

## NOTES FROM THE OWNERS

# ***SUNDANCE***

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Latest Revision: 7/26/2017 – Added new section for TV on page 14.

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*Welcome aboard **SUNDANCE**!*

*She's a 3-stateroom 2005 Jeanneau Sun Odyssey 37 with a roomy cockpit and ample storage for food and gear. I hope that you will appreciate the extensive ship's inventory and equipment choices and that you will enjoy sailing her as much as I do. You will find **SUNDANCE** is very well balanced and sails beautifully. She keeps her speed in light air and is very stable in heavy weather. We're immensely pleased with this fine vessel and look forward to sharing her with you, our guests.*

*Happy Sailing!*  
Clint Henry, Owner

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- 1. Anchors.** *SUNDANCE* is equipped with two anchors, one forward and one in the starboard cockpit locker. The primary bow anchor is a 44 # Lewmar Claw (Bruce) with 300 feet of 5/16" chain. The chain is marked with yellow polypropylene line woven through the links. The first mark is a 10-foot section of polypro at 100'. Then 5-foot sections of polypro every 50' interval thereafter.

The scope to use in the islands is 4-to-1 based on the highest water while at anchor during your stay. In most coves the nighttime depths will be 25'-40'. So expect to pay out about 100'-150' of scope. After you have paid out a suitable amount of rode, 2 minutes of reverse (while in idle speed,

which is about 800 rpm) sets the anchor and tests its holding power to 15 knots of wind. If you wish to sleep even better, advance the throttle in reverse to 1250 rpm in reverse to prove to yourself that the anchor is well set for 25 knots of wind, or even 1500 rpm for 30 knots of wind. Any higher than 30 knots of predicted overnight wind, and I'm usually looking for a mooring ball, lateral mooring lines (at Sucia and Reed Harbor) or preferably a dock to ride it out!

For storm conditions, extend scope to up to 10-to-1 (250' in 25' of water), provided you have room to leeward. Otherwise, set two bow anchors (using the secondary anchor, chain and rode) in a v-type pattern for extra holding power.

**NOTE:** *SUNDANCE* has a fin keel and draws 6'4" ...so figure on 8 feet to be on the safe side. (I like to always have 10-12' under the keel at all times. Both underway and at low tide on anchor!)

- 2. Electric Anchor windlass** receives power from the engine start battery. Always operate the windlass while the engine is running! Otherwise, the windlass will drain the start battery. The breaker (i.e., the "on" and "off" switch) for the windlass circuit is located in the port aft stateroom. It is labeled "Guindeau". Down is "on" and up is "off". The up-down controller for the windlass is located inside the chain locker (leave it plugged in at all times, please).

#### A. Deploying the Anchor:

With an electric windlass, it's important to deploy the anchor into the water by hand. Pay out enough slack in the chain so that you can hand-deploy the anchor into the water about one foot below the water. (By having the anchor slightly in the water, the water will buffer that troublesome "pendulum" action that causes a partially deployed anchor to swing and hit the bow before you get it all the way into the water with a windlass controller that you're not familiar with.) Once the anchor is in the water, then use the electric windlass to lower the anchor to the sea bottom and deploy the desired amount of scope.

#### B. Retrieving the Anchor:

When retrieving the anchor, *never* use a windlass to pull the boat forward to where the anchor is set. (The windlass is powerful enough to do that, but it may deplete much of the charge on the start battery that operates it.) Instead, head the boat under power (slowly) toward the anchor while using the windlass to take up the stack chain.

Take your time, as the anchor chain sometimes bunches up under the windlass and you might need to push chain down to the bottom of the chain locker with the mop's handle.

Also, when retrieving the anchor, only retrieve it up to where you can see the anchor about one foot below the water (again to buffer any possible "pendulum" action if the anchor were just out of the water). Then, by hand, retrieve the anchor from just below the water up and onto the bow roller. Besides preventing possible pendulum action, if the anchor gets hung up on the bow roller and you continued to press the "up" button on the windlass controller, you'll either damage the electric windlass motor or pop the windlass breaker. Once on the anchor roller, carefully take up the slack in the chain with short taps on the windlass controller's "up" button.

