

SAN JUAN YACHTING

PREVENTIVE MAINTENANCE SCHEDULE

FOR 2010 SEASON

(FALL 2009 thru 2010 – 15 Months)

Responsibilities: After the owner and maintenance professional have agreed who will do each task, the maintenance professional will check “M” (maintenance pro) or “O” (owner) by each task AND your maintenance pro will place the “official” working copy of this checklist in the Charter Guest Reference Notebook (at the end of 3-ring binder section). As each task is completed, the person completing the task is to write their initials / date on the ORIGINAL onboard the vessel.

Both you and your maintenance pro must keep this “official” working copy up-to-date for SJY’s fleet manager to monitor.

For Charter-Ready Certification: The “official” working copy must be annotated with a date / initials next to each task indicating when and by whom it was completed. Vessels are eligible for charter when all required tasks are accomplished. On due dates, SJY’s fleet manager will review the status of initial / dates to assure that preventive maintenance is being accomplished per this required schedule.

Boat Name: _____ Maintenance Pro: _____

FALL 2009: Complete no later than December 31, 2009, or earlier as indicated, all required tasks below:

1. **M** **O** Date & Initial: _____ Apply two coats varnish/Cetol/polyurethane to exterior teak. Renew areas as necessary. (Starting in September, look for first good weather window and schedule break.)
2. **M** **O** Date & Initials: _____ Thoroughly clean bilge (all compartments). Consider using enzyme-action cleaners. (Vinegar is inadequate to reduce odors that build up in bilge.)
3. **M** **O** Date & Initial: _____ Check ports and hatches for leaks. Reseal where necessary. Clean and coat opening port and hatch gaskets with talcum powder.
4. **M** **O** Date & Initial: _____ Ensure cabin is properly vented, heater(s) set properly, cushions lifted or removed, drawers/doors open for ventilation to prevent mildew.
5. **M** **O** Date & Initial: _____ Before first predicted freeze, drain fresh water tanks, scrub interior (if accessible) to remove algae; rinse and treat with bleach solution to prevent algae build-up. Drain to prevent freezing.
6. **M** **O** Date & Initial: _____ Before first predicted freeze, check antifreeze level and freezing point in engine(s), genset (if applicable) and diesel furnace hot water cabin heat system (if applicable) and add protection if necessary. Test with PH test strip, and add corrosion inhibitor to heating system and/or engine(s) as necessary.
7. **M** **O** Date & Initial: _____ Before first predicted freeze, close all seacocks below waterline except engine(s) and genset(s) for winter months to minimize danger of seacock, pipe and hose freezing. Assure all wooden seacock plugs are attached with nylon line to each seacock.
8. **M** **O** Date & Initial: _____ Before first predicted freeze, treat toilets(s)/head system with a liming solution (salt water head systems only). Two options to do this:

UNCLORIC ACID (Option #1): Mix one bottle unchloric acid powder (available from SJY, Owners Consumables Inventory) in gallon warm water. Pour into toilet bowl. Leave for 48 hours; then pump sequentially through hoses and holding tanks at 48 hour intervals to remove salt buildup. After treatment, assure holding tank is empty and flush RV antifreeze into toilet fixture(s).

MURIATIC ACID (Option #2): Pour mixture...two gallons water, one quart acid (available from SJY, Owners Consumables Inventory)...into the bowl. When fizzing stops in a few minutes, pump w/ dry setting until bowl is empty. Wait a few minutes, pump 10 times on wet setting, to move acid into discharge hose. Wait a few minutes and pump 10 times on wet setting to thoroughly flush system. pending on condition of system, another acid flush may be needed. Pump out tank. (Especially important if Stainless Steel tank.)

