

## Notes from the Owners of Chinook

*Welcome aboard!*

*Chinook is well-known in the fleet for her easy and predictable handling and cruising comfort. From the bright and spacious saloon, the roomy stand-up shower/head combination, the spacious cockpit with pivoting wheel, the roomy fore and aft cabins, to the storage and excellent galley with both front-load frig and top-load freezer, there are so many features to like about Chinook! We personally want to cruise on her in relative comfort, so we have outfitted Chinook with systems and amenities that make that possible.*

*We appreciate you not smoking or vaping, or having pets aboard. Please remove your shoes when possible.*

*Below are some other tips on how to get the most out of Chinook. If you have questions or feedback, we would love to hear from you!*

Happy sailing,

Jami and James Lewis

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CHINOOK'S SPECS:	
Year: 2005	Refrigeration:
LOA: 37' LWL: 32' 10"	- Front-load refrigerator 12" W x 16" D x 26" H
Beam: 12' 4" Draft: 6' 3"	- Top-load freezer 19" W x 14" D x 21" H
Displacement: 15,013 lbs (dry)	Berth Mattresses:
Mast height above WL: 53' 6"	- V-Berth 6' 6" L X 5' 6" W at head & 24" at ft
Fuel: 33 gal.	- QTR Berth 6' 6" L X 5' 6" W (minus "seat")
Water: 98 gal. (2 tanks) Hot water: 6 gal.	Headroom:
Holding: 22 gal.	- V-Berth 6' 5" - Shower 6' 8"
Engine: 39 hp. Yanmar	- Salon 6' 7", - Qtr berth 6' 9"

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**Key to Markings:** Throughout these notes we have use the following convention:

- **Italics** – used for headings.
- ALL CAPS – used for safety and operational warnings.
- Underlining – indicates the location of things.
- **bold** – indicates important knowledge or data.

## 1. Emergencies:

**Fire** – There are four ABC rated fire extinguishers onboard, there location are:

1. Forward cabin, below berth
2. Under Nav station desk
3. Aft cabin, above cabin door
4. Starboard cockpit locker

**IF YOU HAVE A STOVE FIRE, TURN OFF THE LP GAS BREAKER AT ELECTRICAL PANEL**

**Hitting a Log, or Running Aground** – In case of a log hit or running aground, immediately check for leaks in the bilge and then check for cracks in the fore and aft sections of the bilge where the keel attaches to the hull. Also check all keel bolts. Once you are sure no water is entering the hull contact **San Juan Sailing at 800-677-7245** and proceed as directed.

**Leaks** – First, get bilge pumps going, both manual and electric. Then determine the source of the water, check the prop shaft first and then the through-hulls. There is a diagram showing the location of the through hulls in the notebook. Get the crew on deck and into life jackets. There are wood plugs wired to each of the through hulls.

There are **two bilge pumps**. The manual bilge pump is located on the starboard side of the cockpit wall. The handle is part of the pump housing – pull out to use. The electric bilge pump has an automatic float switch **but the switch on the electrical panel can be used to power the main pump manually.**

**Steering Failure** – If the steering system fails there is an emergency tiller in the starboard cockpit locker. It fits on rudderpost which is under the hinged steering seat.

**Safety Gear** – Flares, horn, etc. are located starboard under seat cushion at NAV table. An extra Radar Reflector is located under the port settee seat cushion. The first aid kit is located in the nav station seat.

**Spare Parts and Tools** – Spare parts and tools are located under the middle and forward port side settee cushions.

## 2. Anchors and Windlass:

**Primary anchor: 44lb Bruce w/200ft of chain marked every 25' with a yellow poly line.**

**Secondary anchor: 15 lb Fortress in the port stern locker w/ 50' of chain and 200' of rope.**

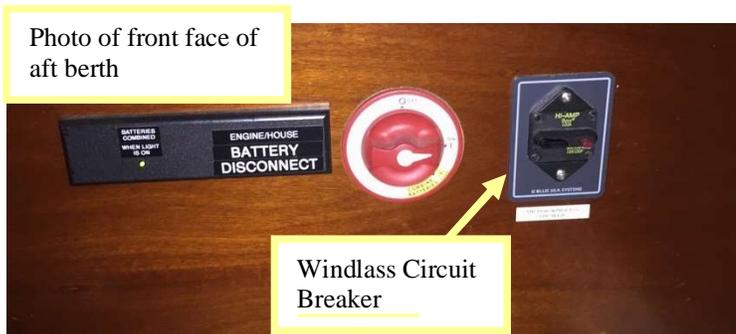
Typical scope in the San Juan Islands is **4 to 1**. Scope of 7 to 1 is required only in certain conditions (i.e. sustained winds over 25 knots). Most of the anchorages are well-protected and popular, so you will likely have someone anchored nearby. Popular coves are 20'- 40' deep, so expect to pay out 100'-175' of chain when anchoring. Remember that twice-daily tides **can change water depth up to 13 feet** so be aware of where you are in the cycle when choosing an anchorage and deciding how much chain to pay out.

$(\text{Water depth on sounder} + \text{tide increase expected} + 4 \text{ feet} *) \times 4 = \text{Length of Chain}$

\*to account for the distance from sounder to bow roller

For example:  $(25' \text{ of water} + 6' \text{ of tide increase} + 4') \times 4 = 140 \text{ feet of chain out}$

**Anchor Windlass will operate only if the engine is running.** It requires power from a circuit breaker located in the aft stateroom under the front of the berth (see photo). If this breaker trips there will be a small lever on the bottom which needs to be swung back into place to reset the breaker. The up-down controller for the windlass is located in a small dry bag inside the chain locker.



### **Lowering the anchor:**

- Check that windlass breaker is on.
- Remove windlass controller from dry bag
- Untie the line holding the anchor in place (this line doubles as the snubber).
- Please lower the anchor by hand for the first 5-6 ft. so it does not swing into the bow.**
- Continue lowering the anchor with windlass until desired length of rode is paid out.
- Secure the rode on one of the forward cleats.
- Set the anchor by reversing at 800 RPM for 1-2 minutes, **DO NOT go above 1000 RPM.**
- Turn on the anchor light.

### **Raising the anchor:**

- Start the engine.
- Turn off the anchor light.
- Slowly motor toward the anchor** while using the windlass just to take up the slack (never use the windlass to pull the boat). If the anchor is really stuck in the mud you will hear the windlass slow under the load. If you hear this change, immediately stop the windlass and motor the boat forward to free the anchor.
- Once the anchor is out of the water, please bring onto the boat that last short length of chain by hand.** Pulling the anchor up onto the rollers using the power of the windlass will likely chip the fiberglass as the anchor swings into the bow.
- Secure the anchor with the snubber.
- Consider washing down the anchor/chain with the salt-water anchor wash-down system (more info in water section as this requires advance planning).
- Re-secure windlass controller in dry bag.

### **Stern Ties:**

There are times when adding a stern tie to shore will be handy, especially in Desolation Sound. Chinook has **500' of line on a spool stored in the starboard cockpit locker.** We use the mop handle to mount the spool in the transom walk-through so the line can easily be deployed and recovered. The recovered line is usually very wet so we leave the spool sitting on end in the walk-through for a couple hours to dry before we put it away.

