

# CONGRATULATIONS

That is what everyone says, whether you have purchased a new pencil sharpener or a new 22' sailboat. We do not feel we have to say: "Congratulations for being so smart and buying our product." Our buyers are bright. We want to congratulate ourselves for having been able to attract you to our RHODES 22. We want to thank you for the confidence you have shown in the Rhodes and in our small, pushing 50 years old, company. We promise not to disappoint you or desert you.

Stan and Rose Spitzer, owners

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## TIPS ON RIGGING AND SAILING YOUR NEW RHODES 22

You might be thinking, "Here I am, with all these wires and bolts and aluminum tubes and Dacron and fiberglass, and I am not even in the boat business". What to do? First: Don't panic. It is very easy to turn all these parts into a glorious sailboat. Second: Don't call in an expert. The Rhodes is different and experts, unless they are broad-minded enough to glance through these guidelines, could prove useless, or worse: cause damage. You will be your own expert by following these simple, logical and common sense steps, that you could have written yourself, had you had the time.

When delivery and preparation is paid for, most boats come with a pre-rigged mast, pre-assembled furling sails and, a pre-ordained driver to join hands with you in setting up and launching your boat. When boats are picked up at the plant, the delivery and preparation fee is saved, but the same service is given.

So why the instruction sheet? First, there are occasional weather related, or buyer initiated, or other reasonable causes for having a boat picked up at the plant or dropped off on delivery, unopened. And second, if and when you ever sell your Rhodes to a stranger, instead of back to the company, it becomes your responsibility, as the seller, to take care of *your* customer.

### TOOLS REQUIRED:

Actually, your Rhodes can be set up without any tools. But you might find it convenient to have a screw driver and pliers handy for cotter pins and stubborn nuts, and maybe a drill if you want to install that wind vane on the mast before raising. You could also consider bringing cleaning materials with you so you can spiffy up the hull before you launch. The deck is easy to do after you are in the water, but not so the sides. See section on "*Maintenance*".

## UNPACKING:

Use the stern ladder for easy boarding. Undo the lines, tape, ties or shock cords that are holding the mast to the boat: The line holding the mast to the bow pulpit\*. The line holding the mast to the stem rail.\*\* Safety lines (to bow cleat and/or the mast step). Stabilizing lines from spreader ends to deck. If your genoa sail is mounted on its furling tube, do not undo any tie that keeps the sail from unraveling. If your furling system extends beyond the bottom of the mast, undo any packing connections holding the genoa furling system against the mast. If your furling system does not protrude beyond the mast bottom, do not undo it from its mast bracket before the mast is raised. All other ties holding the genoa furling system to the mast **should** be undone.

\*On newer style bow pulpits the mast is held on the pulpit by a neat pin release system.

\*\*With the mast hoist option, the top end of the mast rides untied on the stern rail carrier roller.

Look in the starboard cockpit coaming compartment. On the UPPER shelf you should find the cabin and lazaret keys. And maybe some additional hardware like pins and mast bolt and perhaps the winch handle or deck vent cap. If not, look in the port compartment since some of our workers do not know their port from their starboard. Look in the Lazaret. No telling what you will find there; maybe a napping worker. (If we seem a little imprecise it is because different packers and checkers have their own styles but it will all be there — probably.)

Do not peek inside the cabin before you raise the mast because this is hard to do with the standard packing and, although easy to do with the mast hoist packing, the sliding hatch must be in the closed position when using the hoist option. The cabin is beautiful. You will be going below in a few minutes, after the mast has been raised, to get the traveler bar from the port shelf along the "V" berth (or maybe off the carpeted cabin floor) and to retrieve lines and sheets and other surprises from the giant slide out drawer under the entrance step.

## PREPARATIONS FOR RAISING THE MAST:

Please Note: These instructions are for raising the mast manually from the bow deck where the top of the mast moves aft. When using a mast hoist, follow the mast hoist instruction booklet.

It is nice to have a helper although the following steps can be done single handed:

Place the 3/8" X 4" mast bolt and wing nut next to the mast step. Lay an empty sail bag over the bow pulpit to protect the metal and to reduce friction. Un-bundle the stays and throw the ends overboard so they will not hang up on deck parts when the mast is moved forward. Tip: feed the two upper shrouds through the bow pulpit legs before they turn to dangle overboard so you won't have to go overboard to fetch them in a few minutes from now.

Take a time-out-minute and look over the mast, boom and genoa furling bundle. All lines connecting this bundle to the boat should now be off Other than the boom goose neck and topping lift line connection to the boom, all other ties between the boom and mast that can't be reached once the mast has been raised, should be removed. Other than the jib stay connection of the furling tube to the top of the mast and the pin holding the bottom drum end of the genoa furling system to the mast (if you have the shorter GB Furler), all other ties between the genoa furling system and the mast should be removed. What you are saying to yourself is, "Are there any ties between the boom and mast, between the genoa furling system and mast and to stays and the mast that I cannot reach to remove after the mast is up?" If you get a "No", go to the cockpit . Good idea: Make sure the factory has already inserted the pop top slider into the mast sail track and that it is snapped into its raised position.

Push the mast out over the bow pulpit as far as you comfortably can. Go to the bow deck and continue moving the mast out over the bow pulpit until the hole in the mast bottom lines up with the slot in the mast step. Because of the seesaw effect of the mast on the bow pulpit fulcrum you will have to keep a light downward pressure on the mast as you guide the hinge pivot pin through its 4 holes. (You may have to rotate or slightly shift the angle of the mast to make all 4 holes align for easy insertion of the mast bolt pin.) Put on the wing nut so that it falls short of touching the mast step side. You want the pin to be loose enough to freely slide in the mast step slot. With mast secured to its hinge step and at rest on the bow pulpit, you will be freed to connect those stays that will allow the mast to be manually raised from the bow deck. Check electrical wiring coming from the mast to be sure none will not be cut by the bottom of the mast as the mast is raised.

This is the first mast raising and you do not know where the turnbuckle adjustments should be set, so open all 6 shroud turnbuckles allowing about 'A" of stud thread to show in each turnbuckle barrel. Four shrouds get connected to the deck before raising the mast: The two forward lowers to keep the mast from continuing moving aft after the mast is perpendicular and the two upper shrouds to keep the mast from falling sideways. The turnbuckle ends of the two forward lower shrouds connect to the forward chain plates on the cabin roof. These chain plates are forward of the mast pivot point. The two upper shrouds, coming past the ends of the spreaders, connect to the two chain plates on the gunnels. These chain plates are in line with the mast pivot point. The aft lower shrouds cannot be connected to their chain plates aft of the mast pivot point before the mast is raised because they will not reach.

Having to read this makes it seem more complicated than it is. It really is just straight forward common sense and you will manage it all very quickly — the second time around: Untie the mast, move it forward so you can insert the mast bolt through the mast step, connect the two forward and two upper shrouds. You are now ready for help; psychiatric or someone with brawn instead of brain.

Before raising the mast, run through this quick check list: Is the pop top slider in the mast track? (This pop top slider can only be inserted via the bottom opening of the mast and who would want to lower the mast because they forgot this key part?). Are the four connected

turnbuckles pointing toward the bow so they will pivot freely as the mast is lifted? (If they face aft or outward, they may bend as the shrouds become taut, and this is not covered by your warranty.) Check the remaining stays. (They should be draped over the boat or taped to the mast in such a way as to not catch on the trailer or boat hardware while raising the mast. This reminds me of another good point to make: if anything does not go easily, stop and find the good reason.) Look to see that there are no remaining tapes or lines around the mast that you will not be able to reach once the mast is up. And, finally, before you start to raise the mast, check to see that you are not straddling any of the connected stays that could come up and give you such a pain.

### RAISING THE MAST:

Some owners say they can do this by themselves. I am not one of them. If I am not using my push button electric mast hoist, at this point I look around the ramp for a volunteer. I must backtrack here: If you have a standard mast and are raising the mast without the boom and sails, it can be done single handed. Most buyers do, however, take the IMF and must raise mast, boom, jib and main sail and furling hardware, all in one action. This is quite a load. So many of our ingenious owners rig up their own mast raising system — or, spend a lot of money on our wonderful single handed mast hoist system. Here we are going to do it the hard way; no mast hoist system.

It only takes two of me, six seconds to raise the mast. With two people on the bow deck, the mast is rapidly lifted up so you can go under it and walk it up the rest of the way. Trick: don't stop half way up for a conversation. Once up, one mast raiser can hold the mast up with one finger while the other raiser connects the two aft lower shrouds to their aft cabin top chain plates. At this point you can thank your helper and go back to the single handed mode of operation to complete your rigging.

If you are by yourself we find it best to follow these steps:

Undo the furling jib tube bottom from the mast bracket and walk it to the bow. If you rest the furling tube on the deck you may kink the jib stay protruding from the bottom of the tube. Avoid this. This stay has a fork end that goes over the bow chain plate and is secured with a clevis and cotter pin (or a fast pin, if you trailer a lot).

1. On pre-rigged IMF masts the boom is packed alongside the mast with its goose neck connected to the boom slider riding in the mast slot. One end of the topping lift line is tied to the inner rotating tang at the outer end of the boom. The other end of the topping lift line is on a cleat on the side of the mast. Free this end of the topping lift line and lower the boom so it is horizontal. Temporarily re-cleat the topping lift line and feed the end of this line through the stand up block just aft of the port aft lower cabin top chain plate and then back to the small cam cleat on the port, aft end of the cabin top. Again, un-cleat the topping lift line from the mast cleat and use the cabin top cam cleat to keep the boom horizontal. Check it out: The topping lift should be running from the tang at the end of the boom, up to the top of the mast, through two sheaves atop

the mast, down passing the aft side of the port spreaders to the cabin top stand up block and to its terminal cam cleat atop the port aft cabin top.

2. If your boat is factory rigged, the double back stays are connected to the top of the mast and have adjusters at their lower ends. Untwist these two stays so that each runs to its appropriate transom corner chain plate. Fasten the bottom hole in each adjuster to the top hole in its chain plate with clevis or fast pins. (Have the open side of the adjusters face inward just for the aesthetics of it.) Take all slack out of the back stays by equally lowering the "eye" ends of the stays to as low a hole as they can go in at the top ends of their adjusters, keeping the holes' positioning difference to no more than one.

#### TUNING THE MAST:

The objection to IMF masts is that they sing when winds pass their slot at a right angle. Tuning the mast does not improve this singing nor is tuning a critical operation and can be done single handed. What you want is a perpendicular mast, a straight mast and a non-sagging jib stay. This will give you a great performing boat that you may be able to tune even further for a greater performing boat, but then you would be going beyond the ambitions of this booklet.

Take the 5' long traveler tube from its hiding place in the cabin and insert its ends into the cups on each back stay. You want the orientation of the traveler bar into the cup on each back stay to be such that the lines coming out the side near each end of the traveler bar are facing the bow so that the fiddle block, riding on the traveler bar car, will be facing forward so its cam cleat is in the operable direction. (You can do that.) Line up the hole in each cup with the hole at each end of the traveler bar and put in a fast pin.

