



**Adopted by Board [2/3/2020]**

## I. Introduction

This Cruiser Skipper Information File (SIF) sets forth the skipper responsibilities and SCOW procedures specific to the use of SCOW's three cruising keelboats: *Rebecca* (1980 Catalina 25), *Hiatus* (2003 Catalina 250), and *Lion's Paw* (2003 Catalina 250), which are docked on G dock. The SIF supplements the SCOW *Skipper Requirements and Boat Use Policy*, which contain general procedures for use of all club boats.

As a condition of being approved to use the Club's boats, each Cruising Skipper has agreed in writing to operate the club's boats safely and in accordance with the Inland Navigation Rules, other legal requirements, and SCOW's policies. Cruising Skippers also must be familiar with the Washington Sailing Marina Rules, which are posted on the Bylaws and Policies page of the SCOW website.

*Towing Insurance:* Cruiser skippers are required to purchase an individual towing policy such as the Unlimited Freshwater Towing policy offered at a discount to SCOW members by BoatUs.com. Proof of a current policy must be submitted to the Skipper Director at skipper@scow.org and skippers must renew or change policies to ensure coverage at all times while skippering a SCOW cruiser. Skippers are further required to carry their insurance carrier information, including information on how to request a tow, with them while skippering a SCOW cruiser. Skippers may be held liable for damages incurred while being towed by a vessel not sanctioned by their towing insurance carrier.

This SIF only emphasizes important features of the boats; it is not an "instruction manual" on how to operate the boats. Detailed operating instructions, equipment inventories and stowage plans are on board each boat. Each skipper must be familiar with how to operate all of the systems on each boat. This SIF is not a substitute for SCOW Cruiser Training or other land/water keelboat training.

Our boats are for enjoyment by all of our members. Take pride in our boats by removing all trash and personal items and cleaning the vessel after use. Leave the boat in as good a condition for the next skipper as you'd like to find it yourself. Stow equipment only where identified on the stowage list. Failing to return equipment to the proper location endangers the next crew, who could be unable to find equipment in an emergency.

## II. General Use Procedures

Cruisers are available for year-round use by Authorized Skippers certified in accordance with the *Skipper Requirements and Boat Use Policy*. The boats must be used only under the on-board supervision of the skipper who scheduled the boat. Cruising boats may be sailed upriver only to the 14th Street Bridge or upriver on the Anacostia River under the Frederick Douglass Memorial Bridge and up to the Martin Luther King Jr. Ave SE/ 11th St. Bridge. Boats may be sailed as far downriver as the skipper pleases, provided that the boat can be returned on time. Boats must be motored under the Douglass Bridge and the Wilson Bridge. The sails may be left up while motoring if steering will not be affected. However, depending on wind and traffic conditions, the skipper may want to lower the sails. If the sails are up, a careful lookout must be kept for traffic. (The Anacostia Channel Familiarization Sheet on the SCOW website contains additional details for passing safely under the Douglass Bridge (which may not have adequate clearance in certain conditions) as well as restricted areas near the Navy Yard.)

Boats may be reserved during the following time slots below, following the instructions on the "Reserve a Boat" link on SCOW's website (scowreg.herokuapp.com). The boats must be returned to their proper slip

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at the end of the usage period except in emergency situations. If the boats are not returned to their proper slip on G dock, the skipper must notify the Skipper Director and Commodore as soon as possible.

1. Day Sail Time Slots
  - a) 8:00 a.m. to 5:00 p.m. daily
  - b) 5:00 p.m. to 12:00 a.m. daily
2. Overnight Sail Time Slot
  - a) 5:00 p.m. to 8:00 a.m. daily
  - b) Skipper must have prior permission of Skipper Director and the vessel must be returned to the slip, completely ready for use by another skipper, before 8:00 a.m.

### III. Safety Considerations

- A. The cruisers have different sailing characteristics than small boats. Cruisers are heavy boats. They do not “turn on a dime” like Flying Scots. This has to be considered in light winds or when in close proximity to other boats or obstructions.
- B. After a heavy rain, be alert for logs or debris that may wash into the river, which may be partially or totally submerged. In winter, do not sail into areas covered with ice, even if it appears to be thin. If the fairway out of the channel is iced over, the cruisers cannot be taken out. If the lagoon or river is partially iced over, the cruisers cannot be sailed where the ice is solid and the skipper should assess whether it is safe to take the boat out at all. In winter, always be alert for floating ice.
- C. Cigarette, cigar, and pipe smoking is not permitted on the cruising boats. Open flames of any type are not permitted, other than as set forth in E below. Each boat has a gas tank.
- D. Grills, Stoves, Open Flames
  1. The Marina prohibits charcoal grills, gas grills or open flames of any type on the docks or on any boat tied to the docks. The use of grills is not permitted on board SCOW boats at any time, whether or not at the Marina. Only the alcohol, butane, or propane stoves installed in the cruising boat galleys by the club may be used for cooking on board. Be sure that the hatch is open enough to provide adequate ventilation in the cabin during use of any of the stoves. Be sure that the fire extinguisher is charged and that you are familiar with its use. These stoves are reasonably safe but can cause a fire, or carbon monoxide (CO) poisoning, if used improperly. Skippers are responsible for bringing their own fuel for the stoves.
  2. Stoves may be used only when docked or moored. Use of a stove while the vessel is underway presents a fire risk. Only refill an alcohol stove when the boat is docked or moored. Avoid spilling or overfilling. Never refill a hot stove. If there is spillage, do NOT light the alcohol stove until the area has been thoroughly cleaned and any spill has evaporated – it is possible to start a fire if alcohol spilled near the stove and the stove is then lit.
  3. Butane, propane, and gasoline vapors are heavier than air. Because of this butane canisters should never be stored below deck and should not be left in the stove when not in use. When the boat is docked, butane canisters should be removed from the boat entirely. The propane stove on *Hiatus* or *Lion's Paw* should be turned off in this order: at the knob on the propane tank, at the LPG switch on the starboard cabin wall, and then at the knob on the stove. Ensure that all knobs and switches are in the off/closed position. Before introducing a spark in the galley of any of our cruisers, ensure that the cabin is well ventilated and free of gasoline vapors. Carbon Monoxide/Smoke detectors are installed on our cruisers. Ensure that the detectors are charged and working.



