockpit lazarette. While using the shore power cable, we tend to leave the excess cable coiled in the cockpit near Puffin's shore power receptacle to protect it from the elements as much as possible.
 - ▶ Screw on the shore power receptacle cover onboard Puffin
- Ensure loose items on deck, in the cockpit, and down below are stowed
- Close all hatches and portlights to prevent lines from getting tangled and salt spray from getting below
- Remove instrument covers
 - ▶ The knotmeter, depth sounder, and wind instrument are located over the companionway on the spray hood
 - ▶ The chartplotter and autohelm are located on the instrument pod at the helm
 - ▶ The instrument covers may be stowed in one of the small lockers on the cockpit seat coaming



Battery switches below the port settee and the electrical panel above

- Connect the VHF remote microphone on the cockpit instrument pod
 - ▶ The microphone is stowed in the chart table at the nav station when not in use
 - ▶ The microphone is turned on and tuned independently from the VHF radio at the nav station
 - ▶ While underway, the VHF and remote microphone should be tuned to Channel 16



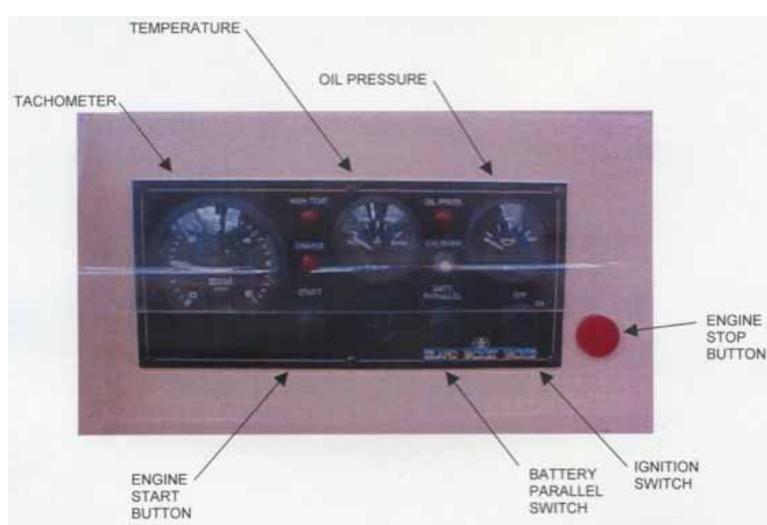
Raymarine E120 chartplotter

- Power up navigational instruments
 - ▶ The chartplotter is turned on by pressing the red power button at lower left for a few seconds – the startup process takes a minute or so
 - ▶ If there seems to be problems with the chartplotter, power it down by pressing and holding the power button and then check the compartment at upper left to ensure that the chart card is inserted
 - ▶ If the location of Puffin is not obvious on the screen when powering up the chartplotter, press the “Find Ship” softkey at lower left next to the power button
 - ▶ The wind, speed, and depth instruments will turn on automatically when the Electronics breaker is turned on
 - ▶ The Automatic Identification System (AIS) will be powered on when the Electronics breaker is turned on. AIS targets will appear on the chartplotter as dark grey triangles. Hovering the cursor over an AIS target will provide speed and intercept data. Pressing the center softkey labeled "Full AIS Data" will show all available data on the target.
 - ▶ The VHF radio may or may not need to be powered on after the VHF breaker is turned on
 - ▶ Ensure that the autohelm is in “Standby” mode
 - ▶ You may use the radar as a supplement to visual indications, but do not rely on it for navigation in fog – please stay put until the weather clears enough for safe visual piloting

Starting the Engine

- Daily engine checks
 - ▶ Check oil level – the dipstick may be accessed through the small door on the starboard side of the engine compartment in the galley. If the oil level appears to be low, contact San Juan Sailing or NW Explorations before starting the engine. Do not add oil to the engine unless directed to do so by San Juan Sailing or our maintenance professionals at NW Explorations.
 - ▶ Check the raw water intake seacock to ensure it is open - the raw water through-hull is located below the aft end of the salon sole

- ▶ Check the strainer to make sure it is clear of eelgrass - the strainer is located in the same space as the raw water intake through-hull
- ▶ Check the fuel level - the gauge is under the dustpan at the foot of the companion ladder
- Put the gear shift in neutral
- Ensure the dinghy is drawn up near, but not touching, the swim step and the dinghy painter and stern line are not in the water
- Retrieve the ignition key from the chart table
- Put the key in the ignition and turn to “On” – an alarm will sound
- Push the “Start” button for a second or two until the engine turns over
- If the engine does not start
 - ▶ Do not crank for more than five seconds
 - ▶ Push the button on the gear shift lever and advance the throttle slightly to try starting the engine again
- If the engine starts
 - ▶ Push the button on the gear shift lever and advance the throttle slightly to warm up the engine
 - ▶ Do not put the engine under load (in gear) until the engine warms up (wait at least five minutes)
 - ▶ Ensure that water is being ejected from the exhaust at the center of the stern below the swim platform – if not, stop the engine (see procedure below)
- After the engine has warmed up, return the gear shift to idle (the button will release automatically so the transmission may then be shifted into forward or reverse)
- When shifting from forward to neutral or reverse to neutral, do it slowly
- When shifting from forward to reverse or reverse to forward, always pause in neutral to avoid damage to the transmission
- Puffin will cruise under power comfortably at 6 to 7 knots between 2200 and 2800 rpm – running the engine for extended periods higher than this will burn fuel excessively with little gain in speed
- Fuel consumption at these speeds will be 0.50 to 0.75 gallons per hour
- Puffin has a fixed three-blade propeller



Engine control panel in the cockpit

Stopping the Engine

- Return the throttle to neutral
- Push and hold the red “Stop” button until the alarm sounds
- Only when the alarm is sounding, turn the key to the “Off” position

- **NOTE: Never turn the key to the “Off” position while the engine is running or damage to the electrical system will occur**

