

Owner's Notes
Esprit de Mer
Jeanneau 45.2 (46' 6")

Dear Friends,

Welcome aboard *Esprit de Mer*!

We have placed our private boats in charter for well over three decades, each one with San Juan Sailing. *Esprit de Mer* is our fourth. We've watched designs come and go, and frankly, we think the Jeanneau 45.2 is the finest, classiest design we've seen. Period. And the sailing is unsurpassed.

We really fell in love when we sailed her around Vancouver Island. We've never been aboard a boat that glides as easily through the water, scampering in the slightest breeze; nor one that is as comfortable for friends and family aboard. Under power, she backs straight, with only the slightest hint of walk to port. Although the "less weight" carbon fiber rig and the 6'7" draft help stiffen her in a breeze, her mast is five foot higher than normal to give good light air performance, so we encourage reefing the main if the wind pipes up, given her large sail area.

We've made many wonderful cruising memories in the San Juan Islands and points north...our hope is that you enjoy *Esprit de Mer* as much as we do. If something comes up, please feel free to give me, Roger, a call at 360-224-4300 (cell).

If you can think of anything...anything at all...that would make her more enjoyable for you, please let us know. We've tried not to overlook any detail in our effort to make her the unsurpassed pride of the San Juan Sailing fleet.

We wish you fair winds and wonderful memories. Thank you for being our guests!

Sincerely,

Dennis and Darlene Elenbaas, Roger and Marlene Van Dyken
Partners in *Esprit de Mer*

PS *Esprit de Mer* is French for "Spirit of the Sea".

Esprit de Mer Boat Specifications

LOA: 46' 5"	Displacement: 20,750	Fuel: 53 gallons (starboard);
LWL: 38' 5"	Ballast: 6,600	34 gallon port tank
unused		
Beam: 14' 8"	Draft: 6' 7"	Holding: 2 x 10 gallons
Year built: 1999	Water: 120 gallons	

Engine: Yanmar 88hp w/ feathering 3 blade MaxProp

Sails: five full-batten North Spectra main (2013) and 130% jib (2013). Symmetrical spinnaker in sock, spinnaker pole (spinnaker available to those experienced).

Rigging: ATM carbon fiber high-rig mast, carbon fiber boom and spinnaker pole.

Electronics: ICOM VHF at nav and helm, Raymarine color chartplotter/radar at helm with active AIS, depth/WA/WS/Boat speed at starboard helm/center console with readouts at port helm, nav station and master stateroom, color Garmin fishfinder.

Staterooms: three doubles, 1 ½ singles

1. Forward: Owner's Stateroom island bed: 7' x 63" max width;
2. Starboard aft stateroom: 7' x 60" max width;
3. Port stateroom: 7' x 48" max width.
4. Main salon: adult single on settee, child single on island settee.

Headroom: 6' 6"

Heads: two fresh water electric toilets; separate round shower stall forward.

Refrigerator: 24"D x 23"L x 18"W with front and top opening.

Freezer: 24"D x 22"L x 9" W, top load

Other: electric winches, bow thruster, Bose stereo, XM satellite radio, 26" HD TV/DVD.

Esprit Nuances

1 – **Electric winches:** we're spoiled...but caution, they can cause major damage. We watch children closely. For safety, we leave two *unsecured* loops around the winches when not sailing so winches can rotate safely.

2 – **Fenders:** we stow in the *sail locker* forward.

4 – **Fresh Water:** We now get “bottled water” quality with the built-in carbon filter on the cold water line in the galley. Tanktender gauge opposite galley—see #25 below for important protection. One tank, 450 liters (120 gallons). Galley foot pump is salt water when seacock opened (flip valve below sink for fresh).

5 – **Bow thruster:** activated by pushing joystick to port while holding down red button. *Overheat shutdown after 45 seconds use.* Separate battery charged only on shorepower.

6 – **Mainsail:** See step by step for ease in hoisting and in dropping, under #22 Sails below. Easy to operate with some simple tricks.

7 – **Backstay adjuster:** “10” for winds above 10 knots; “20” for winds above 20 knots apparent. Never exceed red tape on hydraulic shaft.

8 – **Max Prop:** After killing engine by pressing black button by the key, we slip into reverse for a second to stop counter-rotation, allow blades to feather, then back to neutral. **Prop Walk:** almost nonexistent. Backs straight, with very slight walk to port.

9 – **Fuel:** key must be on to read fuel. Toggle (port of tachometer) pressed “down” reads main tank, “up” is auxiliary (normally empty). 53 gallons in main tank, uses 1.3 gal/hr at 2100 RPM (economy cruise), 1.5 at 2500 fast cruise. Main tank is starboard fill cap.

10 – **Heads and holding tanks:** Electric fresh water toilets; after liquid use, we push lower toggle: “drain” then “fill”, then “drain” to refresh. For solids push “fill” before above. Holding tanks are gravity drain, valves under sinks. Please...do NOT overfill. Seacocks closed in harbors/coves please; USCG regs say closed in all US waters.

11 – **Throttle:** neutral is at 10:30, in line with the red arrow. Straight up engages reverse.

12 – **Table leaves in main salon:** we remind ourselves to *pull out recessed supports* before folding down table leaves or table will be permanently damaged. Please see photos at end of these Notes.

13 – **Draft:** Please note our draft is a deep 6’7” and the rocks are hard. Very hard.

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1 – Emergency Equipment

Highlights

- **3 fire extinguishers:** under nav station seat; in cabinet above nav seat; in galley under the counter in the forward cabinet.
- **6 inflatable vests.** NSO: please check for “green” visible at bottom of clear canister before each cruise. That verifies the auto-inflate function when immersed. We wear these at all times when working the deck and often in the cockpit.
- **Fog horn, 3 emergency flares.** In cabinet above nav seat.
- **Emergency bilge pump.** Handle in clips underside of starboard helm seat. Note: if water rises above floorboards, can use shower sump pumps also in emergency.
- **Emergency tiller.** Long curved pipe in port cockpit locker.
- **Lifesling,** inflatable, to right of starboard helm on stern pulpit. Please review the cartoons on the face of the small plastic 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. Automatically inflates with a CO2 cartridge when it hits the water.
- **VHF,** ch 16. VHF at nav station & at helm. Portable VHF at nav station for dinghy.
- **Cockpit cushions.** In case of COB, throw anything that floats, quickly.

Details

Through hulls: A schematic showing through hull locations is in the Charter Guest Reference Manual aboard, facing the title page of these Notes.

Through-hull locations fore to aft:

1. Forward head, under sink: 1) raw water intake (closed, not used), 2) holding tank drain (closed in US waters), 3) sink drain.
2. Forward cabin, under aft floorboards, centerline: transducers for depthsounder and knotmeter.
3. Galley, port side, under sink: 1) galley sink drain, 2) salt water seacock (Closed. Open only if rinsing dishes with salt water/foot pump).
4. Aft head, under sink: 1) raw water intake (closed, not used), 2) holding tank drain (closed in US waters; shallow bays/marinas), 3) sink drain. 4) refrigeration and watermaker outflow valves always closed; not used. If watermaker, pickled except for blue water, is commissioned, assure watermaker outflow valve open.
5. Engine compartment, aft: 1) engine raw water (starboard side, aft), 2) engine shaft, 3) watermaker inlet (also stbd side, aft under bunk)

2. Anchors

Highlights

- Please be careful of fingers and feet around the windlass!
- Oversized 66# Bruce primary, 260' chain, 10' yellow mark at 100'
- Fortress secondary in fwd sail locker, 30' chain/130' rope
- Salt water washdown
- Snubber always hooked unless chain is moving
- Chain can build into mountain in chain locker when retrieving
- 600' polypropylene stern tie line in port cockpit locker

Details



Main anchor – 66# Bruce mounted on the bow, with 260' 3/8" chain marked with 10' yellow paint at 100', and 5' yellow at 150' and 200'.