9. **M** **O** **Date & Initial:** _____ Test the electric and manual bilge pumps to ensure they pump water. (Rebuild/replace if necessary.) Protect manual pump(s) from freezing.
10. **M** **O** **Date & Initial:** _____ Before first predicted freeze, “pickle” water maker (if applicable).
11. **M** **O** **Date & Initial:** _____ Check battery voltages (with charger “off”) and, on unsealed batteries, the water level. Load test all batteries more than one year old to confirm they still have capacity, replace if necessary. Turn charger back “on”.
12. **M** **O** **Date & Initial:** _____ Check shore power cord connection (male end, at dock box) for signs of black electrical arcing on prongs. If present, cord has a short inside. Replace cord. If okay, lubricate with dielectric silicon grease and re-plug into dock box electrical outlet.
13. **M** **O** **Date & Initial:** _____ Check seals / O-rings on deck filler caps. If deteriorated, repair to prevent leaks (especially water into diesel tanks and contamination into fresh water tanks). Lubricate with NSF-approved SUPER LUBE.
14. **M** **O** **Date & Initial:** _____ Replace all raw water impellers on main engine(s) and genset.
15. **M** **O** **Date & Initial:** _____ Every year, replace primary fuel filter (2 micron) on engine(s) and the genset, bleed fuel system and assure no air locks, test for proper operation and no leaks.
16. **M** **O** **Date & Initial:** _____ Check belts for tension (1/2 inch deflection) and wear (look for black powder and cracks in belts). Adjust or replace.
17. **HIGHLY RECOMMENDED (BUT OPTIONAL):** **M** **O** **Date & Initial:** _____ **No one** Pick up oil sample kit from NAPA (best price). Take oil samples (old oil, before change) from main engine, transmission, and genset (if applicable) and submit to testing service for analysis and recording in oil sample log. Report any problems to owner and SJY.
18. **M** **O** **Date & Initial:** _____ Change oil, if not changed for past 12 months (recommend Delo 400 15/40) in engine(s) and genset (if applicable).
19. **M** **O** **Date & Initial:** _____ Change transmission fluid. Check with engine manual to be sure the proper transmission fluid is used for individual makes/models.
20. **M** **O** **Date & Initial:** _____ Check all bolts, screws, hose clamps, engine fittings for tightness.
21. **M** **O** **Date & Initial:** _____ Check hoses for wear (i.e., chafe, cracking, swelling and general deterioration). Replace as necessary. Add chafe guards as necessary.
22. **M** **O** **Date & Initial:** _____ Wipe engine(s) and mechanical components in engine room with oily cloth to remove dirt and grease (use degreaser if necessary). Remove any rust, spot paint engine(s) and other components if necessary for “like new” appearance. Coat engine(s) with *WD-40* or *BOE SHIELD* anti-corrosion spray.

23. **M** **O** **Date & Initial:** _____ At end of season, make sure fuel tanks are full. Add STANADYNE (1 oz per 4 gallons) and Racor Biocide (1 oz per 40 gallons “shock”, per 80 gallons maintenance).
24. **M** **O** **Date & Initial:** _____ 1) Remove floorboards or inflatable floor from inflatable dinghy, if applicable. Thoroughly wash sand/rocks from inside hull. If wood floorboards/transom, check condition and, if needed, re-varnish or repaint each with *PETTIT EZ-POXY* paint (gray recommended). 2) If inflatable, re-insert floorboards and re-inflate dinghy, verify leak-free. (If dinghy leaks air, spray bottle of soapy water to find leak and repair.) 3) Clean with *SUPER CLEAN* (NOT acetone) or *SEA POWER* cleaner/wax. Protect with *303 AEROSPACE PROTECTANT* or *ISLAND GIRL* protectant or *FLEET WAX*.
25. **M** **O** **Date & Initial:** _____ Have outboard serviced/winterized by an outboard professional. Empty gasoline from outboard tank.
26. **M** **O** **Date & Initial:** _____ Inspect BBQ and replace any worn parts, remove from rail and stow in cockpit locker for winter protection.
27. **M** **O** **Date & Initial:** _____ Lubricate and inspect anchor windlass. Check electrical connections and ground wire attachment bolt for tightness.
28. **M** **O** **Date & Initial:** _____ Assure that there is a shackle between anchor and swivel connector to chain. Tighten shackle pin and secure with seizing wire, including on shackle at chain’s bitter end.
29. **M** **O** **Date & Initial:** _____ Mark chain. (Paint recommendation: *Hammerite Rust Cap*, *Rust-Oleum*, or *Krylon Rust-Tough* gloss enamel.) SJY requires a single 12-inch mark of yellow paint at 50 feet, two 12-inch marks of yellow paint (with 12 inches of unpainted chain in between marks) at 100 feet, three 12-inch marks of yellow paint (with 12 inches of unpainted chain in between marks) at 150 feet and so on. The last 10 feet of chain should be marked in yellow paint.)
30. **M** **O** **Date & Initial:** _____ Lubricate and inspect davit winches, service if necessary. Clean and lubricate davit rigging, make sure it is strong and safe.
31. **M** **O** **Date & Initial:** _____ If flying bridge, remove and check exterior ignition control panel for water intrusion, loose wires and corrosion, spray with *WD-40* or *BOE SHIELD* anti-corrosion spray to prevent corrosion/rust.
32. **M** **O** **Date & Initial:** _____ Confirm all stanchions secure. Confirm rail gates, latches, swim ladder and securing mechanisms operate smoothly, lubricate. Tension any cables between stanchions as required for tightness and safety. Check stanchion cable fastener security.
33. **M** **O** **Date & Initial:** _____ If applicable, check mast stays and halyards for tension and integrity.
34. **M** **O** **Date & Initial:** _____ Renew interior varnish to “like new” varnished and/or oiled finish. Inspect bulkheads, tables, doors, steps and cabin sole. (Add an additional coat of varnish or polyurethane [inspect Polyurethane surfaces—may last more than one year] to heavy-traffic areas of your wooden sole annually.)
35. **M** **O** **Date & Initial:** _____ Replace any non-skid on stairs if worn. Clear tape coated with varnish recommended.
36. **M** **O** **Date & Initial:** _____ Renew painted finishes as necessary.
37. **M** **ONLY** **Date & Initial:** _____ Inventory tools in onboard tool box against SJY required Tool List. (Obtain list from SJY.) Purchase and/or replace tools as necessary. Wipe down all metal tools and parts with *WD-40*. NOTE: Maintenance professional is required to confirm to SJY that all required tools are aboard.

38. **M** **O** Date & Initial: _____ Every 5 years, replace non-PVC head system waste hoses. Use PVC pipe wherever possible, and top-quality thick-wall hose where necessary. If PVC pipe used in low areas, can change hose replacement interval to every 10 years. Use two stainless hose clamps. Note: Write on hose (inside a compartment, but visible when compartment is opened) with indelible marker both “hose installed (00/00)” AND “change on (00/00)” (5 or 10 years hence).

NOTE: Vetus hoses are 10-year hoses (available at Fisheries Supply), but are more costly than standard head system hoses. If Vetus hoses are used (often in conjunction with PVC), head system hose replacement interval becomes every 10 years.

39. **M** **O** Date & Initial: _____ Every 5 years, thoroughly service the diesel cabin heater. (Follow service manual.) Or subcontract task to authorized service technician or company.

40. **HIGHLY RECOMMENDED (BUT OPTIONAL):** **M** **O** Date & Initial: _____
No one On all holding tanks, use 1" vent hoses (replace fitting to larger 1" if necessary) to prevent overflow clogs (debris) in the vent hoses leading to “vacuum lock” which prevents/hinders holding tank discharge, and for odor abatement (microbes in tank need lots of oxygen).

“WINTER WATCH” STORM CHECK

October - April DURING AND AFTER STORMS: Complete 1-5 below.

Date & Initial: _____	Date & Initial: _____	Date & Initial: _____	Date & Initial: _____
Date & Initial: _____	Date & Initial: _____	Date & Initial: _____	Date & Initial: _____
Date & Initial: _____	Date & Initial: _____	Date & Initial: _____	Date & Initial: _____
Date & Initial: _____	Date & Initial: _____	Date & Initial: _____	Date & Initial: _____
Date & Initial: _____	Date & Initial: _____	Date & Initial: _____	Date & Initial: _____
Date & Initial: _____	Date & Initial: _____	Date & Initial: _____	Date & Initial: _____
Date & Initial: _____	Date & Initial: _____	Date & Initial: _____	Date & Initial: _____

1. **M** **O** Check bow, stern and spring lines for wear, alter/replace (add chafe guards) as needed. Recommend double bow lines for added holding in storms.
2. **M** **O** Check fenders for placement, pressure, wear. Reposition, inflate or replace as needed.
3. **M** **O** Assure tender is secured properly.
4. **M** **O** Check power cord (make sure it’s out of the water). Check power is “on” and the charger is “on” in the boat.

If severe freeze is predicted:

5. **M** **O** Confirm anti-mildew heater(s) “on”. While below, inspect for mildew, clean if necessary. Adjust temperature setting to high-heat setting. IMPORTANT: Following freeze, lower temperature!

MONTHLY OFF-SEASON: Complete 1-6 below.

Date & Initial: _____	Date & Initial: _____	Date & Initial: _____
Date & Initial: _____	Date & Initial: _____	Date & Initial: _____
Date & Initial: _____	Date & Initial: _____	Date & Initial: _____

1. **M** **O** Start main engine(s) and genset, run under load up to operating temperature to prevent corrosion of cylinder walls.
2. **M** **O** Run diesel cabin heater (on highest setting) for a minimum of 1 hour.
3. **M** **O** Run refrigerator/freezer and icemaker (if applicable) for a minimum of 1 hour.
4. **M** **O** Inspect and, if necessary, replace engine and genset zincs. (If monthly checks reveal a slow rate of deterioration, then less frequent checks okay.) List comments below:

5. **M** **O** Check bilges. Operate all bilge pumps and float switches. (Repair/replace if necessary.)
6. **M** **O** Rotate steering to lubricate shaft and reduce exacerbated passive electrolysis.
7. **M** **O** Conduct security check for entry, missing major equipment, damages. (Notify SJY if problems.)

WINTER / SPRING 2010: Complete no later than April 1, 2010 the required tasks below.

(Note: Bellingham “CharterFest” Boat Show is Saturday, April 3, 2010).

1. **M** **O** **Date & Initial:** _____ Inspect and if necessary, apply two coats varnish/Cetol/polyurethane to exterior teak trim. Renew areas as necessary. Note: no treatment for teak decks; optional for teak rails; mandatory for grab rails/trim.
2. **M** **O** **Date & Initial:** _____ Inspect canvas for mildew or dirt and if present, clean canvas with “Oxy Clean”, replace tension bungees and snaps as necessary. Apply Vaseline to all snaps.
3. **M** **O** **Date & Initial:** _____ Assure each portable piece of canvas is labeled for location (including port, stbd; and location if multiple pieces.)
4. **M** **O** **Date & Initial:** _____ Open Bimini, check that fasteners are tight and complete, and all zippers are operational, with no teeth missing.
5. **M** **O** **Date & Initial:** _____ Check battery voltages (with charger “off”) and, on unsealed batteries, the water level. Turn charger back “on”.
6. **M** **O** **Date & Initial:** _____ Turn on all interior and running lights to check operation. Replace bulbs if necessary.
7. **M** **O** **Date & Initial:** _____ Replace batteries in CO detector(s).
8. **M** **O** **Date & Initial:** _____ Turn on running, spreader, and exterior courtesy lights, check and replace as necessary.
9. **M** **O** **Date & Initial:** _____ Check hydraulic steering systems for fluids and leaks. (If applicable, oil steering cable sheaves with #30 oil; check tension and wear of steering cable.)
10. **M** **O** **Date & Initial:** _____ Open all raw water intake seacocks, check sea strainers (clean if necessary), hoses and pumps for integrity. Start engines and genset and warm up, verify proper operation. Assure all wooden seacock plugs are attached with nylon line to each seacock.
11. **M** **O** **Date & Initial:** _____ Grease rudder shaft(s) (if zerk fitting available), check adjustment of rudder packing gland (if applicable).
12. **M** **O** **Date & Initial:** _____ Spray engine and electrical components (done in fall too) with *WD-40* or *BOE SHIELD* anti-corrosion spray to prevent corrosion/rust.
13. **M** **O** **Date & Initial:** _____ Check throttle and shift controls and cables. Lubricate, adjust or replace, as needed.
14. **M** **ONLY** **Date & Initial:** _____ Service all Jabsco toilets: Replace flapper and duckbill valves. If necessary, rebuild pump or replace pump OR replace entire toilet (fairly inexpensive). All other toilets, inspect and service as recommended by manufacturer.
15. **M** **O** **Date & Initial:** _____ Check accuracy of holding tank “full” lights and gauges. If floating sensor mechanism, clean and lubricate. If in-tank sensors, clean off film.
16. **M** **O** **Date & Initial:** _____ Inspect (and operate) stovetop burners and oven burner(s) for scale and rust. Clean if indicated to assure proper flow and operation.
17. **M** **O** **Date & Initial:** _____ If applicable, commission water maker, supply spare filters, check water quality.
18. **M** **O** **Date & Initial:** _____ On tenders with wheel steering, remove, clean and lubricate cable in tilt tube.

19. **M** **O** Date & Initial: _____ If inflatable tender, assure proper pressure. Check painter for wear. Replace if necessary with a multi-filament soft polypropylene line (available from SJY, Owners Consumables Inventory). Check bottom paint (if applicable), repaint as indicated.
20. **M** **ONLY** Date & Initial: _____ Inventory spare engine parts against SJY required Engine / Propeller Spares List. (Obtain list from SJY.) Purchase and/or replace engine and propeller spares as necessary. Place items in plastic (e.g., Sterilite) box labeled “Engine Spares”. **NOTE:** Maintenance professional is required to confirm to SJY that all required engine spares (including spare props) are aboard. **OWNERS: Location of engine spares must be clearly indicated in Notes from Owner, under “E” for “Engine Spares”.** (Recommend stowing in engine compartment.)
21. **M** **ONLY** Date & Initial: _____ Inventory general spares (e.g., extra pump for manual toilets, lights, cotter pins, hose clamps, screws, bolts, etc.) against SJY’s required General Spares list. . (Obtain list from SJY.) Purchase and/or replace general spares as necessary. Place items in plastic (e.g., Sterilite) box labeled “General Spares”. Note storage location in Notes from Owner, under Spares. **NOTE:** Maintenance professional is required to confirm to SJY that all required general spares are aboard. **OWNERS: Location of general spares must be clearly indicated in Notes from Owner, under “S” for “Spares Parts”.**

(See next page for required spares – check off that all are aboard)

ENGINE, PROPELLER & GENERAL SPARES

Assembled in box with clear plastic cover labeled: “Engine Spares”

- 1 quart spare oil for each engine – write “Main Engines Only” on containers
- 1 quart spare oil for generator (if applicable) – write “Generator Only” on container
- Quart transmission oil or fluid (check specific oil or fluid required by the specific transmission) – write “Transmission Only” on container
- Spare fuel filters for engine, generator (if applicable)
- Spare raw water filters for watermaker (if applicable)
- Spare belts for engine(s), and generator (if applicable)
- Spare impellers for engine and generator (if applicable)
- Spare impeller plate gaskets for each
- Minimum of a half dozen 12” zip ties.

In a compartment (with location noted in you Owners Notes):

- Battery water (distilled) – write “for batteries” on container
 - Replacement head pump (for manual pump toilets only)
- OR**
- If you have a VacuFlush head, 4 duckbill valves per toilet plus on bowl seal and one ball valve assembly.

Assembled in box with clear plastic cover labeled: “Propeller Spares”

- Spare propeller(s) with prop nut assemblies, zincs, etc.

Assembled in box with clear plastic cover labeled: “General Spares”

- Minimum of 2 spare light bulbs for each type of navigation and cabin lights
- 2 hose clamps for each size fitting
- 6 cotter rings, various sizes
- Various screws, nuts, bolt

ANNUAL HAUL-OUT

Complete all required tasks by April 1, 2010, in preparation for the April 15 “charter-ready” deadline.

IMPORTANT: If you would like your vessel eligible for early season (mid-March to mid-April) charters, please be sure to schedule your annual haulout in the spring. Consult with your maintenance professional.

1. **M** **O** Date & Initial: _____ Schedule boat for haulout with yard and deliver to yard.
2. **M** **O** Date & Initial: _____ Pressure wash bottom.
3. **M** **O** Date & Initial: _____ Check hull for damage. Check running gear for damage: shaft(s), strut(s), prop(s), rudder(s), tabs. Report any damage to SJY. Arrange for any necessary repairs after consulting with SJY. (SJY expense if could be detected by diver, unless caused by owner.)
4. **M** **ONLY** Date & Initial: _____ Evaluate condition of bottom paint. Complete 5 and 6 below, or comment below. Note: ablative paints recommended; after several years/coats of ablative, occasional repainting may not be necessary.

Maintenance Professional’s Paint Condition Evaluation/Comments:

5. **M** **O** Date & Initial: _____ Sand or rough up existing paint surface to prepare for fresh coat of bottom paint.
6. **M** **O** Date & Initial: _____ Obtain paint, tape waterline with special painter’s tape, then paint bottom. Add a second coat from the water line down 2 feet and on all leading edges.
7. **M** **O** Date & Initial: _____ Sand propeller shaft(s) and propeller(s) with #400 sandpaper. (Optional: spray with PTFE grease to help inhibit marine growth.)
8. **M** **O** Date & Initial: _____ Replace hull, shaft, rudder and trim tab zincs.
9. **M** **O** Date & Initial: _____ Inspect fiberglass on hull and deck for any blisters.
10. **M** **O** Date & Initial: _____ Rub out hull gelcoat scratches with rubbing compound. Inspect for chips and scratches through the gelcoat. (Report any chips/scratches to SJY. Arrange for any necessary gelcoat repairs after consulting with SJY -- SJY expense, unless caused by gelcoat voids or by owner.)
11. **M** **O** Date & Initial: _____ For non-painted hulls: buff and wax: Wash and wax/polish hull and deck smooth surfaces. (Polyglow acceptable alternative on deck.) If owner does work, maintenance pro must inspect for quality control -- Maintenance Pro Initials: _____
12. **M** **O** Date & Initial: _____ Operate all seacock valves. If stiff and do not open/close easily, disassemble, clean, emery cloth any scratches, grease and reassemble OR replace. On the interior, yank on seacock to check integrity (not to exceed 50 lbs force); on exterior, tap seacocks with screwdriver and hammer—if pink pigment, replace seacock. Assure all wooden seacock plugs are attached with nylon line to each seacock.
13. **M** **O** Date & Initial: _____ Check condition of cutlass bearing(s) for wear.
14. **M** **O** Date & Initial: _____ Check, re-pack or replace shaft seals as necessary.
15. **M** **O** Date & Initials: _____ Evaluate rudder play. If excessive, find cause and correct.

16. **M** **O** Date & Initial: _____ Check operation of trim tabs.
17. **M** **O** Date & Initial: _____ Service thruster(s)...if applicable. (Follow service manual.)
18. **M** **O** Date & Initial: _____ **Every 5 years**, have the fuel tanks professionally checked (no charge through Petro-Clean) and, if sediment is found, polish the fuel in every tank to remove sediments and bacterial growth. Note: Write on the tank with indelible marker "fuel polished 00/00". (If no "fuel polished" date on tank, and if the boat is more than 5 years old, arrange for inspection by Petro-Clean.)
19. **M** **O** Date & Initial: _____ Refloat boat, deliver boat to slip and secure.
20. **M** **O** Date & Initial: _____ If there is any indication that re-alignment may be required, after back in slip for 48 hours, check alignment of shaft with a feeler gauge, re-align engine if necessary. During realignment, check tightness of the nut that secures the coupling to the transmission.
21. **M** **O** Date & Initial: _____ With flashlight and mirror, check all motor mounts for signs of "general wear" (crack in a bolt, weakening of rubber sometimes coming off mount, u-shaped bracket settling down onto base). If no obvious signs of wear, look for sagging/sinking of the engine toward any of the mounts. Replace if signs of wear or if engine is tilting forward, aft or to one side. (If realigning engine, tilt becomes more apparent.) Expect to replace motor mounts after 7-12 years.

FALL 2010: Complete no later than December 31, 2010, or earlier as indicated, all 39 tasks below:

1. **M** **O** **Date & Initial:** _____ Apply two coats varnish/Cetol/polyurethane to exterior teak. Renew areas as necessary. (Starting in September, look for first good weather window and schedule break.)
2. **M** **O** **Date & Initials:** _____ Thoroughly clean bilge (all compartments). Consider using enzyme-action cleaners. (Vinegar is inadequate to reduce odors that build up in bilge.)
3. **M** **O** **Date & Initial:** _____ Check ports and hatches for leaks. Reseal where necessary. Clean and coat opening port and hatch gaskets with talcum powder.
4. **M** **O** **Date & Initial:** _____ Ensure cabin is properly vented, heater(s) set properly, cushions lifted or removed, drawers/doors open for ventilation to prevent mildew.
5. **M** **O** **Date & Initial:** _____ Before first predicted freeze, drain fresh water tanks, scrub interior (if accessible) to remove algae; rinse and treat with bleach solution to prevent algae build-up. Drain to prevent freezing.
6. **M** **O** **Date & Initial:** _____ Before first predicted freeze, check antifreeze level and freezing point in engine(s), genset (if applicable) and diesel furnace hot water cabin heat system (if applicable) and add protection if necessary. Test with PH test strip, and add corrosion inhibitor to heating system and/or engine(s) as necessary.
7. **M** **O** **Date & Initial:** _____ Before first predicted freeze, close all seacocks below waterline except engine(s) and genset(s) for winter months to minimize danger of seacock, pipe and hose freezing. Assure all wooden seacock plugs are attached with nylon line to each seacock.
8. **M** **O** **Date & Initial:** _____ Before first predicted freeze, treat toilets(s)/head system with a liming solution (salt water head systems only). Two options to do this:

UNCLORIC ACID (Option #1): Mix one bottle unchloric acid powder (available from SJY, Owners Consumables Inventory) in gallon warm water. Pour into toilet bowl. Leave for 48 hours; then pump sequentially through hoses and holding tanks at 48 hour intervals to remove salt buildup. After treatment, assure holding tank is empty and flush RV antifreeze into toilet fixture(s).

MURIATIC ACID (Option #2): Pour mixture...two gallons water, one quart acid (available from SJY, Owners Consumables Inventory)...into the bowl. When fizzing stops in a few minutes, pump w/ dry setting until bowl is empty. Wait a few minutes, pump 10 times on wet setting, to move acid into discharge hose. Wait a few minutes and pump 10 times on wet setting to thoroughly flush system. pending on condition of system, another acid flush may be needed. Pump out tank. (Especially important if Stainless Steel tank.)
9. **M** **O** **Date & Initial:** _____ Test the electric and manual bilge pumps to ensure they pump water. (Rebuild/replace if necessary.) Protect manual pump(s) from freezing.
10. **M** **O** **Date & Initial:** _____ Before first predicted freeze, “pickle” water maker (if applicable).
11. **M** **O** **Date & Initial:** _____ Check battery voltages (with charger “off”) and, on unsealed batteries, the water level. Load test all batteries more than one year old to confirm they still have capacity, replace if necessary. Turn charger back “on”.
12. **M** **O** **Date & Initial:** _____ Check shore power cord connection (male end, at dock box) for signs of black electrical arcing on prongs. If present, cord has a short inside. Replace cord. If okay, lubricate with dielectric silicon grease and re-plug into dock box electrical outlet.
13. **M** **O** **Date & Initial:** _____ Check seals / O-rings on deck filler caps. If deteriorated, repair to prevent leaks (especially water into diesel tanks and contamination into fresh water tanks). Lubricate with NSF-approved SUPER LUBE.
14. **M** **O** **Date & Initial:** _____ Replace all raw water impellers on main engine(s) and genset.

15. **M** **O** **Date & Initial:** _____ Every year, replace primary fuel filter (2 micron) on engine(s) and the genset, bleed fuel system and assure no air locks, test for proper operation and no leaks.
16. **M** **O** **Date & Initial:** _____ Check belts for tension (1/2 inch deflection) and wear (look for black powder and cracks in belts). Adjust or replace.
17. **HIGHLY RECOMMENDED (BUT OPTIONAL):** **M** **O** **Date & Initial:** _____
No one Pick up oil sample kit from NAPA (best price). Take oil samples (old oil, before change) from main engine, transmission, and genset (if applicable) and submit to testing service for analysis and recording in oil sample log. Report any problems to owner and SJY.
18. **M** **O** **Date & Initial:** _____ Change oil, if not changed for past 12 months (recommend Delo 400 15/40) in engine(s) and genset (if applicable).
19. **M** **O** **Date & Initial:** _____ Change transmission fluid. Check with engine manual to be sure the proper transmission fluid is used for individual makes/models.
20. **M** **O** **Date & Initial:** _____ Check all bolts, screws, hose clamps, engine fittings for tightness.
21. **M** **O** **Date & Initial:** _____ Check hoses for wear (i.e., chafe, cracking, swelling and general deterioration). Replace as necessary. Add chafe guards as necessary.
22. **M** **O** **Date & Initial:** _____ Wipe engine(s) and mechanical components in engine room with oily cloth to remove dirt and grease (use degreaser if necessary). Remove any rust, spot paint engine(s) and other components if necessary for “like new” appearance. Coat engine(s) with *WD-40* or *BOE SHIELD* anti-corrosion spray.
23. **M** **O** **Date & Initial:** _____ At end of season, make sure fuel tanks are full. Add STANADYNE (1 oz per 4 gallons) and Racor Biocide (1 oz per 40 gallons “shock”, per 80 gallons maintenance).
24. **M** **O** **Date & Initial:** _____ 1) Remove floorboards or inflatable floor from inflatable dinghy, if applicable. Thoroughly wash sand/rocks from inside hull. If wood floorboards/transom, check condition and, if needed, re-varnish or repaint each with *PETTIT EZ-POXY* paint (gray recommended). 2) If inflatable, re-insert floorboards and re-inflate dinghy, verify leak-free. (If dinghy leaks air, spray bottle of soapy water to find leak and repair.) 3) Clean with *SUPER CLEAN* (NOT acetone) or *SEA POWER* cleaner/wax. Protect with *303 AEROSPACE PROTECTANT* or *ISLAND GIRL* protectant or *FLEET WAX*.
25. **M** **O** **Date & Initial:** _____ Have outboard serviced/winterized by an outboard professional. Empty gasoline from outboard tank.
26. **M** **O** **Date & Initial:** _____ Inspect BBQ and replace any worn parts, remove from rail and stow in cockpit locker for winter protection.
27. **M** **O** **Date & Initial:** _____ Lubricate and inspect anchor windlass. Check electrical connections and ground wire attachment bolt for tightness.
28. **M** **O** **Date & Initial:** _____ Assure that there is a shackle between anchor and swivel connector to chain. Tighten shackle pin and secure with seizing wire, including on shackle at chain’s bitter end.

29. **M** **O** **Date & Initial:** _____ Mark chain. (Paint recommendation: *Hammerite Rust Cap*, *Rust-Oleum*, or *Krylon Rust-Tough* gloss enamel.) SJY requires a single 12-inch mark of yellow paint at 50 feet, two 12-inch marks of yellow paint (with 12 inches of unpainted chain in between marks) at 100 feet, three 12-inch marks of yellow paint (with 12 inches of unpainted chain in between marks) at 150 feet and so on. The last 10 feet of chain should be marked in yellow paint.)
30. **M** **O** **Date & Initial:** _____ Lubricate and inspect davit winches, service if necessary. Clean and lubricate davit rigging, make sure it is strong and safe.
31. **M** **O** **Date & Initial:** _____ If flying bridge, remove and check exterior ignition control panel for water intrusion, loose wires and corrosion, spray with *WD-40* or *BOE SHIELD* anti-corrosion spray to prevent corrosion/rust.
32. **M** **O** **Date & Initial:** _____ Confirm all stanchions secure. Confirm rail gates, latches, swim ladder and securing mechanisms operate smoothly, lubricate. Tension any cables between stanchions as required for tightness and safety. Check stanchion cable fastener security.
33. **M** **O** **Date & Initial:** _____ If applicable, check mast stays and halyards for tension and integrity.
34. **M** **O** **Date & Initial:** _____ Renew interior varnish to “like new” varnished and/or oiled finish. Inspect bulkheads, tables, doors, steps and cabin sole. (Add an additional coat of varnish or polyurethane [inspect Polyurethane surfaces—may last more than one year] to heavy-traffic areas of your wooden sole annually.)
35. **M** **O** **Date & Initial:** _____ Replace any non-skid on stairs if worn. Clear tape coated with varnish recommended.
36. **M** **O** **Date & Initial:** _____ Renew painted finishes as necessary.
37. **M** **ONLY** **Date & Initial:** _____ Inventory tools in onboard tool box against SJY required Tool List. (Obtain list from SJY.) Purchase and/or replace tools as necessary. Wipe down all metal tools and parts with *WD-40*. NOTE: Maintenance professional is required to confirm to SJY that all required tools are aboard.
38. **M** **O** **Date & Initial:** _____ Every 5 years, replace non-PVC head system waste hoses. Use PVC pipe wherever possible, and top-quality thick-wall hose where necessary. If PVC pipe used in low areas, can change hose replacement interval to every 10 years. Use two stainless hose clamps. Note: Write on hose (inside a compartment, but visible when compartment is opened) with indelible marker both “hose installed (00/00)” AND “change on (00/00)” (5 or 10 years hence).

NOTE: Vetus hoses are 10-year hoses (available at Fisheries Supply), but are more costly than standard head system hoses. If Vetus hoses are used (often in conjunction with PVC), head system hose replacement interval becomes every 10 years.

39. **M** **O** **Date & Initial:** _____ Every 5 years, thoroughly service the diesel cabin heater. (Follow service manual.) Or subcontract task to authorized service technician or company.
40. **HIGHLY RECOMMENDED (BUT OPTIONAL):** **M** **O** **Date & Initial:** _____
No one On all holding tanks, use 1" vent hoses (replace fitting to larger 1" if necessary) to prevent overflow clogs (debris) in the vent hoses leading to “vacuum lock” which prevents/hinders holding tank discharge, and for odor abatement (microbes in tank need lots of oxygen).

TURNAROUND SERVICE (During Season)

AFTER EVERY CHARTER: Log engine and genset (if applicable) hours, complete 1-11 below:

Date: _____	Initial: _____	Eng: _____	Gen: _____		Date: _____	Initial: _____	Eng: _____	Gen: _____
Date: _____	Initial: _____	Eng: _____	Gen: _____		Date: _____	Initial: _____	Eng: _____	Gen: _____
Date: _____	Initial: _____	Eng: _____	Gen: _____		Date: _____	Initial: _____	Eng: _____	Gen: _____
Date: _____	Initial: _____	Eng: _____	Gen: _____		Date: _____	Initial: _____	Eng: _____	Gen: _____
Date: _____	Initial: _____	Eng: _____	Gen: _____		Date: _____	Initial: _____	Eng: _____	Gen: _____
Date: _____	Initial: _____	Eng: _____	Gen: _____		Date: _____	Initial: _____	Eng: _____	Gen: _____
Date: _____	Initial: _____	Eng: _____	Gen: _____		Date: _____	Initial: _____	Eng: _____	Gen: _____

1. **M** **O** Check oil (recommend Delo 400 15/40) and coolant levels in engine(s)/genset (if applicable), add fluids as needed.
2. **M** **O** Check belts for tension (1/2 inch deflection) and wear (look for black powder and cracks in belts). Adjust or replace.
3. **M** **O** Check sea strainers engine(s) and genset, clean as necessary.
4. **M** **O** Check oil pads, replace if dirty, follow up any fluid leaks.
5. **M** **O** Clean engine bilge if necessary and empty wet bilges.
6. **M** **O** Check extra oil and coolant supply in engine room. (Leave no transmission oil/fluid aboard.) If applicable, check extra hydraulic fluid supply.
7. **M** **O** Check paper towel supply on rack in engine room, re-supply if necessary.
8. **M** **O** Check 110V is “on” at the electrical panel, charger “on”, refrigerator “on”.
9. **M** **O** Check shower and potable water strainers. Clean if needed.
10. **M** **O** Test all lights (interior and exterior). Change any burned out bulbs.
11. **M** **O** Check that tender is secure.
12. **M** **O** If requested by owner, cover boat and tender with canvas (if not turning around).

MONTHLY DURING SEASON (April 15 –October 15): Complete 1-5 below.

Date & Initial: _____	Date & Initial: _____	Date & Initial: _____
Date & Initial: _____	Date & Initial: _____	Date & Initial: _____

1. **M** **O** Check rate of raw water lubrication of propeller shaft(s). Adjust if necessary (applies only to adjustable shaft logs). Check for water leakage at shaft log seal(s).
2. **M** **O** Check transmission fluid levels, top off if needed. Check with engine manual to be sure the proper oil or transmission fluid is used for individual makes/models.
3. **M** **O** If unsealed batteries, check battery water levels, top off if needed.
4. **M** **O** Check vacuum gauges on fuel filters (if present).
5. **M** **O** Inspect and, if necessary, replace engine(s) and genset zincs. (If monthly checks reveal a slow rate of deterioration, then less frequent checks okay.)

MEMORIAL DAY:

M **O** Add *STANADYNE* to fuel (1oz per 40 gallons of fuel).

Date & Initials: _____

AT LEAST EVERY 200 HOURS OF OPERATION:

M **O** Change oil and oil filter in engine(s) and genset. Recommend Delo 400, 15/40.

Date & Initial: _____ Date & Initial: _____ Date & Initial: _____