We have made the next step idiot proof. Not You. We refer to our pre-rigger. One back stay has a block attached to it while the other back stay has a block with a becket attached to it. (a metal loop on the bottom of the block to attach a line to). Since the back stay can be attached to the top of the mast so that the block with the becket can end up on either the port or starboard side and, since we would not want you to have to lower the mast on our account, the boat comes with a rapid tension adjuster line cleat on both port and starboard transom corners and only one will be used.

Find the backstay tension adjuster line (1/4" X 13' — look in the big drawer under the entrance seat) and tie one end to the becket on the block attached to one of the back stays. (A bowline knot will do. We use this knot because it is easy to take apart and because it is the only knot we know.) Run this line across and up through the block on the other back stay, then across to and down through the block with the becket on the first back stay and down and to the cleat on the transom corner. Make this line good and hand tight. This draws the back stays together, which helps secure the traveler bar and, at the same time, makes the jib stay the way it should be; taut and unbending.

One pull on a little line and you have tuned two back stays and one jib stay. Now tackle the two upper shrouds. Hold the stay wire in one hand and turn the turnbuckle barrel to take up slack. You are looking for a perpendicular mast. Shooting for an equal amount of showing thread in the port and starboard upper shroud turnbuckles is a good start. Another indication is the space on either side of the mast in the mast tabernacle. Hand tighten the turnbuckles. Do not use tools. A Naval Academy son of one owner, adjusted dad's stays with a pliers and screw driver until the cabin top changed shape. Remember, beware of experts. Use your own common sense. The stays are there to keep the mast up, not drive it into the cabin top. When wind hits the sails and the mast starts to move, the stays will automatically become as tight as necessary to take the boat with them.

All that remains are the four lower shrouds. Hand tighten their turnbuckles and take out all slack to give you a straight mast port to starboard and bow to stern. The easy way to check the quality of your work is to place your head close to the cabin top deck in front of the mast. You will note there is a groove extruded into the front of the mast and as you sight up this line you will readily see if you forced a bend or hook in the mast. Thoughtful common sense will tell you which stays to tighten or back off to remove any curves or leaning. Sighting up the mast from the side will also be of help. If you have an IMF main you particularly do not want a bent mast since that would work against the ease of the rotation of the furling tube inside the mast cavity.

Once you are satisfied with your mast tune-up job, lock it in with cotter rings through the holes at the ends of the turnbuckle studs or with food ties or tape around the barrels — ask the Rhodies on [Rhodes22-list\(&,rhodes22.org](mailto:Rhodes22-list@rhodes22.org). They are full of clever ideas. Stays are twisted wires and have a tendency to want to untwist. Boats at moorings are constantly in motion and this continually varies the pressure on the stays providing them with the opportunity to back out of their turnbuckle barrels. Pinning, wiring or taping the turnbuckles will discourage this. True, a Rhodes can afford to have as many as 6 stays come apart without losing its mast, but locking turnbuckles is a good precaution. —one not necessary if you trail since you would be checking your turnbuckles at each launching..

There is one pin adjustment you probably will not have to make. If the performance of your boat leads you to believe that changing the rake of the mast is needed to give you the helm feel you want, there is an adjuster at the top of the jib stay that will let you angle the mast aft or forward. (Shortening the jib stay reduces weather helm and visa-versa.).Of course this means lowering the mast. The good news is that once you have made the basic adjustments to the upper jib stay adjuster and to the two lower back stay adjusters, you never have to do this again.

## CONNECTING AND OPERATING THE POP TOP

To proceed in more comfort, let's raise the pop top now. Your mast has two "sliders", the boom slider and the pop top slider. The boom slider connects the boom to the mast plus controls the desired sailing height of the IMF main sail. It has a spring loaded pin and at this juncture should be locked into its highest position on the mast. The pop top slider also has a

spring loaded pin and should be found locked into its highest position on the mast just below the boom slider. Pull back on the ring on the starboard side of the pop top slider and the slider unit will lower to the base of the mast. (You do not have to hold the pin out once you have cleared its locking hole in the mast.)

There is a fitting on the front of the pop top that connects with the fitting on the, pop top slider There is enough play in the pop top assembly to allow the aligning of the holes in the pop top's front hardware with the holes in the bracket on the pop top slider so you can insert the supplied bolt and lock nut. The lock nut should only be hand tightened so that the nut will not fall off but can readily be removed without the use of tools, because of this cardinal rule: **THE POP TOP MUST BE DISCONNECTED FROM THE POP TOP SLIDER BEFORE A MAST IS RAISED OR LOWERED.** Confucius says you cannot pivot around two points simultaneously. If you forget, you will damage the pop top or the mast or both; not beyond repair of the boat but probably beyond repair of the captain's esteem. And not covered by any guarantee since we told you not to do this. And further:

An owner let an expert break his pop top. The expert insisted the top goes up by raising the mast end first. Read my words. The Rhodes pop top is easier to raise than other designs since only half the weight is lifted at a time. But it must be done in the proper sequence: Slide the sliding hatch as far forward as it can go. Stand in the cabin on the entrance step facing the bow. If you have a late model Rhodes place both hands on the stainless steel bar in front of you (the inverted U shaped tubing that is the upper section of the aft pop top arms assembly) and raise this bar until you hear a click. (The ends of this inverted U bar ride in two lower tubes and automatically locks in place when the top is lifted to its full height). If you hear one click you get an A since you raised the top evenly and both locking pins engaged in their respective lower legs holes simultaneously. If you hear two clicks with a fraction of a second delay between them, you get a B plus. The point is you do not want to raise the top lopsidedly and put a bend in the arms. You can test to see if you have fully locked the aft end of the pop top by pulling down on the cross bar. The pop top is now at an angle leaning forward. Step further into the cabin and put both hands under the edge of the pop top and raise it up the mast until the pop top slider clicks into its mast locking hole. To verify mission accomplished, visually check to see that the pull ring on the end of the pop top slider pin is now all the way up against the plastic slider or pull down on the pop top to insure that it is indeed locked in its upper position.

If you have an older model Rhodes, life is a bit more complicated. After sliding the sliding hatch all the way forward, place only one hand on the cross bar and use the other hand to pull out the pin on one of the lower pop top arm legs and raise that side of the pop top up just slightly so the locking pin does not re-engage. . Then put the other hand on the cross bar and use the newly freed hand to pull out the locking pin on the opposite lower pop top arm. The rest is as above.

**Lowering the pop top** must also be done in the proper sequence:

Slide the sliding hatch as far forward as it can go. Step down into the cabin so that you are in a comfortable position to support the front end of the pop top with one hand and use the other hand to pull the pop top slider pin. Until you are at home with this step look at the pins to make sure you are pulling the correct one. Releasing the pop top slider from its mast locking hole suddenly increases the weight on your hand so add your second hand to help gently lower the front end of the pop top assembly back to the cabin top. Move back to the cabin entrance step and, facing forward, place one hand on the pop top cross bar and use the free hand to pull a pin on one of the pop top lower legs. Allow this side of the pop top to lower just slightly so that the pin will not re-engage and reverse the job of your hands so you can release the locking pin on the opposite lower pop top arm. This will suddenly increase the weight on your hand that is supporting the cross bar so have the free hand join in to lower the aft end of the pop top assembly gently to its lowered position.

If you are closing up for the day, insert the cabin door into its cabin tracks and bring the sliding hatch back over the top of the door as far as the sliding hatch will travel. If you want to lock up at this point, push down on the lock on the starboard side of the sliding hatch until it clicks locked. (Your key is not used to lock this lock.) This will make it impossible to slide the hatch forward which in turn will make it impossible to lift the cabin door out of its track. If someone is really motivated (like yourself if you lost your key) to get into your boat, they could figure out that by lifting the aft end of the pop top assembly they will be able to fold down the top half of the cabin door and then lift it out of its track and squeeze into the cabin. If you keep your boat in a high crime neighborhood or amongst boat owners who can't be trusted, there is a cleat on the front edge of the centerboard cowling that supports the entrance step, that will allow you to secure a line to the pop top cross bar (that you have been using to raise and lower the pop top). With this cross bar secured so it can not rise, the aft end of the pop top assembly cannot be raised and therefore the door cannot be taken out and therefore the culprits will have a much more difficult time getting into your boat — as you will also, if no key.

#### GENOA AND IMF (Sally Main Sail) FURLING LINES

Pre-rigged boats come with the Sally Mainsail furling line already installed through its boom path to its cleats. The jib furling line needs your one time attention (unless you are a trailer sailor). It most likely already has one end attached to the jibe furling drum. Undo any packing and feed the free end through the deck block a short distance aft of the drum then up to the fairlead on the starboard front side of the cabin trunk, then through the one or two additional fair leads that guide it outside the cabin top hand rails and inside the lower shrouds on its way to its small cam cleat on the starboard aft side of the cabin trunk where you will take up all line slack.

#### SETTING THE JIB SHEETS

A no brainer: Take the 65' X 3/8" line from the parts drawer, hold its two ends side by side and locate the line's midpoint. Insert the folded midpoint of the line through the large genoa

grommet so that it forms a loop on the other side of the grommet. Feed and pull the two ends of the line through this loop so that you end up with two equal legs. Run one leg outside all the starboard stays and the other leg outside all the port stay with each then going through its respective genoa car and then once clockwise around their respective winch and then locked into their respective clam cleat.

### SETTING THE MAIN SHEET

Just in case your boat did not come with its main sheet assembly ready to go: Attach the single block (it has a becket on its bottom and you now know what a becket is) to the aft tang at the end of the boom. Attach the fiddle block (it has a cam cleat on its bow facing side) to the car that is on the traveler bar. Take the second 3/8" line (it is 35' long) from your supplies and begin its journey with a bowline knot connection to the becket on the boom block. Then run it down to the upper sheave of the fiddle block entering from the aft side. (Tip: hold the fiddle block up vertically from its limp position on the traveler bar car so you can see things more clearly.) The main sheet then heads back up to the boom block, passing through its sheave entering from the bow side, then back down to the fiddle block's lower large sheave, entering from the aft side and exiting through the cam cleat. Take up the slack and you should have three parallel lines between the boom block and the fiddle block with the boom pulled in and at rest over the center of the cockpit.

### TESTING THE SAILS JIB SAIL:

Note wind direction and decide which one of the two jib sheets will keep the sail clear of the three mast shrouds when you make your test. Free the other jib sheet from its coaming compartment (where you may have stored its end since neatness counts), from its cam cleat, from all turns on its winch and from any crew feet or bottoms. The point is that you do not want any drag whatsoever from this not-in-play sheet as you unfurl the genoa. With the in-play sheet in one hand, use the other hand to release the black furling line from its cam cleat and hold onto it so that you can maintain a minimum pressure to insure that this furling line will more neatly warp on its furling drum. Start your test by pulling on the in-play jib sheet. The jib sail will begin unfurling, the furling line will begin furling and, if you are on a trailer, the trailer may begin rolling. Hopefully it is calm enough to allow you to take out the entire sail because part of the purpose of this test is to see if you run out of furling line. If you do, pull on the furling line until the sail is fully furled and then check to see if there are turns of furling line still left on the drum. If there are, figure out how to take out these excess turns and test again to see if you now have enough furling line so that it does not leave its cleat when the sail is fully deployed. If this does not solve the shortage, you were short changed and we will have to send you a longer line. A second purpose of the test is to see that the genoa does not stop short of fully wrapping up on its furling tube. If the test shows this problem, there were not enough initial wraps of the furling line on its drum. The easier way to fix this is, with the sail furled as far as it can, pull the two jib sheets from their genoa cars, coil them and wrap them and the sail around the furling tube until the sail is fully wrapped; reset the jib sheets and test again. The third part of this test is to see that the system works easily. If it does not, make sure that the sail has been allowed to pivot into the

wind so that you are not pulling against wind pressure and that neither sheet is offering friction by being tucked in a coaming compartment or in its clam cleat or has any wraps on a winch, before calling for help.