Wash down pumps salt water from bottom of sail locker, circuit breaker on electrical panel.

Snubber - We use light snubber employed in photo for both nested anchor underway and for overnight if light predicted breeze. If winds forecast, we use 10' heavy snubber shown coiled.

Secondary – Heavy duty aluminum (for weight) Fortress anchor stowed in the sail locker forward with 30' 3/8" chain and 130' rode in separate bag.

To Deploy Anchor:

- 1 – We check tide tables to determine current water level and amount of drop while anchored.
- 2 – Weather (ch 4, "Northern Inland Waters") helps select an anchorage.
- 3 – The windlass breaker is below the bottom companionway step.
- 4 – Normal for the islands is a 4 to 1 scope, bow to bottom (add 5 feet to depthsounder reading: 4' freeboard and 1' for transducer below waterline) . In San Juans, anchorages are often about 25' bow to bottom, deploying about 100' chain—hence the 10' marker at 100'.
- 5 – To avoid hitting the hull we push the anchor forward keeping the shank *level* before gradually allowing the shank to rise as we ease it forward slowly into the hanging position (no swing!).
- 6 – With one fluid motion we lower to approximately the number of feet on the depthsounder so the anchor is near the bottom, either by easing the brake or

depressing the down switch. If easing the brake, the handle is stowed to port in photo. To loosen, pull aft, then use a pulsing motion to moderate gravity descent.

7 – A signal to the helmsman prompts reverse at idle speed while deploying rode to desired scope.

8 – We then allow the anchor to set and to stop the boat while it continues in reverse, idle speed. We then line up objects on shore to determine if we are holding, staying in reverse at idle for about one minute.

9 - Finally, we reset the snubber. As noted, if zero to light winds, we use light snubber



and tie to windlass. If heavier winds, the heavier one. The loop goes over the port deck cleat (not the cleat on windlass), then lead under roller furling line and over vacant port anchor roller. Then ease the windlass so it is not under strain.

If stronger winds are forecast, we test with RPM at half projected windspeed (1,000 rpm for winds to 20 knots; 1,500 rpm for 30 knots, etc), *after* setting snubber. (We check movement shoreside, not the significant prop current going by the chain.)

10 - In storm conditions (or storm forecast), you can increase scope if adequate room to leeward.

11 – The secondary anchor is available for additional holding power if storm is anticipated, but best set before the storm hits.

12 – If anchored in a small cove, you may wish to deploy a line ashore. 600' floating polypropylene on reel resides in a cockpit locker. Open transom doors; use the mop handle as an axle through the reel; set mop handle on helm seats. Deploy the line with the dinghy while the spool unwinds. If sufficient length, bring the line around a secure shore object and back to the boat to a transom cleat for ease of retrieval.

To retrieve the anchor:

1 – The “anchor wash” circuit breaker is at the nav station.

2 - Start engine, given that the windlass draws from the engine start battery.

3 – Depress port “up” switch, always assuring the chain is vertical during retrieval—this avoids either towing the boat or dragging the chain against the hull. Into a breeze, we engage forward gear as needed, but exercise care that we don't overstand and drag the chain against the hull.

4 – As needed, we clean the chain with the salt water pressure hose during retrieval (run hose outboard of right foot so that it doesn't get caught in windlass).

5 – A mountain under the windlass can jam it and in rare cases cause a wild gravity runout of rode. If that happens, stand clear for safety. We avoid that chain “mountain” by “lifting” the chain forward in the well as it is retrieved, using the boat hook. We grab the chain with the boat hook and pull it forward as another crew feeds it by pressing the "up" switch, 2'-3' at a time. Important for the initial chain retrieved. Last 50' can stack under windlass ok.

6 – As the length of rode remaining approaches the water depth, the sound of windlass laboring alerts us to immediately stop. Sometimes a brief pause will cause the anchor to break free, given the 90 degree angle of pull. A brief tap on the button, if laboring, says to break out the anchor with the engine in idle forward, not with the windlass.

7 - To nest the anchor without chipping the hull, the anchor may need to be swiveled. We use the windlass to bring the anchor shank up and over the bow roller in one continuous motion, then nest the anchor by hand.

8 - After nesting, with a slight *slack in the chain*; we secure the anchor once again with the light snubber on the windlass-mounted cleat. As noted, the chain is only “unsnubbed” when it is moving in or out.

9– Reminder: cover the windlass switches *before* closing the anchor locker lid.

10 – Ah! Turn off the “anchor wash” circuit breaker at the nav station to avoid burning out the pump! (windlass breaker normally remains "on" unless there are mischievous kids aboard. Good in case of emergency deployment.)

3. Barbecue

Highlights

- **Blue in-line valve in propane locker**
- **Please clean grill when finished**

Details

The propane fired stainless steel BBQ is mounted on the port stern rail and permanently connected to the dual propane tanks below. To use the BBQ, there is *no need to open* the propane solenoid in the salon. We open the blue in-line valve in the propane locker. Open the BBQ lid and use the lighting stick (from the galley) to ignite. Please find the BBQ cleaning brush attached with a SS lanyard for convenient cleaning when the BBQ cools. We have found that unless we *turn off* the blue in line valve in the propane locker when finished, it *may drain out* all the propane! P.S. Wind isn't a friend of the BBQ.

4. Batteries/Charging/Inverter

Highlights

- **No need to touch battery switches. All automatically charged with combiner**
- **Engine start – Bank #1**
- **House batteries – Bank #2, has 300 usable amp hours (Ah)**
- **Average consumption, engine shutdown until next morning: 100 Ah**

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- **Capacity remaining measured in Ah used (-300 max) and volts (11.8v minimum). Meters for both.**

Details

- We check both Ah used and the voltmeter before retiring for the night, then check both again on engine startup next day to assure we are charging properly. The system charges the house bank first, then the start bank, using a combiner. So you can just leave the switches alone, except to combine for emergency engine start. For reference only, battery switches are in the port aft stateroom, below the forward edge of the cushion. The starboard switch (inboard) should be on #1 (*engine bank*) at all times. - - The port switch controls bank #2 (630 amp hour *house bank*—50% “usable”) with the arrow pointed *down* to “on”.
- The “both” position on the starboard switch is the emergency crossover should you ever need the house bank to fire the engine. Again, it should normally remain in the “#1” position (arrow to starboard).
- Caution: we are careful when we have children aboard to **not** allow them to play with the switches while the engine is operating. The alternator diodes could be destroyed.
- The engine’s high output alternator (90 amp output) and smart regulator deliver maximum battery recharge, while separating the “draw” so that the engine start battery is never drawn down by house loads. However, the regulator will still “tamp down” alternator output to avoid boiling out the batteries. Thus, it is often impossible to fully top off batteries from the engine alone. The engine just doesn't run long enough. If the “Ah consumed” stays between -100 and -200, we try to top off overnight on shorepower. Hint: one mid-week overnight on shorepower helps top off the batteries, especially if we've had a few days of good sailing.