3. **Batteries:** Chinook has a 4-battery house bank (440 amp hr) which is located under the aft berth and a start battery (75 amp hr) located in front of the engine. Battery voltages can be checked at the NAV Station (see picture). **The banks are isolated so there is no need to change the battery switch.**

**If the house bank gets below 12 volts please run the engine for a couple of hours to charge them.**

**Be aware that the CO detector (located under the nav table) will low-battery chirp if the boat batteries get too low.**



4. **Berths:** Chinook comfortably sleeps four in the two staterooms and then one or two smaller crew members in the salon. If you plan on using the salon for sleeping, remember to request extra bedding. The salon table lowers to make a larger port-side sleeping area by inserting the extra crescent-shaped cushion (usually stored in V-berth) Both cabins have the Froli venting system under the mattresses to help vent moisture and provide more cushion.

5. **Cabin Heat:** Chinook has a diesel-fueled Webasto 3500 forced-air furnace. The thermostat is located at the nav station (see photo). Simply turn on the switch and set the temperature you want. **There is a 2-3 minute delay from when you turn it on to when you will hear the fan running.**

Running the furnace will make the cabin dry and warm on those occasional rainy days or cool evenings. You may notice a clicking noise that is the electric fuel pump pulling from the main diesel tank.

We do not recommend running the furnace all night (although it is doable) as its draw on the batteries is sizable. It is also fairly noisy, especially from outside the boat, so your neighbors will appreciate it being off most of the night.

**Remember to keep the areas in front of the registers clear of heat-sensitive items.** Hot air blows from two circular registers, one in the head and the other on the outside of the navigation table seat locker.

There is also a 120V AC electric heater located in the seat-locker of the port setee (closest to galley) should you need this while connected to shore power.



6. ***Dinghy and Outboard:*** Chinook has a 10' Kachemak 310 aluminum bottom dinghy. Towing works best when the dinghy is brought close to the boat — about 4 or 5 feet off the stern – to avoid accidentally wrapping the painter around the propeller when you back up. Help ensure the dinghy does not slip loose by tying the painter off twice (for instance, a cleat-tie close to the dinghy and a stern-rail tie with the bitter end) will

We very much appreciate you take special care when beaching the dinghy. Beaches in the San Juan's are seldom gentle, sandy beaches; they are usually rocky and covered by barnacles equipped with extra sharp rubber cutters. So any extra care will be appreciated. Also consider securing the painter under a rock or to a log, as a rising tide can leave you high, dry and dinghyless!

The outboard has a four stroke engine, so **do not add oil to the gasoline mixture – it uses straight unleaded gasoline**. San Juan Sailing will be sure you have a full gas can, which is normally in the dinghy. Also please **do not cruise with the outboards on the dinghy** as a large wake or gust of wind can overturn the dinghy.

**The combination for the outboard's padlock can be found in your charter packet.**

### ***Honda 2.3 hp Operating Instructions:***

#### ***Starting the Outboard:***

- a. Push the fuel valve lever (starboard aft corner of the outboard) aft to open.
- b. Pull out the choke switch (starboard forward corner of the outboard).
- c. Open the air vent on the top of the fuel cap by turning counter-clockwise.
- d. Make sure the black U-shaped kill clip (with the red lanyard) is clipped into the red shut-off knob (port forward corner of the outboard).
- e. Turn the handle throttle ¼ turn counter-clockwise.
- f. Pull the cord until it starts (you shouldn't have to pull it more than 5 times).
- g. There is no transmission--just throttle up to go forward and throttle down to stop. If you want to go in reverse--just swivel the outboard around 180 degrees.

#### ***Shutting Off the Outboard:***

- a. Shut the outboard off by pushing in the red shut-off knob (where the kill clip is clipped in). Or, just pull the red lanyard until the clip pops off.
- b. To avoid prop damage, shut the outboard off and raise it out of the water before you reach the shore. Pull the outboard forward and out of the water until it clicks and stays in place.
- c. To put the outboard down, release the stainless steel lever on the starboard side of the shaft.
- d. Put the outboard back on the outboard mount on the stern rail and tighten both braces.
- a. Push the fuel valve lever forward to close and close the air vent on top of the fuel cap.

#### ***Troubleshooting the Outboard:***

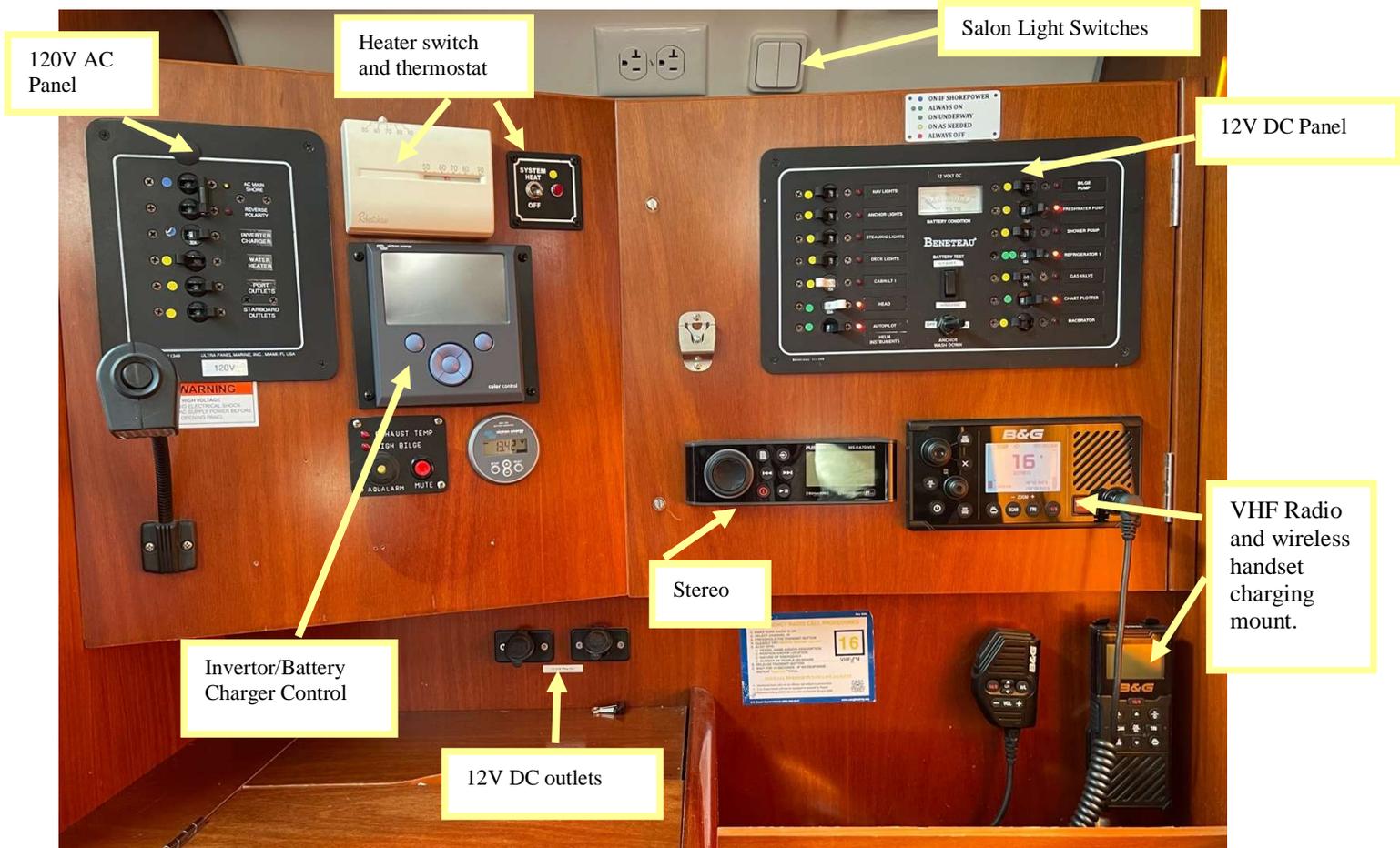
If the engine won't start, review steps 1-6 above to make sure you've done all 6 steps. There is a spare spark plug and spark plug wrench in with the safety equipment in case you need them. If the outboard is running and you're heading toward shore, and the engine suddenly quits, it's usually that someone has forgotten to vent the fuel cap. If the engine is running fine but the propeller isn't moving, the shear pin is probably broken – just take the cotter pin out to remove the propeller and replace the broken shear pin (a spare pin is located forward of the shaft under the handle grip).