- E. SCOW teaches the “quick stop” method of crew overboard recovery, which has been shown in studies to be most effective. Each cruiser is equipped with a Lifesling. Skippers should be familiar with quick stop procedures and operation of the Lifesling. Instructions for the Lifesling are printed on the cover of the Lifesling case. A throw cushion (PFD Type IV) must be in the cockpit of a cruiser when in operation to comply with Coast Guard regulations and must be available for use in case of crew overboard. All cruisers have swim ladders on the transom.
- F. Each boat has a stowage plan in the logbook itemizing the equipment on the boat and its proper stowage location. Equipment is generally stored in the same areas on each boat. Skippers must ensure that all equipment, especially safety equipment, is stowed in the proper location before and after use and that it is in working order. If broken equipment is found that would affect the safety of the vessel, the boat should not be sailed and the maintenance director should be notified.
- G. A float plan must be filled out and left in the unlocked black box labeled FLOAT PLANS between the dock boxes at Rebecca and Hiatus. Blank float plan forms can be found in the log. Float plans must be removed and disposed at the end of each sail.
- H. Seacock valves on *Rebecca* should be closed at all times unless the associated sink or ice box will be used. The seacocks are ball valves and should be turned so handle is perpendicular to the drain hose to close and parallel to open. See *Rebecca's* pre- and post-sail checklist for seacock valve locations. *Lion's Paw2's* and *Hiatus's* sinks drain above the waterline, neither have seacocks.
- I. Skippers should check the weather before leaving the dock and should monitor the weather while sailing. For example, in the summer, thunderstorms can suddenly form. Skippers should be familiar with safe harbors.
- J. Fire Aboard A Vessel
1. Fires may be electrical such as from wiring or a battery (Type C), liquid such as gas or alcohol (Type B), or, less likely on a boat, paper/wood (Type A). SCOW's cruisers are equipped with Type A/B/C extinguishers that will be effective on any type of fire. Only Type A fires can be extinguished with water.
  2. The most effective fire-fighting technique is to avoid fire in the first place. This is why SCOW prohibits smoking, grills, or other open flames in the cockpit or cabin. In addition to the gas tanks, boats have wood fixtures and cloth cushions. The fiberglass itself is flammable. Burning fiberglass is extremely hot and gives off noxious fumes. Skippers should be alert for dangers such as a leaking fuel line, or frayed wires when they perform their pre-sailing check of the vessel. If detected, the boat must be taken out of service immediately and the Maintenance Director notified.
  3. If a fire occurs on a vessel, you must act quickly. Maintain focus on the safety of the people aboard rather than the vessel. Your first priority is the safety of the crew, who should immediately don PFDs and, if below, immediately go topside. If the fire is small and contained, you may be able to fight it. But, if you have the slightest doubt about whether you can contain the fire, the BoatUS Safety Foundation recommends that you focus instead on the safety of the people aboard. If you have any doubt about whether you can contain the fire, immediately give a Mayday with your situation and location and prepare to abandon the vessel. If you do fight the fire, have the crew continue preparations to abandon the vessel in case you are unsuccessful.

AN EXTINGUISHER WILL DISCHARGE FOR APPROXIMATELY **10 SECONDS** BEFORE EMPTY. DO NOT OVERESTIMATE YOUR ABILITY TO PUT OUT A FIRE.

It is critical to use an extinguisher correctly and to aim it at the BASE of the fire. To use a fire extinguisher, BoatUS recommends a mnemonic, **P-A-S-S**:



- P*ull the pin at the top of the cylinder
- A*im the nozzle at the base of the fire
- S*queeze or press the handle
- S*weep the contents from side to side at the base of the fire or use a series of short blasts aimed at the base until it goes out

### IV. Operating Procedures

These are general procedures for operating certain important equipment on our boats. The on-board operations manual contains the actual instruction manuals. The Pre-Sail and Post-Sail checklists on each boat list additional items that must be done before and after sailing.

