



# **Welcome aboard *Sea's the Dream!***





Dear Guests:

Sea's the Dream is a wonderfully comfortable and spacious boat. She's easy to sail, she's fast, and is very maneuverable with a light helm. We're excited for the years of fun and adventure ahead in Sea's the Dream and hope you are too!

Sea's the Dream is a 2013 model Jeanneau Sun Odyssey 44 DS and she's perfect for cruising the Pacific Northwest. Her features include:

- Sleeps up to nine in three 2-berth cabins and the 3-berth salon.
- Luxuriously appointed aft cabin with king-sized bed on the centerline, with ensuite spacious head and shower.
- Comfortable forward cabins include centerline queen-sized v-berth in the bow, and offset bunk beds on the port quarter, sharing a head/shower to starboard.
- Huge space, head-room, visibility and light below in the raised deck salon.
- Handles easily with in-mast main furling, roller furling genoa, and all lines led aft to within easy reach of winches located beside the dual helms in the cockpit.
- Bow-thruster to make docking easy, and an electric windlass to haul the anchor chain.
- Helm-side chart plotter integrated with all navigation electronics including AIS.
- Spacious cockpit with comfortable seating for everyone aboard.
- Outfitted with everything the charter guest needs for a relaxing, fun-filled vacation with family and friends:
  - Galley equipped with everything needed from microwave to gourmet cooking, with an extra refrigerator for cool drinks under the Nav. table.
  - Cockpit can be fully enclosed to stay warm and dry on wet days. Wet weather sailing can be fun!
  - Bose sound system with Fusion Sonic-hub (iPod, iOS, USB) docking station, AM/FM radio, cockpit speakers, and audio controls displayed on charter plotter.

We have two rules....relax and have fun! Oh, and please, no pets, and no smoking below deck.

There are sure to be lots of tips we could use to help make Sea's the Dream more convenient to charter. If you think of anything during your charter, please be sure to let us know. We look forward to hearing all about your adventures aboard Sea's the Dream!

Questions or feedback? Call or text: 208-867-8953 (cell), or send us an email: [rickwatson.sywc@gmail.com](mailto:rickwatson.sywc@gmail.com)  
Please "Like" and "Follow" Sea's the Dream on facebook and share your photos and fun with other fans, at: <http://www.facebook.com/SeastheDream>

Happy sailing!

Rick and Chris Watson

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**Specifications and Vessel Information**

Make	Jeanneau
Model	Sun Odyssey 44DS
Year	2013
LOA	43' 9"
LWL	39' 4"
Beam	13' 10"
Draft	7' 2"
Displacement	21,495 lb
Mast height above WL	64' 4"
Fuel	53 gal
Water	87 gal Fwd (Tank 1) and 53 gal Aft (Tank 2) for 140 gal total
Holding	20 gal each Fwd and Aft heads
House battery capacity	400 Ah LiFePO
Berth lengths and widths	<b>Aft berth:</b> King 6'6" long, 6'3" wide at the head, and 3'11" wide at the foot. <b>Forward V-berth:</b> 6'6" long, 6'10" wide at the head, and 2'4" wide at the foot. <b>Port cabin bunk berths:</b> 6'7" x 2'2" <b>Converted dinette:</b> 6'6" long and 4' wide with side cushions removed. <b>Port settee:</b> 6'4" x 2'4" with side cushions removed, and the stool placed under the Nav table.
Main stateroom headroom	6' 6" at centerline in the main salon.
Hull number	IRISA014G213
MMSI No. (AIS identification)	367542970
Coast Guard Certificate of Documentation (Section 5 of Charter Guest Reference Manual)	No. 1242278. Located under salon floor on aft stringer, in 3" high characters.
Coast Guard Boarding Document – Refer to the Charter Guest Reference Manual (white binder), Section 5 Documentation.	Explains what to expect if you are boarded by the Coast Guard and where to find the information/equipment they may ask to see as part of their safety inspection.
WA State Vessel Registration Number	No. 1397. Located on bow
US Customs Re-entry Decal	Located at the starboard helm below and behind the wheel

## **Emergency/Safety Equipment**

You are not likely to need most of these, but you must know their location.

**Bilge Pump (manual).** Located in the cockpit on port side locker with the handle clipped inside the locker. Note: if water rises above floorboards, you can also use shower sump pumps in an emergency.

**Carbon Monoxide Detector.** Located in the aft cabin, starboard side below the berth and beside the main electrical breakers.

**Cockpit Cushions.** In case of COB, quickly throw anything that floats, including cockpit cushions.

**Life-jackets.** 10 adult-sized, vest-type or auto-inflating life jackets are aboard. Each cabin should have two lifejackets in the hanging locker, and the remaining four should be located in the seat locker, port side of the salon. Previous guests may move them, so we recommend you find them prior to leaving the dock.

**Lifesling.** On port stern pushpit. Please review the illustration on the case for procedures. The lanyard is secured to the boat so that tossing the floating harness allows it to tow behind the boat like a ski tow rope. Circling the person overboard will draw the recovery line near them.

**First Aid Kit.** Located in the center cupboard above the port settee in the salon.

**Flares.** Visual electronic day/night distress signals are located in the orange water-proof box in the starboard cockpit locker.

**Fire Extinguishers.** Located in:

1. aft cabin starboard bulkhead above the hanging locker,
2. v-berth cabin starboard bulkhead above the hanging locker,
3. bunk cabin above the hanging locker.

**Fenders and Dock Lines.** Five of each are provided. Store fenders in the bow anchor-chain locker, and dock lines in the starboard cockpit locker.

**Radar Reflectors (tube style).** Located permanently on shrouds just above the first spreaders.

**Tapered Plug, Universal Foam Orange StaPlug.** Located in center cupboard above the port settee in salon.

**Tiller (emergency use).** Located in the port cockpit locker. Looks like a metal pipe with a T-end. The rudder post attachment point is under a silver plate in the deck between the two helms. Unscrew the cover with a winch handle, insert the pipe vertically and feel it engage with the steering post below. Travel at reduced speed when in use.

**Tools and Spares.** Located under the settee on starboard side of salon.

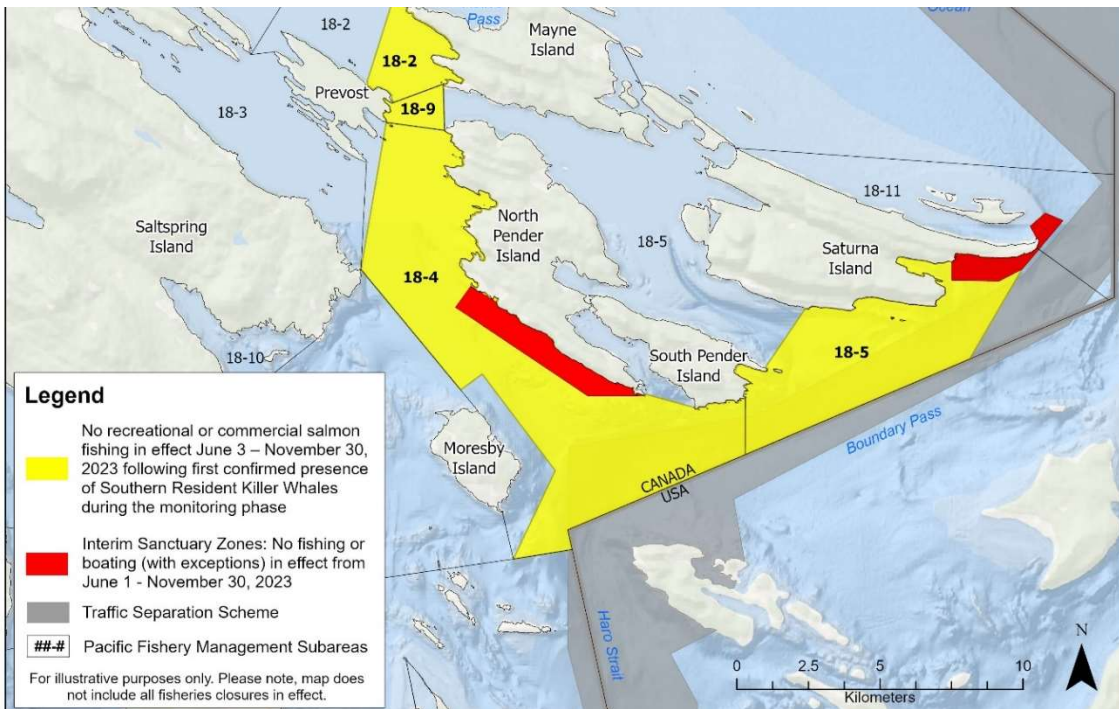
**VHF Radios.** Located above Nav table. Hand microphone also in cockpit on starboard side of center console.

**Windlass Clutch Release/Tighten Wrench.** Use winch handle located in cockpit or deck plate key located under Nav table lid.

## Being Whale Wise

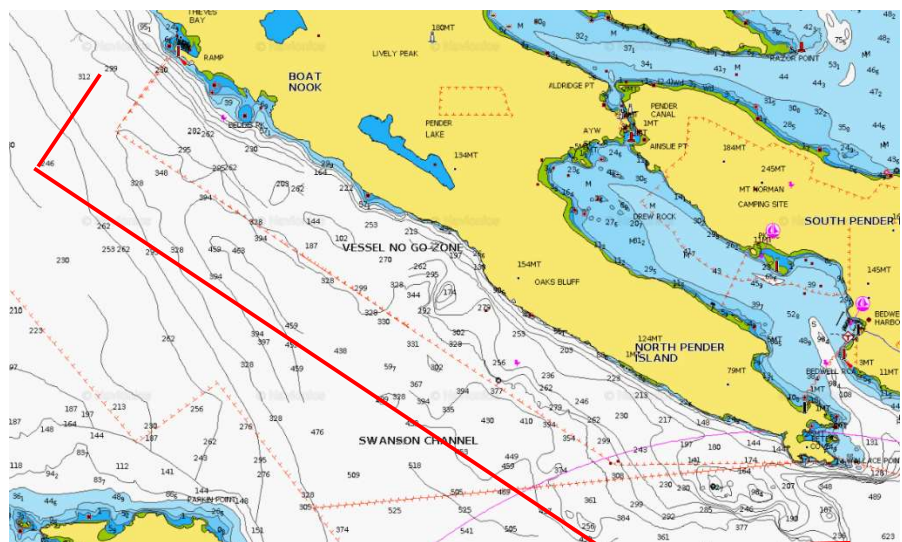
Our local Killer Whales (Orcas) are a wonderful part of the local family. But they are having a difficult time surviving due to declining salmon runs. These whales use echo location to find and catch their food. Noise pollution from boats and ships make it harder for them to thrive. To decrease human impact on whales the Canadian and US governments have implemented boating and fishing rules. SJS provides you with a summary of these rules in the packet you receive when you arrive and there is more information in section 10 of the white reference book onboard *Sea's the Dream*. In general, stay at least 400 ft away from 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, labelled “VESSEL NO GO ZONE” on charts. 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 Sea's the Dream's chart plotter. The red lines have been added to help point out the red 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.



## Nuances

This section was requested by San Juan Sailing to describe quirky little issues, tips or tricks to help you enjoy your charter on *Sea's the Dream*.

### **Chart Plotter “Searching for Audio Server” message**

If you see this message on the chart plotter and you want to play music on the Sonic-hub, you need to reset the computer in the chart plotter by:

1. Shutting down the chart plotter (press red button then select Standby on screen), then
2. Turning off Nav instruments on the electrical panel above the Nav table, then
3. Turning off all power from the house battery bank using the red-handled switch on the starboard side below the bed in the main cabin, then, after waiting 30 seconds,
4. Repowering all systems by turning on house bank power, then
5. Turning on Nav instruments on the electrical panel, and then
6. Selecting “Accept” on screen. Then give the chart plotter about 3-4 minutes to find the audio server.

### **Chart Plotter “No Radar” message**

If you get this message on the chart plotter screen, and you wish to use the radar, follow the same steps described in the paragraph above to reset the computer in the chart plotter. It should then locate the radar. Select the radar overlay on screen on the plotter and verify that it is active (not off or in standby mode).

### **Thrumming sound...how to stop it!**

*The solution:* Loosen tension on the topping lift.

This sound drove us crazy for weeks until we figured out the cause...and now it's easy! The problem was that we could hear a low thrumming sound whenever we were at anchor or in a slip when the wind blew, even gently. It sounded like I imagine a large ship's propeller would sound when transmitted through water, but was loudest against the mast. We searched high-and-low for the source of this noise. Weeks went by to no avail, until one day I laid my ear against the boom to listen to the noise, and looking aft I could see the topping lift was vibrating under tension like a violin string. I loosened the tension on the topping lift and... the noise stopped!

### **AC plugs quit working**

The AC outlet below the Nav table has a GFCI breaker switch. It is easy to trip this switch accidentally when inserting some kinds of plugs, and doing so turns off the entire AC power circuit. If you are using AC while connected to shore-power and the power goes off, first see if pressing “Reset” on the GFCI breaker restores power. It may have been accidentally tripped.

### **Battery warning tone from engine panel beside starboard helm**

In 2017 we installed a high-output Balmar alternator (150 Amp) to boost power available for charter guests. It has a 45 second start-up process to save the drive belt from wear. A side-effect is that the low battery tone on the engine panel beside the starboard helm sometimes continues for 45 seconds after start-up. This is normal.



If the warning tone starts at any other time, **do not ignore it**...the same tone can sound if the engine is overheating or oil pressure is low. Look at the control panel to see which alarm icon is lit to understand the problem.