7. ***Dodger & Bimini:*** As with all dodgers, please be gentle. If the glass becomes spotted with salt please get a pot of fresh water from the galley sink and “flood” the salt crystals off the plastic. Our dodger has some very handy rails on the back and sides that make staying upright and onboard easier. The connector canvas between the dodger and bimini can be removed by unzipping it. When you remove it please fold and store it so the windows do not crease. We have onboard several “waterblade” squeegees that are great for wiping away the morning dew from the windows. Fresh water from the fresh-water hose can be used to spray down the dodger/bimini. Please avoid using salt

water to clean them. You will notice flexible solar panels are mounted on the bimini. Please don't place items on them and please avoid using them or their cables as handholds.

### 8. Electrical Systems:

Nav Station Overview



## 120V AC Panel

*120V AC Panel--*

Chinook has two ways to get AC power. A 30-amp shore power connection and a 2500 watt inverter. The AC outlets and microwave will work on either shore power or inverter, but the microwave has a very heavy draw on the batteries if run using the inverter without the engine running. (**so run the microwave only on shore power or while the engine is running**). The water heater and the battery charger both require shore power, therefore **the water will not heat by idling the engine**.

The inverter controller is mid nav station under the furnace thermostat with directions on the next page.

*12V DC Panel –*

- Most of the breakers on the 12V DC panel are self-explanatory.
- Chart plotter breaker sends power to the stereo, radar and the VHF radio, chart plotter.
- Autopilot/Helm instruments breaker powers the depth sounder, knot meter, and wind instruments in addition to the autopilot.
- Electric toilet requires Head breaker on.
- Best to turn on shower pump breaker before getting in the shower.
- Shower pump breaker also operates the freezer pump-out.



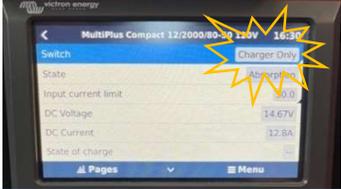
**Main Screen**  
(press any button to wake)

Scroll buttons  
(up/down/left/right)  
and Selection  
(middle) buttons

Press Menu  
button to start

**Shows Charging Mode  
(default)**

**Shows Inverting Mode**



**Default "charger only" mode**  
Leave in this mode unless needing  
inverted power.

**Inverting mode is "On"**  
Use only intermittently when  
inverted power is needed.

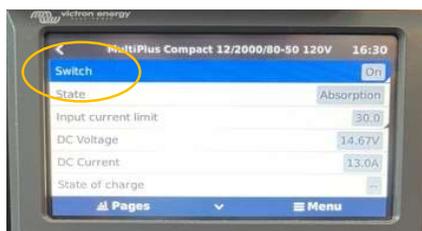


Scroll up/down to highlight  
and middle button to select  
"switch"

Press middle button  
select "Switch"

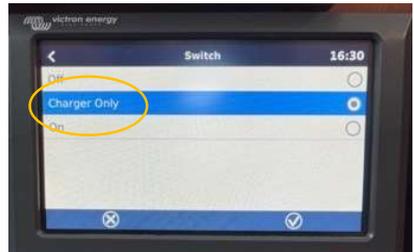
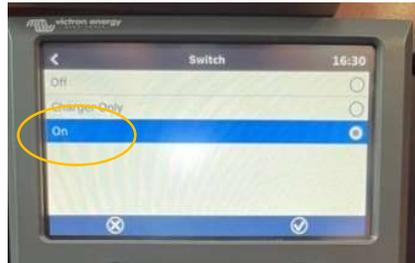
**To Switch Between Modes**  
Leave in default "charger only" mode unless  
needing inverted power. This process will  
ensure you have battery power when you need it!

- 1) Press the menu button to start
- 2) From Device List select "MultiPlus Compact"
- 3) From MultiPlus Compact menu scroll up/down to highlight (blue) and Select "switch"
- 4) Scroll up/down and select desired mode (on/charger only)
- 5) Press menu button to return to main screen



Scroll up/down and select "on"

Scroll up/down and select  
"charger only"



**Now will be inverting!**

**Now will be back to charger mode.**

Remember to have the engine  
running with the inverter on for  
large power draws like the  
microwave or you will quickly be  
left without power!  
It is safer to use the microwave only  
while connected to shore power.

**Solar Panels --**

The two 100W solar panels mounted on the bimini supplement the electrical supply and are helpful to offset navigation and refrigeration needs while sailing and while anchored/moored (extended periods without running the engine). The system is self-controlling and should not require any attention. Care should be taken to avoid using the cables as handholds. A fanatical skipper can use the traveler to adjust the boom to reduce shading of the solar panels.

## 9. Instruments & Electronics

We recommend your PRIMARY navigation tool should be the Maptech waterproof chart book or paper charts (with the most active “killer rocks” marked in red). **The best way to stay off the rocks is by knowing where you are at all times.** And the primary role of the chart plotter is to verify you are where you think you are. It can also be used to zoom in to get more detail that the paper charts provide.

Please refrain from changing settings beyond the typical functions like chart orientation, radar overlay, AIS overlay and range. For complete orientation and get the most value for a Garmin Chartplotter, we recommend downloading the user manual to review before your trip. The manual is also available electronically from the chartplotter menu.

**Chart Plotter – Garmin 942XS** at the helm has a color touch screen with integrated radar, AIS. Menu bars along the bottom and right side navigate through the functions. Water tank levels can be monitored on lower right corner while in navigation mode.

### Power On:

Requires “Chart plotter” breaker then physical power button top right of charter plotter screen.

### Begin Use:

< Navigation Chart> from start up screen

### Exit out of other screen/start over:

<Home> from lower (horizontal) menu bar center

**Zoom in/out:** finger-pinching or +/- on right side of screen

### Re-center the Display:

<Stop Panning> box on lower right screen that appears after only panning.

### Restore Course-over-ground heading line:

From Navigation chart

Menu > Layers > My vessel >

Heading Line \*\*\*arrow to right of the word, not word itself\*\*\*

> Source > GPS/COG

### Chart Orientation:

Menu > Settings> Orientation (we rec head-up or north-up)

### Media Player (to play music from your device):

(Before you can open the media player, you must connect a compatible device to the chartplotter.)