Engine start battery:

One Group 31 battery is located just aft of the battery switches in the port aft stateroom.

This compartment also contains the 2000 watt Magnum battery charger/inverter.

House Bank (2016):

The battery bank is located under the floorboards at the foot of the companionway stairs.

The batteries can be charged by:

- a) running the engine
- b) shorepower (push the “charge” button on the Magnum panel at the Nav Station if it doesn’t do so automatically. When charging, volts should show 13+. Of course, we first verify that the “Battery Charger” circuit breaker is turned on, on the AC panel.



Electrical Monitors

1 – Voltmeter/alarm: large red number readout located upper left at the nav station displays voltage in the house bank. If voltage drops below 11.8v for 20 seconds, an alarm will sound. You can temporarily mute the alarm, but the only way to turn off the alarm permanently is to start the engine or charge via shorepower.

2 - The Heart Link system (lower right on photos above and below) shows how many of your 300 usable amp hours (630 Ah total, 50% usable without damaging batteries) have been consumed. Press “A Hrs” (Amp hours) button and #2 (house). If you near -300 hours on the house bank (#2), please recharge the batteries with one of the above

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methods. Drawdown of more than 300 amp hours can permanently damage these top-of-the-line 10-year AGM batteries. Thank you! To monitor the current rate of charge or discharge, press the “Amps” button.

When charging at full rate, the red “charge” light will be on, followed by the yellow light and the green “float” light as batteries approach maximum charge. This monitor also has a voltage display: press the “volts” button.

The Inverter draws from the house bank to provide 110v power for the microwave (we are careful to limit the microwave to reheating, not cooking), TV and Bose stereo. To check if you have AC, see if digits show at the microwave display. If necessary, press “Inverter” on the Magnum display at the nav station. The Magnum's 2,000 watts is sufficient for the stereo, TV, DVD, hair dryers, the microwave, and other electrical devices, but *not* simultaneously. The total load cannot exceed 2,000 watts. In particular, we turn off all other 110v devices before using the microwave. Remember to turn on the “AC outlets” circuit breaker at the starboard side of the nav station.

5. Berths and Bedding.

Each berth has a “breathing barrier” under the cushions to dissipate body and boat moisture. (No need to raise the cushions for airing each morning.)

- For added comfort in the Owners Stateroom, we have added 2 ½ inches of “memory foam” topper to the extra thick boat mattress, with a wrap-around mattress pad to secure it all.

- The aft cabins feature the same extra thick mattresses and wrap around mattress pads, and have a crushable spun fiberglass breathing barrier underneath.

- Finally, each berth has two feather/down duvets—a light summer duvet and a thicker “spring/fall” duvet if you like to sleep a bit warmer. For winter conditions, the two duvets Velcro together for a very warm and cozy covering. SJS provides 2 sheets and pillow cases for each berth.

- An adult can also sleep on the settee, and a child on the island settee. The table does not convert to a berth.

- Berth measurements are under Boat Specifications above.

6. Bilge Pumps

Highlights

- **Emergency Hand Pump:** starboard helm seat
- **Electric Bilge Pump:** under nav station: check strainer
- **Sail Locker Pump:** under bow thruster motor

Details

1. Emergency Hand Bilge Pump – This hand operated pump is located at the starboard helm station. The bilge pump handle is in clips under the starboard helmsman’s seat.

2. Electric Bilge Pump – The automatic float switch is located under the center bench seat, forward end. Note: the circuit breaker labeled “Bilge pump” *must be “on” at all times* for the float switch to work (marked by “double green” dots). The bilge pump is under the nav table and has an in-line screen strainer under the nav station. *If pump fails to empty bilge, we check the strainer under the nav table, in case it may become clogged with debris.*
3. Sail Locker Bilge Pump - A third bilge pump with float switch is under the bow thruster motor and tube in the bottom of the sail locker. It is hard wired and vents into the anchor well. Please let us know if you notice water coming out the anchor well drain to give us early warning of a potential problem in this watertight locker.

The dripless PSS engine shaft seal helps reduce bilge water.

Note: in emergencies, the shower sump pumps can be turned on if water rises into the heads.

7. Bow Thruster

Highlights

- **activate by holding joystick to port while depressing red button**
- **use minimally**
- **battery charged only on shorepower**

Details

The 7.5hp Maxpower bow thruster sounds a beep and shows a green light at the center of the red button to tell you it’s activated.

Shuts itself off after 12 minutes of non-use. Just before shutdown, you will hear 5 beeps; a few seconds later you will hear another series of 5 beeps, followed by a long beep. It’s now off. *Caution: expect automatic shutdown from overheat after 45 seconds cumulative use during a short period of time.* Note: overuse will deplete its battery, which is *only recharged on shorepower*. We seldom use the thruster...but always have it activated in a marina in case we need it.

There is no circuit breaker for the bow thruster. There are in-line fuses on the electric bow thruster motor and in the port aft stateroom (for the bow thruster battery charger). Spare fuses are attached, but they are seldom if ever needed.

Caution: the bow thruster is very powerful, designed to push into a 30 knot sidewind. It will rotate the boat on its keel and can swing the stern sharply into the dock. Please position a crew with fender between stern and dock when departing and arriving until you get a feel for it.

8. Cockpit Cushions.

Six dark blue foldable canvas “Sport-a-Seat” cushions aboard. You can either lay them flat like a conventional cockpit cushion, or flip the back up for truly comfortable back support at the helm, in the cockpit, or even for sunning on the foredeck. Lay it flat to

activate the ratchet; squeeze ends toward one another to release the ratchet. At night, we carefully tuck them under the dodger, being careful not to scratch the dodger glass. This avoids dew-soaked cushions come morning!

9. Dinghy and outboard

Highlights

- 10' aluminum hulled Apex dinghy (2016), 15hp Yamaha on davit
- 100:1 fuel mix, full when you board
- tow 6' off stern, place loop over port aft cleat; tie off bitter end
- please don't tow with OB, or leave on overnight—may flip

Details

The custom chrome block and tackle outboard davit at the starboard helm makes transfer on and off the dinghy simple and relatively strain-free.

We have learned these precautions, please:

1 – *Never tow the dinghy with the outboard on the dinghy, or overnight.* Always transfer the outboard to the sailboat transom. It could flip and swim, costing you an outboard.



2 – The 15hp outboard takes a *fuel mixture of 100:1*. The premixed fuel is in the fuel tank. We normally stow it on the cockpit sole between the two helm seats. For safety, please *never* store gasoline in a compartment. (If you need to replenish gasoline, there is 2 cycle premix oil in the lazarette.) The tank is topped for you and we will top it off when you return the boat.