More on genoa handling later. However, at the risk of sounding grouchy, my experience with flustered skippers handling the jib makes me emphasize that: a) The furling line is not used for coming about. It is only used to set the size of the genoa wanted. In most cases, once set, it is never touched again until it is time to put the sail away. b) You cannot have both jib sheets in play at the same time. One must be completely free of any sort of drag. c) Easy furling, of any size genoa, is best done with the sheet released and the sail allowed to orient itself completely in line with the wind.

## THE SALLY SAIL MAIN

These days most Rhodes come with IMF so if you have a conventional main sail, we are going to let you figure it out on your own. If your boat has the IMF system you may be wondering where Sally Sail came from. We are not sure about Genoa. We think it had something to do with Genoa, Italy. But we do know where "Sally" came from. We made it up. Webster's says: "bursting forth, witty, imaginative, off the beaten (sail) track". All appropriate.

Three lines and three hardware elements control this sail. The outhaul line (generally blue) is attached to the sail (via a car that rides on the boom) and comes back to the top end of the boom where it turns down through a hole in the boom and comes out the bottom side of the boom where it passes through a vertical cam cleat attached to the boom bottom. This provides continuous locking in of sail size so that should you lose control during this act, the line will not get away from you. You can keep the space between the sail and boom to a minimum if you push up on the boom while pulling down on the outhaul line. The second line (generally black) lets you furl the sail back into the mast. The third hardware element is a series of small cleats on the underside of the boom that lets you store the slack of either the blue outhaul line or the black furling line so they are not in your way.

While genoa and main sail furling mechanisms are essentially the same (one line pulls the sail out while the other wraps around its sail's furling tube - then the one around the tube pulls the sail in when the other is released), the technique in handling the lines is different. When unfurling the genoa it is best to keep a light pressure on the black furling line so it wraps neatly on its drum and when furling the genoa it is best to keep a light pressure on the genoa sheet so it wraps neatly on its furling tube. However, when unfurling the main sail we find it best to just toss the black furling line away and pull the outhaul line. And when furling the main, to toss the blue line aside and pull the furling line. Tip: Pull the black furling line back (parallel to the boom), **not** down at a right angle to the boom.

The third line, integral to the IMF system, is the topping lift. The topping lift, as you know from rigging the boat, supports the boom at its aft end. If you furled the main sail and had no topping lift, the boom would fall on your head. However, if you left the topping lift

supporting the boom while under sail, the main sheet would not control the sail since it would be pulling against the topping lift. Therefore, once the main sail is deployed, the topping lift should be released from its port cabin top cleat and allowed considerable slack before you re-cleat it. But wait. There is more. At some point a partially furled main sail will not sufficiently support the boom. So, when and whether you use the topping lift or slacken it completely, depends: Full main, slacken it. Partially reefed main, set the topping lift for the shape wanted. Putting away main, use the topping lift to support the boom so you don't get a headache. But wait, there's even more. There are times you can use the topping lift, with the main sail fully out, for sail shape you could get no other way.

A few closing Tips: a) The IMF main sail is designed to wrap around a specially extruded tube in only one direction. This direction favors it coming out of the mast slot when the boom is slightly starboard of the boat's center. Just as a conventional sail is raised and lowered with the boat into the wind, your Sally main, while it will work in any direction to the wind, goes in and out of the mast with the least effort when pointed into the wind with the boom angled to the starboard side of the cockpit. b) The black furling line must be off all boom storing cleats when unfurling. The blue outhaul line must be out of its boom cam cleat before you can furl to shorten sail or furl completely for the day. c) It must work easily or one of the following is the likely problem: One of the lines is still in its cleat. It is a windy day and you are not into the wind. Lift up your foot — you are standing on the line. It cannot be the spring because there are no springs so, if it is not one of the above, call the plant.

#### OPERATING THE DIAMONDBOARD

This booklet is written for new boats but we realize it will be used by many "used" boat buyers whose older boats have the conventional shaped centerboards. These earlier boards have the same profile as the rudder blade and draw about 4-1/2' down. The Diamondboard has a completely different shape and draws 4' when fully lowered. Either style has its depth controlled by a special hard finish 1/4" line that locks into the servo cleat just outside the cabin entrance sill.

Centerboards and centerboard trunk interior walls are anti fouling coated at the factory and can go for many seasons without re-painting, depending on the waters you sail. The demo boat in brackish Albemarle Sound has never needed the trunk re-done. We have bottom painted using tidal beaches allowing us to do one half the bottom on one high tide and the other half on another tide. On a trailer you can jack up the bow, paint as far as possible and then jack up the stern. Having the hull lifted at a marina is easier. The centerboard can be lowered and painted and the trunk swabbed with a rag on a stick.

There is no need to lock the centerboard in the down position. Hit bottom and it swings up automatically with no damage. On the Albemarle it is our built in depth finder. The Rhodes will sail amazingly well on just its molded-in keel. Lowering the board will allow a bit better pointing and a tighter radius turn. The down board adds little to stability since the ballast is in the fixed keel. This makes it possible for anyone to raise the board without the use of a winch, so there is none.

The boat can be sailed with the board at any depth you set it via its servo cam cleat. The board does not pivot in the opposite direction so if you hit bottom and elect to back off, you must first raise the board. If the board talks to you (makes noise in its trunk), it is letting you know it is not needed on that point of sail. Retracting the board will shut it up plus increase speed. When the boat is not in use the centerboard should be fully retracted.

## OPERATING THE RUDDER

The rudder blade is controlled by two lines. The bow side line comes up through a clutch that you set to a tension that keeps the blade in position while sailing yet permits the blade to easily pivot up if it strikes anything. The aft side line comes up through a lance cleat that lets you adjust the blade angle for shallow waters or sculling. At the end of the day the rudder blade can be fully retracted, if that is your preference. Like the centerboard, the rudder blade does not pivot in the opposite direction so its aft control line should be used to lock the blade in its up position when launching off the trailer.

The wonderful feature of a pivoting rudder blade (as opposed to a fixed blade that can be disabled by submerged objects or sandbars), does have one down side. The motor is up and off when sailing but down with its prop rotating when motoring. As long as the rudder blade is fully down or fully up a lowered prop and blade will never meet. Your job is to remember not to set the blade at an angle when under power since the possibility of the blade being nicked by the spinning prop exists. Not a disaster and easily patched — but not necessary.

One other neat feature: Most Rhodes tillers have adjustable length hiking sticks. On the starboard gunnel side is a special pocket that locks in the end of these tiller extensions so that you can set yourself on course and leave the tiller to raid the icebox — or even make a shore trip to the head. Older models have similar acting hardware on their stern rails.

## OPERATING THE MOTOR LIFT

**Note:** The motor lift has evolved on a daily basis and today we will be talking about today's model. If you have an earlier model much of what we mention here will still apply.

The motor lift consists of a trolley that carries the motor, tracks the trolley rides on and a manual or electrical mechanism for raising and lowering the trolley. At the bottom of the track(s) is a stop to encourage the trolley to go no further. The stop(s) is removable for servicing the system.

Lower the trolley until the line or strap starts to go slack and then bring the trolley back up a few inches. Clamp the motor to the center of the trolley, adjust the motor's tilt setting so its cavitation plate is parallel to the water line and secure the motor with a safety line made taut between the motor and the stern rail (or using any other reasonable safety arrangement). Please be advised that if a motor lift fails we may accept the responsibility to repair it, however, we take no liability for the fate of the motor. Separate instructions cover motor/tiller linkage and remote control options.

Most motors provide tension adjustment to the steering shaft. Set this loose enough so that you can easily move the motor for steering with the tiller linkage or the motor handle but not so loose that the motor wanders when steering with an un-linked tiller. In reverse the motor should always be under full time control since in this direction it has a mind of its own. Sailing with a down motor provides drag that substantially slows sailing speed. The new electric motor lift raises and tilts the motor clear of the water under sail. On some lifts you will have to hand tilt the raised motor and on some motors you have to turn the motor head 90 degrees before you can fully make use of its tilt mechanism.

Dry test the motor before launching. Check: Gas and electrical line connections. Motor control settings. Some motors require turning the throttle a few times with the motor in forward gear. Check the oil level. See that the gas line primer ball is pumped and the gas tank vent open. Test start the motor. Most motors will start on the second try or there is something not right. As soon as the motor kicks over turn it off since there is no coolant flowing at this point.

### PREPARING THE TRAILER FOR LAUNCHING

If you have gotten to page 11 and the sun has gone down, put the launch off until tomorrow. You will get through all of this in 30 minutes (60 minutes if you count loading the ice box) — the second time around. We have taken your time with operational details so that you understand the logic behind the various steps to prepare you for handling all contingencies, if any should arise after you lose this booklet.

**The Trailer Bearings:** If you live by the book, take the grease gun from your car and top off all bearings per manufacturers instructions. Hot trailer wheels in cold water cause air within the bearing chambers to contract and form a vacuum to draw in the sea water. So the goal is to have air around the bearings fully displaced by grease.

**Trailer Lights:** Make certain you have disconnected the trailer plug from the car. You have to do this to use the extension tongue. If you are not using the extension tongue, you still want to do this so that electrical current is not going through the submerged lamps when you hit the brakes. . We find the most bothersome part of a trailer is its electrical system. Manufacturers save by not supplying a ground wire; plus lamp connections quickly corrode in water. We have a cute disconnect light system that solves both these failures. It probably did not come with your trailer but is available for \$

**Trailer Extension Tongue:** You will probably use this feature on almost every ramp you come across. Disconnect the electrical plug. Disconnect the brake line. Take the safety chains and brake safety hook off the car hitch. Release the ball coupling lock. Put down the trailer jack and lift the trailer to clear the trailer coupling of the car hitch ball. And drive the car at least 10 feet forward. Pull the horizontal and vertical pins that lock the extension tongue to the trailer frame. If you have a helper, give them the vertical pin so they can drop it in the end hole of the extension tongue when this hole comes up to the hole in the trailer frame that this vertical pin

came out of. If you are by yourself, struggle with test pulls until you get the holes to align — then mark the tongue with paint or tape to show this stopping point the next time you are pulling out the tongue single handed. The single vertical pin will suffice for the launching. Reconnect the coupling at the end of the extended extension tongue back onto the car. It is a good idea to keep the tongue lubricated, particularly if your tongue is not galvanized. Active launchers should mount an additional front hitch and become an instant pro.

Launching: Three more steps before getting into your tow vehicle: If the trailer bow arm is not fully toward the car, move it back now. (This will keep the boat's bow eye from hanging up on the trailer bow socket.) Undo the winch strap from the boat's bow eye. Raise the trailer jack wheel as high as it can go. (I cannot count how many times the trailer jack and I have been bent out of shape because our crew keeps forgetting this obvious step.)