Bow Thruster

- The bow thruster is controlled by the joystick on the instrument pod in the cockpit, shown in the photo at right
- Press both “On” buttons simultaneously to ready the thruster for use – a green light will illuminate between the “On” buttons indicating the thruster is ready
- The thruster will shut off after several minutes if it is not used, so wait to turn it on until just before needed
- Engage the thruster by pushing the joystick to port or starboard
- It is best to use short bursts on the thruster to control movement and avoid overheating the electric motor
- A dedicated AGM Group 31 battery was installed in 2015 for the bow thruster so that it no longer draws current from the house batteries. This will improve house battery capacity and eliminate effects on the electronics while using the thruster.
- Because the thruster draws significant current, never use the bow thruster when the engine is not running
- The boat will pivot about the center of gravity, so the stern will swing in the opposite direction from the bow



Puffin's bow thruster control joystick on the port side of the binnacle

Sailing

- Hatches and portlights must be closed
- Clutches must be flipped up and rotated all the way forward to release the lines
- There are four winch handles stowed in the drawer beneath the freezer – use a locking winch handle for the jib sheets to avoid losing a handle overboard
- Please try not to drop the winch handles because they will damage the gelcoat
- The engine should be left in neutral while



Puffin close-hauled under full sail

sailing; the propeller will freewheel and may produce an audible sound when sailing at speeds of 5 knots or greater

- Unfurling the sails
 - ▶ We generally unfurl the main first, the jib second, and the staysail (when needed) last
 - ▶ The main is best unfurled while luffing or just slightly off the wind
 - ▶ You can then fall off and unfurl the headsails
 - ▶ Maintain slight tension on the furling lines when unfurling to deploy the sail in a controlled fashion and minimize unnecessary “belly” in the sail
 - ▶ The staysail is small enough that winch handles are not normally required for unfurling or furling
- Furling the sails
 - ▶ The headsails can be furled on any point of sail, but will be easiest when pointing up - having some wind in the headsails will help make a tight wrap
 - ▶ The main can be furled either luffing or just slightly off the wind
 - ▶ Maintain slight tension on the outhauls when furling to ensure a tight wrap and no binding (for the jib, maintain slight tension on the leeward sheet while furling)
 - ▶ Take a couple wraps of the sheets around the headsails after furling
 - ▶ Cleat the staysail furling line and outhaul after furling
 - ▶ Take two or three wraps of the jib sheets on the winches and put them in the self-tailers after furling to keep the sheets from flying
- We often deploy the main while motoring to stabilize the boat if there is any wind
- Heavy weather sailing
 - ▶ The prudent skipper avoids sailing in foul weather if at all possible
 - ▶ However, Puffin is built to handle just about any possible weather conditions
 - ▶ Shorten sail when the boat begins to feel overpowered (in general, if you’re thinking you might need to reef, you probably should)
 - ▶ We have sailed Puffin in steady winds up to 20 knots without shortening sail, but reefing earlier may improve your ride, especially if you feel uncomfortable
 - ▶ The moderate draft full foil keel will provide better tracking and less leeway if the boat is more upright, so if there is excessive heel on the boat (more than 10°-15°) reducing sail will improve handling performance without sacrificing significant speed
 - ▶ We generally reef the main first, and then the jib, furling each in turn to about 70%
 - ▶ If further reefing is warranted, furl the staysail
 - ▶ Use the helm to judge the balance of the boat fore and aft
 - Ideally, you should have slight weather helm
 - If lee helm – decrease the power of the headsails or increase the power of the main
 - If excessive weather helm – increase the power of the headsails or decrease the power of the main

Communications

- A new VHF antenna cable and aerial were installed in late 2012 to improve VHF range
- Monitor Channel 16 on the VHF while underway
- Channel 16 is reserved for emergencies and hailing – after contacting another party switch to a working channel
- Before anchoring each night and before departing each morning, listen to the NOAA or Environment Canada weather broadcast on the VHF (WX 1 through 8, whichever provides the clearest signal in your location) – listen for “Northern Inland Waters” for the San Juan Islands
- San Juan Sailing monitors Channel 80A during business hours
- The remote VHF microphone in the cockpit provides all essential functions of the VHF radio at the nav station
- The cell phone booster antenna, installed in 2013, will be powered on when the Electronics breaker is turned on. We've noted an improvement in cell phone reception by 1-2 bars when in areas of limited signal.

Docking

- Because Puffin is very beamy (13' 1”), it helps to have someone assist the skipper from the bow or the widest point of the beam – otherwise it is difficult to determine whether the boat is too close or too far from the dock
- Do not expect Puffin to stop on a dime when you put the engine in neutral. Like all heavy boats, Puffin will carry way very well, even with the engine in neutral. Remember this fact when docking to avoid inadvertently striking a dock or adjacent boats. We tend to maneuver in marinas in idle forward or neutral, applying forward throttle only periodically to maintain adequate steerage way. A burst in reverse may be necessary to stop her after entering a slip.
- Puffin will back straight in idle reverse, but her stern will swing slightly to port if bursts of throttle are applied in reverse
- In idle reverse, use the thruster to keep the bow oriented in the desired direction. She will not turn in idle reverse using the wheel, so use the bow thruster to control your orientation.
- Use the thruster to assist the helm in turning into or out of slips – in calm conditions with no cross current, Puffin can be pivoted with the thruster to align with a slip
- The full keel makes Puffin very sensitive to cross currents – be aware of currents, particularly if they are running in a direction different from the wind



- Use a spring line from the midships cleat as the primary control after stepping ashore – with this line secure, Puffin can be aligned in the slip using the bow thruster and/or bow and stern lines
- In windy conditions, some power will be required to keep Puffin from falling off during docking – use bursts of power in reverse to stop her but keep in mind these bursts will cause the stern to pivot to port (and the bow to pivot to starboard)
- Puffin has six fenders and a fender step available to accommodate just about any docking situation
- We always keep a spare fender available under the dodger “just in case”
- We stow the fenders and the docklines in the starboard cockpit lazarette – if you store the docklines on the shelf and arrange the fender whips on top of the docklines they can both be retrieved quickly without going locker diving



AC (left) and DC (right) electrical panels in the cabinet above port salon settee aft