#### C. Securing the Anchor (on the Sea Bottom, and on the Anchor Roller)

After the anchor is deployed, be sure to secure the anchor with the "snubber" line. Hook the line's "clevis hook" onto a link in the chain about 1/3 of the way from the bow roller to the water. Then run the snubber line through the "chalk" (the slot in the toe rail) and tie the line to the nearest bow cleat with a standard cleat knot. Briefly and repeatedly (as needed) tap the "down" button on the windlass controller in order to slacken the chain so that the snubber is the primary anchor chain holding device (with your windlass as your backup holding anchor chain holding device should the snubber line fail for some reason).

Once the anchor is retrieved and up on the bow roller, secure the anchor with the snubber line. Hook the line's clevis hook onto a link in the chain near to the anchor. Then tie the line to one of the bow cleats. (The "gypsy" or "catwheel" on the windlass should not be the only thing keeping the anchor from unexpectedly returning to the sea bottom!) After securing the anchor with the snubber line, immediately switch the windlass breaker "off" to prevent draining the engine start battery should the windlass experience an electrical short.

#### D. Secondary Anchor

The secondary stern anchor is a 12# Danforth with 50 feet of chain and 250 feet of nylon rode. It is in the starboard cockpit locker.

#### E. Stern Tie Line

There is a 600 foot reel of line for stern ties in the aft cockpit locker. (Please do not cut line; all 600 feet are needed in Desolation Sound in certain places.)

- 3. Barbecue.** The stainless steel propane BBQ is plumbed to the propane tank. Make sure the faucet-like valve on the tank is turned on. Then, the BBQ's little blue regulator is the control. (With the lid on, the BBQ tends to be hot and cook quickly, so tend meat often.) As a courtesy to the next guest, please use the wire brush attached to the BBQ to clean it after use.

4. **Batteries & Charging.** For normal operations, leave all battery switches on (in the vertical position) all the time. An isolator assures all batteries are charged, while protecting the engine start battery from draw-down by house usage. The House bank has three 70 amp-hour deep-cycle batteries for house services. The “Moteur” (motor in French) is a single battery isolated from the house bank. The horizontal position on the battery switches is “off”, the vertical position is “on”. **CAUTION: Never turn a switch to “off” while the engine is running!** This will blow the diodes on the alternator, and your batteries will no longer charge.

Battery voltage can be checked on the electrical panel. The starting battery is labeled “bot. moteur” and the house battery is “bot. bord”. You should try not to discharge below 11.5 volts before you re-charging the batteries by (a) running the diesel or (b) plugging into shore power with the charger breaker “on”.

**Battery Charger.** Connect to shore power by first plugging the shore power cord into the stern of the boat followed by plugging the other end of the cord into the shore power outlet on the dock (and making sure, if it has a breaker, that it's in the ON position). Back on the boat, flip the “Battery Charger” breaker to the ON position at the A/C portion of the electrical panel (lower part). Then on the ProMariner Charger/Inverter control below the electrical panel (lower right area), press the red “Auto Standby/OFF/ON” toggle switch to the “Auto Standby” position. You'll see a little green light come on by “Shore Power/Charger” and you'll see a constant red “Shore Power” light come on at the electrical panel. You're now charging both your house battery bank and the start battery.

5. **Berths.** *SUNDANCE* is ideal for 6 people, but she'll sleep a maximum of 9 people:

- Six in the 3 staterooms, with double berths in each.
- One person on the port-side settee with a wood insert piece and cushion (stowed under the settee) that, when inserted under the nav table, extends the settee below the nav table to the edge of the nav table seat, for a full-length berth. (Remove backrest cushions for more space.)
- Two people on the dinette table (which converts to a double berth). Directions: (1) Take the tabletop off the metal “legs” by just pulling up on the fore and aft edges of table (then stow the two metal legs). (2) Insert the wood brace (usually\* located in the wooden rack above the v-berth (either starboard or port side) in the wooden brace-holder fixtures on the outer edge of the dinette (near the centerline of the boat). (3) Extend the “pistons” on the under-side of the tabletop, inserting them into the two holes in the wood just below the port side dinette settee (just below the cushions), then double check that each piston is fully extended for stability/safety. (4) Rest the tabletop on the wooden brace. (5) Place the two special cushions (stowed under a wooden hinged flap under the aft end of the v-berth mattress) on the tabletop. (Remove backrest cushions for more space.) \*Sometimes stowed behind the backrest cushions of the dinette. And also once found stowed under the mattress in one of the staterooms.

- 6. Bilge pumps.** Please check the bilge each day, morning and evening. It is accessed by lifting the floorboard next to the nav table.

There are three bilge pumps:

1. One electric on-demand bilge pump is controlled at the electrical panel. Press the breaker to turn it on. Press again to turn it off.
2. There is also a second bilge pump hot-wired to the batteries with a float switch high in the bilge. If it goes off, you should investigate why. (Typically it's water from a bag of melting ice in the fridge compartment, which drains into the bilge. Or there may be a slow fresh-water leak, often a loose hose clamp on fitting at the hot water heater. Rarely will it be salt water.) Pump will automatically shut off (via float switch) when there is no more water in the bilge.
3. The manual emergency bilge pump is the third bilge pump. The emergency bilge pump handle and insert outlet is located in the cockpit (with the pickup tube in the lowest point in the bilge). The handle is stored in clips in the aft starboard cockpit locker.

Monitor bilge water daily. Alternate your choice of pumps to ensure that all are functioning properly.

- 7. Dinghy.** *SUNDANCE* has an inflatable "Sea Eagle" brand 10'6" dinghy. With its two aluminum seats, the dinghy will accommodate even the largest crews in comfort (4-6 on seats, the rest on the tubes). Towing works best when the dinghy is brought close to the boat—only have about 4 or 5 feet of painter line from the stern cleat to the bow of the dinghy. This lifts the bow, reduces drag, and lessens the chance of wrapping the painter around the propeller. Tie the painter off twice—once at a cleat then the bitter end to the stern rail. We've recovered dinghies "lost at sea" by others who relied on a single cleat hitch.

Please take special care when beaching the dinghy (refer to the dinghy beaching procedure in your charter guest book). Most of the beaches you will land at are strewn with barnacle covered, bottom slicing rocks. When approaching the shore, weight the dinghy aft by leaning or moving 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 deposit it gently on the beach. Also remember to secure the painter under a rock or to a log—especially in the case of a rising tide.

- 8. Dodger.** The dodger's plastic "glass" is vulnerable to scratching from salt crystals, especially after sailing into a challenging breeze. The salt spray on the glass dries in the wind, leaving behind tiny salt deposits that obscure your vision. Please avoid directly touching the glass with a 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, please use generous amounts of fresh water from a pan from the galley or a sopping wet sponge to "flood" the glass and dissolve the salt crystals away. (Better yet, wait until you're at a dock where

you can hose off the salt crystals. If the dodger glass is really clear, you can thank previous guests for their diligence. And I thank you too!

**9. Electrical Panel.** Most switches at the panel board are self explanatory, but some circuits are unique.

**A/C Power.** The A/C outlets will only function while connected to shore power OR, when not connected to shore power, when the 2000-watt inverter button is pressed “on” (converting 12 volt house battery to 120 volt A/C). A/C outlets will only work when the A/C Outlets breaker in “on”.

**Battery Charger.** The Battery Charger breaker switch must be turned “on” for shore power to charge the batteries. There is a 90-second delay from the time you flip the breaker “on” to when the red light on the electrical panel comes on (indicating that you’re charging and A/C power is available). Wait for the red light before using A/C power. And, the A/C Outlets breaker switch must be “on” for the plugs to be live.

**Inverter.** The inverter button is located under and forward of the electrical panel. Press it “on” (a light comes on) and “off” when it’s no longer needed. Again, the A/C Outlets breaker switch must be “on” for the plug to be live. (Do NOT use the inverter while connected to shore power.)