The next steps depend on whether you have a helper, whether the helper will be on board or dockside, whether there is indeed a float or dock alongside the ramp or whether you are accepting the challenge of launching single handed.

If you are launching single handed, attach a slack line (25' should do) to the boat's bow eye and to the trailer bow post and be prepared to get wet unless you can attach the slack line to the dock instead of the trailer, and go to the next paragraph. If you are launching with a helper on board, put that crew member on board now, make sure he or she knows how to use the motor and forget about a trailer-to-boat slack line. If you are launching with a helper that can walk alongside the boat and onto the rampside dock, take a 30 to 50 foot line (your two 25' docking lines temporarily joined will do) and put one end on the bow docking cleat and the other end on the stern docking cleat that will be next to the dockside that your helper will be walking onto. And, if the situation allows, plan to use a dockside that will have the wind keep the boat off the dock. Instruct your helper to hold the endless guide line with both hands so that pulling with one hand or the other will provide complete control in drawing the boat parallel to the dock once it is free of the trailer. This idea of the boat being free of the trailer is important because nervous helpers tend to prematurely pull the guide line before the boat has completely cleared the submerged trailer, causing the bow of the boat to be picked up by the trailer as the trailer is being pulled up the ramp.

Warning: Momentum of a launched boat can be considerable, taking a lightweight helper at full gallop along the dock and off the deep end for an early swim. This can be avoided if the helper realizes the force of the pull is beyond his or her means and drops the looped line over a piling or cleat before they leave the dock.

Having chosen your mode of launching and taken the corresponding appropriate steps, it is time for the final check list: Are there any overhead wires between you and the water? Is the centerboard locked in its up position? Are all connections used to hold the boat to the trailer now disconnected? Is the ladder, rudder blade and motor all in up position? Also, you might want to consider hanging some fenders if seems appropriate. And finally, look to see that no other boat is

planning to come in on the same ramp while you are going out because you are about to participate in the one of the fastest launchings on record.

With all systems "go", slowly start backing toward the ramp. Aim down the middle of the ramp if a crew is onboard. Aim close to a dockside if a helper is walking along side the boat with the control line in hand. When the boat reaches the water's edge, the landside helper will be walking onto the dock or the onboard crew will be bracing for the launch. We use the word "bracing" because once at the water's edge you will pick up speed until the stern of the boat starts to rise (float), You will then hit the brakes (with a reasonable pressure). The trailer will stop and the boat will continue. Drive car and trailer back up the ramp as soon as the bow of the boat clears the trailer bunks. This rapid launch technique is not required in a crew-on-board launching mode since the on board helper will lower and start the motor (or start and lower the motor) when the transom raises and motor off the trailer. And, of course, if you are in the single handed launch mode you will not be taking the car and trailer up the ramp after the boat clears the trailer bunks because you will have to leave the car and take the control line off the trailer first to guide the boat to the dock.

If you are planning to pull the boat the same day or if the trailer is not going back on public roads for now, you may want to leave the trailer tongue extended to save this duplicating effort later. When ready to put the trailer tongue back into its road position, jack the coupling off the car hitch. Pull the vertical locking tongue pin and slide the tongue back until the forward vertical hole aligns with the vertical pin hole. Reinsert this pin and then its safety pin and find where you stored the horizontal tongue locking pin and reinsert it through the set of horizontal holes and then secure this pin with its safety pin. A good way to frustrate trailer snatchers is to simply remove these pins from a stored trailer. The crooks will discover their mistake at a busy intersection when the extension tongue and trailer part company, encouraging the snatchers to give up the whole idea as they pull a 10 foot long sparking, clanking bar down the street. Just make sure you don't make the same mistake.

If you are challenged to a race, suggest it start and end on land - you will appreciate why even more when you review the below "Retrieving" paragraph. First let's review Launching: Decide if your ramp requires the extension tongue. Decide if you are launching single handed, or with crew on board or with a helper on the dock. Disconnect all trailer connections. Check to see that the centerboard is locked in the up position and that the rudder, ladder and motor are all up. Back your rig down the ramp, picking up speed until the transom starts to float. Put your foot on the brakes. Call the coast guard if you forgot the trailer control line or the onboard crew can't sail, motor or swim or the endless line take the dockside helper beyond the 3 mile limit.

Retrieving: Extend trailer winch strap to be reachable from the boat's bow. Back trailer down ramp (close to dock) until the bunks just submerge. Board boat where temporarily tied, LOWER centerboard and motor onto trailer. Leave motor on so boat is kept docked into trailer socket. Reach over bow and connect trailer strap. Use foot on winch handle to take up strap slack. Kill boat motor and step back onto dock, go to car and pull rig out of water. After a

few times you will have this down so pat that even the stink potters will applaud how fast you got a sailboat off the ramp.

## TIPS ON SAILING

We assume you already know how to sail but thought we might take you on a hypothetical sail anyway, as partly a review and partly an introduction to some partly new thinking. We will consider light airs and heavy airs and let you interpolate for conditions in-between. We will touch on tacking, running, reaching, coming about, jibing, and showing off. Like a new car, there is a feel to your new boat that will soon become second nature. But while you are making yourself at home on this vehicle that only moves in water and works on wind power, we suggest you restrict your first outing or two, to light air days (winds in the up to 10 knots range).

### Light Airs:

Put up the Pop Top, particularly if you have guests. The up top will not hinder your sailing or your visibility and actually make it easier to walk to the lounging foredeck. Lower the centerboard. The lighter the airs, the slower your boat moves through the water so the larger the fin area required to counteract slippage. (Remember the glider with its large wing span and the fighter jet with its small wings that get even smaller as it increases speed.) Under the majority of conditions you will leave the dock under sail but for this first time out, it might be best if you motored out to a clear-of-obstacles area before taking out both sails. In very light airs the furling sails can be taken out without considering wind direction. The mainsail outhaul and the genoa cars positioning will contribute to sail shape and there are ribbons on the sails to help you know when you got it right and even a stripe on the genoa to help align the jib sheets at proper pulling angle. But we are not going into all of this heady stuff here. Your Rhodes will sail fine no matter how much we skip these finer points for now. We will even skip fiddling with the traveler controls since having the main sheet work from the center of the bar will do just fine. For this hypothetical outing we will be satisfied with the general rules: Fuller sail shape (large draft) for light airs. Flatter sail shape for heavy air. Crew induced heeling for light airs (less wetted surface). A hiking crew or less sail area (or both) for sailing flat in heavy airs.

### Heavy Airs:

Compared to motor cruisers, sailboats are built very close to the water (have a low freeboard). Those sailboats that opt for more commodious interiors at the expense of lower freeboard do not perform as well as lower profile designs. Wind against the sail makes the boat go and wind against the hull can make the boat not go. So, depending on its size, weight, freeboard, etc., a sailboat has a practical wind velocity limitation it can be successfully sailed in. With the Rhodes 22, this happens when the winds approach 28 knots. Some sailors use the length of the boat as a guide to its safe wind limitations. The Rhodes can stretch this limits because of its dual furling sails and boom lowering feature. This does not mean the boat will not go like and with the wind in 50 knots but tacking would be impossible (you would have to jibe to come about) and life would generally be more stressful.

In heavy airs (15 to 25 knots) we suggest sailing with the pop top down to cut the hull's wind resistance. With the top down you can take advantage of the boom's ability to be sailed from a lower position. Lowering the boom automatically lowers the main sail. Lowering the main sail automatically lowers the wind's center of effort against the boat. The boat gets stiffer and sail area has not been decreased. All of this is done in a matter of seconds with the sail in or out and the boat at rest, under power or under sail. Under sail it is easier done when pointed into the wind and the sheets slack. With the boom at a lower level the topping lift will require additional slack.

Lowering the boom alters two forces. Like a person on a see-saw, moving in towards the fulcrum, becomes less effective in raising the person on the other side, the same size sail area, moving closer to the deck, loses some of its ability to heel the boat. However, the total wind energy being absorbed by the sail has not changed and must be used some other way, so the boat goes faster. When the boat goes faster, it requires less underwater fin (like the fighter jet decreasing wing area as it pick up speed) so you raise some of the no-longer-needed centerboard. And this cuts down the wetted surface (friction). And the boat goes faster. So you need even less fin area. The cycle feeds on itself to the point that often you will find you need no centerboard at all.

Many pleasure motor boats have planing hulls. When a planing hull goes faster it tends to lift more above the water. (High speed motorboats sometimes leave the water.) This reduces wetted surface and so less power is required to maintain the same speed. Racing sailboats with planing hulls are sailed flat to get the same results. The Rhodes has a modified planing hull so, to that extent, the same thinking applies. So, while in light airs we shifted crew to heel the boat so it could sail on its side for less wetted surface, here, in heavy airs, we want to keep the boat flat. (Sailing is full of conventional wisdom contradictions.) In the Rhodes you sail flat by lowering the pop top (to allow lowering the boom), lower the boom (to lower the sail's center of effort), shift your crew to sitting on the gunnels (to take advantage of the built in hiking seats created by the hull's flared design). And if you still cannot keep her flat, start shortening sail. (More contradictions; less sail and you go faster.)

If speed is what you want, lowering the boom is the first step to take. But you may find yourself doing this when not racing and merely wanting to heel less for the comfort of green guests. Experiment with this feature that we have not seen on competitive boats but that offers so much performance flexibility. Of course you sacrifice standing head room. However, there is still plenty of sitting headroom at the lower boom level and heads should always be on the lookout for booms no matter what level each is at. A side effect advantage of the lower level boom position is that if you accidentally jibe the chance of the boom snagging the back stays is eliminated.

Let's return to live ballast for a moment because it is a valuable tool in a 22' size boat. They say that, if there are two sailboats on the water, there is a race. So you are not a racer but there is a sailboat next to you and you want to go a little faster than he is — and certainly faster than she is. It is a fair wind and you have been sailing with only part of the giant genoa. Put away

the cockpit cushions. You will note the groove along the seat edges that keep the seats dry in a rain. This groove not only adds strength and drainage but provides support for crew heels when their live ballast is planted atop the comfortable gunnels of the flared hull (moving weight further out on the see-saw). This transplanted live ballast is very effective in keeping a 22 foot boat flat. Even light weight crew members help since shifting weight from one side of the boat to the other has the effect of two times the actual weight of that crew member. Sailing from the gunnels is practical so take the time to work this into your repertoire until you feel at home up there. There are grab rails on the aft cabin walls to cling to. Hands can go under the rub rail. Arms can go around the stern rail. Heels can go into seat ditches. Visibility is great. You can control the main sheet fiddle block cam cleat from any gunnels seat. You can steer from any gunnels seat with the adjustable length tiller hiking stick.... Go for it.

In your zeal to pass the other guy, you pull out too much genoa. The boat is saving you from your misjudgment by rounding into the wind and slowing you down. Get yourself back on course and flat by reducing sail. While you can shorten sail by using just the main or just the jib, it is better to shorten both sails to keep a better balanced helm. Correcting for an imbalanced helm by sailing with the rudder at an angle has the effect of sailing with the brakes on, a sure formula for coming in last.