Connecting to Shore Power

- Most shore power connections will be 30 Amp service, for which the shore power cable is configured. Puffin has a 75’ shore power cable, new in 2014, to accommodate situations where the shore power panel may be more than 50’ from the onboard receptacle.
- Ensure all breakers on the AC panel are in the off position
- Ensure the breaker on shore is in the off position (if there is one)
- Connect the shore power cable onboard Puffin first, and then connect on shore
- Turn on the breaker on shore (if there is one)
- If the connection is good and there is no polarity problem, the amber light next to the “Shore Main” breaker will illuminate and the three lights above and left of the breaker panel will glow green
- If there is a polarity problem, the red “Reverse Polarity” light will illuminate on the AC panel

- Poor contact at the plug on shore can cause an audible alarm and the "Ground Wire" light above and left of the breaker panel will glow red. This can usually be remedied by tying the plug tight against the shore receptacle with a short length of small diameter line.
- If the connection is good, slowly turn on the “Shore Main” breaker on the AC panel
- The AC voltmeter will show ~120V if all is working properly
- Turn on the “Battery Charger” breaker on the AC panel
- The two breakers labeled “Outlets Port” and “Outlets Stbd” will enable the respective AC outlets onboard Puffin
 - ▶ When on shore power, these breakers will enable shoreside AC at the outlets
 - ▶ When on battery power, these breakers will enable AC at the outlets when the Xantrex inverter is turned on at its panel left of the chart table (the amber lights next to the breakers will not illuminate when running on the inverter, but AC power will be available at the outlets)
- You may turn on the “Water Heater” breaker on the AC panel if you wish to provide electrical heat to the water heater – this will ensure you have hot water available any time while you are connected to shore power

Anchoring

- Puffin’s primary anchor is a 35 lb Delta on the bow (starboard anchor roller) with 275’ of 5/16” chain – the Delta anchor is well-suited for the holding ground in the Pacific Northwest and is designed to set more easily than the similar CQR plow anchor
- The primary anchor chain is marked with yellow zip ties, one at 50’, two at 100’, three at 150’, four at 200’, and five at 250’.
- Puffin’s secondary anchor is a 33 lb Bruce on the bow (port anchor roller) with 20’ of 5/16” chain and 200’ of 9/16” 3-strand nylon rode
- The secondary anchor rode is marked with green tags showing the depth at 30’, 60’, and 90’, red tags at 120’, 150’, and 180’, and a yellow tag at 210’.
- In the San Juan Islands, the holding ground is typically mud and a scope of 4:1 is generally adequate (stormy weather conditions may require more scope and possibly a second anchor) - be sure to account for any rise in the tide overnight and add 5 feet (distance from water surface to bow roller) when calculating scope
- The primary anchor is lowered using the electric windlass



- ▶ Ensure the engine is running before operating the windlass - the windlass draws significant current and can deplete the batteries without the engine
- ▶ Turn on the windlass breaker below the port salon settee (forward of the battery breakers)
- ▶ Release the chain brake
- ▶ Lower the anchor in short bursts until it is hanging vertically and just touching the surface of the water (so it doesn't swing and hit the topsides)
- ▶ Position the boat over the desired drop location, stop the boat, lower the anchor in short bursts to the approximate water depth, then begin to back the boat in idle reverse
- ▶ Allow the anchor chain to pay out as you back the boat
- ▶ Use the bow thruster to keep the boat oriented in the desired direction
- ▶ It may be necessary to adjust the chain in the chain locker as the anchor is lowered (the chain sometimes has a tendency to "ball up" and apply resistance when traveling through the deck pipe – if enough resistance is felt by the windlass, the breaker will trip) – a mop handle works well to keep the chain running free
- ▶ If a ball of chain stops the windlass, you can set the chain brake and remove the chain from the windlass gypsy by hand to straighten it out before replacing it and resuming use of the windlass (**never put your hand near the chain or windlass when it is moving**)
- ▶ When the desired scope is paid out, set the chain brake
- ▶ Set the anchor with the engine in reverse – the rule of thumb is to set the anchor for 60 seconds at 1000 rpm if 20 knot winds or less are expected, 1500 rpm if 30 knot winds are expected, etc...
- ▶ Attach the chain snubber forward of the chain brake and secure the snubber on the starboard bow cleat to take the tension off the chain brake
- ▶ Pay out a link or two of chain to take all load off the windlass
- ▶ If the anchor is not holding, a common problem is a pile of chain on top of the anchor, preventing it from setting properly. To avoid this situation, ensure that the boat is backing slowly as the anchor chain is slowly paid out
- ▶ When satisfied that the anchor is holding, turn off the windlass breaker down below
- The secondary anchor can be lowered by hand, or by using the capstan on top of the windlass
 - ▶ Untie the preventer from the bow platform to allow the anchor to be lowered
 - ▶ Lower the anchor by hand until the nylon rode emerges from the deck pipe
 - ▶ If using the capstan, take a turn or two of the nylon rode around it
 - ▶ To lower the anchor using the capstan, allow the line to pay out by easing as you would to ease a sheet
 - ▶ When the desired scope is paid out, remove the rode from the capstan and secure to the port bow cleat - ensure that the rode is captured by the fairlead so it doesn't chafe on the bow platform
 - ▶ Set the anchor as described above for the primary
- The primary anchor is raised using the windlass – follow the reverse of the anchoring