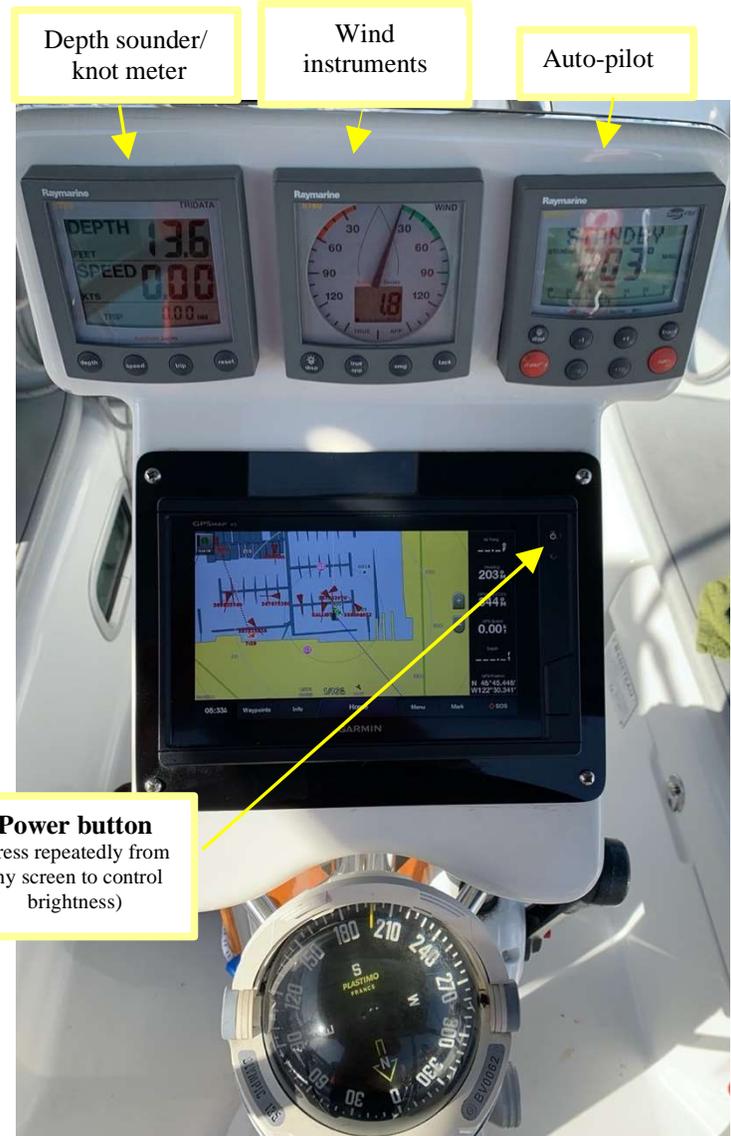
Select A/V, Gauges, Controls > Media.

From the media screen, select Devices, and select the stereo.

From the media screen, select Source, and select the media source.

**Manual (on screen):** Info > Owner's Manual

We appreciate you  
keeping the instrument covers on  
when not in use.



**Power button**  
(press repeatedly from  
any screen to control  
brightness)

Manuals for the chart plotter, radar, and other instruments are in the starboard forward salon locker. Chart plotter manual is also available on-screen or you can download a copy for yourself online before your cruise.

### Display Brightness:

Settings > System > Display > Backlight

**Radar Overlay Settings:** Menu > Layers > Radar >

**Radar** -- activated by selecting the “radar” icon on left of screen after which the screen with indicating that it is “spinning up” which takes a few seconds. “Sea clutter” and “rain clutter” can be adjusted for on the right side of the radar screen. To exit the radar screen, “unselect” the radar button in the upper left.

A **second radar reflector** is located in the port-side settee seat immediately forward of the galley sink if needed. You should have little need of the radar except for the highly unlikely event that you are suddenly enveloped by fog, which is rare in this area. The fog that we’ve encountered in the islands usually forms in the wee hours of the morning and burns off by mid-day. So, if it’s a little soupy after breakfast, we put on an extra pot of coffee until it lifts. **Please remember that SJS contracts do not permit night or restricted visibility sailing.** However, you can practice by occasionally comparing radar screen to reality to familiarize yourself for in the case fog rolls in while you are underway.

**Autopilot** – The autopilot is the right-most Raymarine instrument above the chart plotter (see photo above). To engage the Autopilot simply press the “Auto” button on the controller. To disengage press the “Standby” button. **If the steering wheel ‘locks up’ on you it is likely that the “Auto” button got pressed accidentally. Please remember to stay situationally aware while using the autopilot, it cannot see logs, rocks or other boats.**

**Automatic Identification System (AIS)** – AIS always remains active and transmits Chinook’s position to other vessels for safety and SJS tracking. The chart plotter has the AIS integrated, so you will see other vessels with AIS (most commercial vessels) as on-screen triangles. Each triangle points the direction that vessel is traveling. Other vessel information (name, speed, etc) will display on the screen when the triangle is touch-selected. Share Chinook’s AIS info with friends/family or follow your own track on [www.marinetraffic.com](http://www.marinetraffic.com) or device application:  
<https://www.marinetraffic.com/en/ais/details/ships/shipid:5862127>

**Depth Sounder**– Speed and depth are displayed together on the left-most Raymarine instrument above the chart plotter (see photo). **The digital depth sounder will not give accurate readings beyond 400’.** In deeper water, the sensitivity on the unit increases as the transducer tries to get some reading back. Consequently, when you are in deep water, false readings caused by currents, changes in water temperature, fish, etc. are common. These false readings often report very shallow water, so knowing you are in deep water will help prevent panic attacks. Also, if the word DEPTH is blinking on and off it means the unit is not getting a return signal (i.e. you are in very deep water). The depth showing on the sounder is being measured from the transducer (about 12” under true water level) so the water under the boat is really a bit deeper than the reading. But, we strongly recommend leaving 10-12 feet of water under the boat. **We do NOT recommend using the alarm.** Experience in the islands tells us that it goes off at the wrong time – usually the middle of the night as a seal or fish passes underneath.

**Knot Meter** – Speed and depth are displayed together on the left-most Raymarine instrument above the chart plotter (see photo). If the digital knot meter shows a reading of “0.00” while underway, the impeller is most likely clogged. Sometimes it will clear itself; wakes from big powerboats are good for this. You can also try clearing it by traveling in reverse. The instrument transponders are under the forward end of the saloon just port of the mast. You can remove the impeller to clear it but only if you are experienced in such things. If needed, the SOG (speed over ground) reading on the chart plotter will work as a standby knot meter.

**Wind** – Wind speed and direction are displayed on the middle Raymarine instrument above the chart plotter (see photo). Pressing the “True/App” button switches between True and Apparent wind readings.

**Stereo (AM/FM/Bluetooth)** – The stereo system can be operated from the electrical panel as well as from the Garmin Chart Plotter. Speakers are located in the cabin and cockpit. Please be aware of other boats when you are in harbor and adjust the fader so that the cockpit speakers are turned off when not in use.

**Power Outlets** – Personal electronic devices can be charged/operated while underway via the two 12V DC outlets on the lower instrument panel. The AC outlets found throughout Chinook's interior require inverter or shore power to operate. The gooseneck reading lights in sleeping cabins have USB ports in their bases. We have a few adapters and cables in a box above the nav table.

**VHF Radios (Main and portable) –**

**Main VHF** – Chinook is equipped with a B&G VHF radio with wireless handset is located at the Nav Station lower righthand corner. Disconnect the wireless handset from its charging station to use in the cockpit, and take care that it is secured safely from going overboard. **We recommend that you monitor Channel 16 during your cruise.** It is reserved for emergencies and boat-to-boat initial contact. After contact, move to a working channel (68, 69, 72, 74 or 78). We listen to weather channels 1, 2, 3, 4 or 8 (whichever gives the best reception) before we sail in the morning and prior to anchoring for the evening. The islands are generally a light wind region but weather changes can be sudden. Listen for the reports identified as “Northern Inland Waters” for the San Juan Islands. **San Juan Sailing monitors channel 80** during office hours.