#### A. Four-Stroke Engine Operation

SCOW's cruisers all are equipped with four-stroke engines, which use regular unleaded gas, not an oil/gas mixture. For issues not addressed below, see onboard operations manual. In particular, review the procedures for tilting the engines on *Hiatus* and *Lion's Paw2* which operate in similar manners but will not tilt if incorrectly aligned. If you are unable to move the motor, do not force anything. Consult the manual.

1. On *Rebecca*, check the drainage ports behind the gas tank to ensure they are clear.
2. The engines on all three cruisers have electrical starters. If the batteries have discharged, the starters will not work. In that case, the engines can be started with their manual pull starters. Set transmission to neutral before starting.
3. The engine on *Rebecca* does not have a manual choke. *Lion's Paw2* and *Hiatus* have manual chokes. The choke is opened to start the engine when cold, then adjusted when the engine has warmed up.
4. To start the engine, first tilt and/or lower the engine into the run position (varies on each boat). Then open the air vent on the gas tank completely, pump the bulb on the gas line two or three times until it is firm, make sure the engine is in neutral and the throttle is at the "start" setting. Make sure the kill-switch key is properly attached. On *Rebecca*, then push the start button. On *Hiatus* and *Lion's Paw2*, pull out the manual choke and then press the start button.
5. Check the oil pressure indicator light per instructions on the cruiser (varies on each boat): (1) *Rebecca*: green light on, (2) *Hiatus*: red light off, (3) *Lion's Paw2*: red light off. If the oil pressure is not registering, immediately turn off the engine, and consult the log book materials for the proper way to check the oil level and, if needed, add oil.
6. Allow the engine to idle for several minutes to ensure it is running properly before taking off from the dock. (On *Lion's Paw2* and *Hiatus*, adjust the manual choke when the engine has heated.) Make sure the engine is in low idle before engaging the forward or reverse gears or returning to neutral. When switching from forward to reverse, wait in neutral for 2 seconds. To stop the engine, throttle to idle, put the engine in neutral, and then hold in the kill-switch button until engine has completely stopped.
7. The engines are water-cooled. The "cavitation plate" on the engine must be underwater when the engine is running to allow the engine to draw cooling water. When you first start the motor, check to see that a small "stream" of water about the width of a pencil is coming out from below the engine housing and do so periodically thereafter. This shows that engine cooling water is flowing. The stream must be continuous as long as the motor runs. If several people are on the foredeck, the engine may lift out of the water high enough so that the cavitation plate will not be



underwater and therefore, will not draw in water to cool the motor. ***Even a few seconds without cooling water will damage the engine.***

8. When the engine is off and you are sailing, you must close the air vent on the tank to avoid gas spilling if the boat heels or rocks. The caps should be fully closed when the cruisers are docked or at anchor.
9. Filling the fuel tank and treating gas with ethanol treatment:
  - a) After using boat, the skipper shall not leave the fuel tank less than three-quarters full. The skipper is responsible for refilling the fuel tank when the boat is returned to the dock. Foul weather or a late return is not an excuse. If you cannot refill the tank when you return, you must see that it is refilled before the beginning of the next reservation slot. Many skippers bring a gallon or two of gas with them to the Marina so that they can “top off” the tank when they return; this is especially recommended if you believe you will be returning late.
  - b) ***Never fill a fuel tank onboard the boat.*** The tanks may be removed and taken to a gas station to be filled. Alternatively, the skipper may bring gas in an approved container to the marina. If this is done, the tank must be removed from the boat and the fueling done fully ashore in the parking lot. If refueling the boat at a gas dock during a cruise, the tank must be removed from the boat and filled ashore or on the gas pier. If refueling at a gas pier, the fire extinguisher shall be readily available.
  - c) Ethanol Treatment: Ethanol in gasoline attracts moisture, which causes corrosion of fuel lines, carburetors and injectors. SCOW uses a fuel treatment to prevent this. The treatment is kept in the dock box but the brand may vary. Add the amount directed on the label to the boat’s gas tank. Normally, this will be less than an ounce for every one gallon of gas **you add** to the tank. Note that the gas already in the tank will have been treated.

### B. Docking Procedures

1. Whether docking at the Marina or elsewhere, boats must be docked under engine power, except in emergencies or during training, tutoring, or checkouts.
2. At the Marina, boats must be docked in their correct slips. *Rebecca* and *Hiatus* are secured against the “T” end of G dock, with bows facing each other, approximately 6 feet apart. *Lion’s Paw2* is docked in a slip next to *Rebecca*. All boats are to be secured with fore and aft spring lines and bow and stern lines, and with fenders. Secure fenders only to the base of stanchions or to rail cleats, not lifelines, to avoid lifeline damage and difficulty opening lifeline gates. (Always tie fenders to the base of stanchions and not to the tops because if you push the tops of the stanchions, you cause leaks where the stanchions meet the deck.)
3. The dock lines have been adjusted and fixed to hold each boat in the correct position in its slip. Therefore, do not untie the ends of the dock lines attached to the cleats on the dock. For use, cleat and uncleat the ends of the lines from the cleats on the boats and leave the lines on the dock. SCOW has a specific technique to attach the docking lines to the boat, including which cleat, the path to the cleat and a proper cleat knot. The technique is shown in the logbook. If you arrive at the boat and it is not tied properly then make a note in the log and notify the Skipper Director.