procedure above

- ▶ Ensure the engine is running before operating the windlass
- ▶ Do not use the windlass to pull the boat over the anchor – instead, idle forward taking in the chain in bursts as the boat moves forward
- ▶ Ensure that the chain falls freely in the chain locker – use the mop handle to keep it free and straight, as necessary
- ▶ If the windlass does not break the anchor free, idle forward over the anchor and it will come loose
- ▶ Carefully use short bursts with the windlass to bring the anchor up and over the bow roller – **do not pull the anchor up tight with the windlass**
- ▶ Set the chain brake to hold the anchor in place
- ▶ Pay out a link or two of chain to take all load off the windlass
- ▶ Replace the snubber to act as a preventer on the anchor chain
- The secondary anchor is raised by hand
 - ▶ Put the hook on the deck pipe cap through a link of the chain to hold it in place
 - ▶ Tie off the preventer to the bow platform
- Using the anchor washdown on the bow
 - ▶ Retrieve the short hose and nozzle stowed in the port cockpit lazarette
 - ▶ The blue hose adapter remains attached to the short hose
 - ▶ Insert the hose adapter in the receptacle on the starboard side of the foredeck (just forward of the windlass foot control) - push down and turn clockwise a quarter turn until the adapter is fully seated
 - ▶ Turn on the “Anchor Pump” breaker on the DC electrical panel only after inserting the hose adapter on the foredeck
 - ▶ Use the nozzle to spray the muddy chain and anchor as they emerge from the water – this will reduce cleanup on deck after stowing the anchor and it will keep the chain locker smelling better
 - ▶ Use the washdown in short bursts so the pump doesn’t overheat and shut off
 - ▶ When finished, turn off the “Anchor Pump” breaker, remove and stow the short hose (with adapter still attached) and nozzle in the port cockpit lazarette
- At times it is desirable to employ a stern tie to shore
 - ▶ There is a spool in the starboard cockpit lazarette with 550’ of yellow braided polypropylene line for stern tying
 - ▶ There is a wooden dowel stowed with the spool in the starboard lazarette to use as an axle. Alternatively, you can use the mop handle as an axle.
 - ▶ Insert the dowel into the spool and hold it in the cockpit as the bitter end is rowed ashore in the dinghy
 - ▶ Secure the line to a stern cleat onboard Puffin after tying off the bitter end to a fixed object on shore. Alternatively, loop the line around a tree or other secure object on shore and cleat off the bitter end onboard Puffin.
 - ▶ When removing the stern tie, wrap the line back onto the spool and allow to drip dry in the cockpit before stowing in the lazarette

Dinghy and Outboard



- Puffin's dinghy (we call her Puffling) is a 10.5' AB Ventus 10VL, new in 2013, with a fiberglass bottom and hypalon tubes.
- The dinghy should be pulled up close to the swim step so that it is almost, but not quite, touching when stationary – do not allow the dinghy bottom to hit the swim step in rough seas or wakes
- Tie the dinghy off above the turnbuckle on the port backstay (a clove hitch and a half hitch or two works well) and be sure to tie off or cleat the bitter end of the dinghy painter. Check the dinghy periodically while underway to make sure she's towing well.
- The dinghy painter is polypropylene cored and will float, but ensure that it is not in the water before starting Puffin's engine to ensure it does not get wrapped around the propeller shaft
- We use a short line at the port aft end of the dinghy to tie her off to Puffin when boarding so she lies athwartships and can easily be boarded over the side from the swim step - this makes installing or removing the outboard much easier also. However, do not tow the dinghy in this position.
- There is a gas can tied off in the dinghy with extra gas for the outboard
 - ▶ The outboard is a 4-stroke engine, so **do not add oil to the gas**
 - ▶ The gas tank cap is on top of the outboard
- Starting the outboard engine
 - ▶ Flip the fuel valve lever on the starboard aft corner of the engine cover to the open (forward) position
 - ▶ Pull out the choke
 - ▶ Open the air vent on the gas tank cap
 - ▶ Ensure the black kill clip is installed behind the red shut-off switch
 - ▶ Apply some throttle
 - ▶ Pull the starter cord smartly
 - ▶ Slowly push in the choke as the engine warms up
- Stopping the outboard engine
 - ▶ Pull out the choke, or
 - ▶ pull out the kill clip - reinstall the clip after the engine stops
 - ▶ Shut off the fuel valve lever
 - ▶ Close the air vent on the gas tank cap
- Always remove the outboard and return it to the taffrail mount overnight or anytime Puffin is underway - be sure to tighten the two clamps securely
- When going ashore it is best to kill the outboard and drift up onto the beach (tilt the engine up if necessary to avoid grounding the skeg or prop)
- Step onto the beach and back into the dinghy over the bow to avoid damaging the hypalon tubes on sharp rocks or barnacles

- After going ashore on a beach, pull the dinghy up the beach to stay above a rising tide, and tie her off to a tree, stump, or large rock.
- There is a bailer tied off in the dinghy to remove rainwater - be sure to bail the dinghy before getting underway if there was rain overnight

Stove/Oven/Microwave/BBQ

- The 10 gallon propane tank for the Force 10 stove/oven is located in a locker on the starboard cockpit coaming
- The propane locker drains overboard in the event of leaks
- To use the stove or oven
 - ▶ Manually open the propane tank valve in the cockpit locker
 - ▶ Turn on the “LP Gas” breaker on the DC electrical panel
 - ▶ Turn on the solenoid valve at the switch just inboard of the galley sinks
 - ▶ Light the stove or oven burner(s) by pushing the control knob in and turning counterclockwise to “High” for the stove or the desired temperature for the oven
 - ▶ It may require up to 5-10 seconds for the burner to ignite
 - ▶ Continue holding the control knob in for a few seconds after the burner ignites
 - ▶ Adjust the flame to the desired level with the control knob
- The stove may be locked in place or unlocked to allow the gimbals to keep the stove level when the boat is heeled
- If using the stove in gimbaled mode while underway, there are pot fiddles stowed in the drawer beneath the refrigerator
- If using the broiler burner in the oven, do not cook food more than 20 minutes and check it often
- After finishing with the stove/oven, turn off the solenoid valve and let the burners extinguish, then turn off the “LP Gas” breaker and then close the manual valve on the propane tank
- The microwave will only operate when connected to shore power
- Using the barbecue grill
 - ▶ There is a shelf stowed inside the barbecue that attaches to the front to create workspace - make sure to remove the shelf before lighting the barbecue
 - ▶ The barbecue has a dedicated propane tank on the outside of the starboard taffrail



The Force 10 propane stove and oven showing the three burner controls (left) and the oven control (right)