#### Shortening The Jib:

Release the in-play jib sheet from its clam cleat and winch so the sail swings out into the wind. With pressure off the sail, lift the furling line from its cam cleat and pull this line until you have the sail area wanted. In heavy airs, the pull can be substantial. In most instances, if something on your Rhodes does not work easily, do not force it. Something is wrong and must be checked out. In heavy airs, the genoa furling line is the exception and may require the muscle of the strongest crew member as the wind beats the released sail back and forth. If necessary, run the furling line to the genoa winch. In moderate airs, furling the genoa is anyone's assignment.

#### Shortening The Main:

Put tension on the topping lift line so the boom does not have to be supported by the sail. Release the mainsail outhaul line so the sail swings into the wind. In heavy airs, turn the boat into the wind so that the sail travels cleanly though the mast slot to reduce cloth friction along the mast. This can be done by holding the boat into the wind with the motor or, if under sail, rapidly pulling on the mainsail furling line when the boat passes into the wind as you bring the boat about. In either case, you free the furling line from its storage cleats and pull it when the wind/sail relationship has the sail cleanly aligned in the mast slot (ideally going in slightly from starboard). Note: When under full main, the furling line need not be cleat locked. For anything less than full main the furling line must be secured to one of its cleats lest the wind pull the main out to full size again. A few marks on the furling line can be a quick aid in setting for the shorter sail size sail wanted.

Allow slack in the furling line (or use the mark wanted) and secure the furling line on one of its boom cleats. Pull the mainsail outhaul line until the secured furling line allows no additional sail area to be taken out. (Remember, the blue outhaul line is automatically locking continually as you pull it out.) Move the outhaul car toward the end of the newly established mainsail size. Readjust the topping lift line to give the sail shape wanted and you are ready to resume your journey.

#### Trimming The Sails:

You must know where you are going to and where the wind is coming from. It is imperative to establish this information since these directions are interrelated. But, in this new fluid element, new sailors tend to get confused. One way to stay the course is to have a compass. An easier way: pick a land reference. One way to know the wind direction is to have tell-tales on the stays (I am not a fan of having to look up 26' to a wind vane.) Another: slowly turn into the wind until the leading edge of the jib starts to flutter, take note of the wind's direction in relation to your land mark. Once established, wind direction remains amazingly constant for the day or for many days. New sailors are always complaining that the wind has changed. But it has not. They are changing (course) and are not aware of it. Winds do get fluky in close quarters because of land obstacles but the basic direction still remains and the fluke direction quickly passes, so you can stay with your basic information.

Let's assume you have conquered this beginners' dilemma of imaginary wind shifting; you face three possible conditions: Your destination is directly into the wind (tacking), your destination is directly away from the wind (running), or you will be traveling with the wind caressing or battering you somewhere along the boat's port or starboard sides (reaching).

#### Running:

Your destination is such that the wind is directly in back of you or, coming at the boat over its transom. It feels like the wind has stopped or, at least let up considerably. It has not. You are simply moving with the wind so there is little relative difference in speed between you and the wind. It is an easy concept to understand yet almost all beginners comment on how the wind suddenly died when he or she inadvertently drifts off course and onto a Run. If you are on a Run and have any questions about how much the wind has suddenly let up, you can answer your own questioning, and even turn the wind back on again, with just a 90 degree turn.

If you are on a Run and have your boom set down the center of the cockpit, the wind will be striking the thin edge of a 5 ounce cloth; obviously not the proper trim for Running. You want the wind to be pushing against as much sail area as possible. So let out the boom as far as it can go — just short of rubbing against an aft lower shroud. If you were racing for blood, you might even disconnect the aft lower shrouds so the boom can keep swinging out as far as the upper shrouds would then allow. If the jib sail is on the same side as the main sail (boom) then as soon as the boom is allowed out the jib will go limp because the main sail will be preventing wind from filling the jib. (The wind has not changed.!) Move the jib to the opposite side so this wind coming from

directly in back of you can fill both sails. Sailing "wing and wing" or "butterflying" is easier said than done. Your window of directional opportunity is very narrow here. Go slightly off course in one direction and the boom swings over (jibes) and again the jib gets blocked. Go slightly off course in the other direction and the jib collapses. Running with both sails powering the boat simultaneously becomes a little easier when you graduate to using a "whisker pole". This "boom" for the jib allows more of a perpendicular setting of this sail to the boat's center line so that you have a wider leeway in course or wind variation before reaching the angle that would cause the jib to lose its wind.

Running is the easiest point of sail in that you are not sailing at all, just being pushed by the wind. But beginners have trouble with it. I think it has to do with feel. A sailboat feels like it is going faster if it is heeling. Sailing downwind there is no heeling so the beginners' instinct may be to pull in on the boom and "let's get this baby to heel and pick up some speed" when, of course, doing this on a Run is the wrong medicine. I recall being in a fun race and looking over the transom at an amateur fleet falling behind me. "Let out your sail", I graciously shouted. With instructions from the front office, they all instantly obeyed and all started gaining on me. Having gained their confidence with this rewarding advice and seeing an embarrassment closing in on me, I shouted, "Pull in your sails". They dutifully did, which of course slowed everyone down and I went on to a save face win. The point is, don't let your feelings, or experts who want you to lose, mislead you. On a Run, you want sails perpendicular to the wind.

With the wind in back of you there is no side thrust on your boat, so no slippage. So you do not need an underwater fin. Here is an opportunity. Keel boats cannot jettison their keels. But the Rhodes wetted surface can be decreased by raising its centerboard. In fact, if you do not pick up your board, it will probably start talking to you and, until you learn your boat's language, let me translate the noise you will hearing: "Under this point of sail I am not needed so pick me up." The raised board, retreating from the water flow under the boat, seats silent in its trunk. •

#### Reaching:

When the direction in which you want to be sailing is such that the wind will be coming at the boat from the side, you are on a Reach. It is the easiest way to sail. When the wind is coming at an angle from the side, so that its direction is over the corner of the transom, you are on a Broad Reach, and the sailing is even easier. Most of your sailing time will be spent Reaching because; after all, the boat has two sides. So, when you are on a port or starboard Reach, where do you want to be in the boat? When you feel like an old pro, sit wherever you want but for now we suggest you sail from the windward side (the high side — the side the wind will be coming from). On page 22 you will see why.

Trimming the jib and main sails for this point of sail is simple — what new sailors seem to find not so simple is keeping the boat on course while trimming the sails. If you think about it, you can see why a boat must be kept on course while adjusting the sails. If you inadvertently alter direction when you trim for a particular wind direction, then go back on original course, of course your sails will then be out of trim. So, staying the course, while setting sails for that course,

is mandatory. Let out a sail until its leading edge starts to luff (flutter in the wind) and then pull it in just enough to stop it luffing. You can get encouragement from the ribbons on the sails. When the ribbon on the leeward side of the cloth (the low side of the boat — the side the wind is leaving from) straightens in a horizontal plane (you can see this through the sail cloth), you get an "A" for airflow. If the ribbon on the windward side starts to go horizontal, take an A+. Be happy with a straight "A". Most genoas also have a short angle mark on the cloth where the sheets attach. This allows setting the genoa car so that the sheet leaving the car and turning upward to the sail, will be a continuation of this angle to insure that the horizontal and vertical vector forces from this angled pull, have a balanced effect on sails shape.

#### Tacking:

A sailboat sails like an airplane flies: The air (part A), dividing into parts A1 and A2 at the leading edge of the wing or sail, wants to re-unite back to a single part A at the aft end of the sail and, since shifting all the air around the globe would be difficult, and since part A1 (going around the outside curve to the sail), has farther to go than part A2 (which can take a straight line to the back edge of the sail, part A1 has to move faster to get to the back edge of the sail at the same time part A2 will arrive. Well, by a decision of high school physics, faster airflow creates a lower pressure atmosphere than slower air flow. And that net difference between the pressures on the two sides of the sail moves the boat. You might look at it as air, flowing over the sail, creating a vacuum and sucking the boat into it. If you missed something here forget about it. All you need know is to make your boat go you have to have a difference in pressure from one side of the sail to the other. If you point the boat directly into the wind, the pressure is the same on both sides of the sail, and you go nowhere fast until you start to go backwards. TIP: If you find yourself going backwards, throw the tiller hard to one side and the bow will begin moving to that side. When the sails fill with wind, straighten the tiller, sail to pick up speed and then turn back onto course.

OK, so here we are with where we want to go being directly in the direction the wind is coming from. We see from the above that our only solution is to zigzag our way in that direction. But how much to zig and how much to zag? If we sail too close into the wind the pressure differential decreases and we slow up or even stall. If we zigzag at too broad an angle, we go fast but go where —more back and forth rather than forward in our wanted direction. It turns out that for most boats a 45 degree approach into the wind direction is the best compromise. This means that each time we come about we will be making a 90 degree turn. With the zig and zag angles being equal, once we set our main sail, we do not have to touch it again while we are tacking. That is a big help.

While we do not have to be concerned with the main sheet when tacking, we do have to work the jib sheets. (If your boat has the self tending jib option, Tacking gets down to just tiller handling.) Tacking is more of an effort with the full genoa flying so, for serious tacking, particularly in narrow waterways, we will probably use a shortened jib.

Tacking is beginning to look like the complete opposite of Running. Running: Sails as close to perpendicular to the boat's centerline as can manage. Reaching: Sails somewhat out. At least to the point where they just start luffing and then drawn in a bit. Tacking: Sails drawn in as close to the boat's center line as possible while keeping an eye on port and starboard tacks speed vs. overall forward progress. Do you fall off the wind further and go faster or do you point closer and go slower but make more forward headway with each tack? Unless your boat is computerized, this is still an art.

The giant genoa makes it even artier. The 175% genoa, of necessity, must pass outside the spreaders and outside their shrouds. This path puts a limit on just how far this size sail can be trimmed for optimal tacking. So, do you go with the full genoa for more speed or with a reefed genoa for closer pointing? The three Rhodes' genoa lead positioning systems make it possible for that decision to even exist. If you shorten the genoa so that it falls short of hitting the spreaders, you can then run the jib sheets inside the upper shrouds and to the second lead position (aft sides of the cabin trunk). Add using this second genoa lead feature to your bag of sailing tricks and you will be rewarded with a dramatic improvement in pointing ability. Want to point even closer? Feed the sheets inside all the shrouds and use the third genoa sheeting position. (Located on both sides, top aft end of cabin roof.)

What we have covered regarding sails will get you going but not necessarily winning. There is sail shape to contend with and that is not within the modest scope of these sailing tips. Experiment, read a good book, install a knotmeter and watch the applause needle go up when you do something right.

## STEERING

Humans do not like to feel redundant. This boat requires so little from the skipper that I have noticed new owners continually working the tiller back and forth just so they feel that they are doing something. If you need proof that the Rhodes can sail without this endless tiller correcting by the captain, lift the hiking stick from its clip on the tiller, rotate it slightly so that it moves freely in and out (like a trombone), insert the end into its locking fixture, rotate the extension tubing slightly so that the tiller locks on course; and take a walk around the deck, raid the ice box, or even risk a visit to the head. If you can contain yourself and keep hands off, you will find that the tracking ability of the boat is such that it corrects itself automatically from small course deviations prompted by small chop.