### C. Displacement, Freeboard, Sail Area, Draft and Mast Height

1. Rebecca displaces approximately 4500 pounds, with approximately 1500 pounds of ballast and approximately 270 square feet of sail area. Hiatus and *Lion’s Paw2* displace approximately 4,200 pounds with approximately 1,050 pounds of ballast and a little less sail area.
  2. The cruisers have more freeboard (the distance from the deck to the waterline) than small boats. Freeboard acts like a sail when the wind is blowing. This means that the cruisers may be affected by wind conditions when docking.
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3. *Rebecca's* draft is 4 feet; it has a fixed keel with no centerboard.
4. *Hiatus* and *Lion's Paw2* have fixed wing-keel draft of 3'5". For a wing keel, if you happen to go aground, instead of shifting weight from port to starboard to help un-grounding, you should instead move weight fore and aft to assist in un-grounding the boat.
5. *Rebecca* has the tallest mast in our fleet and has been measured at 36.5 feet from the top of the mast to the waterline. The antenna is estimated to add another 1.5 feet. The masts on *Hiatus* and *Lion's Paw2* are slightly shorter.

### D. Marine Head

1. Portable heads with removable holding tanks meeting Federal regulations are installed on all three vessels. Instructions for operation are posted next to the head. In short, you detach the base and empty the waste from the bottom half. After reassembling the head, you refill the head with the enzyme product that breaks down waste and eliminates odors. It is poured *directly into the waste holding tank (the bottom half)*, not into the fresh water tank (in the top half). Use the amount shown on the label. The top half of the head is only filled with water.
2. Use only the single-ply toilet tissue on the boat, which is specially made for use with the portable heads. If possible, put used tissue in a trash bag instead of the head, which will make emptying the head easier. If the head was used during the sail, the skipper is responsible for emptying the holding tank. If the marina office is open and the pump-out station at D dock is operational, WSM management prefers that the skipper pump out the holding tank at the pump-out station (dock the boat in its own slip and go to the Marina office to arrange access to the pump-out station). If the office is closed or the pump-out station is not available, *e.g.*, because water on the docks is turned off for the winter season, the tank may be taken to a marina restroom and emptied. To empty, follow the instructions posted in the head, remove the holding tank and carry it to the pump out dock or restroom. If at the pump-out station, pump out the holding tank, fill with fresh water and pump the tank out again. If at the restroom, it will only be possible to empty the tank into a commode. Take a bucket of water to the restroom to use to rinse the tank. Reinstall the head per the posted instructions.

### E. Electrical System

1. SCOW cruiser engines have alternators that charge the batteries when the engine is running.
2. If running lights are inoperative or not bright enough to be seen at a safe distance at night because of a weak battery, do not use the boat at night until the battery has been charged or replaced and all running lights are working properly. Be sure that you are familiar with procedures for charging batteries or seek assistance from the Maintenance Director or others familiar with the process before attempting to charge batteries with a battery charger to ensure that the settings are correct for the type of battery on the boat.
3. *Rebecca's* DC panel is on the starboard side above quarter berth. *Rebecca* has two batteries and a "1, 2, 1 + 2" battery switch near the base of the companionway ladder, which allows either battery to be used as the "house" battery or the engine starting battery. **Do not change the battery switch position with engine running** – doing so may damage the engine's alternator diodes.
  - a) When starting or running engine: Switch the battery to position "1 + 2" to use and charge both batteries.
  - b) When under sail, at anchor or at a dock (engine not running): Switch to "1" on odd calendar days; "2" on even calendar days. Because the boats are not used daily, this ensures alternating use of the batteries as the "house" battery. Do not switch when engine is still running.



- c) When boat is not in use: Turn off all electrical panel switches, then turn battery switch to “OFF.”
4. The *Lion's Paw2* power system consists of two marine batteries wired in parallel. One battery starts the engine and the other is the “house” battery. However, there is no “1 + 2” switch as on *Rebecca*. Instead, when the red battery switch is “on,” the boat has a power management system that charges both batteries at once while also isolating the house and engine battery system. In the event you have a dead battery on one side, an indicator lamp will glow. In that case, turn the switch to the yellow mark to combine both batteries. The LED indicator will flash to show various conditions such as charging, which generally are not of concern. However, a triple flashing signals that one or both batteries have dropped below 9.5 volts.

*Lion's Paw2* has a 12-volt power outlet panel wired on the house battery. It has a 15-amp internal circuit breaker (which is also the “on” and “off” switch), a 12-volt power socket and two 2.1A USB power sockets for charging phones, GPS and so on. The panel also has a voltmeter that will display the status of the house battery in volts when the switch on the panel is turned on to power the panel. The 12-volt panel should be switched “on” only when needed. Make certain to turn it off after use.