- ▶ Manually open the valve on the barbecue propane tank
- ▶ Open the control valve on the barbecue to “High” to light
- ▶ Insert long matches or butane lighter through the hole near the bottom of the forward side to light
- ▶ We cook just about everything inside aluminum foil – it makes the food easy to handle, makes cleanup a breeze, and the food tastes great with no charring

Refrigerator/Freezer

- Power to the two refrigerator/freezer compartments is provided by the “Ice Box Left” and “Ice Box Right” breakers on the DC electrical panel
- To open the refrigerator or freezer lids, push down on the latches to release tension, and then turn the latch. The gas struts will then raise the lids and hold them in an upright position. When closing, push down on the latches to release tension, then rotate to the closed position.
- To set the temperature in either refrigerator compartment, use the digital control panel in the galley
 - ▶ Hold for two seconds and then release the “SEL” button when “St-1” appears in the display
 - ▶ Use the up or down arrows to adjust the setpoint
 - ▶ Press the “SEL” button again to return to the temperature display
 - ▶ The inboard compartment (right side as you’re looking at it) works best as a freezer – a setpoint of 25°F is recommended
 - ▶ Both compartments may be configured as a refrigerator if a freezer is not needed – a setpoint of 42°F is recommended
 - ▶ The refrigerator and freezer will default to the last setpoint when powered on, so if the temperatures are acceptable, there is no need to reset them
 - ▶ The refrigerator will be colder than the setpoint next to the cold plates - keep this in mind when stowing liquids to keep them from freezing
 - ▶ If you need to drain either compartment, turn on the “Ice Box Drain” breaker on the DC panel and activate the drain switch on the counter above the refrigerator – be sure to turn off the pump after the water is drained from the compartments
 - ▶ Sometimes, the refrigerator or freezer will run at max current continuously regardless of the temperature or setpoint. If this happens, they may get very cold. Cycling the refrigerator breakers off and then on at the electrical panel usually seems to get the controllers working properly again.



Refrigerator/freezer compartment lids open and showing the digital control panel

Lights and Flashlights

- Puffin is very well lighted throughout and there are lights everywhere they are needed
- There are dome lights in each of the two cockpit lazarettes, in the engine compartment, and in the bilge – they are operated by a switch on the side of each light fixture. Please remember to turn these dome lights off when closing the compartments.
- The overhead lights in the salon and forward stateroom are dimmable
 - ▶ The salon dimmer switch is above the LPG solenoid switch inboard of the galley sinks
 - ▶ The forward stateroom dimmer switch is located on the forward side of the hanging locker to starboard
- There are dimmable reading lights along the side of the cabin in the salon and both staterooms – each is controlled independently by a knob on the bottom of the mount
- The aft stateroom and nav station have lights that are switched on and off with a slider
- The head has three lights that are operated by sliding the fixture itself back and forth
- There are deck lights mounted on the mast that are operated from the DC electrical panel
- The refrigerator has a light that is illuminated by the switch on the countertop above the freezer
- On the starboard side of the companionway, there is a switch that controls the courtesy entry lights – these are wired directly to the battery and provide light when entering the boat at night (including inside the electrical panel cabinet) even if the cabin light breakers are switched off
- There are flashlights mounted next to the companion ladder and against the forward bulkhead of the salon on the starboard side
- When anchoring, turn on the “Anchor Light” breaker on the DC panel for the all-round white anchor light at the masthead. A LED anchor light fixture was installed in 2015 to reduce current draw overnight.
- If needed, the steaming light and the tricolor light are illuminated from the DC panel

Salon Table

- We keep the table folded up and out of the way when not in use
- The table leg snaps against the table to hold it in place when raised
- Pull the pin to lower the table – replace the pin after lowering the table so it doesn’t get lost
- With the carpet on the cabin sole, the pin on the bottom of the leg will not fit into its socket – ensure that the leg is more or less vertical so that it will be stable while the table is in use
- When using the teak surface of the table, please use the placemats stowed in the cabinet behind



Looking forward through the salon with the table fully open

the table. These will prevent damage to the teak surface.

- To fully open the table, fold out the second leaf and support it with the two suction-cup legs that are stowed in the salon hanging locker
- There is stowage for cups, mugs, glasses, and wine bottles in the table cabinet

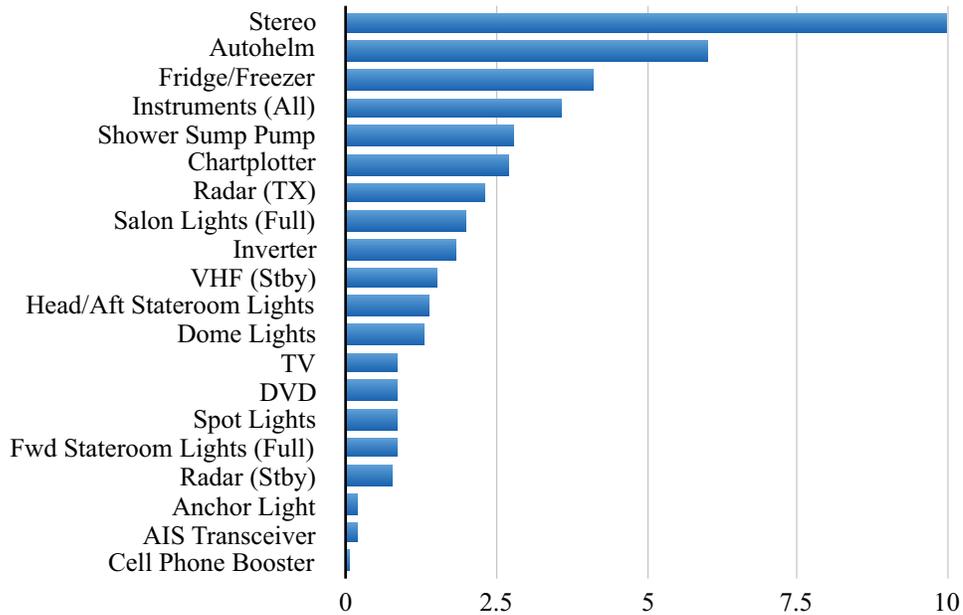
Salon Berth

- The table must be stowed in the vertical position before the salon berth can be deployed
- Remove the port settee cushions
- Remove the pin in the inboard center of the settee top
- Lift the settee top and slide it inboard along the rail mounted to the forward salon bulkhead
- Settle the aft end of the settee top on the shelf inboard of the aft end of the settee
- Replace the pin in the outboard hole of the settee top to hold it in place
- Use the cushions (including the two forward seat backs) to make up the berth
- There is an additional triangular piece of cushion stowed behind the starboard salon settee that fills the last gap