\*\*\***Newer VHF units like our B&G have adopted the latest channel numbering system** – many of the familiar 2-digit channel numbers like 79 & 80 have changed to 4-digits with the first two digits being 10, (1079 & 1080). Refer to the new listing in the Charter Guest Reference Manual binder on board, section 7, VHF Procedures & Weather Reporting.

**Portable VHF-** For trips away from Chinook during which you want to be able to communicate with those who stay aboard or other VHF radios, a rechargeable battery-powered handheld VHF is located in the starboard salon cabinet behind the television. Charging cables for the radio are kept in the same storage box. Range is of course much less than the main VHF so is not suitable for cruising.



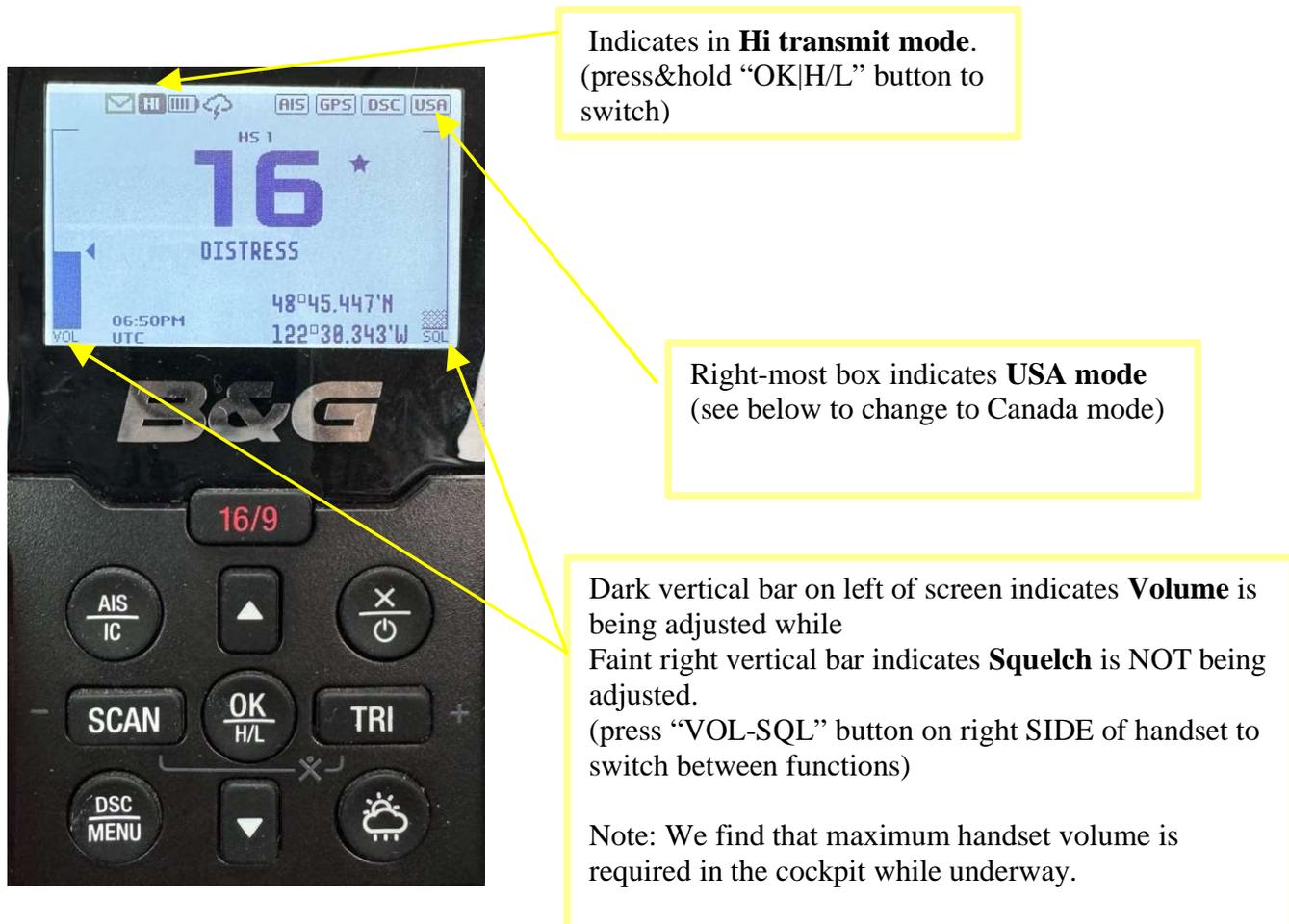
Power(long press)  
EXIT(short press)

The VHF radio settings can be controlled from the nav station or from the wireless handset, but you'll notice that the control buttons differ slightly due to some buttons sharing functions on the wireless handset.

Some common functions on the handset are described below and continued on next page.

**VHF handset Common Functions:**

- **Turning on/off:** First Chart Plotter breaker then power buttons at nav station and wireless handset.
- **Silence DSC ALARM** (Distress call): “X | Power” button
- **Switch between High/Low transmit power:** Press&Hold “OK| H/L” button. Current mode will be indicated in box along top of screen (see photo next page)
- **Quickly get to channel 16:** “16/9” button with red text
- **Weather channels:** Cloud/Sun icon button then scroll through channels with up/down arrow buttons on face on handset.
- **Scan channels:** “SCAN” button press to start scanning and press again to stop scanning.

**Other VHF tips:**

- We find that maximum handset volume is required in the cockpit while underway.
- The VHF handset **does not float**. Please keep it secure in the cockpit!
- While underway we most often stow the handset in the gray cupholder clamped to vertical bar near the cockpit table. (port side opposite of throttle.) This also seems to help magnify the VHF volume.
- Charge handset overnight by docking at nav station.

## Common VHF handset functions continued:

### Adjust Volume/Squelch:

- “VOL-SQL” button on right SIDE of handset to switch between functions.
- Level will be indicated with vertical bars on screen- left (Vol) and right (SQL)-
- Dark text will indicate which is being currently adjusted.
- Adjust level with +/- button on SIDE of handset above VOL-SQL button.

### Change between USA/Canada:

- “DSC|MENU” button hold until menu appears.
- Scroll with arrow buttons to “radio set-up” and select with “OK” button
- Scroll with arrow buttons to “UIC” and select with “OK” button
- Scroll to desired “USA” or “Canada”
- Current mode will be indicated along top right of handset screen (see photo above).

**10. Engine and Operating Under Power:** We have found the **39 HP Yanmar engine** to be very reliable. **Cruising should be done at engine RPMs of 1800 to 2200.** The following table gives approximate cruising information:

RPM's	Boat Speed	Fuel Consumption	Range
2200	7 Knots	Approx. 0.75 gal/hr	250 Naut. Mi.

**The ranges listed assume a 25% reserve in the 33gal fuel tank.** We find pushing the engine beyond 2200 RPM does little good, as boat speed does not increase much.



### Starting the engine:

- Please visually inspect the engine compartment daily, if there is no oil or liquid under the engine you are good to go. All boats in San Juan's fleet have the engines checked by a mechanic on every turnaround, so there really is **NO NEED TO CHECK THE OIL LEVEL** unless you are out for more than one week. **If no oil appears on the dipstick, open the oil cap to normalize the pressure before making the decision to add oil.** Please do not overfill the oil.
- Make sure the gearshift is in neutral (vertical), push in the red button at bottom of handle (which disengages the shifter), then push forward until you feel it engage the throttle a bit.
- Turn on the key on the engine panel and push the start button.
- After she starts, check for water flowing out the exhaust.