With the rudder blade down and slightly forward (as far as it can possibly go), the tiller has such a light "power steering" touch, there is a tendency for the new owner to over steer - at first. For those who have spent their sailing days fighting heavy tillers and want to continue with that heavy feel, pulling the blade slightly upward, will do it. While the tiller is occasionally used to fine tune your direction, coming about is its big number, with the centerboard part of the act. The boat can turn with the board up. But the turning radius will be somewhat smaller with the board down. So, if you are in tight quarters requiring precision maneuvering, lower the board.

Speed is another part of the steering act. To steer a boat (or for that matter, a car or plane), the boat must be in motion. The act of coming about brings the boat directly into the wind for a brief moment as it turns to present its other side to the wind. If a boat is not in motion when it is headed directly into the wind, we know it will start to move backwards. So, there must be sufficient momentum built up on the original tack, before turning the rudder, to carry the boat through the directly-into-the-wind dead spot, on its way to the opposite tack. Too gingerly a turn and you can find yourself with an abortive execution that you have to work your way out of. Generally do not sneak up on a coming about maneuver. Stay on a straight tack course and, when ready to come about, push the tiller suddenly hard over. We say "generally" because there are times you will elect other techniques for coming about:

The winds and sea may have picked up to the point where their force against the hull becomes greater than the power the sail can generate at that angle into the wind and you find that you just can't get the boat to cross through the head-on wind spot. In a Rhodes this can happen as winds approach 30 knots. The solution is to jibe; to "come about" by not turning into the wind, but out of it. The dual down sides of jibing are that a) the boom comes over with a vengeance that can rock the boat and, b) forward progress is temporarily blunted — sometimes even going negative. But you have come about.

Or conditions may allow stretching out coming about to squeeze out more forward motion: Here you can cash in on your seat of the pants "feel" for how much potential forward motion you have at your command for that particular wind velocity. You are tacking in a narrow canal. You want as much forward progress as possible with the least number of tacks. Instead of the hard-over tiller technique, you turn just enough to head directly into the wind. You let momentum carry you into the wind just short of stalling, then turn the tiller again to complete the coming about. Making use of momentum coasting, results in a lot more forward progress per tack. The same use of momentum can be effective when, if you could only squeeze by a small shore projection or other obstacle, you would be able to avoid a tack altogether. Start the tack turn, abort it when the turn takes boat directly into the wind, make use of momentum then turn back onto the original tack. It is challenging and rewarding seeing how far you can pull off this kind of maneuvering without stalling out.

This idea of speed and maneuverability and stalling is so important that there are times you will have to put your bonding with your boat's personality into play to save the day, even though it might appear to guests that you have lost your marbles. For instance: Suppose there is a jetty to port bow and you are on a starboard tack that, continued, will have you end up on the rocks. And you do not have enough speed, at your tack angle to the wind, to insure a successful coming about. Nervous time. Slowly changing course to avoid getting closer to those rocks (as most beginners would tend to do) only gets you closer and closer into the wind and thus slows you down further with the risk of eventually stalling the boat. Not having the boat respond as expected, the beginner tends to hold the rudder blade way over which now, of course, applies additional braking action and completes the stall. Once in a stall the wind will surely push the boat onto the rocks before you can manage to get the motor going. Panic time but the solution is simple, although gutsy. You turn more into the direction of the rocks as if hell bent on self destruction.

There is the risk of having guests abandon ship so you might want to advise them of the plan. You know the Rhodes can turn on a dime, if you have enough speed. This new course (less of a tack and more of a reach) lets you pick up more speed and at the last second you have the momentum needed to turn in a flash before you dock on a rock or end in a crash..

You have a smart sailboat. You will even learn to back it into a slip under sail..

### Body in Motion

Up to now we have talked about bringing the boat about. But what about bringing your body about?

Although I would like to, I have not found time to read a book on sailing or get to a sailing school, as yet — I suppose that is obvious from the terminology I have used in explaining my notions in this booklet. So the following suggestions on the body language of "coming about" are not necessarily text book teachings. Rather, much of what you are reading here comes from, and is based on, my years of watching beginners and then doing the opposite. A few examples:

After dutiful shouting all the prescribed commands, the novice pushes the tiller and immediately springs towards the opposite seat; time of arrival depending on how badly feet get tangled in sheets carpeting the cockpit floor. During these seconds of skipper-in-motion, eyes never leave the view across the boat's bow since that is what the sailing fathers in sailing school said, "Never take your eyes off the bow (or the direction you are going). Not since the "Exorcist" have heads been known to rotate 360 degrees. This means the skipper's two hands had to remain in back of the body, switching tiller from hand to hand, a very awkward maneuver. Once planted on the opposite side on the opposite bench, novices become distinguishable by their crossed eyes, self-knotted limbs and sheet-entwined feet — and oh yes, their next step.

Some immediately straighten the tiller before the boat has completed coming about, the theory being, "If I am now on the other side of the boat we must be on the other tack". But, with the boat still sailing on the original tack, a fog of confusion quickly engulfs skipper and crew and the standard phrase is heard, "Oh, oh, the wind shifted".

Some skippers are neater and do not straighten the tiller until they have straightened out themselves: hands, feet and mind. By then the boat has come about 180 degrees instead of 90. They too have sailed into that fog of confusion with only one way out, "Oops, the wind has changed".

In good sailsmanship I do believe neatness counts. Particularly a neat cockpit with lines tucked out of the way in the handy coaming compartments, bags and other personal items thrown down below, items that can fly or make you fly, like soda bottles, stored standing in the sink instead of used for live ballast. But even more important, I have concluded that keeping half an eye on the relationship between the tiller and boom, should be the skippers' prime interest. I don't say this is how you should do it if it is contrary to what you have learned. But here is the Spitzer maneuver:

I sit peacefully relaxed (to inspire crew's confidence) on the windward side, nonchalant but with all systems quietly going. I push the tiller away from me, either rapidly or gradually, depending on my decision for a sharp or gradual turn (as we previously discussed). In either case I stay where I am. And I keep staying there. And keep staying there, that half eye on the boom. When I note the boom starting to move towards me, I release (or call for the release) of the in-play jib sheet. And by "release" I mean total sheet release; no part left in the coaming compartment, out of its clam cleat, no turns left around its winch. It is not until the boom crosses the center line of the cockpit that I pivot myself to the opposite seat, *my back to the bow*, my front toward the transom, the tiller handed from one hand to the other, all easily done with no limbs or eyes crossing in the process.

There are two reasons for the boom in motion timing controlling the skipper's body in motion timing in going from one side of the cockpit to the other. The obvious one is that when the boat comes about it will then heel in the opposite direction. And obviously the smoother and smaller that change is, the more comfortable the ride is for guests. The right timing of live balance shifting does just that. The more interesting reason for sitting tight and then exchanging seat position simultaneously with the boom's crossover is that you know the boat has actually come about when the boom has moved to the other side. And, once knowing this to be a fact accomplished, you can immediately straighten your tiller position for the next tack.

Before dismissing the Spitzer maneuver because it is not in the book, let's review the pros and cons. The Pros: By pivoting the body so you take your eyes off the bow and are facing the transom, you do not suffer the awkward ritual of having to have both of your hands in back of you when switching the tiller from one hand to the other. You can afford to lose sight of what is in front of you for these few seconds and the rare view over the transom may prove interesting. But the real advantage is knowing where you are. I have seen beginners, push the tiller away from them and immediately spring to the other side where the logic flows: "if I am on this side we must have come about (if it's Thursday this must be Belgium)". So they straighten their tiller when in fact the boat has not come about and prematurely straightening the tiller guarantees the boat will not come about. And I have noted the reverse routine; the tiller being pushed and the body staying put until the sail fills on the new tack before the body finally moves to the other side and gets around to straightening the tiller and by then the boat has more than come about or even reversed course and forward motion has been lost. The Cons: I can't think of any.

Almost as important as the choreography of boom, body and tiller, is the priority of re-creating sails on the new tack vs. repositioning of the tiller on the new tack. For some reason the focus of new sailors is on the sails before the tiller. Maybe it is because sails are so large and can be so noisy that the beginner wants to see them attended to right way before turning attention to the tiller. The Spitzer maneuver preaches tiller first and re-setting sails for the new tack, second. The impulsive reaction to tackle sail readjustment first thing on a new tack and then the tiller, invariably leads to loss of original course with the crew very possibly now headed toward Belgium. Tiller first. Stay the course. You can always set the sails after you and the tiller are properly re-set.

One of the advantages of single handed sailing (no matter how many you have on board) is that you do not have to worry about an enthusiastic novice prematurely pulling the jib sheet and thus keeping the jib, wind-filled, so as to keep you from coming about.(a job that should be left to your friend, the wind itself). If you do not mind a line running across the cockpit, you can use the winch on the leeward side as a turning block and bring that in-play sheet over to the winch on your side where you take it around the winch next to you and secure it on its clam cleat. Then, when you go into our coming about dance, you can release the jib (without having to reach over to the other side) and also take the other not-yet-in-play jib sheet with you for locking in the clam cleat that will be next to you on the new tack. Try this idea when you get a chance — it's a neat, handy trick.

Jibing is coming about by turning out of the wind rather than into it, as we normally do. Jibing can get you out of a tight situation (miscalculation) in a hurry. In heavy seas and strong winds jibing may be your only turning option when attempting to change the boat's direction. Downsides are it gives up much of your forward destination movement plus its impact and noise can have a shocking effect on crew and boat. You can do a controlled jibe by ignoring or freeing the jib and by pulling on the main sheet and letting it out at a measured pace once the wind moves to the other side of the sail.

#### RETURNING TO PORT

You are a sailor. This is a sailboat, not a motor boat, so learn to rely on your motor less and less. Time will decrease you motor's reliability - and increase yours.

To dock you have to bring the boat to a stop and using the dock to accomplish this, is the least desirable of the techniques. , I have seen owners sail into a slip with the wind in back of them and destruction in front of them. Fortunately with your Rhodes there are several other plans. For starters, if the wind is strong enough, put the genoa away so you only have the main to contend with.

The conventional approach is to come up along side the dock (or up to a mooring) headed into the wind. Sailboats quickly exhaust their momentum into the wind and this braking action can take you to a perfect stop. Sail in open water and get familiar with your boat's momentum by turning into the wind. You will get a good feel for its momentum factor faster than you think. Even with the wind slightly off parallel with the dock, you have some latitude by allowing the boom to swing free so the sail pivots into the wind and loses drive power. Just be careful that an extended boom does not clear the dock of spectators. You will find docking under sail fun and easier to do than you thought — once you learn to trust the maneuverability of your boat and not make the turn to parallel the dock too early so that you end up too far away from the dock.

So let's try docking and examine some options. Your good feel for your boats' momentum characteristics has you spilling air to get down to the docking speed you want. Based on the dock's runway space available to you , you either elect to make a wide gradual turn into the wind, edging the boat closer and closer to the dock or, with space tight, you head directly into the dock,

turning hard at the point that will bring the boat right up against dockside. Good idea to have the motor up so the prop does not affect your critical steering. With either approach, the boat will do its thing if you show it who is in charge. Of course your fenders are out to compensate for slight miscalculations. And there are other tricks you can use to emphasize your skills: If you know it is shallow dockside you can lower your centerboard and let it drag in the mud for a stop that will have the kibitzers asking, "How did you do that?". At some demo docks I have a line on a dockside cleat that is just the right length and has a loop on its end that I can pick up as I come in to the dock and drop over my stern docking cleat. Or, I have a line on my stern docking cleat with a loop in its end that I drop over one of the dock's cleats. Either way they act as does the tripping wire on an aircraft carrier's deck and saves the crash my guests were bracing for. With the pre-measured line quietly dropped over the cleat and the boat stopping just in time, you will be acclaimed before your time.