The 30' polypropylene dinghy painter floats. Nevertheless, we suggest that you tow the dinghy about 6 feet off the *port quarter*, away from the starboard engine exhaust (to avoid any sooting of the white dinghy), with the painter **not** on the blue paint, but led **outboard at the cleat**, as shown. We have put a loop in the painter so you can just drop the loop over the cleat. If we use the cabin heater, we lift the painter so it rests

on the end of the rail. This avoids the heater exhaust (also on port quarter). *It melts painters!*

The 6' scope also avoids wrapping the painter around the engine shaft when in reverse! Plus, underway the bow is raised slightly, reducing drag, so you sail faster.

Dinghy painters inexplicably come loose (and dinghies disappear), so we suggest you tie the bitter end to the rail as shown.

10. Dodger and Bimini (both 2017)

Highlights

- pan of fresh water clears dodger glass
- bimini-dodger insert zips in
- **Hint: if we get early morning dew fogging our dodger glass, or salt crystals from spray, we rinse off with a pan of fresh water from the galley. We *avoid wiping*. By the way, if you or your guests use *aerosol sunscreen*, please apply well away from the dodger. Sunscreen will destroy the glass. (San Juan Sailing recently replaced two panels destroyed by sunscreen.)**
- To deploy the bimini, assure the boom is raised (mainsail down). Unclip the two aft legs and secure with pins. Then clip the adjustable straps onto the aft bar of the dodger and tension as desired.
- If you wish to use the rain “insert” between the bimini and the dodger (gives full coverage over the cockpit), zip the insert in *before* attaching the bimini’s two aft legs or tensioning the straps. Here’s the steps we use:

1 – Remove bimini cover and bungie cord; stow in starboard locker.

2 – Carefully pull the leading edge of the bimini forward.

If zipping in the “rain insert” now is the time. If not, go to step #5:

3 – Zip in the leading edge of the insert to the aft edge of the dodger. The insert should be rolled and is normally stowed on the starboard “ledge” or starboard hanging locker of the forward stateroom.

4 – Zip the aft edge of the insert to the forward edge of the bimini.

5 – Unclip the aft legs of the bimini. Secure them to the mounts on the stern rail, using the attached pins.

6 – Finally, tension the bimini by clipping its two adjustable straps around the aft bar of the dodger and tension as desired.

Reverse the steps to stow the insert and bimini. Thanks for your good care.

11. Electrical Panel



- for convenience, all breakers used for normal operation have *green dots*.
- *Yellow dots* are for use *as needed*.
- Never activate *red dot* breakers.
- *Never turn off double green (bilge pump)*.
- AC panel is just to the right of the above 12v panel
- AC main breaker is under starboard helm seat, in case it trips (rare)

12. Electronics

Autopilot



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Highlights

- Tap “pilot” button (lower middle) to activate
- Tap red to nudge to port, green to starboard
- Tap “off” (lower left) to regain steerage

Details

The ComNav 1420 autopilot is either on or off, depending upon which of the lower left buttons, “pilot” or “off” is pushed.

“Pilot” will engage about 2 seconds after pushing the button.

Each tap of the red or green button will adjust heading a few degrees. Depressing and holding either button will cause an approximate 30 degree *temporary* course change.

After release, the autopilot will return to the earlier heading.

Note: wheel frozen? Tap "off" to free the wheel.

Chartplotter

Highlights

- 2014 Raymarine c125 12” color chart plotter displays chart, radar, SOG, COG and other relevant cruising data.
- Customized to swivel and tilt for ease of reading.
- Nearly all controls are on the upper right: the toggle, surrounding doughnut and menu button

Details

1 - At nav station, flip “chart plotter” circuit breaker switch “on”.

2 - At helm unit, press “Power” for about 2 seconds (lower right).

3 - Press in toggle (upper right) for "ok". If not defaulted to chart, press "home" and toggle to chart display.

4 - Press the + or - - to zoom in or out.



We respectfully ask that you not adjust the display settings, other than “heads up” or “north up” and zoom. Please use the chart plotter only for position finding, not for setting way points. Please do not adjust the default settings. (Sorry, but if we need to call a professional to reset to defaults for the next guest, that will be on you.)

Note: the green line projects your course based on your COG (course over ground). Very handy for crabbing into the current when necessary to avoid being swept off course and onto rocks/reefs! Because the GPS COG is so accurate, we no longer swing the magnetic compass aboard.

To choose “heads up display” or “north up display”, press “menu”, rotate doughnut to “presentation”, choose display.

We use the paper Maptec Chartbook for pre-planning, for continuous orientation underway and for pre-locating rocks and reefs on our planned route. We use the chart plotter to track our position underway in detail, for occasional confirmation of chart position, and for navigating in coves.

Radar:

Highlight

- **4KW digital radar overlays as purple onto chart display**

Details

- 1 – “RADAR” circuit breaker is on electrical panel.
- 2 – At the helm, push the "home" button, rotate doughnut to “RADAR” from the menu, press toggle in to select. Allow warmup.
- 3 – Rotate doughnut to switch from "Standby" to "Transmit".
- 4 – From “home” you can choose to show radar only, radar and chart plotter side by side, or chart plotter with magenta radar overlay. We normally leave the unit preset to radar overlay when the radar is activated; sometimes we find it beneficial to show a side by side display for greater radar clarity.

We do not cruise at night or in fog. The radar is especially useful should one be *unpredictably* enveloped in fog. If there is fog either visible or in the forecast, we stay at our mooring until it lifts (normally before noon). Safety is paramount.

A.I.S. - Automatic Identification System.

Highlight

- **shows most commercial vessels as triangles on the chart plotter**

Details

The triangle points in the direction that vessel is moving and if you move the cursor over the triangle the system will give you additional information (name, size, speed, etc.) The

system also transmits this same type of information about *Esprit* to other vessels with A.I.S. It comes on automatically when the chart plotter is turned on.

Depthsounders

Highlights

- **Raymarine i50 depthsounder with selectable Tri-data readouts at the starboard helm, port helm, nav station and master stateroom**
- **Garmin color fishfinder at the port helm.**

Details

Both are calibrated in feet and are set to read from the transducer, which is about a foot below water level. If you assume the reading is from the top of the water, you will have a very modest 1 foot safety margin. We get nervous in anything less than 30 feet underway and 15 feet in an anchorage, given that we draw 6'7"!! The two biggest hazards to boats in our waters are rocks and docks.

The Raymarine depthsounder is powered through the "Autopilot" circuit breaker; the Garmin via the "Fishfndr" circuit breaker. On the Fishfinder unit, press the bottom red "lamp" button to turn on.

Please note that depthsounders sometimes give false readings in really deep water. In the San Juans, 400'-600' are common depths in some channels and you may see false readings as the sensitivity on the transducer increases in an effort to give some reading, often from changes in water density, salinity, or underwater debris. The fish finder usually reads deeper than the digital Raytheon.

Due to those changes in depth readings (especially in very deep water), we do *not* set depth alarms, but always know our position on the chart.

Please note: You *cannot* rely on the depthsounder to avoid rocks! It is possible to go from 300' to on the rocks in less than 30 seconds under sail in some areas! The answer is simple: we always plan our route on the chart and track our position on the chartplotter. Rocks are clearly marked.

Knotmeter

You have two speed sources: speed through the water (registered by the Raymarine i60 at the aft end of the cockpit table), and speed over ground (registered by the GPS on the chart plotter, which takes current into account).