**Chart Plotter.** The circuit breaker for “Instruments 1” is located on the electrical panel. This switch powers the C70 chart plotter at the helm.

**Auto Pilot.** The autopilot, as well as most of the other instrument are powered by an on/off breaker labeled “pilote” in the port aft stateroom on the engine compartment side wall. Both the “pilote” and the “Instruments 1” switch need to be on for all instruments to work properly.

**Cabin Lights.** Once you have turned on the circuit at the electrical panel labeled “cabin lights 1”, an on/off switch for all recessed salon/galley lighting is controlled by rocker switches, one located above the starboard aft cabin door on the overhead and one located above the port settee on the overhead. All other cabin, head, and navigation station lighting locations have individual on/off switches (after turning on the breaker for “cabin lights 2”).

**Water Pressure.** This pump pressurizes an accumulator located beneath the navigation table, and it shuts down 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, hopefully 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, especially while motoring or even when sailing, turn off the water pressure breaker. Should you run a tank dry, the pump would continue to run until it burns out...and you’d never hear it running when you’re in the cockpit.) Water tank selection valves are located behind the port settee back cushion in front of the navigation table. “Avant” is the bow tank and “Arriere” is the aft tank.

**Shore Power A/C Circuit Breaker** is located in the starboard cockpit locker. It rarely trips, but if it does, just turn it back on.

**Running, Engine (Steaming) Light.** Please be advised that night passagemaking is not permitted under terms of your agreement with San Juan Sailing. Only use in cases of reduced visibility (like fog or on the rare days in the Pacific Northwest when there’s heavy overcast).

**Anchor Light.** Okay to run all night in an anchorage (won’t deplete batteries).

**10. Electronics.**

The radar/chart plotter/GPS, depth sounder, wind instrument, and autopilot are all Raytheon products. Enjoy the very best! Remember to make sure the “Autopilot” breaker (in the port aft stateroom by the windlass breaker) is in “on” position and the “Instruments 1” switch is “on” for everything to work.

**A. Cellular Telephones.** *SUNDANCE* is equipped with a 12-volt cigarette lighter type outlet that may be used for recharging your cellular telephone. The outlet is on the electrical panel face and connected to the Cabin Lights 1 breaker (must be “on” to use cigarette lighter plug).

**B. Depthsounder:** The digital 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 will receive many false readings caused by currents, changes in water temperature, fish, and seaweed. Use the depthsounder only as an aid to navigation in shallow water. However, 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.) I do not recommend using the alarm. It is likely to sound at inappropriate times such as late at night while fish are passing beneath the transducer.

**C. Radar & Chart Plotter:** *SUNDANCE* is equipped with a RayMarine Radar and a color C70 chart plotter at the helm.

The chart plotter may be used without the radar “transmitting” to minimize battery drain. GPS input to the chart plotter comes from a small satellite antenna mounted on the stern rail. To start the Radar/Chart plotter, turn on switches labeled “Instruments 1” and “Instruments 2” at the instrument panel and the Autopilot breaker in the aft port stateroom (above the engine compartment access). Then, press and hold the power button at the lower left corner of the unit until it beeps and turns on the display.

To enable Radar, press the “Page” button, and then press the soft-key just below the icon (at the bottom of the display) that looks like a miniature radar screen. You then press the red “power” button to enable the “toggle” (lower left corner of the display) between Standby (STDBY) and Transmit (TX) for the radar (if you need it). If you plan to save electricity and use the chart plotter only, toggle to Standby. Once the radar is transmitting, press “OK” button, then “Page” and select with the soft-key the miniature chart plotter screen. Then, you'll see purple radar signatures or “blips” overlain on the chart on the chart plotter screen. (Try it on a clear day and see the purple blips and then the actual boat on the horizon!)

To shut down the unit, press and hold the power key (red button, lower left) for 3 seconds.