What if the wind is not accommodating and you cannot use it as your brake? Some simple solutions: Wind off the dock: Sail a distance from and parallel to the dock, turn toward the dock so the wind slows you down, drop the main or furl the IMF and, using momentum, make your final turn to parallel the dock at the very last minute. Wind onto the dock: Drop or furl sails and use the wind to push the hull directly toward the dock then turn to parallel the dock early since the wind will push the hull closer to the dock. Wind parallel to dock but coming over your transom: In all but very light airs, a difficult approach; best done under motor with sails away and hand on shift ready to throw into reverse. Or, if your momentum will not be unreasonable, try the aircraft carrier trip wire technique.

## TAKING YOUR RHODES OUT OF THE WATER

Taking a relatively light weight, shoal draft Rhodes out of the water, is easy for any marina to do with its standard yard equipment; one strap in front, the other in back of the keel. Setting it down on your trailer is the tougher part of the job since the straps end up between the trailer bunks and the hull bottom. Still, it is a fast process. The only objections I have to coming out by hoist are: 1. Expense, 2. You may have to first take the mast down if the yard's crane is not configured to accommodate rigged sailboats., 3) There usually is some accompanying damage: Rub rail, bottom paint and water line stripe, all are hard to insulate from strap pressure and slippage. At the plant we use the bow and stern eyes to lift and move Rhodes. Don't even mention this to your marina or allow them to use any deck hardware to pick up your boat. Straps are the way they have to go.

Being cheap, and liking to set my own pace, I prefer trailer retrieval wherever possible. Fees run from low to nothing, damage should be zero and you can do it single handed. If there is a dock along side the ramp, you need not even wet your feet. It just takes a little acrobatics. Tie the boat to the dock, go to the car and, following all the steps covered in launching, position the trailer as close to the dock as practical and far enough down the ramp to the point where the 12' bunks just submerge. Brake and chock the car wheels and return to the docked boat, where you have 3 choices.

## Sail On

Step a) *Board the boat.* Choose your sail. One will probably do. I favor the furling jib.

Step b) *Lower the center board all the way. Lower the motor* and have it on the ready for if and when needed. Allow for current or wind slippage and sail onto the trailer, using the bow socket as your destination Put the sail away when you have the momentum needed to allow a gentle bumping into the trailer bow arm socket.

Step c) *Use motor power or sail power to keep the boat nudged against the trailer bow arm while you walk to the bow deck.*

Step d) *Lie down on the bow deck and reach for the already extended trailer strap and snap it onto the boat's bow eye. If you have long enough legs use one to turn the winch handle and make the strap as tight as your foot can manage. Or, do as I do and, hanging onto the bow pulpit, stand on top of the trailer bow post and turn the winch handle or, if you are using an electric winch (as I once did) from the comfort of the deck or the dock, just push a button.*

Step e) *Raise the motor and rudder blade and step off boat onto the dock and back to car for pulling the boat out of water and securing boat, trailer and rigging, as previously covered.* With the down centerboard helping to center the boat by using the submerged trailer guides, sailing on is the most impressive way, the most fun way and the easiest way (once you get it down pat) to put your boat on its trailer. Try it on a light air day and see if you don't agree.

## Motoring On

Board the boat, put sails away, lower the centerboard. Motor from the dock, making a wide swing so you can approach the trailer on a straight run. After making computer adjustments for side forces, head for the trailer bow socket. Go into neutral when you feel you have enough momentum for a firm but gentle docking into the trailer bow socket. Use a short burst of forward or reverse if you have miscalculated. Do italicized steps c) & d). Motoring on can be helpful on ramps that are too short to allow the bunks to be sufficiently submerged. When Lake Erie was at a low level cycle one year I screwed plastic strips on the trailer bunks (to create a slippery surface) and emulated the motor boaters in taking their boats out. I went far out, turned the throttle all the way, closed my eyes and went for it. It worked. Only damaged was to the trailer winch casing where the boat landed on it.

## Walking On

Step on to the boat and raise the motor and rudder blade and lower the centerboard. Step back onto the dock and use a continuous line from the bow docking cleat to the dockside stern cleat to move the boat over the submerged trailer as close to the trailer bow socket as you can. Do italicized step d).

## Fishtailing

When a loaded trailer does not have a sufficient percentage of the total towing weight on the car hitch, the rear end of the trailer will start to weave back and forth on the highway, usually when you start approaching the speed limit. At best this can make for a very uncomfortable ride — at worst the distance of each swing can keep increasing until it turns into a disaster. You will have to learn the limit as to how far back your boat can sit on your trailer and still provide a safe ride. Everything is a variable here: The trailer (its axle in relation to its bow post). The weight of the boat (this has varied with models over the years). And the weight and location of the boat's gear (a motor on the transom greatly effects the relationship). As a general rule, with the adjustable trailer bow arm fully positioned towards the car, shoot for the boat being as far forward as the trailer configuration will allow. One way to readjust the boat's seating on the trailer is to re-float it on the ramp and try to winch it up further. If you encounter highway fishtailing and have no immediate way to rectify it, remove the motor and/or rudder assembly and carry in your car or, for greater effect, make such items fast to the trailer frame near the bow post. Moving on-board gear, that is aft of the trailer axle (such as items in the lazaret), onto the "V" berth, will help. Once you establish the best boat location on its trailer, make note of it ("the rear side window one foot forward of the axle, etc.").

## DERIGGING

If you put this boat together, you can figure out how to take it apart. But, to play it safe, we would like to run through the steps backwards — because, when you know it backwards, you really know it:

1. Take out the fastener that is connecting the fitting on the front of the pop top to the pop top slider fixture that is riding in the mast slot. I suggest this as the first step so that you do not forget it and face criminal charges for breaking a law of physics and civil charges for damages. Immediately slide the pop top slider up the mast until it clicks into its up position. And, while in the area, disconnect any mast to deck electrical plugs.
2. Walk to the end of the boom and furl Sally until all that is showing is her colored self cover. Now you can disconnect the boom block from its boom-end rotating tang.
3. Back to the mast and pull the topping lift down tight so the boom is raised up against the mast and secure this line to the higher mast side cleat. Now your hands are free to draw the topping lift line from its cabin top cleat and stand up block so you can leave it piled at the mast base for the moment.
4. Tape or tie the jib sail near its grommet so that it can't unfurl on its tube, free both jib sheets from their cleats and leads and remove this line from the jib grommet and store below or, leave it on the grommet and coil, tape and store this line to the genoa sail and furling tube.

5. To release jib stay tension, hike to the transom and undo the back stays tension line from its corner cleat. My preference is to remove this line altogether. You will work out your own preference.
6. While at this location pull the fast pin at each end of the traveler bar and remove this bar from its back stays sockets so that the bar and car and main sheet and fiddle block and boom block can be stored as one assembly for easy and quick re-installation next time out. (Stores nicely on V berth shelves)
7. Staying at the transom, leave the back stays connected to their adjusters so that you never have to do these adjusting steps again and pull only the clevis pins at the bottom of the back stay adjusters connected to the transom chain plates. You now have two wires that will go out of their way to hang up on something when lowering the mast, so tape them to the mast or toss them overboard for now.
8. Hike back to the bow. Pull the clevis pin from the jib stay. Lift and walk the furled jib to the mast so that the top end of the furling tube goes in front of a spreader but behind that spreader's upper shroud. (This will provide support for the top of the tube when lowering the mast.) Make the bottom of the tube fast to the mast by inserting the lip on the drum into the "U" bracket on the leading edge of the mast and insert a fastener into the lined-up holes. Using the topping lift line sitting on the cabin roof by your feet, reach up and wrap this line around the boom, mast and furled sail to further secure this bundle (the lowest small cleat on the boom will keep the line from slipping down). This all works very nicely, except if using a fancier CDI type furler. These type systems cannot have their tops raised beyond the top of the mast so their bottoms project out past the bottom of the mast. And you will have to have someone hold the furling tube aside while you are lowering the mast. (The Mast Hoist option lowers the mast to the rear so handling a longer style CDI furling system becomes a bit easier.).
9. You now have the mast, boom and furling tube bundled and the mast still standing. You have done it all in no time single handed or in half time with a helper of any size. You now have to enlist a helper of appropriate size. (If you have the hoist option, enlisted personnel are not required.) Drape a sail bag over the bow pulpit and have the helper apply a slight aft pressure against the mast bundle while you unpin the two aft lower shrouds. Opening their turnbuckles slightly may be necessary and is allowable.
10. With only the two upper shroud turnbuckles and two forward lower shroud turnbuckles left connected, you are ready to lower the mast onto the bow pulpit. With the taller helper on the bow deck, allow the mast to pivot forward — the faster the better as long as you slow it down to insure a gentle landing on the pulpit.
11. At this stage, you can thank and dismiss your volunteer. Pull the pins from the remaining 4 turnbuckles and the pivot bolt from the mast step. You can now lift the bottom end of the mast and move the mast bundle aft so that it slides over the bow pulpit until its balance

point on the pulpit now favors the bundle to rest on the boat. With the mast bundle weight balance now favoring your side of the bow pulpit, walk to the cockpit and pull the mast bundle (the other end being on the bow pulpit) until it reaches and rests on the stern rail (if you feel any resistance when moving the bundle aft, check for stays hung up on hardware). Tip: You can rest the mast bundle on the stern rail, off to the motor lift side and that way have easier access to the stern rail ladder as well as more comfortable cabin access.

12. When trailing long distances use scrap carpet to cushion under pop top corners and wherever glass may rub against glass and where sail cloth meets metal and wherever metal meets metal, before securing the mast bundle to the bow pulpit and stern rail and before putting on the safety lines.
13. There are several passable ways to handle your stays when trailing your boat. Allowing any stays to be carried in any manner that has any turnbuckles extending beyond the boat, is not one of them. Turnbuckles can vibrate free and end up on the road instead of at least in the cockpit. One technique is to hang a sail bag from the mast bundle and lead all stays into it. Not bad although this adds windage. A neat way is to use fast pins and completely remove all stays and both spreaders. My lazy and fast way is to simply bring the 6 shrouds and the two back stays along the mast until just over the cabin door where I let them all just fall into the cabin. I use Velcro ties around the mast bundle to support their horizontal travel along the mast to their common point above the cabin entrance: and use the small, top corner openings that remain after the sliding hatch and cabin door are completely closed. If using this technique, make sure the hatch is locked so the pressure from 8 stays tucked into this small opening, does not force the sliding hatch to open when traveling — particularly when raining.
14. Play it safe. In addition to securing the mast bundle to the bow pulpit and to the stern rail, run a line around the mast bundle down to the bow cleat and another to the mast step (if doable) and/or tie the spreaders to the cabin top hand rails. (Just make sure you use carpet to keep metal from rubbing metal.) Without safety lines, the losing of the bow pulpit connection will allow driving-created wind to have the mast take off and fly. I recall a day in Canada, (before I was so smart) losing my mast and seeing a Volkswagen passing me with the world's largest antenna in its class.
15. If you would like to know what a boat puts up with when pulled on its trailer, sit inside the cabin and have someone drive you around the block. It is something akin to being in a clothes dryer. The point is that you should really not travel with anything loose in the cockpit or cabin, like a rudder, anchor, loose gas can or boom, or even a travel bag that could wipe out the galley before you arrive. I do not take anything off the transom but I do tie off the tiller and put an extra line on the rudder blade to take the strain off its lance cleat and one from the motor to the stern rail. See that there are no loose line ends that could beat back and forth against the gel coat. The ability of such flexible lines to cause damage will amaze you. And finally, if someone else has put the trailer coupler onto your car

hitch's ball, don't make the mistake of not looking or feeling to be sure that the coupler lip is under the ball instead of on top of it; a mistake I made, once.