5. *Hiatus* has two marine batteries wired in parallel and a power management system similar to *Lion's Paw2*. It is controlled by a panel on the bulkhead at the aft end of the quarterberth, and the two red switches on the panel should be left ON at all times. If the starting battery is dead, the yellow EMERGENCY PARALLEL switch can be turned to the “on” position to place the batteries in parallel for starting. Once started, turn the EMERGENCY PARALLEL switch to off.
- There is a white DC panel above and to right of the sink and a wooden 110v AC panel is below it. When leaving the boat, make sure all switches on the DC panel are off.
6. *Lion's Paw2* does not have a shore connection available to skippers. It is only for use by maintenance crews. *Rebecca* has no shore connection.
7. *Hiatus* has a shore power cord for AC power when docked. Under normal conditions, including routine docking in its assigned slip, skippers should **not** plug *Hiatus* into shore power.

**When using shore power on any boat, never connect or disconnect the plug on the boat when the shore power cord is “live.” When connecting to shore power, always plug the power cord first into the receptacle on the boat, then into the shore power on the dock. When disconnecting, do the reverse. First, disconnect the cord from the dock, then disconnect the cord from the boat.** Failure to do this can cause “arcing” on the plug and socket of the boat, which is a leading cause of fires. Also, this sequence means that individuals are never holding the live end of a shore power plug while standing near or in water.

Shore power uses a special cord with locking connectors. Carefully read the instructions below on their use.

*To connect Hiatus to Shore Power:*

- (1) Shut everything down (ensure all power switches on *Hiatus* are in the off position). Note that there are two panels of power switches on *Hiatus* – a plastic panel and a wooden panel below it. Also ensure that the power switch on the dock’s white pedestal is in the off position. Finally inspect the cord to ensure that there is no damage to it and that the plug ends are clean and do not evidence shorts or corrosion.
- (2) With the power off, connect power cord to the boat first and then connect power cord to outlet on the dock’s white pedestal (Note: When attaching the power cord to *Hiatus* in the starboard cubby hole, the cord is fit in and then twisted an eighth of a turn to lock into place,



the black retaining ring is then screwed on to ensure that the cord does not pull loose. If this cord pulls loose when power is going through it, it could lead to boat fires, so ensure your cord is securely attached. Next attach the cord to the power outlet on the dock. Wrap the cord once around the white pedestal before plugging it in.). Ensure that the cord will not dip into the water or become wedged between the boat and the dock.

- (3) Now, you may turn on the switch on the dock pedestal and then you may turn on the AC main switch on the wooden box on *Hiatus*. Once you have turned on the AC main switch on *Hiatus*, the boat has AC power.

### *To Disconnect Hiatus from Shore Power:*

- (1) Shut everything down. Turn the power switch on the dock to the off position. Then, ensure all power switches on *Hiatus* are in the off position. Note that there are two panels of power switches on *Hiatus* – a plastic panel and a wooden panel below it.
- (2) Disconnect the cord at the white pedestal on the dock.
- (3) In the starboard cockpit cubby, disconnect the cord from the boat by unscrewing the black retaining ring, rotate cord (eighth of a turn) to unlock and pull gently. If the cord cannot be removed gently, make sure the black retaining ring is completely loose and rotate the plug to find the position where it releases.
- (4) Coil and stow the power cord aboard *Hiatus* following the stowage list.

## F. Radio

1. All cruisers are equipped with marine radios. No license is needed to operate these radios. The radios also receive National Weather Service broadcasts. *Lion's Paw2* has a second handset that can be plugged in the starboard recessed coaming storage box in the cockpit.
2. As required by Coast Guard regulations, skippers should monitor Channel 16 unless they are monitoring another channel, for example, during a race. Do not transmit messages or engage in conversations on Channel 16. Instead, only hail another vessel on Channel 16. Then immediately direct the other vessel to switch to another channel to conduct your discussion. Normally, you tell the other vessel to switch to Channel 68.
3. To initiate a transmission, announce the name of the boat you are hailing three times, then the name of your boat, then say "over" to indicate that you are done transmitting – then release the talk button. You cannot hear a response if the transmit button is depressed. In general, keep messages short and concise.
4. Skippers must comply with the proper usage of "Mayday," "Pan Pan," and "Securite" hailing.

## G. Getting Underway Under Power

1. Go through each of the items on the Pre-Sail Checklist on the boat, including:
  - a) Check the tides and weather
  - b) Brief the crew on duties, emergency procedures, equipment, etc.
  - c) Check the prior skipper's log entry for issues and begin your log entry
  - d) Visually inspect the boat, pump the bilge if needed. On *Hiatus* and *Lion's Paw2* check the lazarettes for water and pump out if needed
  - e) Fill out a float plan and have non-SCOW members sign waiver
  - f) Ready PFD's and have throwable in cockpit
  - g) Check fuel level
  - h) Check sails and other equipment