Last revised: .

The knotmeter reads slightly faster on one tack than the other.

VHF radios

Highlights

- **ICOM IC-504 VHF radio at the nav station.** This must be turned on first.
- **ICOM RAM mic at the starboard helm.** The RAM mike enables us to hear, tune, and transmit from the cockpit.
- **Portable VHF** on charging stand at the nav station for use when the dinghy leaves the cove.
- **Always monitor Ch 16.** As the nearest vessel to an emergency, you may well be able to save a life or a boat. Our earlier boat, with our son and his fiance aboard, was saved in a MAYDAY situation because a nearby boat monitored channel 16 and threw a line as they were drifting toward the rocks.

Details

For your convenience, we have “tagged” two channels for you: 80 (San Juan Sailing) and 16 (the emergency and contact channel). Please remember to *touch the “scan” button on top of the remote mike* after each use so that you automatically monitor channel 16 while underway.

The “WX/CH” button accesses the weather channels (channel #4 is most often in range). We listen for “Northern Inland Waters”. Pressing “WX/CH” again returns the normal channel.

13. Engine

Highlights

- **Yanmar 88hp 4 cylinder diesel, with PYI dripless shaft seal and 3 blade feathering Max-prop.**
- **Bottom 2 companionway steps lift out for engine “lookover”. This “before engine start” daily check shows us in one quick view any black powder belt wear or loose belt, oil in bilge, eelgrass in strainer, or coolant spillage.**
- **Neutral is 30 degrees forward, in line with red**

- **Avoid excessive idling**
- **2200 rpm is economy cruise**
- **2500 rpm is fast cruise (green dot on tachometer)**
- **2800 rpm is emergency fast cruise**

Details

Raw water strainer is at water level. No need to open or clean unless engine overheats. If overheat and cleaned, strainer bowl should refill itself. If not, you may need to “blow out” the hose/seacock with the dinghy foot pump, very forcefully. When replacing the lid, please avoid over-tightening.

Oil dipstick access is via a panel in the starboard aft cabin. The engine is not known to use oil; nevertheless, a spare quart lies just below the dipstick in the engine compartment. Mechanics check the oil levels weekly.

To Start:

1. Neutral has the handle forward as shown. In cold weather, we depress the red button at the base of the throttle, and push the throttle forward until it is even with the Jeanneau registration plate, to accelerate slightly for starting. This disengages the transmission for cold weather 1100 rpm warm-up.
Gentle reminder: straight up on the single lever throttle/gear shift engages reverse.
2. It is easiest to use an index finger to turn the key because the top is protected by plexiglass.
3. Listen/look for water coming from aft starboard end of hull.
4. Most engines idle too long, causing carbon buildup. So if in a marina, we start the engine just before loosing lines. Same protocol if hoisting anchor or untying from a buoy—minimal idle. If starting after sailing, we allow one minute at 1100 rpm, another minute or so in gear at 1500 before resuming cruising speed.

Running:

- 1400 rpm is about 4 knots—marina speed
- 2200 rpm is economy cruise, about 7.2 knots, approx. 1.3 gph, range: 40 hours, 294 NM on main tank (482NM including second tank).
- 2500 rpm is fast cruise, about 8 knots, approx 1.5 gph, range: 35 hours, 254 NM on main tank (417NM if also using second tank).
- 2800 rpm is emergency max cruise, for short burst only.

We are careful to pause 1-2 seconds after the “click” into gear before accelerating, to protect the transmission. And, of course, we always pause when changing from forward to reverse.

Shutdown:

Last revised: 2/6/2017

1. Cool at modest rpm for 2 minute after running at cruising speed, mainly if shutting down after the wind comes up (not necessary to cool down after entering a marina or anchoring, since the lower rpm will have cooled engine.)
2. *We don't touch the key yet!* Push the rubber-covered button on the engine panel to engage the electric shutoff solenoid. If the key is turned off prematurely, electrical damage can occur, and the solenoid will not engage to shut off the engine.
3. After turning off the engine to sail, slipping into *reverse momentarily* stops prop counter-rotation and feathers the Max-prop (you will sail faster!). A return to neutral prevents accidental start of the engine in reverse.

Engine overheat:

Normal engine temp is 180 degrees, straight up at the helm gauge. If the needle climbs, or the alarm sounds, or steam comes out the exhaust, please check the amount of water coming out the exhaust. If it is little or none, the most likely cause is eelgrass plugging the raw water strainer, located at the forward port end of the engine, which you saw on your Daily Engine Lookover, raising the two pins below the bottom companionway step and lifting the two bottom steps out and away.

As an added precaution, a grate below the hull deters eel-grass and other debris so eelgrass is seldom a problem.

(Note: raw water impellers are replaced annually as part of preventive maintenance.)

If the engine overheats with adequate water flow out the exhaust, check the coolant level in the engine. Normally, the coolant level in the overflow plastic container is at the "low" level. If below the "low" level, we add coolant from the cockpit lazarette, but not before.

14. Entertainment Systems

Stereo/Satellite radio/IPOD dock.

We enjoy good music. We have an XMSirius radio with two Bose systems and IPOD dock aboard:

a. Main Salon: A Bose Lifestyle 3 system. On the electrical panel, we tap "Inverter" (Magnum controller), turn on "12V Plugs" (DC lower panel) and "stereo" (AC panel). The white Bose remote labeled "Inside" does need not to be pointed at the unit. The Bose unit is above the starboard settee in the aft cabinet. It has a single CD player. The woofer is under the starboard settee.



b. Cockpit: An added amplifier powers the Bose 150 Environmental speakers in the cockpit. They are

mounted in the support legs of the teak cockpit table and deliver quite remarkable sound. There is a separate remote control labeled "Cockpit". The cockpit speakers will play whatever is selected by the main salon Bose unit, but the volume controls are separate, via the remotes. Again, no pointing is necessary.

c. Satellite radio: The XMSirius satellite radio receiver is at the nav table above the Heart Interface monitor. It is powered by the 12v plug (12v plug circuit breaker must be on).

Press the power button on the XM receiver, then the "AUX" button on the Bose remote control. A playlist of the 145 channels is in the sleeve of the Charter Guest Reference Manual Cover. To select a channel, simply push the appropriate channel numbers on the XM receiver. An XM remote is mounted on Velcro next to the receiver.

d. CD: Use the single play unit on the main Bose amplifier.

e. AM/FM: Press the AM/FM button on the remote to access stations. An FM antenna above the mast-mounted radar dome maximizes reception.

f. IPOD docking station: Universal mount for all Ipods. Adaptors for virtually all MP3 players are in the stereo settee cabinet. On the Ipod dock, slide the switch to "on" (right side of dock). On the Bose remote, depress "tape". (Hint: if you are switching from the IPOD to satellite radio, first reduce the volume because they differ considerably; conversely, increase the volume from satellite radio to play from the IPOD.)

Note: if no stereo or TV, and all circuit breakers are on, check the 110v safety outlet under the center settee. The red safety breaker may have popped. Also, if a Bose remote does not work, tap it gently into the palm of your hand (ok, we don't understand why either ;-)

TV/DVD

The 26 inch HD TV is mounted between the starboard cabinets in the main salon. The DVD player is in the stereo cabinet between the TV and the nav station. Caution: the DVD player takes a few seconds to "think" before responding to your commands. In particular, wait after pushing "open" until the loader ejects. Don't try to force a DVD into what looks like an open slot. Remotes for each should be stowed in the stereo cabinet. No TV reception in the islands, so the TV is used only with the DVD player.