- e. **There is no need to warm up the engine** as getting off the dock (or anchor) and leaving the harbor will do this. If you have been sailing and are switching to engine power starting before you furl will be plenty of warmup.
- f. When you are ready to go, return throttle lever to the upright position and move back to inboard position. Lift the top of the lever and move handle forward for forward gear or reverse for reverse gear.

**Engine Alarms** – If the buzzer sounds while the engine is running first look at the engine panel to see if it is overheating or low oil pressure causing the alarm. If oil pressure alarm is on immediately shutdown the engine. If it is overheating, check to see if cooling water is flowing out the exhaust before shutting down. Overheating is the most likely cause for the buzzer. It is worth checking on the oil level (see notes above about checking the oil), coolant level and raw water strainer. If you see something obvious and can fix it great, if not please call one of the numbers on the first page.

**Engine Shutdown** – First make sure the engine is at idle and the gearshift in neutral. Then push the stop button on the engine panel for about 2-3 seconds (until the engine dies). **DO NOT TURN OFF THE KEY BEFORE THE ENGINE IS STOPPED, DOING SO CAN DAMAGE THE ALTERNATOR DIODES**

## 11. Fuel Tank:

**Diesel tank capacity is 33 gallons.** The tank is located under the aft berth. The fuel gauge is located on the engine panel (see picture above). **Fuel gauges on boats have a tendency to stick and show more fuel than may actually be there.** It is a good idea to note the engine hours on the hour meter when you depart or last filled and then plan to fill up when the engine has operated 30-35 hours.

**Filling the tank: When filling the tank listen closely and stop as soon as you hear fuel coming up the fill pipe.** It will foam out the vent if you go further. If fuel spills on the deck please wash-up with soap as it yellows the fiberglass.



## 12. Extras/Entertainment:

Check out Chinooks' two hammocks with straps located under the aft-most port settee cushion that we enjoy using on deck (not while underway!) with one end strapped around the furled headsail/stay and the other end attached to a shroud ring with a carabiner. Please ensure the hammocks are fully dry before you stow them after use.

Licensed fisher(wo)men can find the crab ring stored in the starboard cockpit locker.

A few of our favorite games and DVD's (zippered case) can be found in the port salon cabinet.

TV/DVD player are mounded forward of the electrical panel. The inverter must be turned on (as well as starboard outlet breaker) to operate them unless you are connected to shore power.

To charge personal devices, two DC outlets are in the nav station, AC outlets (require inverter or shore power) are through cabin and sleeping cabins. Gooseneck reading lamps in sleeping cabins have

integrated USB ports. An efficient way of charging personal electronic devices is when the engine is running while underway.

The stereo can be controlled from the nav station or from the chart plotter (more in electronics section).

### 13. Head & Holding Tank:

**Please do not put anything in the toilet that has not been eaten.** Experienced sailors deposit toilet paper in a wastebasket, not down the toilet because paper tends to clog the system.

#### *Electric Toilet*

- Requires the “head” breaker on the 12V panel to operate. Remember the “rules” regarding safe handling of items to be flushed described above.
- The toilet is now a **fresh-water system** drawing from Chinook’s 2-tank water supply, so be mindful of usage and monitor tank levels for the need to switch between tanks and/or refill during your voyage. (See Water section for more info.)

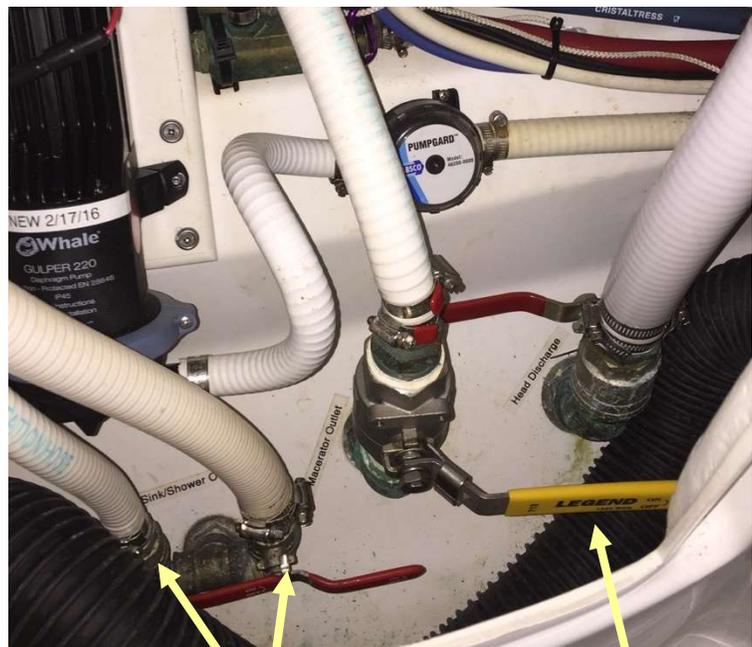
#### *Holding Tank*

- 22 gal. holding tank
- Located in cabinet behind the toilet (cabinet door locks closed with the chrome pop-up imbedded handle)
- Thru-hull valve is under the head sink.
- Level indicator light above the tank cabinet door does not go on until the tank is VERY full.
- Don’t wait until it is full to pump out!

#### *Macerator*

- Requires the ‘macerator’ breaker on the electrical panel then
- Open the yellow-handled thru-hull under the sink by rotating counter-clockwise to be in-line with the hose then
- Push the switch on the left side of the head sink vanity. You should be able to hear the macerator noise change pitch when the tank is empty vs full.

Under Head Sink



Sink and Shower Discharges

Macerator Discharge **yellow handle** (open valve to discharge)

**Showers:**

- Chinook has two showers: one in the roomy full-sized head shower stall and another outdoors on the transom.
- Experienced cruisers know the sailor's shower: get wet, turn it off, soap up, rinse off to save water.

**Head Shower** operation notes:

- Switch on the “Shower Pump” breaker on the 12V panel before entering the shower stall.
- Faucet controls water-flow and temperature. Water-flow can also be controlled at sprayer.
- Hand-held sprayer can be hooked on shower stall wall above window if desired.
- Operate shower pump intermittently to drain water from the shower stall with toggle-switch on the aft side of the sink vanity. (It looks similar to the toggle to turn on the overhead light that is on the front of the sink cabinet).
- Keeping hair and large debris out of the drain will keep it from clogging.
- It is best to shower when the engine is running (or when on shore power) as the hot water supply will be automatically refreshed. **CAUTION: THE ENGINE CAN HEAT THE WATER TO SCALDING TEMPERATURES!**
- Idling the engine unfortunately DOES NOT heat the water.

**Swim platform shower** operation notes:

- Most useful for washing off shoes after returning from the beach.
- The valve located inside the port stern locker must be opened to operate.
- The hot/cold faucet and hand-held sprayer are located on the port side of the transom above the swim step.
- After use, please close the valve in the locker and drain the hose **to avoid accidentally draining the freshwater tanks** while underway.

**14. Galley**

**Refrigeration:** Chinook is equipped with two refrigerated compartments: a **top load freezer** located forward of the stove and a **front-load refrigerator** below and left of the stove. Both units are controlled with the same breaker on the electrical panel. The thermostat located in the refrigerator (controls both) is a dial labeled with the numbers 1(warmest) to 7(coldest) (see photo bottom right). Setting the thermostat to **2-3 seems to keep food cold without freezing it, although fresh food will definitely freeze if placed close to the thermos-plate in the back**. The freezer compartment keeps previously-frozen items frozen, but it is not good at freezing new items. We find that bagged or block ice lasts several days in the

Top-load Freezer view from above



Freezer Drain

freezer if care is taken to limit the frequency and duration of lid-opening. **Freezer lid** removes fully (no hinges). **When replaced after use, it may need to be jiggled to make sure it is sealed tightly.**

Refrigeration pump-out for water that might accumulate in the bottom of the refrigerator or freezer is operated by pressing the labeled pump-out button on the cabinet front near the sink (see photo below). The “shower pump” breaker is required for operation. The freezer drain plug (found in nav table) must be inserted/sealed for draining the refrigerator.

Turning off the refrigerator breaker on the electrical panel at night will help conserve battery-life.



**Refrigeration Pump-out Switch**  
(Press to operate. Requires shower pump breaker)



**Thermostat Dial**  
(Usually set to 2-3 works well for us)

**Range:** Chinook is equipped with a Force 10 two-burner gimbaled propane range with one-rack oven with broiler. Propane is heavier than air and requires caution. For your safety, please follow these procedures.

Having the stove valves open when the solenoid is opened (gas valve breaker) will cause the safety system to kick in which will severely limit the gas flow to the stove. If this happens close all the valves, including the one on top of the tank. Then open the tank valve, next flip the breaker, and lastly turn on stove burners.

Two propane tanks are located in the propane locker, aft port side of the cockpit, which is vented and isolated from the rest of the boat. That way, any leaks will be vented away from the boat. San Juan Sailing's staff fills the propane tanks every 3 weeks. One tank normally lasts 6 weeks or more.

#### **To light the cooktop burners:**

- Make sure all stove controls are in the “**off**” position
- Turn on the ‘Gas Valve’ breaker on the main panel.
- Push burner control knob in as far as it will go and counterclockwise to the ‘high’ position until the burner is lit

- Push and hold down the igniter button until burner lights
- Continue holding the knob in for approx. 20 seconds after ignition to warm up the thermocouple and allow the gas valve to stay open.
- Release burner knob and adjust flame to your needs.
- If the ignition fails, turn the burner OFF and apply a lit match or lighter to it before turning it back to the HIGH position
- When you are finished, immediately turn the gas breaker off.

#### To light the oven and broiler burners:

- Make sure all controls knobs are in the “off” position
- Turn on the ‘Gas Valve’ breaker on the main panel.
- Push in the oven control knob as far as possible and turn the control knob counter clockwise for oven temperature or clockwise to the broiler position.
- Push and hold down igniter button until oven(below)/broiler (above) burner lights
- Continue holding the knob in for approx. 20 seconds after ignition to warm up the thermocouple and allow the gas valve to stay open.
- Release burner knob and further adjust temperature to your needs.
- Close the oven door carefully to ensure the oven burner will not be extinguished.
- Broil with the door open and do not broil for longer than 20 minutes. There is a notch in the door locking mechanism to lock the door in a slightly propped open position.
- When you are finished, immediately turn the gas breaker off.

We recommend that you **KEEP THE CURTAINS ABOVE THE STOVE PUSHED ALL THE WAY FORWARD, SO THAT THEY ARE NOT ABOVE THE STOVE WHILE COOKING. SAFETY FIRST!** This will also allow you to open the port above the stove for ventilation.

**Outdoor Propane Grill:** The propane grill is attached to the stern rail. Use the hose in the propane locker (just forward of the grill) to connect the propane to the grill. It’s a simple connection. Please remember to turn off the valve to the grill and the propane tank after use and place the hose back into the locker.

The grill has its own fuel tank, so the solenoid switch on the main panel does NOT need to be on to operate the grill. Wire cleaning brush is attached to the grill.



#### 15. Tools & Spares:

Spare parts and tools are located in the lockers under the port settee seat cushions

#### 16. Sailing:

**Sailing Characteristics:** Chinook is a delight to sail. Her sloop rig makes for easy sail handling, and gives a variety of options for various weather conditions. Her all around perfect breeze is 10 to 15 knots. Full sails can easily be carried in winds to 20 knots. As the wind picks up it is best to furl the mainsail first.

**Sails and Rigging:** Both the main and the 140% jib are furling sails. Below we list a few tips on handling these sails.

**Mainsail** – Unlike a standard main, it is best to have wind in a furling main when deploying, similar to deploying a furling jib. The wind adds even pressure all the way up the mast and helps the sail deploy. Note, because of this, it matters not which sail is deployed first. This even works going

down wind (in moderate winds, up to about 15 knots). **Therefore, pointing the boat into the wind to deploy the main is unnecessary, in fact it is a bad idea.**

Here are the basic steps to unfurl the main:

- Open the Vang and Mainsheet clutches – this allows the boom some movement. Then pull a few feet of mainsheet thru the clutch and close the mainsheet clutch. This will keep the sail from running free as the wind gets into it.
- Open the In-haul and Out-haul clutches.
- Pull the Out-haul line by hand until you run out of muscle and then put on the winch. If you are planning on setting a reefed main have the In-haul line around a winch, but loose, so you can stop the main where desired. Once the sail is out as far as desired, close the In-haul clutch and then tighten the Out-haul to achieve desired draft. You will need to put the Out-haul on the winch to set your draft.
- Remove the Out-haul from the winch and put the mainsheet on it. Once the load is on the winch, open the mainsheet clutch.
- Set vang and mainsheet as desired.

When furling in the main keeping a little tension on the outhaul (keeping a little air in the sail also helps) will help ensure a tight wrap on the main furler. **The last foot-and-a-half of the mainsail (the part covered with gray sun cover) is supposed to be left outside the mast.** If you do accidentally furl part of the sun cover you may have to go on deck and pull outhaul by hand to get sail started next time you unfurl the sail.

**Headsail** - The jib is on a roller furling. It has good sail shape at the full out position. During periods of heavier winds, furl the headsail as desired. Boat heel will be greatly reduced when sailing under reefed main and partially furled headsail in winds over 20 knots. **Please note that slight tension on the roller furling line when deploying the headsail, and on the sheets when furling, prevents problems from either a rat's nest on the drum or "candy striping" of the furled sail.**

**Prop Noise?** – If the engine was running during the sail-setting process and the boat never came to a stop, the propeller may still be turning (auto-rotating) – even after the engine has been shut down. There is usually a whirring sound below deck when this happens. **To stop the auto-rotation, simply shift the engine into reverse for half a second and then back to neutral.** Doing this allows the Maxprop to feather and increases sailing performance by reducing drag.

**Steering Wheel-** Chinook's steering wheel pivots to the side of binnacle to make passage easier when transiting to the back of the boat. **To swing the wheel, pull out on the knob on the forward side of the binnacle post (see picture). Do not try to operate the boat with the wheel swung to the side – it is not engaged in this position.**

Pull out on this knob to pivot the wheel.