### **Lithium House Batteries**

In 2023 we added Lithium (LiFePO) batteries to supply house power. These batteries operate at a higher voltage than AGM or Lead-Acid batteries, so 14.5 volts is fully charged and 13 volts is low. Below 13 volts at rest and the batteries must be charged with either shore power or running the engine.

### **Battery warning tone from LCD display above the Nav table**

The addition of the Balmar alternator also changed the readings on this voltage alarm. If it sounds, turn it off by pressing the button with the alarm bell below it. It can be deactivated for your trip by following the instructions for the LCD display under Electrical Panel.

### **Engine tachometer reads higher than it used to**

If you sailed *Sea's the Dream* before 2017, you may notice that the engine RPM (tachometer) reads higher than it used to. This is due to the new high-output alternator, which sends pulses to the tachometer at a faster rate than the original alternator. The tachometer has been adjusted as far as possible to reduce this over-reading, but there is still some error, which ranges from about 120 RPM higher than before at idle to 900 RPM higher at full throttle. We have adjusted RPM wherever referred to in these Owner's Notes to reflect the new rates.

### **How to turn off the "Anchor Depth Alarm" on the IS20 instrument**

For some unknown reason this alarm keeps resetting to "On" every time the Nav Instruments are turned off and then on again. It serves no useful purpose and should be turned off.

If this alarm sounds, usually soon after leaving dock or anchorage, turn it off temporarily by pressing the "Menu" button on the IS20.

Then, to disable this alarm until the chart plotter and other navigation instruments are next turned off, do the following:

From the Display screen shown, right...

- Press "Menu" button to get to the "Main Menu" screen
- Press "Arrow Down" button to get to "User Setup" option
- Press "Menu" button to get to "User Setup" screen
- Press "Arrow Down" button to get to "Alarms" option
- Press "Menu" button to get to "Alarms" screen
- Press "Arrow Down" button to get to "Depth" option
- Press "Menu" button to get to "Depth" screen
- Press "Arrow Down" button to get to "Anchor" option
- Press "Right Arrow" to get to "On" option (see image below)
- Press "Down Arrow" to change it to "Off" option
- Press "Menu" to exit from this screen
- Press "Left Arrow" to Alarms menu
- Press "Left Arrow" to User Setup menu
- Press "Left Arrow" to Main Menu
- Press "Left Arrow" to Display

This alarm will remain off until the next time you turn off the Chart Plotter and then turn it on again.



## How to use these Owner's Notes

Essential information is provided on the boat's systems in alphabetical order of subjects. Read the entire Owner's Notes before arriving to start your charter. Use the Table of Contents to find particular subjects later on.

Pay attention to the "TIPS" where provided, as these are intended to be helpful for safe and easy operation of the boat.

The Quick Check List section below provides a brief, easy-to-find, summary of some of the main points. It is not a substitute for reading the entire Owner's Notes starting on page 17. Use it when "...you know you read the information somewhere in the Owner's Notes, but you just need a quick reminder!"

## Quick Check List

**Autopilot:** Press STBY/AUTO button on chart plotter. On popup window, select A Auto to maintain current heading by autopilot or W Wind to maintain current relative wind angle. Pressing S Standby returns to manual steering.

**Battery Breakers:** Located in aft cabin, bulkhead under berth, starboard side.

Ground (black) – always on

House batteries (red) – always on

Engine battery (red) – off while in dock (prevents theft, since start is keyless)

Windlass (yellow) – always on

### Chart Plotter

Turn on sequence:

Turn on Navigation Instruments switch on electrical panel.

Activate chart plotter by tapping "Accept" on touch screen. Use touch screen and Pages button to navigate.

Turn off sequence:

**First:** de-power chart plotter by pressing the red power button and then select "Standby" on the touch screen.

**Second:** turn off the Navigation Instruments switch on the electrical panel.

**The turn-off sequence is important.** The chart plotter is a computer and, like any other computer, must close programs before losing power. This is done by selecting standby mode before turning off the power at the electrical panel.

### Commonly Used Chart Plotter Selections

- **Finding the Navigational Chart:** From any screen, press “X” button to go back to the chart screen, or press “Go to Pages” and on-screen touch “Chart” then touch whichever view of the chart you want.
- **Zooming in and out:** Turn rotating knob.
- **Set Cursor location.** Touch screen at point you want fixed, e.g. to zoom in on.
- **Returning the screen to the vessel’s current location:** On-screen, touch “Clear Cursor” or press “X” button.
- **Clearing Pre-existing Waypoints, Routes and Tracks:** Press “Go to Pages” button, on-screen touch “Tools,” touch “Waypoints, routes, tracks”, touch “Delete all.”
- **Chart Orientation:** On chart screen, touch “Menu” (or touch and hold finger on screen until circle is solid), on pop-up menu, touch “Chart options”, on “Orientation” touch your choice of Heading up, North up, or Course up.
- **Display Brightness:** Press red power button. On popup screen, touch “Brightness” and slide scale to desired level. Press “X” to return to chart screen.
- **Course over Ground (COG) Vector/Line:** Press “Go to Pages”, touch “Settings”, touch “Chart”, touch “Extension lines”, touch “COG”. Select “Length” and a time to show distance covered over selected time by length of line on the chart. Or Select “Infinite Length.” Touch “Save”. Press “X” until you get back to the chart.
- **Displaying and using a Split Screen:** Press “Goto Pages,” touch “Chart,” touch whichever split screen view you want.
- **Radar Overlay:** On-screen touch “Menu,” touch “Radar Options,” touch “Radar state” and select “Transmit.” Press “X” once, then touch “Overlay,” and select “Radar.”
- **AIS Overlay & Targets:** AIS overlay is always on. Press “Go to Pages,” touch “Settings,” touch “Vessels,” touch “Icon filters” to select AIS targets.

### Cockpit Cushions

Store flat, not folded or with objects that could dent the foam. Avoid contact with solvents.

### Cockpit Enclosure Panels

Store rolled in special zip bag, never folded or with weight on them that could cause a crease in the plastic “glass.”

### Cushions Inside

Always separate Velcro tabs with fingers before pulling cushions out of place.

**Electrical Panel Switches**

Anchor Light

On at night when at anchor.

Auxiliary Switch

On while second refrigerator (under Nav Table) is needed.

Bilge Switch (three position switch, left is Auto, center is off, right is on and running)

Always on Auto.

Cabin Lights

Always on.

Inverter Switch

Always off except when in use (use on demand only).

Navigation Instruments Switch

On while underway. *Never* turn this switch off without first de-powering the Chart Plotter.

Refrigerator Switch

Always on.

Shore Power

On while connected to shore power.

Water Pressure Pump Switch

Off while underway except when in use (use on demand only), or sitting quietly at anchor or in dock when you can hear the pump working.

**Emergency/Safety Equipment**

**Life-jackets**

10 adult-sized, vest-type life jackets are aboard.

Each cabin should have two lifejackets in the hanging locker, and the remaining four should be located in the aft seat locker, port side of the salon. Previous guests may move them, so we recommend you find them prior to leaving the dock.

**First Aid Kit**

Located in the aft cupboard above the port settee in the salon.

**Flares**

Visual day/night distress signals are located in the orange water-proof box in the starboard cockpit locker.

**Fire Extinguishers**

Located in:

1. aft cabin starboard bulkhead above the hanging locker,
2. v-berth cabin starboard bulkhead above the hanging locker,
3. bunk cabin above the hanging locker.

**Emergency Tiller**

Looks like a metal pipe with a T-end and is located in the port cockpit locker. The rudder post attachment point is under a silver plate in the deck between the two helms.

**Fenders and Docklines:** Five of each are provided. Store fenders in the bow anchor chain locker, and docklines in the starboard cockpit locker.

**Engine**

Start: Check fuel gauge.

Visually inspect engine, check oil (once per week), coolant, and water strainer (check O-ring is in place and water is pumping through strainer) on first start of the day.

Turn on engine battery.

Check for debris in the water.

Press electrical "on" button labeled "I" on panel by starboard helm.

Press crank button; the engine should start immediately.

Check for water pumping out of exhaust. If little or none, stop engine and troubleshoot.

Stop: Allow engine to run in neutral for 5 minutes to cool.

Press "STOP" button.

Then press "I" button until sound stops.

*Never* press "I" button while engine is running.

**Outboard**

Always remove the outboard from the dinghy and attach to the outboard mount on the stern rail before setting off.

**Phone numbers**

San Juan Sailing office at 800-677-7245 or 360-671-4300.

Maintenance pro: Jon Robitaille of Holdfast Marine at 360-393-0415 (mobile)

**Shore Power**

Disconnecting

1. Turn off AC switch on electrical panel above Nav Table.
2. Turn off onshore breaker (typically near onshore plug).
3. Unplug cable onshore.
4. Unplug connection in port sheet locker.
5. Coil and stow the cable in the port cockpit locker.

Connecting

1. Connect cable in port sheet locker.

2. Turn on breaker in port lazarette (if off).
3. Check polarity indicator on electrical panel; proceed if OK.
4. Connect cable onshore and turn onshore breaker on (if available).
5. Turn on AC switch on electrical panel.

## Storage

Never place magnetic items, including large metal objects, near the auto-pilot compass located in the forward dinette seat locker, next to the mast column.

## Valves

Head Waste Drain Valves: **Secured (tied) CLOSED when in US waters.** Use pump-out stations.

Water Tank Valves (located behind aft seat-back cushion of starboard dinette settee)

With full tanks, open Tank-1 and use first until drained, then close Tank-1 and open Tank-2 to use second.

## VHF

Hail vessels on channel 16, but after establishing contact, ask the skipper of the other boat to switch to working channels 78, 79 or 80.

### Commonly Used VHF Radio Actions:

- **Turning On and Off the radio** – On radio panel, press “Power” button to turn on. Press and hold for 1 second to turn off. On cockpit handset: Press “CLR” and “Menu” buttons at the same time. Press and hold them for 1 second to turn off.
- **Silencing a DSC Alarm** – When the DSC button on a radio is pressed by another boat (or the Coast Guard) it sounds an alarm on all boats in the area. To silence this alarm, press the “CLR” button or any button on the cockpit handset.
- **Changing from High to Low transmit power** – On radio panel press H/L button to switch between High (25 W) and Low (1 W) power. On cockpit handset, press H/L button on left side to switch between High (25 W) and Low (1 W) power.
- **To quickly get to channel 16** – On radio panel and cockpit handset: Press 16 button.
- **Accessing the weather channels (WX)** – On radio panel and cockpit handset Press CH/WX button.
- **Adjusting Volume and Squelch** – On radio panel use the rotating knobs marked Vol and Sql respectively. On cockpit handset: Press Vol/Sql button on top of handset to select between squelch or volume, then turn rotating knob.
- **Changing between International & U.S. channel** – On radio panel and cockpit handset, hold down H/L button and push CH/WX button to select between USA, International and Canadian channel groups in sequence.
- **How to set up and use Channel Scanning** – On radio panel and cockpit handset, start by Tagging the channels you want to scan: Select the desired channel, then press Scan/Tag button for 1 second, “Tag” appears in the display (repeat to cancel Tag). Select next desired scan channel(s) and repeat for each. Push “Scan/Tag” to start scanning. “PRI-SCAN 16” on the screen indicates priority scanning that

includes channel 16. Push Scan/Tag again to switch to “Normal Scan” (shown on screen) which scans only tagged channels and not channel 16 (unless it is tagged). To stop a scan press CLR button or press Scan/Tag again.

## Windlass & Anchor

Turn on yellow breaker to use windlass (starboard side under berth in aft cabin). Windlass will only work while the engine is running.

Deploy and retrieve the anchor using the bow control only. The chain is marked at 25 ft intervals with about 18 inches of yellow line woven into the links and at 100 ft and 200 ft with two pieces of yellow line with a gap of 1 ft between them. Old paint markings may also be seen first at 100 ft in yellow, and then at 50' intervals in white, to the fixed-end at 300 ft marked in red. The starboard helm has a chain counter and control, but please *do not* use the helm control. Snubber line should be hooked to the chain all the time except when the chain is moving.

Deploying:

1. First, protect the plumb bow with the “Hull-hugger” fender.
2. Ease anchor off the bow roller and fend it off the bow with the boat hook. Use short pulses of the control to prevent the anchor from swinging into the bow (a nudge with your foot may be needed to get it moving – always wear shoes).
3. Lower anchor into the water, fending off with a boat hook if it swings.
4. Once in the water it should stabilize; lower to the sea floor.
5. Attach snubber line to chain, cleat, and run chain out until it goes slack and snubber takes the strain.



Putting the Hull Hugger bow fender in place prior to deploying the anchor can help prevent dings in the gelcoat.

Put one loop over each bow cleat to position the fender on the bow as shown.





## Raising:

1. Use engine to motor slowly against a breeze in direction of anchor while using windlass to haul in chain.
2. Don't over run the chain. If you do, stop the windlass immediately, and reverse the boat until chain is clear of hull.
3. Stop anchor in sight but below water level to make sure it is not swinging.
4. Raise anchor to roller, and if needed, use a boat hook to fend it off if it swings.
5. By hand, bring anchor carefully on to the roller, point down (use boat hook to turn the anchor if needed).
6. Use short pulses on the control to bring chain in. **Do not crank the chain in until it's rigid and never leave it like that -- the chain should be slightly slack with the anchor on the bow roller.** Use snubber line to hook the anchor chain to a cleat found on the port side of the chain locker.

**Anchors and Stern Tie****Primary anchor**

In the bow: Delta anchor on 300' of 5/16" HT chain. The chain is marked at 25 ft intervals with 18 inches of yellow line woven into the links and at 100 ft and 200 ft with two pieces of yellow line with a gap of 1 ft between them. Old paint markings may also be seen first at 100 ft in yellow, and then at 50 ft intervals in white, to the fixed-end at 300 ft marked in red. Ignore very old 1 ft yellow marks along the way if still visible.