I recommend that in addition to the Maptech waterproof chart book (with the most active “killer rocks” marked in red) in the cockpit, please utilize the chart plotter for added safety. You should have little need of the radar except for the highly unlikely event that you are suddenly enveloped by fog, which is rare in this area. The fog that we've encountered usually burns off by noon. If it's still soupy after breakfast, I put on an extra pot of coffee until it lifts. (Never depart from a

“safe” location into the fog just because you have radar! That would be contrary to prudent seamanship.)

**D. Knotmeter:** 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 also try removing it by traveling in reverse. The impeller is located beneath the most forward salon sole board. (I don't recommend that you try to remove the impeller to clear it, unless you are VERY experienced in such things. An open hole in the hull is a scary situation, and if not plugged quickly, it can jeopardize the boat.) If the knotmeter is temporarily “out of service”, the GPS input to the chart plotter provides an alternate and quite accurate speed indication called SOG (speed over ground).

**E. VHF Radio:** The remote access microphone (RAM), when plugged into the outlet on the pedestal, controls all radio functions of the unit mounted above the nav station from the steering station. The VHF at the Nav station is turned on (after the VHF/Stereo breaker on the electrical panel is “on”) on by holding down the volume knob (upper right corner) for 3 seconds. There is also a “PWR” switch on the RAM to turn on the system at the helm. I find this very convenient while entering and leaving moorings. 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. You should monitor channel 16 (the hailing and distress channel) during your cruise. After establishing contact on channel 16, switch to working channels 68, 69, or 79. 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 “inland waters of western Washington” or “Camano Island to Point Roberts”. Both cover the San Juan 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). San Juan Sailing monitors channel 80A during office hours (closed Sundays). By phone you can reach the San Juan Sailing office at (800) 677-7245 or SJS's owner, Roger Van Dyken, at (360) 224-4300 (cell) or (360) 354-5770 (home).

**11. Emergency Tiller.** The emergency tiller is located in the port cockpit locker. The rudder post extension is under the helmsman seat.

**12. Engine. Starting—**

1. Check the oil level. The dipstick is easily accessed by releasing the latches on the companionway steps and pulling them forward. The dipstick is on the front starboard side of the engine. There is a wide gap on the dipstick between the full line and the fill line. **Do not overfill.** Use the onboard spare oil to add no more than a cup at a time. Then 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. Also, if the dipstick indicates 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.

2. Check the coolant level...anywhere between the two lines on the overflow reservoir is "good".
3. While you have access to the front of the engine, check for belt tightness, leaking fluids, and a clear raw water strainer.
4. Check the battery switches. All must be in the vertical "on" position
5. Look over the stern for things that could foul the propeller.
6. Make sure the gearshift is in neutral (9 o'clock looking from the starboard side) with the red clutch pin pushed in. Then, keeping the red pin pushed in, advance the throttle lever to about the 10 o'clock position.
7. Insert the key and turn it clockwise.
8. Turn the key further to start the engine. Expect the engine to start in 2 seconds or less. If the engine doesn't start after 5 seconds of cranking, turn key to the left and remove it. Wait 15 seconds and try again.
9. After the engine starts, release the key, check for water gurgling out the exhaust, then gradually ease the throttle back to idle near 1000 RPM.
10. While the engine warms, check your fuel level. To activate the gauge, push down on the toggle switch. Also check and record your engine hours. Fuel gauges sometime stick but hour meters seldom lie.

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.

When you bring the throttle back to the 10 o'clock position (neutral position is marked with black ink), the red clutch pin will pop out. Now you may engage forward gear by pushing ahead on the throttle or reverse gear by pulling back on the throttle. Please remember to pause in the 10 o'clock position when changing shifting from forward to reverse and visa versa.

Operation. 27 HP Yanmar 3 GM series engines are very reliable. Cruising speed is **6.5 knots at 2800 RPM**. Fuel consumption is approximately 1 gallon/hour at 2800 RPM. Please do not exceed 3000 RPM because it's hard on the diesel and fuel consumptions goes WAY UP (at very little increase in actual speed). I find the engine will have least vibration at 2800 RPM...and at some points below 2800 RPM. (5-6 knots at 2000-2500 RPM – economy cruise speed.)

To avoid the possibility of sucking air or sludge when the fuel level approaches 1/4 of a tank, refuel when the fuel drops below 1/2 full.

Engine Overheat. If the buzzer sounds while the engine is running, it could mean a couple things. If you lost oil pressure (the oil icon light will light up), 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). Check for water gurgling out the exhaust before you shut down the engine. If you have a "wet exhaust", check the coolant level in the reservoir and if none appears to be in the bottle, 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.) If there is no water gurgling out of the exhaust, the raw water strainer is likely plugged (most likely with eelgrass). The best solution to this problem is prevention—keep an eye peeled for eelgrass mats, especially along those "soapy" tide and eddy lines in the water. When eelgrass gets sucked into the engine cooling water intake, it jams at the raw water strainer. To clear the strainer (above the

water line in the engine compartment), simply remove the top and extract the eelgrass and toss it in the galley garbage can. Replace the lid and tighten by turning it clockwise until the lid is seated on the rubber gasket. If upon restarting the engine overheats again, check the seal between the strainer and its 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.)

**Engine Shutdown.** **Do not shut the ignition key while the engine is running!** First bring the engine to idle and the gearshift to neutral. Allow the engine 5 minutes to cool down. Then push the fuel cutoff button located next to the key. After the engine stops, turn the key to the off position and remove key.

**13. Flares.** Visual day/night distress signals are located under the nav table seat.

**Fire Extinguishers.** There are three fire extinguishers. One is located under the galley sink, one in the salon by the base of the compression post (mast), and one in the aft starboard stateroom hanging locker.

**14. Fuel Tank.** (36 gallons.) The engine consumes one gallon of fuel per hour. 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 create a sheen and subject you to a Coast Guard fine. Fill slowly and carefully. When the pipe begins to gurgle like it's full, you are probably full. (To check if the tank is full, turn the key one click, and although the low oil pressure alarm will ring, you can use the toggle switch to check the fuel level on the fuel gauge.) Check the side vent and, with soap, wipe up any excess fuel to avoid yellowing the 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.

Note: Unlike automobile fuel gauges, fuel gauges on boats are notoriously inaccurate. 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're 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 for a charter guest.)

**15. Head and Holding Tank.** 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. In fact, offshore sailor don't even put soiled toilet tissue down a marine head. They simply deposit soiled toilet paper (and feminine items) in the receptacle such as a waste basket with a liner bag or a ziplock baggie, but not down the toilet. San Juan Sailing and I highly recommend you follow this rule. And since we've been recommending this, we've had almost no incidents of plugged heads!

*SUNDANCE* has a 18-gallon holding tank, and it will need to be emptied at least every day-and-a-half. (San Juan Sailing staff will discuss holding tanks, overboard discharge and pumpouts upon your arrival.)

**If the toilet pump starts to resist your flushing effort, don't force it!** Exploding or leaking sewage is most unpleasant! Search out the problem and correct it. The head has no Y valve. Pumping the toilet puts everything into the holding tank located in the cabinet behind the toilet. It is a greenish-blue tank. It is a gravity discharge system and 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. If you pump out the holding tank at a shore facility, please fill it with fresh water through the deck fitting to rinse, then pump it out again. Thank you!

**16. Heater .** The diesel fired Webasto cabin heater will make the interior "toasty" within 10-15 minutes. The heater control is located near the Navigation Station. Rotating the dial clockwise starts the unit and raises the temperature setting (turn it all the way in the maximum heat position). Note: It takes about 5 minutes for the heater to "cycle up" and get hot. Turning the dial all the way counter-clockwise will shut off the unit, however the fan will continue to run for about 5 minutes while the unit is cooling down. The heat is dry, comfortable, and on those rainy days or cool evenings, makes a huge difference in cruising comfort!

**17. Inverter.** When not on shore power, A/C power may be enabled by pushing the red "Auto Standby/OFF/ON" toggle switch to the "ON" position on the ProMariner Charter/Inverter control below the electrical panel (lower right area). You'll see a little green light come on by "Inverter" then you'll see a constant red light comes on at the electrical panel. When these two lights are on, flip the "AC Plugs" breaker switch to ON at the lower A/C portion on the electrical panel. Now you may plug in phone and camera chargers. You may also use (for short periods of time so you don't drain the batteries too low) hair driers and other high-demand appliances.

NOTE: When not plugged into shorepower, you may see the red "Shore Power" light blink on and off every 3 seconds. If the red toggle switch on the ProMariner Charger/Inverter is in the "Auto Standby" position, this blinking red light will occur. Best to put the red toggle switch in the "OFF" (or middle) position to conserve energy.

TIP: When using the Inverter, you cannot create hot water (with electricity) just by flipping the "Water Heater" breaker to the ON position at the electrical panel. (When you're plugged into shore power, of course, you *can*!) So here's the tip: if you're at anchor or on a mooring ball for an extended period of time, you can fire up the boat's diesel engine and run it for about 20-30 minutes to create hot water. If it's not hot enough, run the diesel another 15 minutes or until the water is hot enough for your needs. (You'll be charging up your batteries at the same time!)

**18. Refrigerator.** The well-insulated refrigerator must be turned on at the electrical panel. I recommend running the refrigerator at all times to avoid it becoming smelly. You may want to turn the thermostat down to "4" (the medium setting) at night. This will help conserve house battery power. There is a small freezer compartment in the refrigerator (dozen hot dogs max capacity).

To drain the water from the refrigerator for cleaning or in case of water build-up, pull the small plug in the lower right-hand bottom of the refrigerator. Be aware that the water drains into the bilge and the bilge pump may pump it out (along with whatever else is in the bilge) in an inappropriate location.

## 19. Sails / Rigging.

Headsail – The genoa/jib also has roller furling, with good sail shape from full out through three standard reef points marked by blue disks along the foot of the sail. As with the main, slight hand-over-hand tension on opposing lines – sheet and furling line – 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 while pulling in the jib reefing line until only the amount of sail you desire is deployed. (You have infinite reef points on the jib, of course.)

Mainsail – The mainsail is a fully battened, conventional rig with a lazy bag and two pre-rigged reefing lines. When attaching the halyard to the mainsail (I keep the main halyard shackled to the deck fitting abeam of the mast on the port side near the toe rail to keep the noise down), be sure not to foul the halyard on the lazy bag lines. **Be sure to remember to release the spinlock clutches for both mainsail reefing lines when hoisting the main.** When taking the mainsail down, it will flake nicely for the first 1/3 to 1/2 of the sail, but then will require a few tugs on the leech to help flake the rest of the mainsail neatly into the bag. Store the excess reefing line slack in the sail lazy bag. If you tighten the reefing lines to get rid of the slack, it makes it a lot harder to raise the main and puts unnecessary strain on the lines.

Reefing the Main – "Reef early and reef often." Reefing the mainsail is easy, here's how to do it.

1. De-power the main (by pointing head-to-wind, or heaving to).
2. Be sure the topping lift is tight and holding the up the boom.
3. Let the tension off of both the boom vang and the main sheet.
4. Lower the mainsail so that the reefing point you desire is about 24 inches above the boom and cleat off the main halyard to **keep tension on the mainsail halyard when reefing down the main.** Otherwise, the reefing line will bind at the gooseneck as it turns the corner to run through the boom.
5. Grind down on the reefing line and tighten the sail, which will draw down the reef point much closer to the boom and "shape" the sail.
6. Raise the main halyard slightly, if needed.

## 20. Sailing & Handling Characteristics.

- A. **Sailing.** *SUNDANCE* is a delight to sail. Her sail plan (small roller-furling genoa and fully battened main) was selected with consideration for single or short-handed sailing. Once

she has way, *SUNDANCE* is easily steered with small rudder changes. Her perfect breeze is 15-20 knots with heel at 15-20 degrees.

It's easy to reef from the cockpit using the single-line reefing system on the main and roller furling on the headsail. Full sail can be carried in winds up to 17 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've been too conservative.

*SUNDANCE* has a new 3-bladed "Maxprop" for sailing efficiency, gaining you another 0.25 to 0.5 knots under sail. Enjoy! To feather the blades: once the engine is shut down, put the shifter in reverse for about 10 seconds, then shift back to neutral.

### **B. Under Power.**

In reverse, *SUNDANCE* "walks to port" very slightly. It's easily overcome when you have a little sternway.

In forward, very small rudder adjustments are necessary. *SUNDANCE* is very quick on her feet and has a large rudder. She carries momentum well, so most of your docking can be done in neutral or no more than "idle speed".

- 21. Shower.** Hot water is stored in the insulated tank. It takes about 30 minutes of running the engine under load to get hot water. When on shore power, you can heat your water electrically. Experienced cruisers know the sailor's shower: get wet, turn it off, soap up, rinse off. If the shower basin overflows, you're using too much water. After turning the sump pump on at the panel board, it is controlled by a toggle switch located to the right of the washbasin. **CAUTION:** The engine can heat the water to scalding temperatures! Please wipe down the head when are done. On warm, sunny days, an alternative to the below decks shower is the swim platform shower located next to the swim ladder. This is also a good way to rinse off salt after swimming or dirt after going ashore.
- 22. Spares.** Spares for engine and general spares are located under the nav table seat and some spare parts (e.g. alternator, toilet pump, bilge pump) are located in the hot water heater compartment (under the forward-most dinette cushion).
- 23. Stereo.** The stereo is AM/FM/CD with an i-Pod cord (so you can plug in your i-Pod). The stereo must be on "CD" mode for the i-Pod connection to feed signal into the stereo.
- 24. Stove.** The gimballed propane stove has two burners and an oven. Propane is heavier than air and requires caution. For your safety, please follow these procedures:

1. Open the hand valve at the propane tank all the way open and very slightly snug.

2. **Make sure all stove control knobs are in the “off” position!**
3. Turn the electric solenoid switch located near the electrical panel to “on”. A red light will appear.
4. Light a match, push in the stove control knob and turn to the left to high. The burner should light immediately. Hold the knob in for a few seconds and release.
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.)

If you do not intend to use the stove again in the next several hours, it's also a good idea to shut off the hand valve at the tank. Then you'll have both the solenoid valve and the hand valve protecting against a potential propane leak into the main cabin. (You'll sleep much better!) Please note that both propane valves – the hand valve and the solenoid valve – are located in the propane locker in the aft of the cockpit, which is vented and isolated from the rest of the boat. Any leaks there will move down, out, and away from the boat.

While the propane tank normally lasts for six weeks or more, San Juan Sailing's staff fills the propane tank every 2 weeks.

## 25. TV.

The “Auxillary1” breaker on the DC panel powers the TV. Also, the 12V “Cigarette” style adapter cord needs to be plugged in to the outlet at the DC panel. There is a remote control and DVDs located in the cupboard near the TV.

## 26. Water – Hot & Cold Pressure.

Water pressure: The fresh water pump switch is located on the electrical panel. Please switch this off when motoring or sailing. You could burn out the water pump should one of the tanks run dry (and you would not hear the pump running over the sound of motoring or sailing).

Water tanks: *SUNDANCE* has two water tanks. Selection valves are behind the port settee back cushion in the main salon. The bow tank is labeled “Reservoir Eau Avant”. The aft tank is labeled “Reservoir Eau Arreire”. Use only one tank at a time – do not leave both valves open. The tank tender gauges located above the galley counter will only give an indication when the “water pressure” breaker switch is turned on at the panel board. Tank 1 is the bow tank and tank 2 is the aft tank. 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 or shave, you shouldn't have a problem. (Total fresh water capacity in both tanks is 85 gallons.)

\* \* \*

*I hope you'll love her as much as I do! (Thank you for taking special care of her.)  
I'm delighted to have you aboard to enjoy **SUNDANCE**!*