Electrical System

- Puffin has three AGM Group 27 house batteries that provide 300 A-hr of capacity. However, Puffin also has a lot of electronic systems that require a lot of power to operate (a system that draws 10 A operating for 30 hours requires 300 A-hr of capacity). The systems that draw the most current may not always be obvious, as shown by the chart on the next page. Note that the current draw rating in the chart assumes the device is operating in maximum power mode (e.g. the stereo CD player is running and volume is at maximum, the compressors on the refrigerator and freezer are operating, etc...). If you plan to be away from shore power for extended periods, think carefully about battery management and monitor battery charge closely.
- Puffin's house batteries can be charged while motoring or while connected to shore power. However, depending on the state of charge in the house batteries, it can take more than 3 hours under power or more than 10 hours on shore power to fully charge the batteries.
- If charging the batteries with the alternator while the engine is running, the engine must be turning at least 1200 RPM. The output of the alternator is not optimum at lower RPM, and consequently, the batteries will not charge effectively if the engine is just idling.
- Battery charge (both engine start and house batteries) can be checked with the voltmeter and toggle switches on the electrical panel
- Fully charged batteries will indicate about 12.7 Volts when the battery charger is not operating - a battery showing less than 12.0 Volts should be charged to ensure maximum performance (12.1 Volts is about 50% charge)
- The battery charger automatically senses the state of charge and regulates the charging current to prevent overcharging the batteries

Current Draw by Device (Amps)



- The battery charger switch is located on the battery panel below the port salon settee – it should always be switched on to allow charging from the alternator on the engine and from the battery charger while on shore power
- The battery charger only charges the house and thruster batteries. The engine start battery is only charged by the alternator – if the engine start battery is depleted and will not start the engine, press the “Momentary Parallel” switch on the engine control panel while cranking the engine to draw power from the house batteries
- While operating on battery power, the inverter is engaged by turning on the Xantrex inverter switch on the left side of the nav station and the “Outlets Port” and/or “Outlets Stbd” breakers on the AC panel
- The battery charge can also be monitored on the Xantrex inverter control panel on the left side of the nav station or via the instrument repeater at the nav station. If the Xantrex panel is left on, it will provide a false reading on battery voltage. In this case, turn the panel off and back on again to read the correct voltage.
- Never turn off the batteries at the battery control panel below the aft end of the port salon settee - always leave the battery switches on (correct position denoted by the green dots)

TV and Stereo

- TV and DVD player
 - ▶ Power to the TV behind the starboard salon settee is provided by turning on the “Outlets Stbd” breaker on the AC panel (if not connected to shore power, the inverter will provide power to the TV)
 - ▶ The DVD player at the nav station is powered by turning on the “Electronics” breaker on the DC panel
 - ▶ Remotes for the TV and DVD are stowed in the chart table
 - ▶ Remember to aim the DVD remote at the DVD player mounted at the nav station, not the TV

- ▶ Audio when watching the TV is routed through the TV speakers, not the stereo speakers
 - ▶ The TV has a digital antenna for watching broadcast television, but choices are pretty limited in the Bellingham area
 - If traveling elsewhere, the available local channels can be programmed automatically by pressing the “Auto Prog” button on the TV remote
 - ▶ The TV accepts input from a laptop computer (HDMI1) or iPad (HDMI2) via the HDMI ports and Audio In ports (if your device does not send audio via the HDMI cable) on the back
 - ▶ Switch between TV inputs using the “Source” button on the remote
- Stereo
 - ▶ Power to the stereo is provided by the “Stereo” breaker on the DC panel
 - ▶ If the stereo is powered off when the breaker is closed, press the source (SRC) button on the top left of the stereo to turn it on.
 - ▶ Adjust volume with the round knob on the stereo
 - ▶ There are speakers in the salon and the cockpit
 - ▶ The stereo provides normal AM/FM reception, but also includes an iPod connector and SiriusXM satellite radio
 - ▶ Listening to an iPod or iPhone
 - Connect the black cable above the nav station to the iPod charging cable (the stereo connector cable has a USB input)
 - Press the source (SRC) button on the stereo to cycle through the source input selections until "USB" is displayed on the stereo screen
 - After the stereo acknowledges the connection to your iPod, press the "BAND" button to control music playback from your iPod - look for an icon of a hand holding a iPod on the right side of the stereo display
 - You can also connect a device using the white stereo mini-plug cable stowed on the shelf above the nav station. Press the source (SRC) button on the stereo to cycle through the source input selections until “AUX” is displayed on the stereo screen.
 - ▶ Listening to SiriusXM satellite radio
 - Press the SRC button on the stereo to cycle through the source input selections until "SIRIUS" is displayed on the stereo screen
 - Cycle through the genre selections (Rock, Pop, Country, Classical, Jazz, News, Sports, etc...) using the up/down arrow buttons to the right of the volume knob



The nav station showing the stereo and DVD player at center

- After selecting the desired genre, cycle through the available channels using the up/down levers on either side of the volume knob - the name of the channel will be displayed on the stereo screen

Cabin Heat

- Puffin has a Webasto diesel forced air heating system installed in 2012
- There are vents near the cabin sole in the salon, galley, and each stateroom
- The thermostat is mounted forward of the starboard salon settee
- The furnace is activated by turning the switch on the thermostat, shown in the photo at right, from “Off” to “Heat”
- The temperature setpoint is adjusted by pressing the up or down buttons to the desired cabin temperature
- The fan will start circulating air, but it will take a few minutes to feel warm air
- The diesel heat system operates independently of the AC and DC electrical systems and it will operate regardless of whether or not the boat is connected to shore power