You will ingeniously improve on our "15" step breaking down and packing — and we welcome your ideas. Taking the time to run a line directly down from the boat bow eye to the trailer frame was an owner's suggestion. And a particularly good one for rough or long trips.

## TRAILING

Trailing the Rhodes is so easy that you will soon forget that there is a boat following you. Once I did look out my side window and noticed there was a boat passing me. Mine. You don't want to hear about that. Just make sure your coupling is properly locked down and, for backup, the safety chains are hooked on. Of course fishtailing will keep reminding you that you are being followed by a boat and, once on the highway, the cause of fishtailing is hard to rectify — but not impossible: Pull off the road. Apply as much pressure on the trailer strap as possible. Get back on the highway (or find a quieter one) and then, when on a declining road section (with no one tailgating you), put your foot down on the car brakes. If necessary, keep applying lots of strap pressure between braking actions until mission accomplished. Once, in desperation to be able to drive at least within 10 miles per hour of the speed limit, I hung a tire over the transom and gently backed into a tree. I suppose life jackets might have worked. But the maneuver did work.

Trail within speed limits. The relationship of your boat to trailer is designed to be adjustable to avoid swaying and fishtailing at 50 to 60 mph. But higher speeds can re-start this phenomenon and you may find that you have used up all the adjustability the rig offers. Besides, blowouts at higher speeds can be more dangerous. And another thing. When you make a turn, the trailer wants to follow you as closely as possible. And since you do not have someone steering the tiller like the rear steerer on the hook and ladder fire engine does, the trailer makes a sharper turn than the car. One of our drivers brought home paint from an Indiana bridge and the State sent us a bill. You must make a wider turn than normal so that the boat and trailer can then make the turn radius you had wanted the car to make originally. Most drivers will give you a wide berth when they see you are pulling a boat. But they may not see that you are pulling a boat. Examples: When coming out of a gas station exit or making a turn into oncoming traffic or entering a highway from a ramp — at night, allow more timing room for an oncoming driver who may adjust speed for your car's maneuver but may not see that a trailer is coming behind you.

## MAINTENANCE

**Cleaning:** Most anything goes but there are a few no nos. While chemicals like Acetone and Lacquer thinner can be used on fiberglass for stubborn problems, these "cleaners" will destroy the plastic items on the boat such as windows and instruments. Plastic can be cleaned with alcohol or mineral spirit solvents. Soap and water is the place to start and the stores are full of boat cleaning products. Fine scratches will come out with Soft Scrub type preparations. Fine steel wool with paint thinner can take the stains off stainless steel. For the very toughest jobs I use extremely fine wet type sand paper that the crew has thrown away because it is worn out, along

with lots of water. It works wonders but may need some rebuffering to bring back the shine. Keeping the boat's non walking areas "waxed" makes future cleaning easier. Fiberglass is slippery, particularly when wet, even the non skid areas, so move about your boat with caution.

**Lubricating:** There is very little to lubricate on today's sailboats. But salt spray can make cleaning and occasional light lubricating a good program. A spray lubricant is the easy way to get to places like: Sliding hatch and lazaret locks. Table leg ends. Cabinet doors sliding tracks. Boom and pop top sliders. IMF bottom furling tube bearings. Pop top arms. Lazaret hatch hinges. The friction insert of the removable bow vent and its fixed deck ring. Even a squeaky wood tiller in its plastic rudder head can be cured with a little Vaseline. But, as a general rule, "if it ain't broke, don't fix it" since lubrication solutions can themselves attract debris.

**Antifouling Paint:** It depends where you are. Northern climes can get several seasons from a single application. Mid states maybe once a season. Hot water sailing can call for even twice a year and is the reason many of our Florida owners keep their boats on lifts or trailers. Racing fans do not use bottom paint at all since it slows a boat down. A good place to start is to ask other boaters in your waters for their experience. If you trail and do not plan to be in the water more than a week or two at a time, you may want to forget this chore. Of course bottom paint adds good looking color, although the part that is always in the water soon turns into an icky shade. Speaking of color, you may want to put on two coats of different colors so that you can easily see and be put on notice when the outer coat is wearing thin but not be in trouble because the color coded under coat still provides protection.

## DANGERS

Before raising the mast look up at the sky. Will the raising arc clear all obstacles like tree branches. Before moving a boat with its mast up will the mast clear all obstacles like 400 volt power lines. We tried that once. The effects are spectacular. Check for loose turnbuckle barrels that may have studs ready to unthread or have unraveling swaged wire. Does the tiller and rudder blade have their pivot bolt nuts on. Keep an eye on guests who may not be tuned into the fact that booms swing —sometimes violently. Show guests how to brace themselves so that their legs do not slip and go under the opposite seat and scrape shins. Make sure that the 2 aft snap pins, that hold the back half of the pop top, are really engaged by pulling down on the cross bar. Make sure the mast pop top slider pin is fully in its hole by seeing that the pin's pull ring has moved in until it is against the slider's plastic body. A falling pop top can do severe damage to heads, arms and fingers. Should anyone fall off the boat when not wearing a life preserver, throw fenders, cockpit cushions and life jackets overboard. Kill the engine if anywhere near anyone in the water (or at least go into neutral). Where possible, sail rather than motor, to the overboard party, always keeping an eye on them as you come about. It is amazing how easy it is to lose sight of objects in the water since even small chop blocks floating objects from view. Throw out a long attached drag line from stern and lower the ladder.

Always have a safety line from motor to the stern rail or deck cleat or the transom eye in case the motor clamps loosen and walk off the bracket or should any part of the motor lift fail.

When using a mooring consider attaching the mooring line to the boat's bow eye and then a second slack line from the mooring to the bow deck cleat. If you are concerned about active youngsters, consider a slack line from their life jackets to the base of the mast so you can haul them in. Don't use the human body as a fender. This may seem a strange caution but we mention it because it has been tried, with poor results. Read and follow Coast Guard rules and information. The Rhodes does not come with lightning protection devices. We suggest snuggling up to a larger sailboat. Since we are not sure of the best advice, you are on your own re this possible danger. All we can tell you is that in all the years we have been building Rhodes, no lives have been lost or even bruised too badly. (Embarrassed, yes.) We would like you to help us keep our enviable record.

## SERVICING THE CENTERBOARD

You will rarely, if ever, have to service your centerboard. On the latest models if you ever do want to replace the control line, with the boat on a crane or jacked above its trailer so the board can be partially lowered (or on a beach on its side) simply drop the new line in from the cockpit and fasten to the hole on the back edge of the diamondboard. Conventional boards can be done on the trailer but the center plywood floor panel must be unscrewed and the 50 or so centerboard cap bolts removed. Gently lift up the cap so as not to damage the reusable neoprene gasket. Release the centerboard line from its cockpit cam cleat and the centerboard can then be lifted from the centerboard trunk. On older boards the line runs through two blocks on the centerboard and a turning bar in the cap to provide a mechanical advantage. Therefore a new line must be installed to follow the same path pattern. If you ever have to do this chore, take advantage of the opportunity to put fresh anti-fouling paint on the centerboard trunk walls as well as on the removed centerboard.

## THE INTERIOR

### Miscellaneous Cabin Information

The cabin doors on earlier boats can be used with the hinge facing outside or inside. The new doors install with the hinge facing out since these new style hinges have locking nuts on the inside so that they cannot be removed from the outside. The top half of the door can be lowered to serve as a table by using the supplied small supporting leg. Matching flush table leg sockets on the cabin and cockpit floors allow the dining table to be used for "U" shaped inside and outside dining. Since the table is supported by a single stanchion the table can be pivoted for easier sitting or set at an angle or rotated for face to face sitting (the entrance step seat facing the seat on the hinged battery storage seat). With the table stanchion removed from the surface leg socket on the bottom side of the table, the table panel can be lowered to fit on the lips projecting from both the entrance step seat and the hinged seat over the battery storage compartment. With the table in this down position, the large center backrest cushion goes over the table. The square backrest cushion at the bow end of the dinette goes over the entrance step seat and the small aft end back rest cushion gets rotated 90 degrees and gets squeezed onto the hinged seat over the battery storage compartment. When you return these three cushions to their backrest role we want you to get it right so the first tip is: See that the zippered ends are on the bottom. The next tip: All three backrest

cushions sit on top to the long dinette seat cushion along the wall and the top of these backrest cushions push in under the cabin ceiling below the windows. The sequence, starting from the aft end is: The smallest cushion, the largest cushion, the square cushion: always remembering that the zipper is on or near the bottom of each of the three backrest cushions. This gives you a perfect fit since sequence top of the cushions are angled to match the rise in the cabin ceiling. If it comes out looking dumb, think to yourself, "would GB have designed it that way".

When not serving as a bed support or cockpit table or table for the cabin "U" shaped dinette, the table panel stores in tracks on the "V" berth ceiling. Forward of this set of tracks is a triangular fiberglass drawer with a decorative wood fascia. This is the anchor rope locker that accesses anchor line through the bow vent. For those who are active anchor sailors a mesh laundry bag tied to the bow pulpit is a handy anchor rope alternative. The white panels along the "V" berth sides provide 12' of storage shelving. The panels under the aft end of the two "V" berth cushions hinge up for access to the water tank, the head holding tank and some limited storage area. The bow end of the "U" shaped dinette seat hinges up for access to electrical items plus some limited storage. The sliding door under the dinette seat offers additional storage space (good for shoes and such) and the large drawer under the entrance step/seat provides quick access storage. A fascia at the head of the double bunk provides a storage shelf for night time pocket items and the fascia in front of the galley windows creates a handy utensil storage shelf. Sliding doors above the galley counter open to storage deep enough for an entertainment center and sliding doors below the counter can be outfitted with containers and additional drawers. The sink faucet lifts and rotates. The ice box has some space to its right for a small waste container or serving trays. Ice cubes can be put in a large zip lock bag and loaded into the ice box ice container via the ice box counter top lid so that when melted, the water is easily removable. Items to be kept very cold can be put in this top loading container or on the removable shelf to the right of the ice container. All other items for the ice box are put in through the large front opening door. When the cutting board is placed aside, the stove grill can be flipped over for holding pots. Dockside 110v cooking appliances can be plugged into the AC outlets. Dockside or under way 12v appliances can be plugged into the two 12 receptacles. The head compartment is loaded with features that we will let you have the fun of figuring out for yourself. Should you get the urge to remodel, other than the "V" berth bulkhead, all elements of the cabin interior are removable by unscrewing.

***OK, go sailing—just don't sail like my brother.***