To operate away from shorepower, assure the "Inverter" is on (Magnum controller), and the "AC outlets" circuit breaker is on. The sound routes through the Bose music system by pressing "video" on the Bose remote control.

15. Fuel

Highlights

- **Use only the starboard tank**
- **The fuel gauge is at the starboard helm**
- **Fuel fill for the primary tank is starboard, aft**
- **Do not top-off the fuel tank (gauge full only)**

Details

A fuel tank is located under each aft stateroom. Consumption rates are listed under “Engine” above.

Main Tank (fuel and tank polished 2012, inspected 2016): The engine draws from the *starboard tank*, which holds 53 gallons (200 liters). That should be the *only one you use* for the islands.

Reserve Tank: the port fuel tank, at 34 gallons (130 liters), is normally empty, except on extended cruises.

The fuel gauge is at the starboard helm. The key must be on to read. Push the toggle nearest the gauge *down* for the starboard (main) tank reading. (Lifting the toggle yields the reserve port tank reading).

Fuel fill for the primary tank is starboard, aft; reserve port tank fill is port, aft. Again, do *not* fill the port tank.

Fueling: Fill until the *gauge* definitely reads “full”. *Don't top off. Otherwise, in warm wx the tank can “oil can” and seep fuel out the top gaskets.* Please fill very carefully because it is difficult to tell when the tank is full. You need to put your ear to the tank, not fill “too fast”, and be prepared. Knowing how far down the gauge is, and about how many gallons the tank will accept, helps. (If the gauge reads $\frac{3}{4}$, your tank is about half gone, due to hull/tank curvature.)

In the cockpit locker, we have rubber fueling gloves. The attendant will give you absorbent pads. Before fueling, we build a fuel absorbent dam fore and aft in case of overfill (reaching for the pads after the spill is too late).

We find these guidelines helpful: we don't fill too fast, track how many gallons are in, keep our ear to the fill, and occasionally turn on the key and check fuel level, stopping when the needle definitely shows full.

16. Heads and Holding Tanks

Highlights

- **Both toilets are electric fresh water**
- **Holding tanks are gravity drain**
- **No Y valves**
- **There are two gray rocker switches. The switch on top is “flush”. It brings in domestic fresh water and pumps it out simultaneously. The switch on the bottom separates those operations. Depressing one end brings in water, depressing the other end pumps it out.**
- **Jabsco Quiet Flush (well...kinda**



quiet) fresh water minimizes odors.

Details

Rule of the Sea: *The person who clogs the head, unclogs the head.*

Experienced sailor rule: *To avoid the "rule of the sea" above, nothing goes down the toilet that hasn't been digested.* Please place feminine articles *and toilet paper* in the waste basket, plastic bag, or zip lock...makes for a much more pleasant cruise!

Here's what uses least water:

For *liquid* effluent:

- 1 - use the toilet
- 2 - depress the "drain" side of the lower rocker switch to pump out the liquid.
- 3 - Briefly toggle it to "fill" to rinse, then back again to "drain" to pump out.

This method uses only about a cup of your fresh water supply per flush and keeps the toilet fresh.

For *solid* effluent:

- 1 - Depress the "fill" end of the lower rocker switch to bring in a quart or so of fresh water.
- 2 - Use the toilet.
- 3 - Depress the "drain" switch until the solids are evacuated, then press "fill" and "drain" as above. Sometimes the "flush" upper rocker switch is needed to remove everything.

Holding Tanks:

The holding tanks are approximately 10 gallons each. One is located above each toilet. There is no Y valve. The holding tanks are above the water line. Each tank has a deck fitting for use at a pumpout facility. Alternatively, the large seacock, accessed under the head sink, will evacuate the holding tank by gravity.

We urge you to use shoreside facilities for solid effluent when moored in shallow bays and marinas where solid effluent has a measurable adverse impact...or the holding tank. Be aware that discharge in deep water is permissible in Canadian waters, but USCG reg's prohibit such discharge in US waters. The state director of salt water quality told us that urine from boaters has no adverse impact on marine waters. Some sailors maximize capacity by designating one head for liquids only (with the seacock open) and the other for solids only (with the seacock closed.)

If the holding tanks are overfilled, effluent will overflow through the vents, which gives foul odors and dirties the hull.

Depending upon the number and type of flushes above, and the number of people aboard, each holding tank may hold about a day's usage. Designating a "liquid only" head extends that to about 3 days.

Last revised: 2/6/2017

17. Heaters

Highlights

- **Webasto forced air, set thermostat to white arrow**
- **not efficient to run all night, noise wakes light sleepers**
- **auxiliary portable electric for use on shorepower**

Details

The Webasto thermostatically controlled forced air heating system draws from the main diesel fuel tank. In our waters, we use the heater on cool evenings or to take the chill off in the morning.

The thermostat, black, is at the nav station, to the right and above your head as you sit. To turn it on, move the rocker switch (upper left) from “O” (for “off”) to “I” (for “Ignition”). We leave the thermostat dial on the white arrow, which holds it nicely at comfortable room temperature.



We flip down the canvas companionway flap to retain heat in the cabin.

We normally turn off the heater at night, both to sleep cool and to avoid the clicking sound of its electric fuel pump.

The cube electric heater is for marina use. It is normally stowed under the starboard settee.

18. Propane

Highlights

- **solenoid is at nav station, just below the heater thermostat**
- **two large aluminum propane tanks**
- **for safety, we turn off solenoid after stove use**

Details

We have two aluminum propane tanks under the port helm seat, vented to the outside for safety. Each tank normally lasts 4 weeks. The San Juan Sailing staff weighs these tanks weekly to assure that you don't run out. If one tank empties, there is a spare for your convenience.

Troubleshooting: If the stove won't start, check a) propane valve is full open, b) solenoid is on, c) stove knob is first pushed in, then left to “ignite” position and after flame, held until thermocouple heats. If BBQ doesn't start, check a) in-line valve near propane tank is parallel to hose, b) BBQ control is pushed down at “start” before igniting.

Caution: propane is heavier than air. If leak is detected, extinguish all flames and ventilate the bilges.

19. Refrigeration and freezer

Highlights

- Refrigerator is both top load and front load
- Ideal thermostat setting is when control points directly aft
- Circuit breaker is under the bottom step of the companionway
- Check to be sure there is sufficient battery power to operate the refrigeration equipment all night. Usually there is
- Super insulated for minimal energy consumption

20. Sails and Rigging

Highlights

- North low stretch high performance Spectra sails (2013)
- Carbon fiber mast and boom
- Stainless steel rod rigging
- 5' extra mast height gives larger sail area for light breezes, but reef soon
- See hints for ease of hoist and drop of full battened mainsail.

Details

She sails best when kept under 20 degrees of heel. The big tall rig and low stretch sails allow you to sail when others are motoring, but that extra tall rig and large sail area mean you'll want to reef before others do.