Head and Holding Tank

- Don't put anything in the toilet except human waste – if you didn't eat it or drink it, it shouldn't go in the toilet
- There is a covered trash can in the head - put used toilet tissue in a Ziploc bag and place the bag in the head trash can
- We tend to use the facilities on shore whenever possible – it reduces the load on the head and holding system
- When using the toilet, gentlemen please be seated - it's safer in a seaway and keeps the head much cleaner under all conditions
- Using the head
 - ▶ Turn two-position valve to “Flush” and pump the handle using full, slow strokes to add water to the bowl
 - ▶ Turn valve to “Dry”
 - ▶ Use the head
 - ▶ Turn valve to “Flush” and pump the handle 8-10 times to flush the waste into the holding tank



A view of the marine toilet in Puffin's head showing the pump handle and two-position valve at left

- ▶ Turn the valve back to “Dry” and pump until the water level is at the bottom of the bowl
- Leave the valve in the “Dry” position when not in use to avoid sloshing or siphoning water while underway and heeled
- A new state-of-the-art ultrasonic Maretron tank level monitor system was installed in 2014
 - ▶ The display on the left side of the nav station, shown in the photo at right, shows the water and holding tank levels
 - ▶ Press the power softkey at far left to turn on the display
 - ▶ When the startup screen appears, press “accept” on the far right softkey
 - ▶ If the water or holding (black water) tank level is not displayed, press the “up” or “down” softkeys to cycle through the screens. The only screens that have active data are the water and holding tank levels.
 - ▶ The tank levels are displayed in percentages - 100 denotes a full tank, while 0 denotes an empty tank. Please empty the holding tank before it reaches 90%.
 - ▶ Press and hold the power softkey to shut down the display; it will provide a three-second countdown before shutting off
- Emptying the holding tank
 - ▶ The necessary valves and through-hulls are all located under the cabin sole in the forward stateroom
 - ▶ The valves and plumbing are all well labeled
 - ▶ Remember, through-hull valves are open when the handle is in line with the hose and closed when the handle is perpendicular to the hose
 - ▶ One two-way valve (also called a Y-valve) controls the movement of waste from the head to either the holding tank or directly overboard – this valve should remain in the holding tank position as shown in the photo at right (the arrows on top of the valve show you where the waste will be directed)
 - ▶ The other Y-valve controls the movement of waste from the holding tank to either the deck pumpout or overboard through the macerator pump – this valve should remain in the deck pumpout position, as shown in the photo on the following page, except when pumping overboard
 - ▶ The direct overboard discharge through-hull should remain in the closed position



A view of the Y-valve controlling movement of waste from the toilet with flow directed to the holding tank

- ▶ The macerator discharge through-hull should remain closed except when pumping overboard in an area where it is legal to do so
- ▶ The macerator is activated by turning on the “Macerator” breaker on the DC panel – ensure that the holding tank discharge Y-valve is set in the macerator position and the macerator discharge through-hull valve is open (running the macerator pump with either of these valves in the wrong position has the potential to burn up the pump)
- ▶ Listen to the pitch of the macerator pump while it is running; when the pitch rises, the holding tank is empty and the “Macerator” breaker should be turned off. Alternately, you can watch the Maretron tank level monitor as the holding tank is pumped out. When the display reads “0” or reaches a low number and stops decreasing, turn off the “Macerator” breaker.
- ▶ Return the holding tank discharge two-way valve to the deck pumpout position and close the macerator discharge through-hull valve
- ▶ To pump out using shoreside facilities, leave the holding tank discharge two-way valve in the deck pumpout position and follow the directions for the shoreside honey pot
- ▶ The tool to open the deck pumpout is stowed in the chart table; the deck port is located toward the forward end of the port side



A view of the Y-valve controlling movement of waste from the holding tank with flow directed to the deck pumpout

Shower

- The water heater (6 gallons) will get the water hot after about 20 minutes on shore power or about 20 minutes of running the engine under load (the engine running at idle will not effectively heat water)
- The water will stay hot at least six hours after the engine is shut off or shore power is disconnected
- Before showering or using the sink in the head, turn on the “Sump Pump” breaker on the DC panel to pump the water out of the shower sump
- If the shower sump pump is running continuously when the water in the head is not running, or if the sump pump does not run, the pump strainer may need to be cleaned. The pump is located under the sole access plate just to starboard of the door to the head in the forward part of the salon. If cleaning the strainer doesn't fix the problem, pull the pump out of the outlet hose socket to relieve the back pressure. After plugging the pump back into the outlet hose socket, it will often work properly.
- Because the hot water heater is only six gallons, you will need to take a “Navy” shower
 - ▶ Get wet and turn off the water
 - ▶ Soap up and/or shampoo
 - ▶ Turn on the water and rinse off
 - ▶ Turn off the water

- Wipe down the shower stall doors after use and/or use the squeegee to remove the water from the doors to prevent buildup

Cockpit Canvas

- Never touch the dodger glass and never wipe the glass with a rag or towel
- If the dodger glass is covered with salt crystals and needs cleaning
 - ▶ Flood the glass with fresh water
 - ▶ You may use a squeegee to remove the fresh water for visibility after flooding if needed
- The connector piece between the dodger and bimini may be removed if desired
- Please do not attempt to adjust the dodger or bimini supports. If modifications are needed for visibility/usability, please inform San Juan Sailing or NW Explorations.



A view of the cockpit enclosure with all side and rear panels in place

- There is a full cockpit enclosure available on request. If you'd like to have the enclosure for your charter, please inform San Juan Sailing before your check-in and our maintenance professional will install it for you.
- The triangular pieces of canvas on the aft end of the dodger will provide additional protection from the elements when sailing without the cockpit enclosure installed, particularly at the forward end of the cockpit.
- If the enclosure is installed, the forward side panels can be unzipped on the forward and top edges so the panels can be folded back against the aft side panels and snapped into place. This makes it easy to come and go out of the cockpit on either side (e.g. when docking, mooring, or anchoring).
- The rear center panel can be rolled up and secured with the two attached canvas straps to allow easy access to the swim platform from the cockpit.

Miscellaneous

- The companionway hatch boards stack on the shelf under the companion ladder
- The nav station seat is rotated in and out with an electric motor using the toggle switch underneath the chart table on the forward side of the locker
- The steering wheel can be locked in place to prevent unwanted motion of the rudder while docked or moored. To lock the wheel, spin the center hub clockwise until tight. To unlock the wheel, spin the center hub counterclockwise until loose. Make sure the wheel is unlocked before getting under way.

- The Lewmar folding wheel, shown folded in the photo at right, makes it easier to get around in the cockpit while docked or moored. To fold, unscrew the two large plastic couplers, fold the outer wheel segments inward, and connect the attached shock cords together. To unfold, reverse the procedure and tighten the two large plastic couplers to use the wheel before moving the boat.
- Be careful to rotate the forward and aft stateroom door latch handles flush to the door before folding the doors when stowing them in the open position. If the latch handles are not rotated flush to the doors, they will gouge the wood when the doors are folded.
- The Peek-a-Boo blinds operate by sliding them back and forth. Please do not take the blinds off the Portlights at any time. When docked or moored, you may open the portlights for more light and ventilation, but please leave the blinds attached to the glass.
- There are cleaning supplies stowed under the galley and head sinks and a vacuum stowed under the aft end of the starboard salon settee
- Please do not wipe the chartplotter screen unless you have rinsed it with fresh water to remove any salt. Doing so will scratch the anti-glare film on the screen and make it difficult to read. Use only microfiber or pure cotton cloths when wiping the screen.
- When you depart Bellingham, please leave the large two-step dock step at the marina. There is a folding two-step dock step available for your use when away from Squalicum Harbor. Note the line attached to it. Please attach the dock step to the boat so you don't accidentally leave it behind when you depart a marina out in the islands.
- Puffin's USCG Documentation Number is permanently affixed to the interior of the hull and can be viewed behind the center port settee in the salon by removing the cover on the locker on the lower shelf
- Be sure to sign our ship's log which is kept next to the bookshelf above the port salon settee
- Puffin is on Facebook! Please visit her page at <http://www.facebook.com/pages/SV-Puffin/216094218470439?sk=wall> Feel free to post comments or pictures to let us know how you enjoyed your time aboard.



The Lewmar folding wheel in the folded position

In Case of Emergency

- If the problem is not obvious or difficult to address, call San Juan Sailing on VHF Channel 80A or 1-800-677-7245
- Puffin is professionally maintained by NW Explorations – they can be reached 24/7 at 1-360-393-5309

- If you have a question that can't be addressed by San Juan Sailing or NW Explorations, you may call us at 509-528-8077 during weekdays or 509-627-4811 on weekday evenings and weekends
- There are three fire extinguishers mounted in brackets onboard Puffin
 - ▶ One in the starboard cockpit lazarette
 - ▶ One next to the companion ladder
 - ▶ One on the aft bulkhead of the forward stateroom on the starboard side (behind the door)
- There is a flare gun and flares stored in the salon hanging locker in an orange cylindrical container
- Life jackets are stowed in the salon hanging locker and/or the starboard cockpit lazarette
- There are throwable (Type IV) PFDs in the starboard cockpit lazarette
- There is a Lifesling mounted on the port taffrail
- There is a pneumatic signaling horn in the chart table
- If there is a fire at the stove, turn off the propane at the solenoid and the "LP Gas" breaker on the DC panel, if possible
- If an alarm sounds while the engine is running
 - ▶ Is water periodically being ejected from the exhaust port on the stern?
 - ▶ Shut off the engine if safe to do so
 - ▶ The cause of the overheating is most likely eelgrass clogging the raw water strainer or a closed raw water intake valve – check both under the salon cabin sole just forward of the dustpan at the foot of the companion ladder
 - ▶ Before opening the raw water strainer, close the raw water intake through-hull
 - ▶ After cleaning the strainer, remember to open the raw water intake
 - ▶ Restart engine and see if it maintains normal coolant temperature without an alarm
 - ▶ Watch for water being periodically ejected from the exhaust port on the stern
 - ▶ If this doesn't solve the overheating problem, the impeller may have failed, the engine coolant level may be low, there may be a coolant leak, or the water pump may have failed
- In the event you have a significant impact on a rock or log
 - ▶ Immediately call San Juan Sailing at 1-800-677-7245
 - ▶ Proceed to the nearest harbor with marine services and proceed as advised by San Juan Sailing
 - ▶ Check to see if water is entering any of the compartments below the cabin sole – is the automatic bilge pump running periodically or continuously?
 - ▶ There is a manual bilge pump on the starboard side of the cockpit aft – the pump handle is stowed in the small starboard cockpit coaming locker
- Puffin has a very reliable rack-and-pinion steering system and a skeg-mounted rudder, but in the unlikely event of a steering failure
 - ▶ There is a two-piece emergency tiller stowed in the upper part of the starboard cockpit lazarette
 - ▶ One piece fits into the receiver under the small opening in the helmsman's seat

- ▶ The other piece attaches to the first piece and is used as a tiller to steer the boat via a direct connection to the rudder shaft
- ▶ When safe to do so, call San Juan Sailing at 1-800-677-7245 and proceed as directed
- In the event a crewmember inadvertently falls overboard
 - ▶ One person on board should be designated to maintain visual contact with the person in the water at all times - communicate his or her position to the helmsman continuously
 - ▶ Throw a Type IV PFD, a life jacket, and/or the Lifesling to the person right away
 - ▶ Instructions for use of the Lifesling are printed on the inboard side of the Lifesling
 - ▶ The person's position may be marked on the chartplotter by pushing the "WPTS MOB" button
 - ▶ If sailing, heave to immediately
 - ▶ If under power, put the boat into neutral immediately
 - ▶ While maintaining visual contact with the person in the water, carefully maneuver the boat into position to recover the person using the ladder stored under the hatch on the swim step