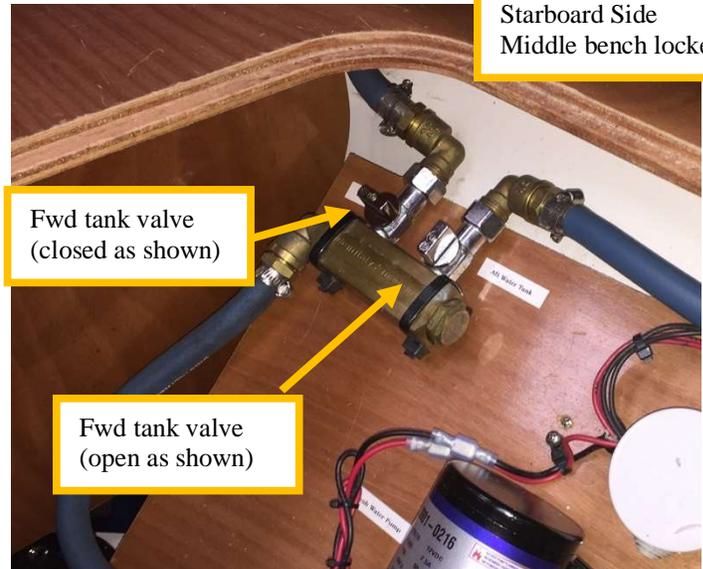
## 17. Docking & Boat Handling:

Chinook is light on her feet (turns in a short radius) and, like most sailboats, carries momentum well. We find it is helpful for the person handling the lines to take a line from the mid-ship cleat, this allows them to pull the boat to the dock without 'losing' the stern. The other important issue is prop-walk – **Chinook has some walk to port, but it is not pronounced.** The MaxProp provides more reverse power than a fixed prop, so reverse idle or slightly above does the trick most of the time.

Most marinas in the islands will help you if you ask for assistance. Asking for docking assistance (arriving and departing), especially in windy conditions or with an inexperienced crew is a sign of prudent seamanship.

### 18. Water

**FRESHWATER capacity is 98 gal**  
- 54 gal. tank located under the V-berth  
- 44 gal. tank under the starboard cockpit locker. The valves to switch between tanks are located under the **MIDDLE** section of the starboard settee seat. The freshwater pump breaker is located on the electrical panel. Please switch this off when motoring or sailing. You could burn out the water pump if the tank runs dry (and you would not hear the pump running over the sounds of motoring or sailing) Monitor tank levels on the Garmin chart plotter.



Water tank levels can be monitored from the chart plotter.

If levels not visible, check that chart plotter is in Navigation Chart mode.

Toilet uses fresh water.

**The TOILET (with 22-gallon holding tank) now draws from Chinook's fresh water supply , so be mindful of usage and monitor tank levels for need to switch between/refill tanks during your voyage.**

**Filling the water tanks** - Deck fill fittings for both water tanks are located on the **STARBOARD** side walkway, one forward of the mast one near the aft. We would appreciate if the deck fittings are **tightened with the deck key** located in the navigation table rather than using the winch handle that can over-tighten them. That being said, if you find that the deck fittings are too tight, we have used a winch handle in the past to loosen them.

Fill two water tanks on starboard side

**Water Heater** – The hot water tank holds 6 gallons, so use it wisely. Water heats automatically when the engine runs under load about 30 minutes (Running it at idle in the morning doesn't work, sorry!) **CAUTION: THE ENGINE CAN HEAT THE WATER TO SCALDING TEMPERATURES!** The hot water tank is located under the aft berth. Water can also be heated electrically when shore power is available by switching on the water heater breaker on the 120V panel.

**SALTWATER**

**Anchor-washdown** – useful for washing down the anchor/chain.

- 1) Attach the blue coiled sprayer hose to the starboard deck fitting next to the forward freshwater tank fitting. Hose is stored in the starboard cockpit locker.
- 2) Open the through-hull valve (yellow handle) located under the floorboards between the galley table and nav table (photo above).
- 3) Turn on the pump toggle switch on the 12V DC panel just below the battery test switch.
- 4) **Remember to close the through-hull when finished.**



Insert hose end firmly into washdown fitting and rotate about a half-turn clockwise.



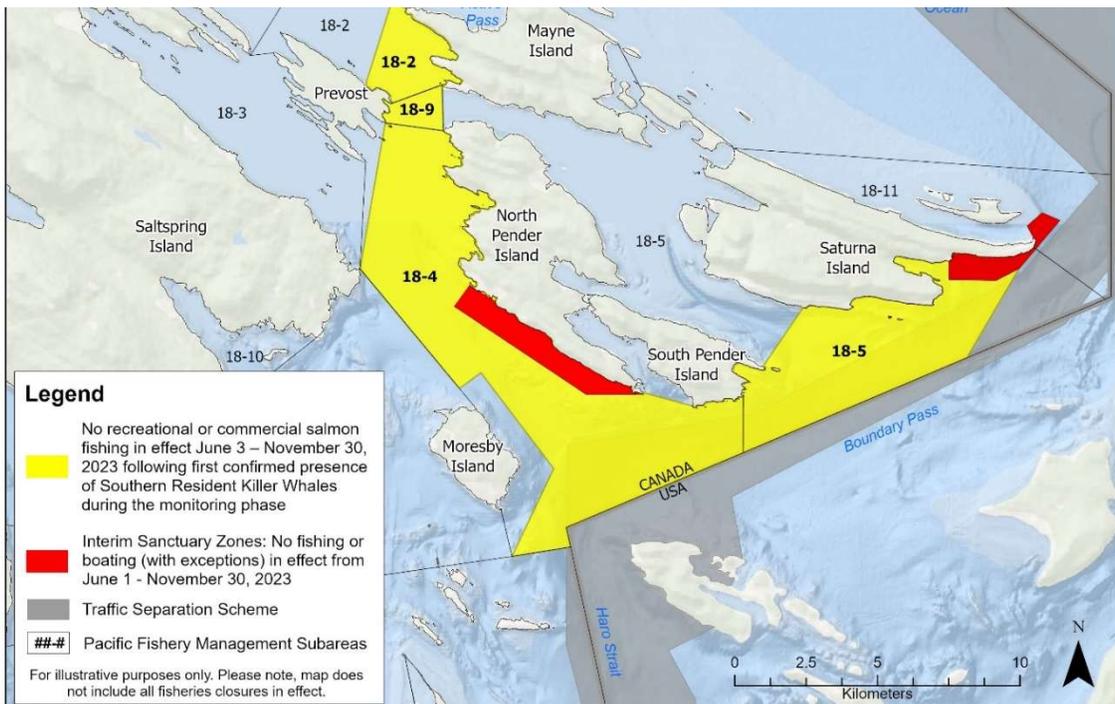
Through-hull valve for anchor wash-down.

Kindly rinse off the deck and dodger with **FRESH WATER** rather than salt water.

### 19. Being Whale Wise

Our local Killer Whales are a wonderful part of the local family. But they are having a difficult time surviving due to declining salmon runs. These whales use echo location to find and catch their food. Therefore, noise pollution from boats and ships make it harder for them to thrive. In an effort to decrease human impact both the Canadian and US governments have implemented rules. We provided you a summary of these rules in the packet you receive when you arrived and there is more information in section 10 of the white reference book onboard Chinook. In general, stay at least 400 yds. away from the whales. Sometimes they come to you, if this happens shutdown the engine and turn off the instruments (assuming this is safe to do). They can hear the pings of the depth sounder – this is why we have you turn off the instruments.

In Canada they have gone a step further by creating some zones where boats are not allowed. This further improves the environment for the whales. The red areas in the diagram below show these zones.



And here is an example of what they look like on Chinook's chart plotter. The red lines have been added to help point out the dashed lines, which are what you will see on the plotter.

Note this is just to the west of Bedwell Harbour, so on your way in or out of there be sure to avoid this area.