2. Make the mainsail ready to hoist in case the motor fails. Also make certain that the anchor and rode are not fouled in case the motor fails and it is necessary to drop anchor.
3. Start the engine and allow it to warm to confirm it is running properly. For *Rebecca* and *Hiatus*, cast off the spring lines. Undo the stern line from the boat cleat and hold onto the stern line. Cast off the bow line. Push the bow away from the dock (crew will need to be slightly forward of amidships), making certain that the engine doesn't hit the dock. Have a boat hook ready above decks in case the boat needs an additional push from the dock or to fend off the boat in front if needed. Once the bow has cleared the other boat, place the motor into forward; apply modest throttle and toss the stern line onto the dock. The engine may be used in reverse to assist backing down the fairway far enough to clear the boat ahead.
4. For *Lion's Paw2*, the boat is backed stern-first out of its slip and fairway, past *Rebecca's* stern and into the channel. To do this, station a crewmember on the bow of the boat with a boat hook to fend off the dock or the boat in the adjacent slip. Cast off the spring lines. Have the crewmember on the bow uncleat and hold the bow line and either the skipper or a crewmember then uncleat and hold the stern line. Put the engine in reverse. As the boat begins to move out of the slip, the remaining lines are tossed to the dock. Back *Lion's Paw2's* stern down the fairway, watching that its bow clears the adjacent boat and the stern clears the dock and *Rebecca's* engine. Continue in reverse past *Rebecca's* stern and into the main channel. (Remember that when the boat is moving in reverse from the slip, moving the handle end of the tiller to the port side of the boat will cause the boat to torque in a counter-clockwise fashion, which is what you will want to get your stern backing down the fairway. Keep your engine in idle so that it is easy to fend off if needed, and easy to compensate if you make an error.) Once *Lion's Paw2* is in the main channel, the engine is put in neutral for two seconds then into forward.
5. All lines are left fixed to the dock and cast off from the boat. Leave the lines on the dock organized and arranged in a manner that they can be easily retrieved during docking.

### H. Docking

1. Before docking, advise your crew of your docking plan and what you want them to do. If there are crew that should do nothing, tell them to do nothing and tell them where to sit. Crew will tend to go to the side of the boat nearest the dock as you approach to "be helpful." This can alter the direction of the boat. As you approach the dock, check for departing boats by looking for masts moving down the adjacent fairways.
2. The sails should already be doused. You may need to adjust your speed depending on wind or currents. On one hand, it is better to be going more slowly, since it is easier to add speed than to slow a boat down. On the other hand, the ability to steer the boat diminishes as speed decreases. If the boat has no forward movement, there is no water moving over the rudder and, consequently, the boat cannot be steered at all. The "freeboard" of a boat may cause the wind to push it sideways and the skipper may need to increase the throttle speed to counteract this. The skipper should analyze all of these variables before attempting to dock, to select the correct speed and should monitor them during the docking to make needed adjustments. Note: One easy way to reduce speed on our cruisers is to smoothly wag the tiller back and forth several times.
3. As the bow reaches the mooring location on the dock, the boat should be close enough to allow the crew to retrieve the bow line and the bow spring line.
4. For *Rebecca* and *Hiatus*:
  - a) Approach the dock from the direction in which you plan to be facing when docked, at about a 45-degree angle and a low speed aiming for a point just a foot or two from the corner of the dock.



- b) Station crew at the bow or forward of amidships with boat hooks. Ask one crew member to call out the distances from the dock to the bow.
  - c) When the bow is approximately 3 feet from the dock, sharply turn the tiller so that the stern of the boat swings into the dock, bringing the boat parallel to the dock.
  - d) The crew may retrieve and secure the bow line and spring line. You might also find that a crew member can easily step from the boat to the dock and arrest the movement of the boat by gently holding onto the shrouds. Retrieve the stern and stern spring lines.
  - e) Do not plan to use the engine in reverse to slow the boat. While it may be necessary occasionally to do so to slow the boat, your docking plan should not assume that you can approach at too high a speed then use reverse.
  - f) Secure the boat so that crew can easily step from the cockpit to the dock (misguided crew members will often tie the bow lines too tight so that the cockpit is pulled away from the dock).
5. For *Lion's Paw2*:
- a) *Lion's Paw2* is turned into the fairway, then turned into the slip. Before turning into the fairway, check for departing boats by looking for masts moving down the fairway. Crew should be posted on the bow with a boathook to fend off the adjoining vessel, to fend off the dock if the approach is "hot," and to pick up lines. Wind or current may suggest stationing another crew amidships with a second boathook. Do not plan to use the engine in reverse to slow the boat; while it may be necessary occasionally to do so to slow the boat, your docking plan should not assume that you can approach at too high a speed then use reverse. A helpful strategy for docking *Lion's Paw2* is to have just enough forward momentum to enable water flow across the rudder and steering and to reduce speed as necessary by wagging the tiller. Keel boats turn on their keel, located about a meter back from the mast. Plan to have your port beam just barely pass by *Lion's Paw2's* dock slip's corner and then turn the boat smartly to port so that your crew members can step off and hand over dock lines.

### I. Headsails

The cruisers have different headsail configurations.