**Snubber line**

Is a double 1/2" nylon line with chain hook to grasp a chain link (located in anchor locker).

**TIP:** Hook the chain hook on a chain link off the bow roller, run the lines loosely over the port roller, and tie off to one or both port and starboard cleats, then let enough chain out to put tension on the snubber line and slack the chain on the windlass. The snubber lines should be at least one foot over the bow roller.

**Secondary anchor**

Is located in starboard cockpit locker: Danforth anchor on 50 ft chain and 250 ft nylon rode.

**TIP:** When anchoring, use a scope of 4-to-1 for the highest water depth you'll encounter in the spot where you drop anchor. As a general rule, pay out at least 100 ft. 2 minutes of reverse at idle speed sets the anchor and tests its holding power. If wind above 15 knots is forecast test holding at 1200 RPM for wind up to 20 kt, 1800 RPM for wind up to 30 kt. For storm conditions (sustained winds of 25+ knots), extend your scope to 7 or 10-to-1, provided you have room to leeward. Otherwise, set two bow anchors (using the secondary anchor, chain and rode—located in the starboard cockpit locker) in a v-pattern for extra holding power.

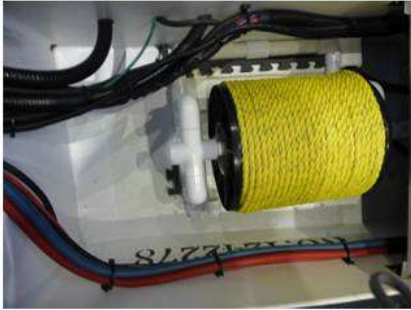
**Stern tie line**

The stern tie line is a 400 ft reel of floating line located in the floor locker in the salon (second locker from the steps). The reel is mounted on a frame that can be hooked onto the stern rail under the BBQ.

**TIP:** Do not use the reel to haul the boat; it is intended only to help you deploy the line easily, and wind it in neatly for storage. Always cleat the line to a stern cleat. If you wrap the line around a tree onshore and back to the boat, cleat both ends to a stern cleat.

Stern tie reel. Use to reel-out or wind-in 400 ft stern tie line.

DO NOT use to haul the boat—reel is not that strong! Tie line to stern cleat.



Stored under salon sole, second locker from the steps. Stand in bilge locker to first lift onto salon floor, being careful of handle, then carry up the steps to the cockpit.



Turn "hooks" 90 degrees to deploy. Hook onto lower rail of stern pulpit.



Secure to vertical stanchion with line or velcro. After use: Wind line in neatly otherwise the reel will not fit under the salon sole. Rotate "hooks" to original position before storing.

## Anchor Windlass

*The engine must be running to use the windlass* (a built-in precaution to ensure the windlass will not drain the start battery). The "on" and "off" breaker for the windlass circuit is located in the aft cabin beside the battery breakers. The yellow lever is "on" when down and "off" when up; generally leave it on.

The up-down controller for the windlass is located inside the bow anchor-chain locker. A repeater and chain length counter is located beside the starboard helm; **but please do not operate the windlass from the helm.** The counter is unreliable...observe marks on the chain for accuracy.

### **TIP:** *Deploying the Anchor*

*Prevent the anchor from chipping the gel coat on the plumb bow by*

1. Tying the "HullHugr" bow fender on the bow with lines to each bow cleat before deploying the anchor
2. Fending the anchor off with the boat hook—have the boat hook in hand before deploying the anchor
3. Deploy the anchor off the roller and down to water level with short controlled pulses applied to the electric windlass. With the anchor in the water, the water will buffer any swing. Once the anchor is in the water, use the electric windlass to lower the anchor to the bottom and deploy the desired amount of scope.

### **TIP:** *Retrieving the Anchor*

When retrieving the anchor into a breeze, motor the boat slowly toward the anchor while using the windlass to take up the slack in the chain. Don't override the chain, as this will place the chain against the hull. If that happens, stop the windlass and reverse the boat until the chain runs clear of the hull.

Retrieve the anchor to where you can see it about one foot below the water to buffer any possible "pendulum" action if the anchor were just out of the water. Then, using short, controlled pulses, retrieve the anchor from just below the water to just below the bow roller making sure the anchor point is toward the boat and fending it off the plumb bow on the way up using the boat hook. To prevent damage to the windlass and/or bow, bring the anchor onto the roller by hand, then take up chain with sort bursts on the windlass. **The chain should remain just barely slack, and definitely NOT rigid taught.**

**TIP:** *Securing the Anchor*

Once the anchor is on the bow roller and chain taken up (remember to leave slightly slack), secure it with the snubber line hooked to the chain near the swivel and cleated to one of the cleats in the anchor locker. Retrieve the bow fender before setting sail.

Manual override of the Windlass is achieved by loosening the windlass clutch using a winch handle or deck plate wrench.

### **Anchor Riding Sail**

When anchored or moored in a windy situation you may find that *Sea's the Dream* has a tendency to swing from side to side. This is common in fin keel boats with high sides. To keep *Sea's the Dream* steadily pointed in one direction use the Anchor Riding Sail which is stored in the starboard cockpit locker. Hank the sail on to either backstay with the two Ronstan snaps provided, tie down to a deck pad-eye to prevent the sail riding up the backstay, hoist until taught using either of the two spare halyards, and sheet forward to one side (preferably to a mid-ship cleat). The sail is actually sailing the boat to one side of the anchor rode. The boat will only swing so far out as to reach equilibrium with the windage on the topsides. There it will stop and hold its position except for minor moves in response to changes in wind velocity and tide.

### **Barbecue**

The BBQ is plumbed to the propane tank downstream of the solenoid valve, so make sure the solenoid is on (located above the starboard forward corner of the galley countertop). Make sure the yellow handled valve on the tank is turned on. After that, the BBQ's valve is the control. Open the lid to light. Depress knob and turn counter-clockwise to the "High" flame position, and light the burner by pushing the Piezo igniter. If that fails to work, resort to the gas lighter provided on the boat. Visually confirm ignition. Turn knob to adjust flame. With the lid down, the BBQ tends to be hot and cook quickly, so tend your food often. As a courtesy to the next guest, please use the wire BBQ brush to clean it after use and wipe off any grease on the outside including the drip tray below. Remember to turn off the yellow valve after use. Please use dishwashing liquid to wash off any grease spills on the fiberglass or teak deck under the grill.

### **Batteries, DC Power Management, and Charging**

For normal operations, leave the house battery switch "on" (in the horizontal position) all the time. A battery combiner isolates the engine start battery, assuring all batteries are charged, while protecting the engine start

battery from draw-down by house usage. As of 2024 the house bank has three Lithium Iron Phosphate (LiFePO<sub>4</sub>) deep-cycle batteries. Total house capacity is 600 Ah with 80% usable (i.e., 480 Ah usable). Voltage readings for Lithium batteries are higher than for standard lead acid batteries. If the voltmeter drops below 13.0 V then you have discharged the battery too much and should charge them by running the engine or connecting to shore power and switching on the battery charger on the electrical panel above the Nav table.

The engine start battery is two 115 Ah (230 Ah total) sealed lead-acid batteries. Turn it off at the battery switch before leaving the boat as this is the only security against theft (there is no ignition key).

We have installed a battery monitor (Renogy Core One), located right of the electrical panel, to provide an accurate estimate of the state of charge of the house batteries. It will show state of charge and time remaining at current uses rates.

Battery Voltage and present current (Amps) draw can also be seen on the electrical panel LCD screen. It defaults to battery display. Press the button beside the battery symbol to switch between house and engine battery. Unfortunately the Amp reading is inaccurate as several power hungry systems by-pass this ammeter. Use the Renogy Core One screen for accurate readings of power consumption.

**TIP:** Avoid discharging below 20% SOC before re-charging the batteries by running the diesel engine at 1500 RPM (it won't charge any faster at higher revs) or plugging into shore power with the battery charger switched "on". A low battery alarm will sound at 25% SOC or 13 Volts if sustained for more than 10 seconds.

**Caution:** Never turn a battery switch to "off" while the engine is running! This will blow the diodes on the alternator, and the batteries will no longer charge.

**DC Power Management**—*Sea's the Dream* is equipped with 600 Amp-hour house battery capacity. If you plug in to shore power every evening and turn on the battery charger on the electrical panel, you will be able to use all the electrical systems all day. However, most charter guests will anchor or pick up a State Park mooring on one or more nights. Under these circumstances, you must pay close attention to limiting your use of DC power and recharging the house batteries by running the engine.

The Table below illustrates normal power consumption of the electrical systems. The highest power uses are listed first except the Microwave. Use the microwave *only* when connected to shore power, or with the engine running at about 1500 rpm.

The auto-pilot uses a surprising amount of power to operate the steering system and along with other navigation tools (like the chart plotter), sound system, and lights, can draw down 20% of total battery capacity in a day of sailing. You can safely use about 80% of battery capacity before recharging, so expect to reach the minimum level in 3-4 days of sailing without charging batteries. It takes roughly 10 minutes of engine running at 1500 rpm to charge 1% of battery capacity, so if the batteries are down by 40% it will take about 7 hours or more to recharge them with the engine (note that the rate of charge diminishes as batteries near capacity so achieving 100% charge will take longer than expected). Check the SOC reading on the Renogy One Core to see how well the batteries are charged. Once depleted by 80% of capacity, you would do well to plug into shore power and turn on the battery charger to charge up overnight.

The cabin heater also draws a high rate of power from the batteries so avoid leaving the heater on all day while sailing. Next to the water pump, which pressurizes water to the faucets and is on only when a faucet is turned

on, the refrigerators use most power and run about 50% of the time. If left switched on without recharging batteries, they will drain the house batteries in about two days. To conserve battery power we recommend that you use the Auxiliary refrigerator (under the Nav table) only to keep drinks cool and only switch it on when plugged in to shore power or with the engine running. Use the built-in top-load refrigerator in the galley for perishable foods and keep it on all day. If you find the batteries are still running low, then turn off both refrigerators at night when it is cool anyway and limit the number of lights and other electrical systems to "on" only when needed.

<b>DC Equipment</b>	<b>Amp Rating</b>
Auto-pilot	10.00
Water pump	9.00
Cabin heater	8.00
Refrigerator / Aux	7.00
Refrigerator	6.00
Deck light	3.00
Aft cabin bedside lamps	3.00
Steaming lights	2.00
Nav lights	2.00
Bilge pump (always on Auto)	2.00
Radar	1.00
Nav instruments	1.00
Music system	1.00
Main cabin lights	1.00
Aft cabin lights	1.00
Fwd cabin lights	1.00
Bunk cabin lights	1.00
VHF Radio	1.00
Inverter on standby	1.00
Anchor light	0.50
Aft head light	0.50
Fwd head light	0.50
Microwave	<b>Shore power or engine on only</b>

**TIP:** Pay particular attention to any of the systems rated above 1 Amp in the Table and make sure they are on only when needed.

## Berths

*Sea's the Dream* is ideal for six people, but she'll sleep a maximum of nine - two in the main aft cabin, two in each of the forward cabins, two people on the dinette seats with the table dropped down and conversion cushions added to make a double berth, and one on the settee opposite the dinette (with the stool inserted under the Nav table for a full-length berth).

The aft King bed is 6'6" long, 6'3" wide at the head, and 3'11" wide at the foot.

The forward V-berth is 6'6" long, 6'10" wide at the head, and 2'4" wide at the foot.

The port cabin bunk beds are each 6'7" long, 2'2" wide.

The converted dinette is 6'6" long and 4' wide with side cushions removed.

The port settee is 6'4" long and 2'4" wide with side cushions removed, and the stool placed under the Nav table.

**Converting the dinette into a double bed.** The table is lowered by electric motor; the up/down switch is located on the end of the sink counter behind the top cupboard door. Place the extra cushions (usually stored in the bunk cabin) on top of the table. Straps on the cushions hold them onto the table top. It's quick and easy, and the berth is comfortable!

### **Bilge Pumps**

Please check the bilge every day. It is accessed by lifting the floorboard next to the dinette table. The refrigerator drains into the bilge, so most of the water that accumulates in the bilge is from melting ice and condensation. The intake tube is in the lowest point in the bilge.

There are three bilge pumps:

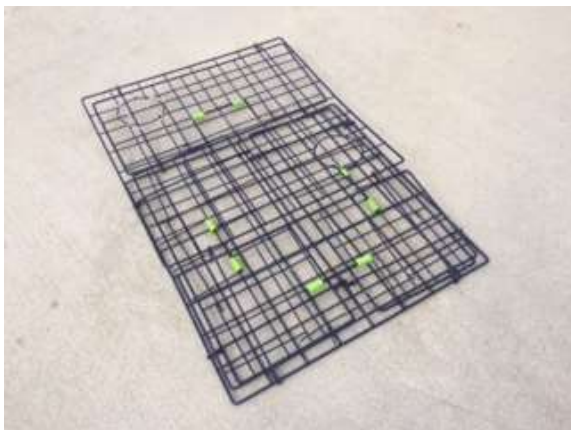
- (1) A small **electric on-demand** bilge pump in the bilge sump will work only while the cabin lights circuit is on. It is located at the lowest point to keep the bilge sump dry under normal circumstances.
- (2) The main **electric on-demand** bilge pump is located in the bilge, slightly higher than the small pump and is on its own circuit, controlled at the electrical panel. The switch should always be on "Auto." The "on" light glows green only when the bilge pump is operating. This pumps water only if the volume exceeds the capacity of the small pump.
- (3) The **manual emergency** bilge pump is located on the side of the port cockpit locker. The pump handle is clipped inside the locker.

### **Bow Thruster**

The bow thruster is operated from the starboard helm. Turn "on" by pressing both red and green buttons at the same time for 1 second. It turns itself off after 10 minutes of not being used, or can be turned off by pressing both buttons together again. In addition to moving the bow port or starboard, the bow thruster can be used in conjunction with the engine in idle to crab the boat sideways. In forward idle, turn the wheel in the opposite direction of desired travel and simultaneously use the bow thruster in the direction of desired travel. E.g., the boat is against a dock to starboard and you want to move the whole boat off the dock to port. Turn the wheel as if turning to starboard, put the throttle into idle forward, and press the port bow thruster; the boat will crab to port and a little forward. Note that if the bow thruster is over-used and heats up, as a safety measure it will cut out until it cools down, taking about 30 minutes. Use the bow thruster in short bursts of 2-5 seconds to avoid over heating.

### **Crab Trap**

We have one crab trap aboard (port cockpit locker). It folds to fit inside the cockpit locker. Unfold to create a box. Insert bait in the bait bag, tie it on inside the box, and deploy to the sea floor with the rope and float. Check the trap at regular intervals, check the size of trapped crabs and keep only those larger than minimum size. A large crab cooking pot is located under the port seat locker in the salon.



Crab trap folded for storage



Crab trap opened for use

### Coast Guard Registration Number

The Coast Guard registration number is permanently painted on the aft side of a cross beam in two of the salon floor lockers. Both the second locker from the steps and in the bilge-pump locker (third locker from the steps). The numbers are 3 inches high and cannot be missed if you're looking in the right floor locker. If boarded by the US Coast Guard, they may want to see this number.



### Condensation

Unless adequately ventilated most boats will develop condensation on cold surfaces, like the under-side of the deck or under side of mattresses. Good air circulation is the key to eliminating condensation. Leave hatches cracked open at night, even if it's cold out (a great excuse to bundle up in your comforter and cuddle!), to reduce or eliminate condensation. Leaving interior doors open to improve air circulation throughout the boat will also help reduce condensation. A ¾ inch mat of "HydraVent" material is located under each mattress to improve air circulation, reduce condensation, and improve warmth.

### Cushions

**Cockpit.** The 8 cockpit cushions (Bottom Siders covered with grey Sunbrella canvas) are closed cell foam which is subject to compression denting. Please store them flat (not rolled or folded), and not against anything that could leave a permanent impression. Clean with a damp sponge or cloth and laundry soap; don't use solvents. Take care using sun-block lotion and insect repellent against the cushions, as these contain solvents that damage the cushions. Holes and tears must be repaired without delay; please report them to SJS staff.

**Salon.** When removing the salon cushions, slide your fingers between the Velcro tabs to separate the two parts before pulling the cushion out. Just pulling the cushion without separating the Velcro first will tear the cushion covers.



**TIP:** The forward backrest cushion on the port side settee should be left in place; there is nothing useful behind it. It is held in place by an extra-large strip of Velcro.

## Dinghy

*Sea's the Dream* has an inflatable 4-person 10' dinghy with two seats, oars and an outboard engine. (See "Outboard" section).

**Towing.** *ALWAYS* remove outboard and any other items not fixed to the dinghy before towing. Towing works best when the dinghy is brought close to the boat with only 6 feet of painter line from the stern cleat to the towing bridle or towing eye on the dinghy. This lifts the bow slightly out of the water and reduces drag so you go faster, and reduces the chance of wrapping the painter around the propeller. Tie the painter off twice – once at a cleat with a standard cleat knot, then the bitter end to the stern rail.

**Beaching.** *Please* take special care when beaching the dinghy. Most of the beaches you will land on are strewn with sharp barnacle-covered rocks. When approaching the shore, weight the dinghy aft by leaning or moving the crew toward the back of the dinghy. Then offload everyone over the bow. Lift the dinghy above barnacle height using the hand lines on either side, and set it down gently on the beach. Secure the painter under a rock or to a large driftwood log so your dinghy won't float away when the tide comes in – we have very large tidal range.

## Dodger, Bimini, and Enclosure Panels

Our dodger, bimini and enclosure panels can enclose the entire cockpit. We usually sail with the side panels removed, and only put them on when we need the extra space outside during inclement weather. There are 7 side panels which are stored on the boat in a black carry bag which may be stored on the shelf beside the aft cabin bed, or in the bunk cabin on an unused bed.

**TIP:** Enclosure panels are stored rolled up in a specially constructed roll of cotton sheets with a plastic tube center. The sheets protect the plastic "glass" from zipper scratches, and rolling the panels together helps to ensure they never crease. When not in use, store enclosure panels rolled, never folded, and never with anything on top to weigh them down. Creasing damages the "glass." At the end of your charter please roll side panels together, with one laid between each sheet of the roll in which they come, return the roll to the black carry bag, and store on the shelf beside the bed in the aft cabin.

**TIP:** The dodger's plastic "glass" is vulnerable to scratching from dirt and salt crystals. When salt spray dries on the glass, tiny salt deposits are left behind and tend to obscure your vision. Please avoid directly touching the glass with a damp rag or sponge. Salt does dissolve in water, but not as fast as you might think. The salt crystals remain un-dissolved for several seconds. It's like rubbing the glass with sand paper! To clean, use generous amounts of fresh water in a pan from the galley or dock hose and "flood" the glass to dissolve the salt crystals away. If the dodger glass is really clear, you can thank previous guests for their diligence. And we thank you too!

**Caution:** Most spray-on sunscreens and bug-sprays react chemically with the plexiglass. Please inform your crew to spray downwind of the dodger glass. And please don't lean against the dodger with sunscreen on your back and shoulders. Once that chemical reaction takes place, the glass is ruined.

**Electrical Panel**

The electrical panel is a panel of switches (not breakers). Most switches on the panel board are self-explanatory, but some circuits are unique and described below.

Fuses and breakers are located behind the panel. Access the breakers only when one needs to be reset. Turn each of the silver-headed screws on the panel a ¼ turn anticlockwise and tilt the panel towards you. Breakers pop-out when they trip, so pushing in resets a breaker.

**AC 110v Power.** The AC outlets will function while connected to shore power OR, when not connected to shore power and the inverter is turned “on” (converting 12v DC house battery to 110v AC). AC outlets will only work when the “AC Plugs” switch on the panel is in the “on” position. The AC outlet below the Nav table is a GFCI plug with a breaker switch. It is easy to trip this switch accidentally when inserting some kinds of plugs, so “Reset” if accidentally tripped.

**Battery Charger.** The Battery Charger switch must be turned “on” for shore power to charge the batteries. Always turn it on when connected to shore power.

**Inverter.** The inverter switch panel is located under the Simrad Sonic-hub just aft of the electrical panel. Use on demand only -- switch it “on” (a green light comes on) and “off” when it’s no longer needed. The AC Plugs breaker switch must be “on” for the plugs to be live. Do NOT use the inverter while connected to shore power.

**Autopilot, Chart Plotter.** The switch for “Nav Instruments” is located on the electrical panel. This switch powers the Simrad chart plotter at the helm and all other navigation instruments.

**Caution:** Never switch off the Nav Instruments switch on the electrical panel without first depowering the chart-plotter in the cockpit by hitting the red power button on the chart plotter, and selecting “Standby” on the screen that displays. This shuts down the software prior to cutting power and is critically important.

**Cabin Lights.** This switch should always be on. An on/off switch for all recessed overhead salon/galley lighting is controlled by two rocker switches located on the ceiling next to the companionway entrance above the starboard aft cabin door. Silver button switches for overhead lights are also located on the mast support column. Lights in the heads and bunk cabin are turned on by rocker switches on the ceiling. The forward v-berth and aft main cabin have silver button switches on the wall. All other cabin and navigation station lighting locations have individual on/off switches on the fixtures. There are LED “mood lighting” strips mounted on the shelves above the seats in the salon which are operated by remote controls usually located on the walls above the LED light control unit; select white or colored light, or changing colors. Note that a brief flash from these LED strips is normal when turning on the Cabin Light switch on the electrical panel.

**Water Pressure.** This pump pressurizes a small tank located behind the dinette cushions to starboard, which it shuts off when the tank is at working pressure. If you don’t hear the pump start up when you turn it on at the panel board, it means that the system is at working pressure – you should hear the pump start again after you use some fresh water.

When no one is below decks, while motoring or sailing, turn off the water pressure switch. Should you run a tank dry, the pump would continue to run until it burns out and you'd never hear it running while everyone is in the cockpit.

Water tank selection valves are located behind the starboard settee back cushion just forward of the galley. Tank-1 is the forward tank, located under the v-berth. Tank-2 is the aft tank, located under the aft cabin bed (starboard), and beside the diesel fuel tank (port). It's a good strategy to open the valve to tank-1 first to lighten the bow first, and keep the weight distribution balanced aft until the last of the water is in use. When tank-1 is near empty, switch to tank-2 using the selection valve. Water tank level can be read on the LCD display on the electrical panel.

**Running / Navigation (under sail) and Steaming (under power) Lights.** Night passage making is not permitted under terms of your charter agreement with San Juan Sailing. Only use these lights in case of reduced visibility, like fog or on the rare days in the Pacific Northwest when there's heavy overcast. Rocker-switch selection is indicated on panel.

**Anchor Light.** Should be on all night in an anchorage. It won't deplete the batteries.

**LCD display.** Press the button beside each symbol to read fuel level, water level in Tank 1 (one press) and Tank 2 (second press), battery voltage, and to turn off an alarm at this panel. To turn off the alarm for your entire trip follow the instructions below:



Press center button for MENU



Press right button twice to move cursor to Alarm MENU then press center button to select



Press right button to move cursor to OFF then press center button to select

To turn off battery alarm. Note, alarm resets to ON every time main power is shut off.

## Electronics

### Chart Plotter and Radar.

Sea's the Dream is equipped with a Simrad NSS-8 touch-screen chart plotter at the helm. The chart plotter, radar, GPS, autopilot, depth sounder, and wind instruments, are all Simrad products and fully integrated.

They are fairly intuitive provided you spend some time working through the various touch screens and options. An instruction manual is on the boat, but it may be accessed online in advance of your trip at: [http://www.simrad-yachting.com/Root/User%20Guides/NSS OM EN 988-10102-002 w.pdf](http://www.simrad-yachting.com/Root/User%20Guides/NSS_OM_EN_988-10102-002_w.pdf)

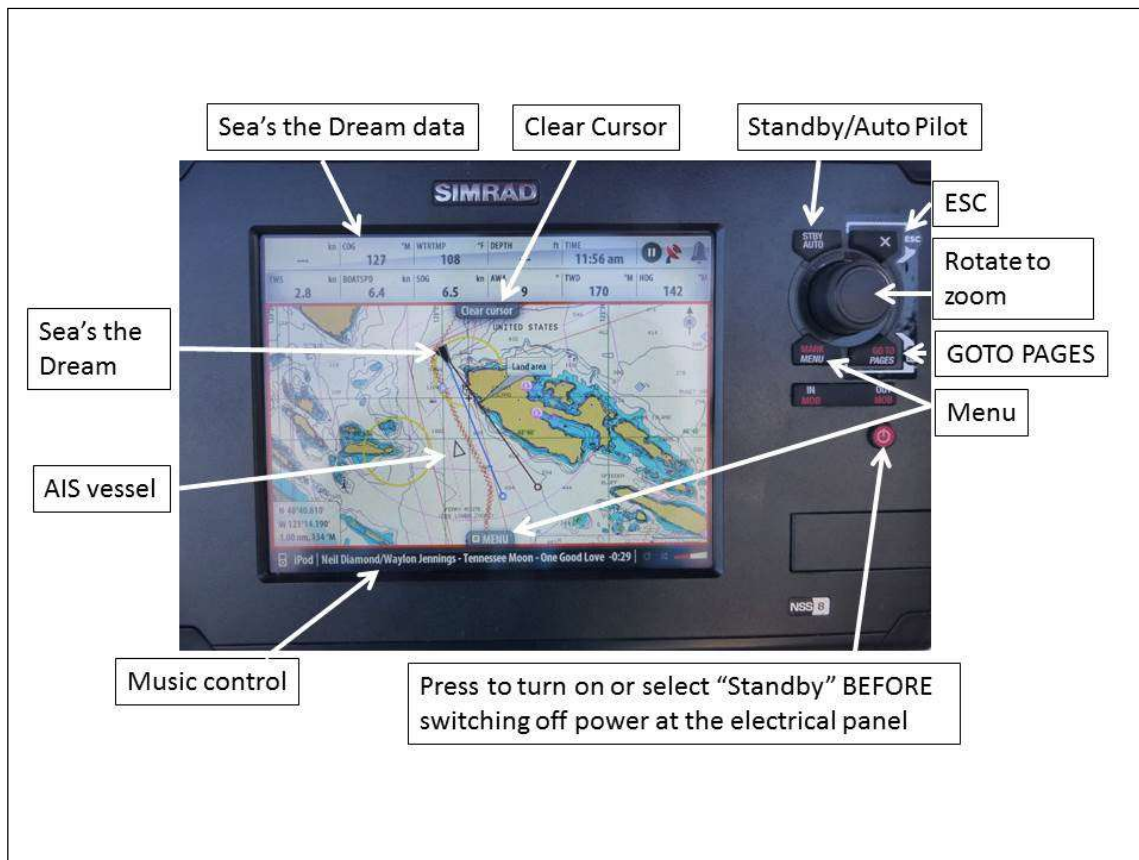
The chart plotter may be used without the radar to minimize battery drain. To start the Chart plotter, turn on the electrical panel switch labeled “Nav Instruments.” It will boot up and ask you to “Accept” by tapping the onscreen button on the display. Use the “Page” key located at the upper right corner of the unit to change modes, and use the touch screen to select options. Pressing Escape (Esc) key gets you back to an intuitive touch screen. To shut down the unit, press the red power button on the chart plotter and then select “Standby” on the screen. ***Never turn off the “Nav Instruments” switch on the panel before going to “Standby” first.***

**TIP:** We recommend that in addition to using your PRIMARY navigation aids – namely, the Maptech waterproof chart book or the roll charts (with the most active “killer rocks” marked in red) – up in the cockpit while underway, you also utilize the chart plotter for added safety. It helps you to see if you are where you think you are on the chart book or paper charts. If someone asks, “Where are we?” Within 3 seconds, you need to be able to point to the chart and show them the vessel’s precise position. If you can’t, you’re in danger of hitting a rock.

The only time when the chartplotter becomes your primary navigation tool is when you’re in a “tight spot” like going through a narrow pass or approaching the entrance to a secluded cove. With the chartplotter, you can “zoom in” to make something that’s the size of a dime on a paper chart into the size of a paperback novel or larger on the screen. You can see more detail and, importantly, any hazards in the area. Your boat’s position on the chartplotter should be accurate to within 3 meters – about 10 feet.

You should have little need for 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 early 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. Never depart from a safe location into the fog! To do so, even with radar, would be contrary to prudent seamanship. FYI – Fog becomes “reduced visibility” when you can see ¼ mile (about 4 football fields) in all directions. It is safe to proceed carefully in reduced visibility using your radar to “see” beyond the haze, but be sure to look up from the screen about every 10 seconds and use your eyes to scan the horizon forward, behind, and side to side. A motoryacht, tanker or freighter traveling at 20 knots takes only 39 seconds to travel ¼ mile! You need to see these fast-moving vessels sooner-rather-than-later so you can quickly take evasive action to avoid collision.

The following instructions will get you started and should be enough information for most normal use of the Chart Plotter.



On startup, the Chart screen is displayed (Figure above). This is all you need for the majority of the time. If you need anything more, just remember two main things:

1. **X ESC button:** No matter where you are on screens and menus, X ESC will back track you to the Chart screen.
2. **GO TO PAGES button:** Takes you to a choice of Pages. Use the touch screen to select between:
  - a. Instruments
  - b. Echo
  - c. Video
  - d. Nav
  - e. Chart
  - f. Radar
  - g. Pages, Tools, Settings are across the bottom of the screen.

Apart from the Chart screen, we use the "Tides" page most often to find the present and future state of tide at our location. Select "Tools" (g. above) to find the Tides page.

**STBY/AUTO button:** Takes you to the Autopilot control screen where you can select Auto (autopilot on) or Standby (autopilot off). Selecting Wind puts Sea's the Dream on auto following the current apparent wind angle.

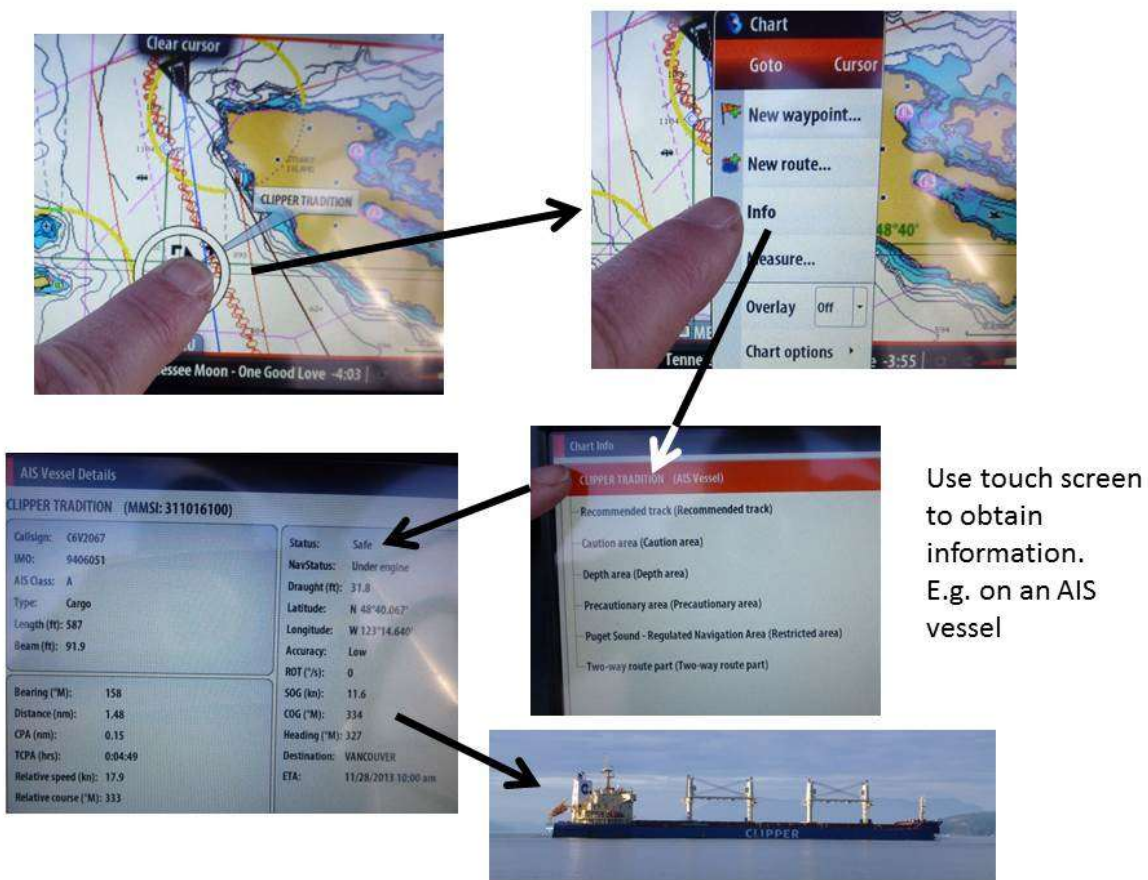
### Using the Touch Screen:

**Moving/Zooming the Chart:** Normally the Chart screen moves with Sea's the Dream (closed black triangle) centered on the screen. If you want to move to another point on the chart, and zoom in (for example), touch the

desired point to set the cursor on it, then use the rotating knob to zoom in (or out) to take a closer look at the point. Touch "Clear Cursor" (top center of screen) to clear the cursor and return to Sea's the Dream centered on screen.

**Touch and hold** on anywhere on the Chart screen. As you hold your finger on the screen a rotating circle appears; as soon as it becomes a solid circle, remove your finger, and a popup window appears with a choice of plotting a waypoint, new route, info, or select overlay radar on or off. Remember to "Clear Cursor" after you return to the Chart screen.

**Information:** Touch and hold on any object on the Chart screen to find information about the object; select "Info" in the first window, then select the item you want information about on the second window. E.g. there's an AIS vessel on the Chart screen represented by a triangle: touch and hold on the triangle, select "Info" from the popup window, then select "AIS vessel" and the next window has all the information on the vessel including name, speed, destination, distance from you, projected closest distance and time if both vessels stay on course and speed, etc. See illustration on next page.



**Data:** The Chart screen displays two rows of Sea's the Dream data on the top, including:

1. COG = Course over ground
2. HDG = Heading
3. Depth
4. Time
5. TWS = True wind speed
6. Boat Spd = Speed through the water

7. SOG = Speed over ground
8. AWA = Apparent wind angle
9. TWD = True wind direction

**Heading/Course:** Lines projected from the triangle representing Sea's the Dream are Heading (Blue) and Course (Brown). I find it most useful to set it so the length of the line represents 30 minutes of travel under current speed over ground.

**Menu:** At the bottom of the screen, touching Menu takes you to the same set of Menus as the button on the right of the screen

**Really important:** Always press the red power button on the Chart plotter, then select "Standby" on the screen that appears, before turning off power with the "Nav Instruments" switch on the electrical switch panel above the Nav table. "Standby" closes the computer software before losing power.

### Autopilot.

The Simrad AP24 Autopilot is integrated with the chart plotter. It can be activated either at the starboard helm or on the touch screen chart plotter. An instruction manual is on the boat; it may be accessed online in advance of your trip at: [http://www.simrad-yachting.com/Root/Operator%20Manual/SimradYachting/English/AP24\\_OM\\_%20EN\\_20222535\\_C\\_w.pdf](http://www.simrad-yachting.com/Root/Operator%20Manual/SimradYachting/English/AP24_OM_%20EN_20222535_C_w.pdf)

### AIS.

Turns on with the chart plotter and VHF radio. The Automatic Identification System shows all vessels transmitting AIS data which includes most commercial vessels and any others like *Sea's the Dream* that are equipped with AIS. AIS vessels appear on the chart plotter screen as triangles. The triangle points in the direction that the vessel is moving and if you touch the screen over the triangle the system will give you additional information (such as name, size, speed, bearing, etc.) about the vessel. The system also transmits this same type of information about *Sea's the Dream* to other vessels with AIS. This system comes on with the VHF radio as it uses the radio to transmit and receive its information. Our MMSI ID number is 367542970 and it will show up if you touch the black-filled triangle that represents *Sea's the Dream* on the chart plotter.

### Depthsounder.

Turns on with the chart plotter. The depthsounder 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, you may receive false readings caused by currents, changes in water temperature, fish, and seaweed. Use the depthsounder only as an aid to navigation in shallow water. The depth warning is set at 12 feet, which gives you just 4 feet depth below the 8 foot keel to react to unexpected shallows.

**TIP:** The key to avoiding rocks is *not* the depthsounder – but knowing where you are at all times. Rocks are the greatest navigational and safety hazard in the islands – but they are all clearly marked on the charts.

We do not recommend using the depthsounder's alarm at night. Besides a fairly high battery drain, it's likely to sound at inappropriate times such as late at night while fish are passing beneath the transducer. Instead, consult the onboard tide table to determine whether you're anchored in a safe location, considering how shallow your depth will become when the tide ebbs out of your anchorage in the middle of the night.

**Knotmeter.**

Turns on with the chart plotter. Speed is indicated in knots or nautical miles per hour.

**TIP:** If the digital knotmeter shows a reading of "0.00" while underway, the impeller is most likely clogged with a piece of eelgrass. Sometimes it will float off overnight. You can try removing it by traveling for a short distance in reverse. If the knotmeter is temporarily "out of service," the GPS input to the chart plotter provides an alternate speed indication called SOG (speed over ground).

**Music (Sonic-hub) Operation from the Chart plotter**

See Entertainment section.

**VHF Radio.**

The remote access microphone (RAM) plugged into the outlet on the cockpit table pedestal controls all radio functions from the steering station of the unit mounted above the Nav table. The VHF at the Nav station is turned on by holding down the "PWR" button for a second. There is also a "PWR" switch on the RAM to turn on the system at the helm.

**TIP:** To listen to the weather reports (should be done in the morning before you head out and ½ hour before your final destination), push the "WX" button on the radio. Scan the weather channels for the one with the best reception before sailing in the morning and prior to anchoring for the evening. This is generally a light wind region but weather changes can be sudden. Listen for the report on "Inland waters of western Washington" which cover the San Juan Islands and the Canadian Gulf Islands. You will also hear "Strait of Juan de Fuca" (south of the San Juans), "Georgia Strait" (north), and "Rosario Strait" (runs through the eastern part of the San Juans). In Canadian waters, listen to the Canadian weather station which also transmits warnings of military area activity, such as area Whiskey Golf (WG) outside of Nanaimo. There's a story behind this warning which we will tell if ever we meet!

You should monitor channel 16 (the hailing and distress channel) during your cruise. You may save a vessel or a life. You may hail vessels on channel 16, but after establishing contact on channel 16, ask the skipper of the other boat to switch to working channels 78, 79 or 80.

San Juan Sailing monitors channel 80 during office hours (closed Sundays). If you need a review of VHF radio protocol, you'll find information located in the onboard Charter Guest Reference Notebook. By phone you can reach the San Juan Sailing office at 360-671-4300 or refer to the contact list in the Charter Guest Reference Manual.

In case of a distress where you can no longer stand by the radio to pass your mayday, use the red distress button on the radio. First flip up the cover, then press the button. GPS input is automatically coded into your signal.

**Wind Instruments.**

Wind speed and direction are displayed at the port helm.



**Cellular Telephones.**

*Sea's the Dream* is equipped with 12-v DC cigarette lighter type outlets that may be used for recharging your cellular telephone. The outlets are on the electrical panel face, and in each cabin. They are connected to the Cabin Lights breaker which must be "on."

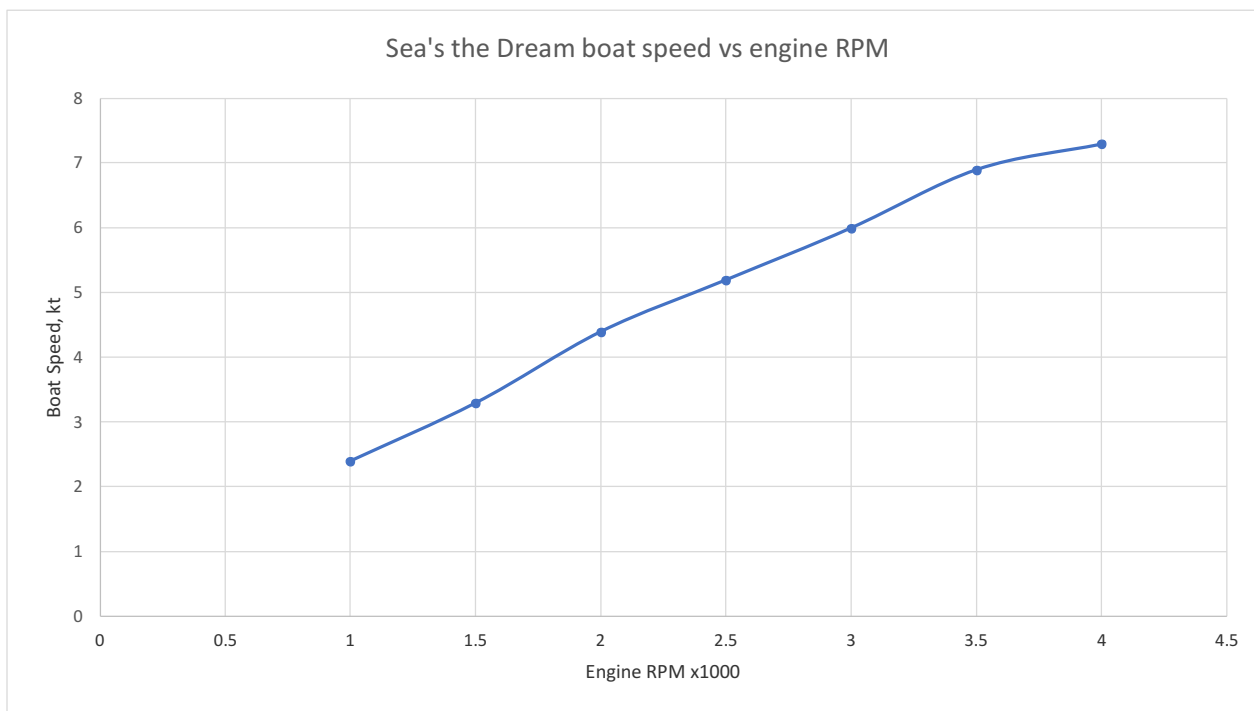
**110v AC.**

*Sea's the Dream* is equipped with AC outlets for use when connected to shore power. There is a breaker switch and outlet located under the Nav table (right of the refrigerator). If this breaker is off, then all the outlets are off and also the battery charger. We leave it on all the time, but it can be turned off accidentally if you store stuff under the table, or even when inserting a plug into the outlet.

**TIP:** If you have no power at the AC outlets, check this breaker first.

**Engine and Handling**

The engine is a Yanmar 4JH5CE series. Maximum RPM is 3900. Cruising RPM is 2500-3000. Idle is around 900 RPM. Many factors affect boat speed including windspeed and direction, current speed and direction, wave action, and condition of the bottom paint. The chart below provides a rough measure of what boat speed through the water you can expect at given engine RPMs.



**Saildrive.** The engine powers an SD60 saildrive which helps eliminate shaft vibration, noise, and alignment problems and maximizes use of space with a direct power-to-prop configuration from a horizontal crankshaft, to vertical down shaft, to horizontal propeller via gearing mechanisms. Under power, you will find *Sea's the Dream* to be quiet, balanced, maneuverable, and powerful.

**TIP:** Always leave the engine in neutral when off but under sail. The propeller will not spin if you first make sure the folding prop is closed.

**Folding propeller.** We have a three blade flex-o-fold propeller on *Sea's the Dream*. Closing the prop reduces drag while under sail and stops the shaft from spinning in neutral. After turning the engine off while under sail, shift to reverse for about 20 seconds, and then shift back to neutral. The prop will close and not spin. The prop opens again as soon as you shift into gear with the engine running.

**TIP:** A folding propeller does not have as much thrust in reverse as a fixed blade propeller so it takes longer or needs higher RPM to stop the boat than you may be used to.

**Reverse.** *Sea's the Dream* barely “walks” to starboard in reverse. Walk is easily overcome with the wheel and rudder when you have a little sternway. Be sure to hang on tightly to the wheel in reverse. If not, water pressure on the aft edge of the rudder will slam the rudder over to one side or the other, which is very hard on the steering mechanism.

**Forward.** *Sea's the Dream* has a large and deep rudder. So she's very quick to turn, and turns in a narrow radius. Very small rudder adjustments will easily change course. Because the saildrive/propeller is almost below the engine, the wash from the prop takes a moment to reach the rudder when starting off; anticipate this delay when maneuvering in tight spaces. A short burst of throttle will shoot water at the rudder, which, if already turned, will result in a short, sharp turn with little forward movement...a strategy that can be handy when turning in confined spaces. Or better still, use the bow thruster with much greater precision and ease! We recommend it!

**Docking.** *Sea's the Dream* carries momentum well, so your final approach and turn in toward your slip can usually be done in glide with the throttle/shifter in neutral; you'll certainly need no more than “idle speed” unless there are high winds. Without the propeller turning you also do not have the complicating effect of prop walk to contend with.

I find that docking into a slip stern-in, gliding-in in reverse, is usually easier than bow-in because you can see exactly where you are relative to the dock when you are at the helm. It also brings the stern close the dock to allow stern access which is so much easier than climbing over the side rail.

Never turn off the engine until the vessel is securely tied at the dock. Remember, you'll need to use your engine to stop the boat's momentum. It's very difficult and often impossible for people holding lines to stop the momentum of a vessel as heavy as a cruising sailboat. Don't use dock lines on a shore cleat to stop movement, as this can result in a sudden swing of the boat and damage to cleats, boat, and/or dock.

When coming into our docks in high winds or if you'd just like a little assistance upon arrival, simply hail “San Juan Sailing” on VHF channel 80. They'll be glad to offer some “coaching” and/or catch your lines. In fact, most marinas in the islands will help you if you hail them and ask for assistance. Asking for docking assistance, especially in windy conditions or with an inexperienced crew, is a sign of prudent seamanship.

### Starting.

1. Visually inspect the engine by lifting the companionway steps on their hydraulic struts (no catches or props, just lift the steps).
2. Once per week check the oil level. The dipstick is on the starboard side of the engine. If the dipstick indicates low or no oil the first time you check it, reinsert and try again - the correct level will show when the air lock bubble is broken. Expect the oil to be blacker than that of a gasoline powered automobile engine; this is normal for a diesel after only a few hours of operation. **Do not overfill.** Only if absolutely certain the level is low, use the onboard spare oil to add no more than a cup at a time. Then, after waiting about 2 minutes for the oil to

trickle down to the pan, check the level again. Overfilling is a bad thing to do to a diesel. The excess oil will escape somehow, perhaps by blowing the head gasket.

3. Check the coolant level; anywhere between the two lines (high and low) on the overflow reservoir is "good".
4. While you have access to the front of the engine, check for leaking fluids.
5. Look over the stern for kelp, logs or branches that could foul the propeller.
6. Make sure the gearshift is in neutral (12 o'clock position).
7. Press the electrical switch labeled "I" until the indicator lights on the RPM gauge light up.
8. Press the "crank" button for a moment; the engine normally starts immediately.
9. After the engine starts, release the crank button, check for water gurgling out of the exhaust.
10. While the engine warms, check your fuel level on the LCD panel on the electrical panel.

Please allow 5-10 minutes of warm up before placing a load on the engine. It is very hard on a diesel to be placed under load when cold.

**Proceeding in Forward/Reverse.** With the throttle in neutral position you engage forward gear by pushing ahead on the throttle or reverse gear by pulling back on the throttle. To keep the transmission "healthy," please remember to pause 2 seconds (say "one and two and") in the 12 o'clock neutral position when shifting from forward to reverse and vice-versa.

**Operation.** 54 HP Yanmar SD series engines are very reliable. Economy cruise speed of 5-6 knots is achieved at about 2500-3000 RPM using about 1 gallon of diesel per hour. Please do not exceed 3900 RPM because it's hard on the diesel and fuel consumption goes WAY UP with very little increase in speed.

To avoid the possibility of sucking in air or sludge when the fuel level approaches 1/4 of a tank, refuel when the fuel drops below 1/2 full and before it reaches 1/4 full. The tank holds 53 gallons, so topping up at about 25 gallons is reasonable.

Engine Overheat. If the buzzer sounds while the engine is running – about 999 times out of a thousand it's no more serious than eelgrass plugging up your raw water strainer. The best upfront solution to this problem is prevention—keep an eye peeled for eelgrass mats, especially along those "soapy" looking tide and eddy lines in the water, and don't run over it. When eelgrass gets sucked into the engine cooling water intake, it collects in the raw water strainer.

To clear the eelgrass from the raw water strainer (above the water line in the rear of the engine compartment, accessed from the aft cabin), twist off the clear screw-top and extract the eelgrass and toss it in the galley garbage can. Replace the lid (make sure the O-ring rubber gasket is in place) and tighten by turning it clockwise until the lid is seated firmly on the rubber gasket. Don't over tighten as the lid can crack. Make sure the lid's screw threads are not crossed as this can give the appearance of a tightened lid but the gasket won't seal. Then restart the engine.

If upon restarting the engine overheats again, check the seal between the strainer, the rubber gasket, and the lid. If the strainer is drawing air, it won't draw water. If needed, open and then retighten the lid on the strainer and check to make sure the rubber gasket is in place in the lid (and not lying in the bilge.)

If the above fails to solve the problem, call San Juan Sailing for assistance. **Do not continue to motor with an overheating engine.**

There may be other reasons you hear the buzzer. If you lost oil pressure, the oil icon warning light will light up, so check which light is showing red. If it's the oil light, shut down the engine, check the oil level, and contact San Juan Sailing. The alarm buzzer is more likely to indicate engine overheating, and the temperature icon light will light up. Before you shut down the engine, check for water gurgling out the exhaust. If you have a "wet exhaust", check the coolant level in the overflow reservoir bottle and if none is seen, add enough to reach the top level line on the bottle. Only after the engine cools down, you might remove the cap on the engine block and add coolant. And check the bilge for a light green liquid. If found in the bilge, call San Juan Sailing. If the coolant reservoir bottle is full, check to see if the engine threw a belt. Without a belt on the raw water pump, the coolant won't circulate and cool the engine. Replacement belts are located in the engine spares kit. One other possibility is that the impeller in the raw water pump has failed. While they are replaced each spring with a new one, it's still possible that a hard object may be drawn in and break off an impeller blade. A replacement impeller is found with the engine spares. Call San Juan Sailing if you suspect you have an impeller problem.

**Engine Shutdown.** With the engine in idle and the gearshift to neutral, allow the engine 5 minutes to cool down. Then push the fuel cutoff button labeled "STOP". After the engine stops, cut the electrical source by pressing the "I" button (I = ignition). Never stop the engine by pressing the "I" button first as this can damage the diodes on the alternator, and the batteries will no longer charge.

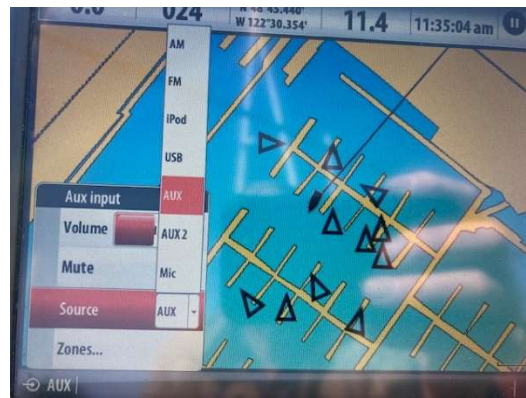
## Entertainment

### Fusion Sonic-hub Dock Operation from the Chart plotter

Located above the Nav table and labeled "B&G" in large letters, this is a docking hub that allows use of various Apple iPhone, iPod, iPad players, Android or MP3 players using a USB cable (or just a USB drive) with the sound system. Any player with a USB cable can be plugged into the USB port which is located on the drawer that slides out after you open the cover.



The Sonic-hub can be controlled from the Chart plotter screen by touching the bar at the bottom of the screen. From here you can select music source (iPod, AM, FM, USB, AUX),



change the volume, and adjust volume in each zone (zone 1 = main cabin, zone 2 = cockpit, zone 3 = bass speaker in main cabin). If your iPod, Android or MP3 player plugged into USB port does not show up as an option, then it is not fully plugged in the Sonic-hub or it is defective.

Alternatively, a **Bluetooth receiver** is connected to the AUX jack of the Sonic-hub. It is identified as **Fusion-MS-BT-100**. With your device's Bluetooth turned on, find Fusion-MS-BT-100 in your list of available devices and tap "Connect". No PIN code is needed to make the connection. Set the music source on the chart plotter to AUX and control volume and zones through the chart plotter screen but select music and play on your device. If your device does not show the Fusion MS-BT-100 as discoverable, you may need to disconnect it from previously paired devices by turning it off and on again using the power switch on the box with the house battery voltmeter located above the Nav table.



### **Flashlights**

Two flashlights are (1) clipped under the Nav table and (2) clipped to the wall in the aft cabin, starboard side.

### **Fuel Tank**

*Sea's the Dream* has a 53-gallon fuel tank. The engine consumes about 1 gallon of diesel per hour. The fuel fill is on the port side at the stern under the small seat aft of the port side helm.

Please be very careful when fueling. Never allow maximum flow from the filler hose. If you do, the fill tube will surge and diesel will spill from the vents onto the side and onto the deck. It takes only a few drops of diesel fuel in the water to cause oil sheen and subject you to a Coast Guard fine. Fill slowly and carefully. Check the side vent and, with dish washing soap, wipe up any excess fuel to avoid yellowing the hull and stern and polluting the water. Also be very careful of drips when removing the hose. Diesel and shoe bottoms are a very slippery and dangerous combination. After wiping, please use soapy water to scrub down any drips so it does not stain the fiberglass.

Put your ear down to the fill hole and listen to the diesel flow. When the pitch changes and gets higher and higher, the tank is likely full and you're now filling the hose between the tank and the fill hole. Avoid a fuel spill – STOP! Check the fuel gauge on the LCD display on the electrical panel. If the gauge does not show Full, continue filling. When you think you're finished fueling, check the fuel gauge one last time to make sure it's reading "Full." That way, San Juan Sailing will not charge you a fueling charge plus the cost of fuel.

**TIP:** Unlike automobile fuel gauges, fuel gauges on boats are notoriously inaccurate, especially on the low end. Therefore, whenever the fuel level drops below ½ full, you should refuel at your next opportunity. Never let the fuel level fall below ¼ full or you may be in danger of running out of fuel. Towing and the cost of a mechanic to bleed the air from the fuel lines is an expensive proposition.

### **Hatches**

*Sea's the Dream* has numerous hatches to let in light and air when open. They also have built in "slide-over" mosquito netting and shades (v-berth hatch is missing mosquito net). Hatches with lever locks can be locked in either of two positions: one is dogged down tight, which you should always use when under way; the other is

raised slightly (about ¼ inch) to allow a small draft. At anchor or slip, hatches can be raised on the arms and clamped in a raised position using the grey twist handles on the support arms.

**TIP:** Be sure to loosen the grey twist grips before trying to close the hatches. Forcing them will result in damage. Always close hatches before getting under way. A raised hatch is a magnet for jib sheets and could be seriously damaged if caught, not to mention letting in water.

## **Heads and Holding Tanks**

*Sea's the Dream* has push-button, electric flush, fresh-water heads. Wet the bowl before use with the rocker switch pressed one way, then evacuate the bowl by pressing the rocker switch the other way. Once the waste is pumped out, wet the bowl with clean water again and fully evacuate again. This helps push the waste all the way to the holding tanks and reduces the possibility of waste leaking back into the bowl. There are two buttons. The rocker switch wets the bowl (rock left) and evacuates the bowl (rock right). The single switch does both at the same time, but uses more water. Use either one. Travel with the bowl dry and the seat and lid down!

The heads each have a 20-gallon holding tank, and they will need to be emptied once every day or two to avoid leaking sewage or, worse yet, an exploded holding tank, a real “vacation ruining” event! San Juan Sailing staff will discuss holding tanks, overboard discharge and pump-outs upon your arrival.

We do not rely on holding tank gauges or warning lights to tell us when the tanks need emptying. These electronic monitors are too often unreliable. Instead, empty the tanks often and check them visually to be sure. The holding tanks are located in the cabinet behind each toilet. To access, pull the top of the panel towards you by 2-3 inches, then lift the panel up to clear the lip at the bottom. Replace the panel by inserting the lip at the bottom first, then, when the whole panel is carefully aligned, push in the top until it holds. The tank is a green color and the waste level inside can be seen by shining a flashlight from the top downwards. It is a gravity discharge system and, when outside US waters, to empty it, or simply pass waste through it directly overboard, open the red-handled large seacock located under the head sink. All tank contents will drain overboard in just a few seconds; you'll hear a noticeable “whoosh” as it discharges. Then close the large seacock handle, and all toilet contents go to and remain in the holding tank once again.

Overboard discharge is not allowed within 3 miles of shore in US waters, so use a pump-out facility instead. If you pump out the holding tank at a shore facility, please fill it with about 5 gallons of fresh water through the deck fitting to rinse, and then pump it out again. Thank you!

Waste tank outlets for pump-out are located on the deck directly above the waste tank in each head. On the starboard side, the fresh water inlet is nearby, so don't confuse the two. They are clearly marked.

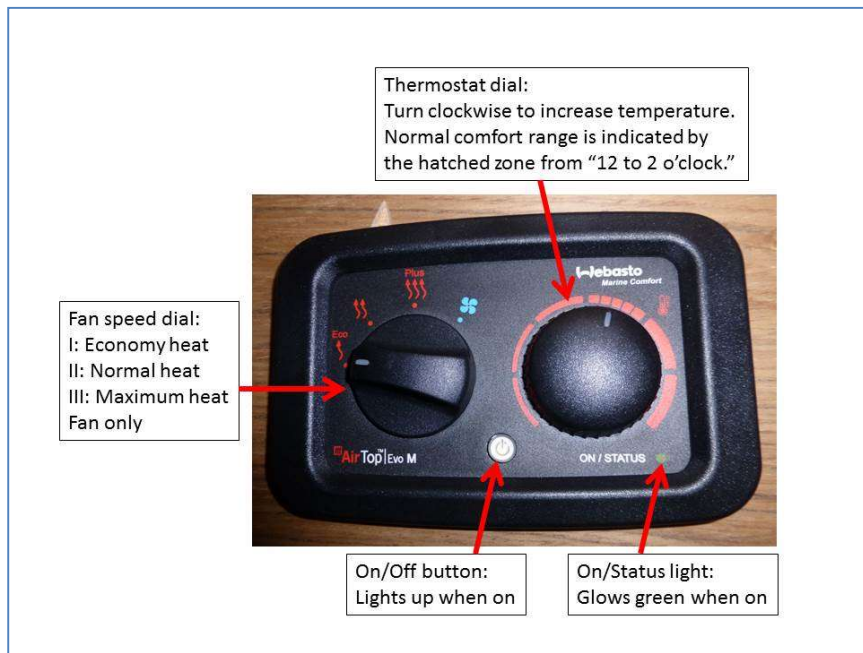
**TIP:** Offshore sailors have a rule: “Never put anything down a marine toilet that hasn't been eaten first.” And that, of course, includes feminine items and “flushable wipes.” In fact, offshore sailors do not even put soiled toilet tissue down a marine head. They simply deposit soiled toilet tissue, feminine items, “flushable wipes” (etc.) in the waste basket with a liner bag provided, but not down the toilet. San Juan Sailing highly recommend you follow this rule. And since they've been recommending this, they've had almost no incidents of plugged heads! Never put “flushable wipes” down the toilet...they will clog the impeller and leave you with a mess and a repair bill.

## Heater

The diesel-fired Webasto cabin heater will make the interior “toasty” within 10-15 minutes. The heater control is located inside the cupboard to left of the propane switch between the galley and dinette areas—behind the “Webasto On Board” label. Press the power “on” switch and select the fan speed (I, II or III) and temperature (about “1 o’clock” on the dial). A slow fan speed is most power efficient, and quietest. It takes a few minutes

for the heater to “cycle up” and get hot. Turn the heater off using the same push button switch. The fan will continue to run for up to about 5 minutes while the unit is cooling down and cycling off. The heat is dry, comfortable, and on those rainy days or cool evenings, makes a huge difference in cruising comfort!

When it’s cool, we recommend warming the boat before turning in for the night, with the last person to go to bed instructed to turn the diesel heater off before retiring. Then, the first one up in the morning can simply turn the cabin heater back on. While the heater can run all night, the boat will likely get too hot and the electric fan will drain the house batteries, not to mention being noisy for the people in the aft cabin.



## Inverter

The inverter converts house 12 v DC battery power to 110 v AC and is used only when not connected to shore power and when a 110 v appliance must be used (e.g., microwave). Turn on the unit above the Nav table and located below the Sonic-hub. Once finished using the 110 v appliance, turn off the inverter to save battery power. Even when not in use, the inverter draws current and depletes the batteries if left turned on. We have found that using the microwave on inverter power depletes the battery very quickly; start the engine and run at about 1500 RPM to maintain battery voltage while using the microwave on battery power, then shut down after use and after allowing 5 minutes to cool.

## Keel Depth

*Sea's the Dream* has a deep fin keel and draws 7'2" so figure on 8 feet to be on the safe side.

San Juan Sailing strongly recommends that you always maintain a minimum of 10'-12' under the keel at all times, both underway and at low tide at anchor.

*Sea's the Dream* is equipped with a 4-stroke Honda 2.3 horsepower outboard. This brand and size has proven to be a practical and reliable dinghy outboard.

DO NOT add oil to the gasoline – it uses just straight gasoline. The fill cap is located on the top of the engine. Being a 4-stroke engine, it has an oil sump and the oil level should be checked before use. However, the oil sight glass on the side (supposedly designed to show you oil level) is notoriously unreliable – it can look like there's no oil in the sight glass even when there's plenty of oil in the sump. If the sight glass looks empty, open the filler cap and look inside – if there's oil within 1 inch of the rim it's fine. Tell SJS check-in crew when you return that the outboard oil level looks low or empty. DO NOT ADD OIL to the sump – the most common cause of outboard engine failure has been over-filling oil in the outboard – just tell SJS check-in crew about it.

As a courtesy we have an additional red spare gasoline container tied into your dinghy.

**WARNING** – Gasoline fumes are explosive and a very dangerous fire hazard if gasoline is stored on a boat. Keep the spare gasoline container in the dinghy and tied to the transom so it stays upright. NEVER store the spare gasoline container in a locker, lazarette, or any other storage area on your vessel.

**TIP:** The outboard is light so it's easy to transfer from the stern rail outboard mount to the dinghy transom (and vice versa). Please do not cruise with the outboard on the dinghy. It will no longer work after saltwater gets into or even near the intake of the carburetor. If this happens, you will have to condition your rowing muscles until you get back to Bellingham. We also recommend taking the outboard off the dinghy at night. We have known dinghies to deflate in the cool of the night and had wind waves or powerboat wakes flip the dinghy over. It's a disturbing sight first thing in the morning to see your outboard propeller sticking straight up, with the motor under the water. At that point it's nothing more than a very ineffective \$1,000 anchor!

### **To Start**

1. Push the fuel valve lever (starboard aft corner of the outboard) aft to open the fuel valve.
2. Pull out the choke (starboard forward corner of the outboard).
3. Open the air vent on the top of the fuel cap (top of outboard) by turning to "on" indicator.
4. 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).
5. Turn the handle throttle ¼ turn counter-clockwise.
6. Pull the cord until it starts. You shouldn't have to pull it more than 2-3 times.

### **While Running**

1. Push the choke back in shortly after the engine starts (after about 10 seconds).
2. 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.

### **To Shut Off**

1. 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.



2. 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; row the rest of the way. To put the outboard shaft back in the water, release the stainless steel lever on the starboard side of the shaft.

**When Not in Use**

1. Put the outboard back on the outboard mount on the stern rail and tighten both braces.
2. Push the fuel valve lever forward to close (starboard aft corner of the outboard).
3. Close the air vent on top of the fuel cap (top of outboard) by turning it clockwise.
4. Secure the outboard further by tying the safety lanyard to the stern rail.

**Troubleshooting**

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 the tool box in case the engine won't start or is running rough. A new spark plug solves myriad outboard problems. If you use the spare spark plug, notify your check-in skipper upon your return so a new one can be placed aboard for future guests. 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) and put the propeller and new pin back into place.

**Propane**

The propane tank and both propane valves (the hand valve and the solenoid valve) are located in the propane locker in the starboard lazarette aft of the helm, which is vented and isolated from the rest of the boat. Any gas leaking there will move down, out, and away from the boat.

While the propane tank normally lasts for 4 weeks or more, San Juan Sailing's staff tops them off every 2 weeks, so you'll have plenty for you cruise! There are two propane tanks in the locker. If you have to switch tanks, turn off the valve before unscrewing the pipe connection. The connection is a reverse thread, so turning it clockwise undoes the connection while anti-clockwise tightens the connection.

To use propane, turn on the valve on the tank, and turn on the electrical solenoid valve with the switch located above the starboard forward corner of the galley countertop.

**Propeller**

*Sea's the Dream* has a folding propeller to help maximize speed through the water. To fold the propeller when sailing and with the engine turned off, shift the gear/throttle lever into reverse for 20 seconds and then back into neutral.

**TIP:** Remember to shift into neutral again. Starting the engine in gear can damage it.

**Refrigerators and Freezer**

The top-loading refrigerator located in the galley must be turned “on” at the electrical panel. The temperature thermostat control dial (with min through max, max being coldest and will probably freeze your lettuce) is located inside the refrigerator. There is a freezer compartment in the refrigerator. We recommend running the refrigerator at all times to avoid it becoming smelly. It works well set at one level above minimum.

To drain the water from the refrigerator for cleaning or in case of water build-up, pull the small plug in the bottom of the refrigerator. The water drains into the bilge and the bilge pump may come on to pump it out.

**TIP:** If you spill something, like milk, in the refrigerator, clean it out using a sponge or paper towel, then rinse with water and drain. Don't drain spills into the bilge otherwise it smells bad.

The extra refrigerator is located under the Nav table and looks and operates like any domestic refrigerator. It is connected to the Auxillary power switch on the electrical panel and should be left on only when connected to shore power or while running the engine otherwise it drains the batteries.

**Sails****Headsail**

The 106% (447 sq ft) genoa/jib has roller furling. Whether fully or partially deployed, you'll have good sail shape. Slight hand-over-hand tension on opposing lines – furling line and sheets – prevents problems such as a rat's nest on the drum (should the wind catch the sail and unwrap it violently) or a baggy furled sail.

Reefing the Headsail – Simply ease the jib sheets (keeping control of them) while pulling in the jib reefing line until only the amount of sail you desire is deployed. You should not have to use the winch to furl the jib. If you cannot furl by hand, forcing it with the winch will only exacerbate the problem. Instead, investigate to see why it will not furl and sort out the problem.

**Mainsail**

The 430 sq ft main has an in-mast furling system. With an in-mast rig, in normal conditions, it's recommended that the headsail be deployed first (while underway). The mast bows slightly aft at the top. By deploying the head sail first, the pressure of the wind in that sail tends to straighten up the mast. This makes it easier for the main to deploy from within a plumb mast. So, provided that the wind is less than 10 knots, steer to a course of about 60 degrees to the wind (close reach). Deploy the head sail first. Now you may throttle down and place the engine in neutral, sailing on the head sail alone. Shut down the engine. Now you're ready to deploy the main.