Mainsail:



The fully battened mainsail uses Antal slides and track, and Schaefer Battslides at each of the 5 battens.

We have a "stack pack" zipped boom cover and lazy jack system. *No need to adjust the lazy jacks...just unzip and hoist!*

To hoist: The main halyard is normally stowed as a boom lift. After attaching halyard, we release the a) mainsheet, b) boom vang and c) downhaul.

Hint: we found this the easiest way to hoist the main is as follows (full hoist is when the black ring emerges from the aft end of the sheet stopper):

1 – After moving the halyard from the end of the boom to the head, assure that the main halyard leads *outside* the tan boom cover on the port side of the mast. Leave the boom cover zipped in front of the mast.

2 – With the boom cover top unzipped and the mainsail *directly* into the wind (any wind in the sail makes hoisting and lowering difficult!), crew at the mast pulls down on the main halyard while a second takes up slack through the closed sheet stopper in the cockpit. When hoisting gets hard, (normally about 80% up) crew #1 pulls the halyard horizontally out—like a bow string, with cockpit crew quickly taking up slack on each release. Do this repeatedly to raise as high as possible, normally about 95%.

3 – Tension with the cockpit halyard winch, or very carefully bend the halyard around the inside of the halyard winch to the port electric winch. Take 2 or 3 wraps around the electric winch—**but hold it by hand--never put the halyard in the self-tailer**. Just look up and “feel” when the luff is tightened properly. Watch for the black circle to emerge from the aft end of the sheet stopper.

We have trailing tell-tales on the main leech to assist mainsail trim. If they don't trail straight aft when sailing upwind, most likely you need to back off on the mainsail traveler.

This boat sails best with a foot or so of mainsail luff (though sometimes hard to see with the full battens), and the tell tales flying straight.

Now, dropping the main can be a bit more difficult than you think. Past charter guests have registered it as their only complaint. In response, we have fixed this with a downhaul. Here is our easy procedure:

To drop the main:

- 1 – Let the halyard lie on the cockpit sole.
- 2 – Assure the main is directly into the wind.
- 3 – Push the main halyard sheet stopper all the way forward and let the main drop.
- 4 – Assist the drop by pulling on the downhaul. Also helps to have crew at the mast to lift the halyard, reducing the drag from turning blocks and sheet stopper.
- 5 – Move the traveler a bit to one side. Makes zipping the stack pack easier.
- 6 - Zip the top of the stack pack.
- 7 - Return the main halyard to its resting position as a boom lift. Important: this reduces boom swing under power and avoids mast chatter at night.

Alternatively, leave the halyard attached to the head, and tie off to the shroud to avoid

mast chatter. But if motoring in any chop the next day, be sure to move it to the boom end or the boom will swing, possibly causing head injury and/or damaging the dodger bar.

There should be no need to ever adjust the lazy jacks.

Reefing:

Two large reefs are pre-rigged.

1 - release the mainsail halyard to the blue ring for reef #1 or the red ring for reef #2. Both correspond to the color of the respective reef lines.

2 – Tension the single line reef moderately, then release the mainsheet and boom vang. Now fully tension the reef line until the new clew is close to the boom. Then re-tension the mainsheet and vang. (Using this method raises the boom sufficiently above the dodger.)

Note: tuck the extra mainsail foot if you like, but please don't bother with reef ties, which in our experience easily tear sails.

Genoa:

Please do *not* adjust the luff tension. The primary sheet winches for the 130% genoa (Harken roller furling) are two speed electric Harken 53s. (An inserted winch handle will automatically provide manual override, but will tend to pop out.) Please operate these powerful electric winches with extreme care.

The *inboard button is high speed*. The *outboard button is low speed*.

NOTE! For safety, whenever you are not sailing, please *don't* secure the sheet through the self-tailing. Just take two wraps around the winch and let it hang loosely. That way if a child pushes a button, damage is less likely.

These winches have tremendous power and one needs to be watching all lines carefully during their operation. Keep fingers well away from the drum when trimming. Thank you for your conscientious caution.

Note: the electric winch circuit breakers are in the port aft stateroom, just outboard of the battery switches, in the compartment just under the leading edge of the cushions. If popped, a black lever sticks out at an angle from the top of the circuit breaker. Squeeze the lever back up into the circuit breaker to activate.



The genoa fairleads are adjustable underway with the blue control lines in the cockpit...very handy to move the fairlead forward when sailing off the wind. We position the fairleads about even with the aft end of the nearby small deck hatch for close hauled (see photo), then move them forward (blue lines led aft) as we fall off the wind.

Spinnaker:

If you are *well-experienced* in handling a tri-radial spinnaker and spinnaker pole, you are welcome to use this symmetrical spinnaker in appropriate conditions. It is a *very* large sail suitable for breezes under 15 knots.

It is stowed with its lines and snatch block in the sail locker forward of the master stateroom, and accessed by the large foredeck hatch. The pole is mounted on the leading edge of the mast. The spinnaker is enclosed in a sock with a fiberglass “mouth” for ease of employment and dousing. To jibe, douse the sail, dip the pole, complete the jibe, and open the sock.

As you may know, the spinnaker is the most vulnerable of sails. Thank you for your care!

Backstay adjuster:

The carbon fiber rig can be easily tuned with the hydraulic backstay adjuster at the transom. “10” is ideal for winds over 10 knots, “20” for winds over 20 knots. Do not exceed the red tape on the hydraulic shaft (about “25”) or damage can result. Please relax the adjuster after sailing by turning the knurled knob to the left and then back again.

21. Showers and Sump Pumps

Highlights

- **separate shower stall forward has circular rotating shower wall**
- **aft head shower**
- **transom shower**
- **shower sump pump circuit breakers at nav station, switches in showers, no sump or float switches**

Details

Forward circular rotating shower wall protects the head door and paper and towels from shower spray. We find it easiest to rotate by placing one hand under the handles on either end of the curved shower wall. This also helps keep it in the track (top). Toggle operates the sump pump.

The aft shower is incorporated into the aft head. The sink faucet extends to become the shower head. Depress the top of the shower head for spray. Again, toggle operated sump.

The transom shower features both hot and cold water. To operate, pull the T handle toward you. That brings water to the shower head. Turn the T handle left or right to adjust temperature. Depress the spring loaded top of the shower head for spray.

Note: shower sumps can become emergency bilge pumps if water rises to that level.

22. Spares and Tools

Common spares

Location: under center starboard settee cushion

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Contents: oil absorbent pads, fuel filters, oil filter, impeller, watermaker replacement filters.

Heavy Duty spares

Location: under forward stateroom mattress, forward end. Access by removing mattress, then carefully disengaging the forward end of ventilation slats.

Contents: spare float switch, spare electric bilge pump, spare domestic water pressure pump(s), spare engine starter, spare engine alternator, Yanmar tool set, battery jumper cables, bag with spare oil and fuel filters, light bulbs, outboard tools, toilet one-way check valves, spare shower drain pump.

Tools

Three tool boxes are under the nav seat. Yanmar unique tools are stored with Heavy Duty Spares.

23. Storage

The amount of storage is one of the appealing factors of the Jeanneau 45. We found these of greatest use:

Food:

1 – Given the large capacity and the front load feature of the refrigerator, we stow many optional refrigerated items in it.