1. *Rebecca* Jib: *Rebecca* has a set of jibs with traditional "hanks" that are attached to the forestay.
2. *Hiatus* and *Lion's Paw2* Roller Furling Jib: *Hiatus* and *Lion's Paw2* are equipped with a roller furling/reefing system which allows the jib to be adjusted from a minimum of 0% (fully furled - heavy winds or docked) to a maximum of 135%. To unfurl the jib, luff up slightly off the wind and pull on the active sheet, while at the same time easing the grey furling line but maintaining some tension. (Always maintain tension on the furling line when taking out and putting away a roller furling jib so that the furling line does not tangle.) When at the desired sail position, cleat off the furling line, adjust the jib lead blocks on both sides, and tension the jib sheet appropriately as you fall off the wind. To furl the jib, luff up and ease the active sheet slightly, maintaining some sheet tension; pull the grey furling line until you reach the desired amount of sail. Cleat off the furling line. Adjust both jib sheet blocks and tension the jib sheet as you fall off the wind.

### J. Securing the Boat After Sailing

1. Go through the Post-Sail checklist, which can be found in the boat's log.
2. Properly stow the sails:
  - a) Main sails are flaked to boom, tied with sail ties, and the cover secured. Mainsheet is neatly coiled and tied to the boom.
  - b) On *Rebecca*, jib is flaked ashore and stowed in v-berth. Wet sails, wet sail bags and wet sheets should NOT be stowed in the v-berth; they will cause the cushions to mildew. Leave



- them on the cabin sole and put a note in the log that you left them in that condition because they were wet. If only the jib sheets are wet, leave them outside the bag to dry.
- c) On *Hiatus* and *Lion's Paw2*, the jibs are completely furled, roller furling line cleated, jib sheets pulled taut, wrapped once around winch then cleated.
  3. Lift the engine out of the water properly (varies by boat). If the engine is difficult to lift, do not force it. Check to see if the engine is still in gear and then consult the manual.
  4. Remove all food, trash and personal items.
  5. Clean the boat. Damp towel and broom clean the cabin. Scrub and rinse the deck and cockpit with a small amount of boat soap and water, followed by a hose rinse. Cleaning supplies are in each boat. If the anchor has been used, clean the anchor and chain. See that the ground tackle and rode have been stowed properly. Factor in time to clean up when you are determining when to head back to port.
  6. Clean the galley. Water on the boats is not potable but may be used for washing hands or dishes. Keep the sink drains clear of debris and food, which will clog the hoses. The water system on *Lion's Paw2* is de-activated.
  7. Check that all gear is stowed as shown on the stowage plan in the log. If you or your crew used the head, empty, clean and refill the head.
  8. Turn off VHF radio and all electrical panel switches, then, on *Rebecca*, turn battery switch to "off." No battery switch action is required on *Hiatus* or *Lion's Paw2*.
  9. Close the gas tank vent. If the gas tank is less than 3/4 full, add gas and ethanol treatment.
  10. Leave all lines on the dock neatly coiled and properly secured.
  11. All lines on the boat are run properly and none is in the water or lying loose on the deck.
  12. Make the proper entries in the log and sign the log.
  13. Secure all hatches and lock the companionway hatch (with the numbers in the combination lock right-side up). Spin the wheels on the companionway lock so the combination is scrambled. When leaving the dock, be sure the gate is closed and locked behind you.
  14. Even if you have an experienced crew, the skipper is responsible for checking the crew's work and ensuring that the all equipment is properly stowed, the dock lines are properly cleated, the boat is clean, and is locked.

## V. Grounding

Skippers should be careful of running aground. If in doubt, seek "local knowledge" from other skippers. Charts are often out of date and unreliable for shoaling conditions:

1. The Potomac River shoals change from season to season, particularly after flooding or high water.
  2. Channel markers sometimes move, or are lost, during winter particularly if there has been heavy ice. (The red "WR 6" buoy marking the sunken barge in our channel is often lost over the winter).
  3. Areas outside of channel markers become shallow very quickly, particularly near the #7, 7A, and 9 buoys.
  4. Areas near the Naval Research Lab pier and near the Alexandria waterfront may have submerged pilings. Areas outside of the #2 mark near the Wilson Bridge were historically used to dump concrete and other materials.
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5. The area between the #6 buoy and the Blue Plains plant, south of the white “Danger” mark, is known as “Dave’s Cradle,” with 20 – 30 submerged pilings 1’ to 3’ below the surface at low tide. A chart is available at [[http://discsailing.org/DISC\\_Docs/Daves\\_cradle.pdf](http://discsailing.org/DISC_Docs/Daves_cradle.pdf)] on the Daingerfield Island Sailing Club webpage.

If you run aground, take one or more of the following actions, depending on your situation. For example, groundings often occur at an angle to the shoal if you try to hold a tack too long in a narrow channel and skirt the edge. This will affect where your deep water is.

1. React quickly to avoid grounding. If you feel yourself grounding at an angle to a shoal (such as along the edge of a channel), as soon as you sense the boat slowing but before you completely stop, try to immediately tack to use any remaining momentum to turn the bow of the boat towards deep water. You may then be able to turn the boat further and get back underway by sheeting in hard or backing-winding the jib.
2. If you are grounded, avoid being driven further aground. Luff the sails or stop the motor. When headed downwind, if needed, drop the sails or put out the anchor to the stern. If you are being blown further into the shoal, drop anchor.
3. Check for damage to the boat. Don PFDs. Before taking any action to get off, brief the crew on what you plan to do and what they should do.
4. Determine where the deep water is. Immediately note the path that got you into trouble – that may be the best path out. If you go aground at an angle to a shoal, shallow water may be on one side, deep water on the other side and not behind you. Use a boat hook to “sound” the bottom around the boat.
5. Evaluate the conditions (wind, current and tide) and your options. If at low tide, the rising tide may carry you off. If you are in an area with other traffic, a large wake may lift you.
6. If stuck in mud, rock the boat to break the suction holding the keel in place and to enlarge the “groove” in the mud to free the keel. On *Rebecca*, shift weight from port to starboard. On *Hiatus* and *Lion’s Paw2* due to the wing keel, move weight fore and aft.
7. If stuck on rocks, swing the boom out over the side with crew weight to heel the boat. However, on a rocky bottom, the skipper should consider potential damage to the vessel before taking any action and, if such danger exists, call for a tow.
8. Try to pivot the boat to head toward deep water, using the jib or main or possibly a boat hook, (on *Rebecca*, try “sculling” to turn the boat towards deeper water) then try to sail out.
9. With the help of another boat, try kedging. Pass the anchor to the assisting boat. Have that boat drop the anchor in deep water at least several boat lengths away (i.e., as much scope as possible). Use the anchor line to pull the boat to deeper water. You may need to use a winch. Some skippers have kedged by throwing the anchor if no other vessels were around.
10. **Using the motor when aground risks stirring up silt which will be sucked into the raw-water intake of the engine cooling system, seriously damaging the engine.** You should use the engine **only** if there is sufficient water below the engine to avoid stirring up silt. At the first sign that the bottom is being disturbed, you must shut off the engine.
  - If you can back into deeper water without kicking up silt, put the motor in slow reverse, and steer the stern toward deep water while everyone else rocks or heels the boat.
  - If you can pivot the boat to point to deeper water without kicking up silt, try using the motor to pivot. Because *Hiatus* and *Lion’s Paw2* have a wing keel, a complete turn may not be possible. If you are able to pivot adequately, you may be able to motor out or use



sails to further turn and sail out. Note, however, that if you are at an angle to the shoal, as the bow pivots toward deep water, the stern and engine may move into the shoaled area, risking damage to the engine if it continues to run.

11. If, after assessing the situation, the skipper determines that getting the boat off the grounding is not feasible, or would potentially create risk to the crew or vessel, the skipper should call for tow assistance.

### VI. Maintenance and Damage to Vessels

- A. All Cruiser Skippers are expected to assist in maintaining the fleet by using the boats carefully and by participating in monthly Fleet Days or semi-annual Maintenance Days.
- B. If a skipper observes a maintenance problem with the boats, or if a boat is damaged while you are the skipper, you should take the appropriate action as noted below. If equipment is lost or broken while a skipper is using the boat, the responsible member ideally would assist the maintenance director with the needed repairs. Note that the Club generally pays for replacement equipment unless the damage is caused by deliberate misuse or misconduct, in which case the skipper may be held responsible. Note that many items are available in the WSM chandlery.
- C. If the previous skipper left the boat in a significantly poor condition that suggests a failure to follow SCOW policies, notify the Skipper Director ([skipper@scow.org](mailto:skipper@scow.org)). Examples would be: gas tank left empty, sails not stowed properly, improper dock line attachment, boat left unlocked, etc. Describe the issues in the email so that the Skipper Director can address the problem with the offending skipper.
- D. If there is an issue requiring minor repair or replacement of equipment that does not require the boat to be taken out of service, note it in the log book so the next skipper is aware of it and in the "TO DO" list in the log book so that it can be addressed during the next maintenance day. Also advise the bosun for the boat ([Hiatus@scow.org](mailto:Hiatus@scow.org), [Rebecca@scow.org](mailto:Rebecca@scow.org), or [Lionspaw@scow.org](mailto:Lionspaw@scow.org)) and the Cruiser Maintenance Director ([cruisermaint@scow.org](mailto:cruisermaint@scow.org)). If the repair is a very minor item (such as replacing batteries in a flashlight) fix it yourself if possible before leaving the vessel. While you are encouraged to assist with larger repairs, do not attempt the repairs yourself unless authorized by the bosun or Cruiser Maintenance Director. The Club has to make certain that any expenditures are properly authorized and that the repairs are done correctly. The Club may have some repairs done by professionals.
- E. If there is an issue requiring the boat to be taken out of service, note it in the log and advise the bosun for the boat ([Hiatus@scow.org](mailto:Hiatus@scow.org), [Rebecca@scow.org](mailto:Rebecca@scow.org), or [Lionspaw@scow.org](mailto:Lionspaw@scow.org)) and the Cruiser Maintenance Director ([cruisermaint@scow.org](mailto:cruisermaint@scow.org)). If possible, access the reservation system to identify the next skipper who has the boat reserved and notify them.