If you're in high wind (15+ knots) conditions, you may prefer to deploy the mainsail head-to-wind instead. That's okay, but in this situation, deploy the main first. Since you're in high winds, only partially deploy the main so it's “reefed.” Once deployed, fall off and begin sailing...just like you would on a vessel with a conventional main. Then partially deploy the head sail. Be conservative with the amount of sail you deploy in high winds. If you've been too conservative, you can easily deploy more sail area while sailing.

Deploying the mainsail:

1. The mainsail does not cooperate when the boom is pulled down tight, so give it a little “play” by loosening the boom-vang (then close the rope clutch) and loosen the main sheet by pulling out about 3 feet of line (then close the rope clutch).
2. The red-flecked “outhaul” line is what pulls the main out. Pull the outhaul by hand or careful use of the winch. Be careful not to force the outhaul or you will do damage to the rigging and the sail. If it does not respond to moderate force check for the hang-up. Most rope clutches provide one-way stops, so you don't need to open it when winching in.
3. For control, keep slight tension on the yellow-flecked “main furler” line while winching in on the outhaul until the main is partially or fully deployed (depending on the wind and your preference). The wind pressure on the main will actually help the main to deploy.

### Reefing the mainsail:

You have infinite reef points with an in-mast furling main. You can deploy as little or as much sail area as you determine is appropriate for wind conditions you encounter. And you can reef an in-mast main while sailing and from the safety of the cockpit!

Simply wrap the “main furler” line on a winch. Then grasp and control the “outhaul” line by maintaining adequate tension. When you're ready, open the outhaul rope clutch. Crank in the main furling line, while you slowly pay out the opposing outhaul line, until you've shortened the mainsail to a position appropriate for the wind conditions. Close the rope clutch on the outhaul.

After you've furled the main, you are ready to shorten the head sail. If you shorten the head sail first, you'll increase “weather helm” and likely round up. So always reef the main first.

### Furling the mainsail:

When you're ready to bring in the sails, start by furling in the main. When the main is tightly wrapped inside the mast, you're ready to furl in the head sail.

1. While still sailing, steer the vessel to pinch the wind on a close reach (less than 60 degrees off the wind).
2. Pull the boom down using the boom vang. This will help the mainsail enter the mast without wrinkles that may hinder a future deployment.
3. Wrap the “main furler” line on a winch (do not apply excessive force to the winch or damage may result).
4. Grasp and control the “outhaul” line by maintaining adequate tension, and open the outhaul rope clutch.
5. Crank in the main furling line, while you slowly pay out the opposing outhaul line, until the main is wrapped fully inside the mast.

**TIP:** Be sure to keep plenty of tension on the outhaul to get a tight wrap of the mainsail inside the mast. The wind will help you get a tight wrap. Remember, if you furl the main without any wind pressure on it (if you're head-to-wind in high winds or if you simply becalmed), tension on the outhaul line is the *only* force that will get you a tight wrap inside the mast. And a loosely furled main inside the mast could mean a tough next deployment or, in the worst case, a jammed main.

Now that you're just sailing on a close reach on the head sail only, it's time to start the engine and shift into forward to maintain your course of less than 60 degrees off the wind. While holding course, furl in the head sail. And motor in to your anchorage or marina!

Sea's the Dream is a delight to sail. Her sail plan (a medium-sized furling genoa and furling main) was selected with consideration for single or short-handed sailing. Once she has way, Sea's the Dream is easily steered with small rudder changes. Her perfect breeze is 10-15 knots with heel at 5-15 degrees. Full sail can be carried in winds up to 15 knots. If you reach the edge of your comfort envelope sooner, don't hesitate to shorten your sails. Remember, "reef often and reef early." You can always shake them out if you decide you've been too conservative.

Sea's the Dream has a 3-bladed folding propeller for sailing efficiency, gaining you an additional 0.25-0.5 knots under sail if closed. After stopping the engine, place it in reverse for 20 seconds to close the prop then back into neutral. Enjoy!

German rigged main sheet: Most of the running rigging is standard but some of you may find the "German" main sheet unusual. Newer Jeanneau's like the 44DS are fitted as standard with a "German" mainsheet system. The benefit of this system is that the helmsman has full control of the sail without leaving either wheel, which is great both for tweaking the sail trim when the cockpit is full of guests, and also if the wind gusts up so that the mainsheet needs dumping to avoid rounding up. Just remember, the leeward winch is used for the genoa sheet, as usual. The windward winch is used for the main sheet with the leeward end of the sheet clamped off in the rope clutch. It takes only a little practice to get used to switching both the genoa sheet and main sheet between winches as you tack, but the advantage is that all lines are within easy reach of the helm, and for the most part, the main sheet can remain held by the rope clutches if your angle of sail is the same on each tack. The disadvantage is that you cannot bring the boom above centerline as you can with a traveler; but you're not racing competitively anyway!

## Spinnaker

Sea's the Dream no longer has a spinnaker available. If you enjoyed using it before, please know that it is our hope we will be able to replace it with a new one in the future.

## Shore Power AC Circuit Breaker

The main shore power breaker is located in the lazarette behind the port helm, near the shore power socket which is in the sheet locker beside it.

**TIP:** *Always* connect shore power when available and *always* charge the house batteries when connected by switching on the AC Plugs and Battery Charger switches on the electric panel above the nav table.

### Connecting Shore Power

1. Connect shore power cord to AC outlet on boat.
2. Connect shore power cord to AC outlet at dock.
3. Turn on shore power switch at dock.
4. Turn on shore power breaker in the aft port lazarette locker.
5. Check that red AC power light is on below AC voltmeter at electric panel.
6. Turn on AC Plugs and Battery Charger switches on electric panel

### Disconnecting Shore Power

1. Turn off AC Plugs and Battery Charger switches on electrical panel.
2. Turn off shore power breaker in the aft port lazarette locker.
3. Turn off shore power switch at dock.

4. Disconnect shore power cord to AC outlet at dock.
5. Disconnect shore power cord to AC outlet on boat.
6. Coil and store shore power cord in port cockpit locker.

### **Shower, Hot Water, and Shower Sump Pump**

The shower head can be adjusted for height by sliding it up or down the chrome bar, but it is important to press the push button first. Forcing the head up or down without pressing this button will wear out the resistance gasket, and then it won't stay up at all!

Hot water is stored in the insulated tank. It takes about 30 minutes of running the engine under load to get the water hot. When on shore power, you can heat your water electrically by turning the "water heater" switch on the AC panel to the "on" position. It takes about an hour to heat the water electrically.

**Caution:** The engine heats water to scalding temperatures! So please *be careful!*

The shower "sump pump" is controlled by a toggle or button switch located on the washbasin stand. Press the button to void water from the shower stall. It runs a preset time, so you may have to press twice or more times. Running while dry is OK.

Experienced cruisers know the sailor's shower: get wet, turn off the water, soap up, rinse off. If the shower basin overflows, you're using too much water.

On warm, sunny days, an alternative to the below decks shower is the swim platform shower (with hot and cold water) located next to the swim ladder. This is also a good way to rinse off salt after swimming or dirt after going ashore.

### **Spares and Tools**

It is our goal and hope that you will not need to make repairs during your trip. That being said, we have also provided a good selection of tools and spares in case you need them. *Sea's the Dream* is equipped with engine and general spares. They are located in plastic containers in the starboard seat locker of the dinette in the salon. Two boxes of tools are located in the next seat locker forward. Extra engine oil and engine coolant are located in the starboard cockpit locker.

If you have problems that you are not comfortable handling please call San Juan Sailing or our maintenance pro at **360-393-0415**.

### **Stove, Oven and Microwave**

The **microwave** runs on 110 volts and operates like any domestic microwave. When connected to shore power, with the AC circuit switched on at the electrical panel, you can use the microwave as you would at home. However, when operating on battery power you should turn on the inverter at the electrical panel and start the engine and in neutral (press in the red button on the throttle) rev to about 1500 RPM to maintain the

domestic batteries at above 13 volts while the microwave is on. After you have finished using the microwave, let the engine cool in idle for 2 minutes before shutting it down. And turn off the inverter at the electrical panel.

The gimbaled **propane stove** has two burners and an oven with a broiler. Propane is a hazardous gas, and requires caution. For your safety, please follow these procedures:

1. Open the valve at the propane tank all the way open. The tanks are located in the starboard lazarette aft of the helm.
2. Make sure all stove control knobs on the stove are in the "off" position.
3. Turn on the electric solenoid switch located on the forward edge of the galley wall.
4. Push in the stove control knob and turn to the left to high, while also pressing the electric ignition button (you will hear it sparking). The burner should light immediately, unless the tank has just been renewed, in which case it may take some seconds to push air through the pipe. Hold the knob in for 2-3 seconds (warming a thermocouple) and release. You may then operate the knob like a normal stove.

If you rotate the oven knob to the right, you will turn on the broiler burner in the top of the oven. If you use the broiler, please make sure you first slide the heat shield out to protect the plastic control knobs that are located just above the grill. Previous charter guests who failed to take this precaution have melted the knobs.

5. When finished with the stove, shut off the burner(s), then shut off the solenoid switch. What little propane remains in the line from the tank to the galley is insignificant, and even if this tiny amount of propane were to leak into the cabin, it would not cause a problem. No need to shut off the propane tank during the day.
6. At night, it's recommended that you turn off the propane tank with its hand valve. That way, should the solenoid valve fail, there's no chance that propane will leak into the vessel. Since propane is a deadly gas, you'll sleep much better knowing you are safe! Then, the first one up in the morning can go out to the tank and turn it back on to start the water boiling for coffee!



*Figure 1. Heat shield pulled out at top of oven protects plastic knobs above when using the broiler.*

If cooking underway, gimbale the stove by pushing the rod under the oven door to the right, so it is not inserted in the hole in the cabinet (forward). Then, if the boat heels, hot liquids and foods will not readily slide off the stove top. For added security, use the fiddles that hold the pots/pans on the burners. If you have something in the oven, please lock the oven door so the contents cannot slide out onto the galley sole (or someone's feet). A latching mechanism is located in the upper left of the oven door.

**TIP:** Never cook in high wave conditions or in strong, gusty winds. Food will definitely go flying!

When cooking at a dock or in a quiet anchorage, lock the stove in position by pushing the rod under the stove to the left and into the hole in the cabinet (forward). That way, if someone leans on the stove or grabs the oven handle, it won't tip and spill pot/pans on the cooktop.

Storage

Sea's the Dream has storage space in cupboards in each cabin and the salon. There is additional storage under the seats in the salon and under the floor boards in the bilge area. The bilge can get wet, so use waterproof plastic boxes to store items under the floor boards.

**TIP:** The compass for all the electronic instruments is located in the space below the forward seat of the dinette, beside the mast column. Be careful not to store anything ferrous or magnetic nearby, such as metal cans of food.

**Tables:** *Please do not sit on the tables or countertops*

The **cockpit table** has drop leaves which can be raised to increase its size for dining. They are held down with magnets, so just pull up on the leaf on either side to raise the leaf, and then pull out the hinged support brackets until they click into place. To drop the leaf, press release levers on both sides of the support bracket and push the bracket down, followed by the leaf.

The **dinette table** in the salon can be opened to double its size for dining. Find the release chain below the table and pull gently, rotate the table clockwise by 90° and open the two leaves. Reverse the process to close. The table can be lowered and raised electrically using the switch located on the end of the galley sink counter inside the top cupboard. We leave boxed games of Scrabble and Yahtzee inside the dinette table.

The **navigation table** has two, fold-up lids on its surface. Navigation books, charts, and instruments can be stored in the space below.

**Trash Can**



Trash bin is located in slide out drawer on end of galley-sink cabinet



Trash bin drawer should be clipped to slider under the hook shown



The knob on the end of the slider, shown here...



Pull trash bin drawer out horizontally on its sliders using the handle



Like this



...should rest in the hole in the middle of the white flange on the bottom of the drawer

The trash can is located in the slide-out drawer on the end of the galley sink cabinet. To open, unlock the button catch then pull horizontally with the handle. If you pull up, it may come off its sliders. If that happens, take the time and care to put it back in place as follows:

### **Water Pressure and Tanks**

**Water pressure.** The fresh “water pressure” switch is located on the electrical panel. It’s okay to leave on while someone is below decks. But please turn “off” when motoring or sailing. You could burn out the domestic water pump should one of the tanks run dry as it tries in vain to pump water to build pressure (and you would not hear the pump running continuously over the sound of motoring or sailing).

**Water tanks.** *Sea's the Dream* has two water tanks, fore and aft. Tank-1 (forward) holds 87 gallons and tank-2, aft, holds 53 gallons. Selection valves are located behind the starboard dinette aft seat-back cushion in the main salon.

**Water fill locations.** The forward tank fill is located on the starboard deck forward of the mast. Do not confuse it with the waste tank drain which is nearby and painted black. Both are clearly marked on the cover plate. The aft tank fill is located under the starboard helm seat near the flag pole.

The water tank levels are indicated on the LCD screen on the electrical panel. When the tanks are full, use the bow tank first (Tank-1). With water tanks filled with water, *Sea's the Dream* is a little bow heavy. Depleting some of the water weight forward first brings the boat into balance. Use one tank at a time – do not leave both valves open.

State parks have no pressurized water to refill tanks, but all points of civilization do. If your crew does not let the water run continuously while they brush their teeth, shave or shower, you shouldn't need to refill too often.

**We hope you enjoy your vacation aboard *Sea's the Dream*!**

And don't forget to share your photos and fun on *Sea's the Dream*'s Facebook page!

<http://www.facebook.com/SeastheDream>

Warm regards,

**Rick and Chris Watson**