2 – Salon center settee. Located opposite the galley counter, the island settee storage is convenient. There is door access on the port side of the settee, as well as two flanking storage areas on each end accessed by lifting the cushion.

3 – Mast support enclosure. A two-level custom teak mast support cabinet is ideal for wine and dry snacks and canned goods.

4 – Galley bilge areas. Two shallow bilge compartments, all in the main salon, that we call “galley forward”, “galley aft” are ideal for things like eggs and “keep cool” vegetables. Please be careful of the small black watermaker lines in those compartments.

5 – Under forward settee cushion. Big storage compartment under the cushion.

6 - Master stateroom under-bed cabinet. We will often co-opt the large slide-out drawer under the master stateroom mattress for food stowage. It's huge!

7 – Behind settee cushions. There is some stowage under the U-shaped settees, but not a lot. Much has been used for the Bose woofer and other equipment. Some storage behind the settee cushions, and the cabinets above them.

8 – Above galley counter cabinets. We store quite a bit of food in the cabinets above the refrigerator and freezer.

9 – Table drawers. The teak table has four small drawers convenient for condiments.

Note: you might want to check that the wood cutting board above the refrigerator is behind the fiddles before you heel to starboard. Yes, this is the voice of experience ;-)

Clothes:

Each stateroom has a hanging locker and drawers that we find more than adequate.

Tools: Under the nav seat.

Fenders: We store them in the sail locker forward. *Hint:* when lowering them into the locker, droop the fender line over the top rung of the ladder; making for easy retrieval. A fifth light white fender is ideal for the “rover” or when backed into a slip.

Dock Lines: In the port cockpit locker.

Cooking utensils: In the forward galley under-counter cabinet.

24. Stove and Oven

Highlights

- **4 burners, depress knob, turn left, use hand sparker**
- **stove off, then solenoid off**
- **microwave for brief use**

Details



The four burner gimbaled Force 10 propane stove must have the propane solenoid switch on to operate (above and to the right of the nav station).

We suggest that whenever you turn off the stove burner, you shut off the propane solenoid, which, for safety, shuts off the propane flow in the cockpit.

To light a stove burner, *depress* the knob, turn $\frac{1}{4}$ turn to the left

and light with the provided sparker. Note you don't need a flame...just the spark. Hold for a few seconds to heat the safety “thermocouple”, then release. Turn the knob to the *left*, counterclockwise, to go from “high” to “simmer”.

To light the oven, set the knob to the desired temperature. Open the oven door. While kneeling, depress the blue cylindrical button on the stove panel. This bypasses the thermocouple and allows propane to flow to the oven burner. Ignite the burner with the sparker. Keep the blue button depressed for about 30 seconds before slowly releasing, watching the pilot to make sure it remains lit.

The microwave oven is behind teak doors, above the forward end of the galley counter. The inverter must be on, and the “AC outlets” circuit breaker on. You are welcome to use the microwave, but note that excessive use sucks down the batteries. We find it is best for warm-ups and short term uses, but *not for extended cooking* like bringing a soup supper from cold to hot.

25. Water

Highlights

- **In line carbon filter yields bottled water quality in galley**
- **One 120 gallon water tank**
- **Tank tender water meter opposite galley**
- **Deck fill is starboard forward**

Details

The water tank is under the master stateroom bunk.

The “tank tender” gauge opposite galley is at knee level by the mast step. Always leave toggle in “clear” for its protection. Move the toggle to the left to “read”, then depress and hold the “Tank A” button as you *carefully and slowly* give the little pump rod a little shove. Where it settles is how full the tank is. The green dot at about 12 o’clock is “full” for the water tank. **Caution:** if you push too hard on the pump rod and “peg” the needle, you can *destroy* the tank tender. Again, return the toggle to “clear” to protect the instrument.

Hot water is produced by two methods:

Engine: It takes about an hour under solid load to heat the extra large 12 gallon hot water tank. (Running the engine at idle won’t heat the water.)

Shorepower: If hooked up, turn on the “hot water” circuit breaker on the 110v panel above and to the right of the nav station.

26. Watermaker (normally pickled...activated upon request, used for longer voyages)

Note: Watermaker is commissioned only upon advance request. No charge for cruises of 3 weeks or more. Practical for voyages to remote areas, not practical for normal island cruising. Regardless, we will commission the watermaker for you for charters of less than 3 weeks for a \$250 commission/decommission fee. Please give at least one week notice.

If you have requested that the watermaker be activated, please run daily—in clean water but *never* in small coves or marinas—to keep your water topped and the watermaker fresh. It makes tasty bottled quality water.

We run it first thing each day when we leave a cove or marina—as soon as we get in deep clear water—to make the “supply” for the day.

There are these steps:

- 1) Under the galley sink, aft wall, turn the gray Y valve away from you--outboard.

2) Above the nav station, flip on the two circuit breakers labeled “watermaker”. That activates the two pumps under the port stateroom cushions to “push” water through the membrane, after going through the screen and pre-filter.

3) Now watch the galley sink. You will see water from the watermaker coming through the spigot labeled “watermaker test”. At first, it has a sulfur odor (flushing out marine organisms). This is normal. After 1 or 2 minutes (a pint or two) the water will be pure (you can smell or taste it). Then, pull the Y valve under the galley sink toward you—inboard. The water will stop flowing out the test spigot and is now diverted into the water tank.



4) Glance under the bottom companionway step: You can see the gallons per hour being produced, and the backpressure. The steel ball in the vertical “temperature gauge” style meter shows gallons per hour (normally at 15 gallons [50 liters] per hour), then bounces down with each pump pulse); the round gauge to its starboard shows backpressure (normally around 60 pounds). If you note the gallons per hour falls below 14, or the backpressure varies significantly from 60 pounds, please let San Juan Sailing staff know on your return.

5) When the tank is full, shut off the watermaker by simply flipping the two watermaker circuit breakers to “off”. Of course, please remember to turn off the watermaker before you enter a cove, marina or sediment-heavy water, regardless of the time needed to top off. Push the Y valve under the sink to “test” as a precaution when starting up again.

Note: You can’t make “too much water”. Any excess is pushed out the fresh water tank (located under the forward stateroom cushions) vent, into the anchor well (starboard aft corner—a bit difficult to detect, but there will be a small stream there when the tank is full.)

For your reference, the salt water enters through the water manifold in the starboard aft stateroom, below the cushions. The two pumps push the water through a pre-screen, then a 5 micron pre-filter to remove any impurities (visible looking aft through the engine starboard engine compartment door). The membrane is under the floor at the companionway, and the high pressure pump that pushes water through the membrane is along the centerline cabinet of the port aft stateroom.

If you forget to turn the watermaker off before entering a cove or marina—or encounter sediment loaded water—the 5 micron pre-filter will load up with green marine growth. You can check it through its glass with the flashlight. Again, it is aft of the engine, under the centerline board in the starboard aft stateroom. The filter glass is on hand tight, and a spare filter is under the starboard settee cushion. Please rinse the old filter, put it in a plastic bag and give it to SJS staff on your return. The filter can be cleaned and recycled.

These photos that may help orient you to *Esprit de Mer*:



Companionway doors, with flip up canvas flap employed or flipped up

Sequence showing how to expand main salon table:

