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# Rhodes 22 Owner's Manual

(Circa 1988)

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Lila Cunningham

# "CONGRATULATIONS."

That is what everyone says, whether you have purchased a new pencil sharpener or a 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 our product and our company. We promise not to disappoint you, or desert you.

Stan Spitzer, pres. 516 666 2148

# TIPS ON RIGGING AND SAILING YOUR NEW RHODES 22

You might be thinking, "Here I am with all these wires and bolts and tubes and dacron and fiberglass, and I'm 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. You will be your own expert by following these simple, logical and common sense steps, that you could have written yourself, if you had had the time.

When delivery and preparation is paid for, most boats come with a pre-rigged mast, a pre-assembled furling sail, 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 some weather related, or buyer initiated, or other reasonable causes for having a boat package picked up or delivered, unopened. And Second, for your second season you may have to be on your own.

# 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 windvane 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 three or four lines holding the mast to the boat: a line to the bow pulpit, a line to the stern rail, one or two safety lines to the bow cleat and mast step, and lines or tape holding the spreaders. Undo all mast packing tape except: tape around the jib at its grommet that keeps the jib from unfurling, tape holding the jib sheets to the furled jib, tape holding the jib furling line alongside the bottom of the jib furling tube, and any tape or lines that are holding the jib and boom alongside the mast. The point is that you will be raising the mast, jib and boom together as one unit, so you want them bundled up as one unit. If your spars came from the plant bundled up like this, do not undo them. However, any stays that are taped or tied must be freed, even if this requires undoing some of your mast/jib/boom bundle.

Look in the two cockpit coaming compartments on both the lower and upper shelves. You should find the cabin keys and the lazaret keys and maybe some additional hardware like pins and mast bolt and perhaps the deck vent cap. In the lazaret you will find the fenders, and maybe a sailbag. (If we seem a little imprecise it is because different packers and checkers have their own styles and we have no checkers to check the checker, but it will all be there.)

There is no need to open the cabin until the mast is moved to the raising position. If you are impatient, you will have to lift the mast pressure off the pop top, unlock the sliding hatch and push it forward, fold back the cabin door, lift it out of its tracks and store it under a cockpit seat. Now you can look inside your new boat. (Hope we got all the colors right.) On the floor or in a shelf in the "V" berth area, you will find the traveler bar. In the sliding drawer under the entrance step, or in a sail bag, you will find the remaining lines and hardware. In the ice chest are the various papers that come from our parts suppliers.

# PREPARATIONS FOR RAISING THE MAST

It is nice to have a helper, but these steps can be done single handed. Place the 3/8" X 4" mast bolt and wing nut next to the mast hinge step. Put an empty sail bag under the mast on the bow pulpit to protect the metal and reduce friction. (Not required if you have the mast/bow pulpit roller option.) Then throw all your stay ends overboard. The reason for this is that you do not want the turnbuckles to catch on the edge of the sliding hatch or on hardware as the mast is being moved into position. (If you plan to trail often you will develop your own sophisticated technique for taping the stays to the mast in an appropriate sequence so that they will not interfere with mast positioning and can be untaped in the proper sequence as needed.) Tip: have the two upper shrouds, (the ones attached to the spreaders) pass thru the legs of the bow pulpit before dangling overboard, so you can reach them later without having to get off the boat.

Standing in the cockpit, push the mast out over the bow pulpit as far as you comfortably can. Walk to the bow deck and continue pushing the mast out over the pulpit (if you have a low positioned light on the mast you will have to raise the mast slightly when the light reaches the pulpit.) until the hole at the base of the mast lines up with the slot in the mast step. Because of the see-saw effect of the mast over the pulpit, you will have to keep a slight downward pressure at your end of the mast. See that wires coming from the base of the mast, are forward of the mast step, so they will not be cut by the mast bottom when it is raised. Now insert the mast bolt through the mast step and mast. The mast may have to be rotated and/or shifted slightly at the bow pulpit to get these four holes to align for easy insertion of the bolt. With the bolt in place, thread on the wing nut but do not tighten it. The mast is now secure and you can leave it.

Four shrouds get connected before the mast is raised: the two forward lowers to keep the mast from continuing moving aft after it is perpendicular, and the two upper shrouds to keep the mast from moving sideways as it is being raised. If the mast has never been raised before, all turnbuckles should be opened so that only about 1/4" of thread projects into the barrel, since you do not want the shrouds to be short, and stop your mast raising part way up. The fork ends the two forward lower shrouds are connected to the forward holes in the double mast tangs just below the spreaders turnbuckle ends connect to the forward chain plates on the cabin These chain plates are forward of the mast pivot point. two upper shrouds, coming from 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.

It is all very straight forward and you will do it very quickly the second time around: untie the mast, move it forward so you can put the mast bolt thru the mast step, connect the forward and upper shrouds. You are now ready for help or the optional mast hoist.

Before raising the mast, run through this quick check list: Is the pop top slider in the mast track? (This slider can only be inserted from the bottom of the mast and you don't want to lower and raise the mast again.) Are the four turnbuckles pointing to the bow so they will pivot up easily as the mast is lifted?. (If they face aft or outward, they may bend as the shrounds become taut, and this is not covered by your warranty.) Check the remaining stays. should be draped over the boat, or taped to the mast, in such a way as to not catch on the trailer or hardware while raising.) Is the upper end of the jib furling tube resting on one of the upper shrouds? (There is enough play in the jib stay to allow this, and while you can skip this, it is good technique.) The disc at the bottom of the jib tube should be sitting on top of the lower cleat on the side of the mast, with the top of the cleat into the hole at the rim of the disc. (This helps keep the tube and mast together while raising.) 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 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. At this point I look around the ramp for a volunteer, or set up my electric mast hoist option. If somewhere in our literature it says "One man can raise the mast.", I must admit I have not met him yet. (We were referring to the standard mast.) However, many owners do rig up their own single handed hoist mechanisms.

It only takes two of me, three seconds to raise the mast. With two people on the bow deck, (one on each side of the mast, or both on the same side, if that feels more comfortable,) the mast is thrown up so you can get under it and walk it up. The trick is to do it fast and lowers shrouds are connected to the aft set of cabin top chain the single handed mode to complete the rest of the rigging.

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

- 1. Undo the jib tube from the mast and walk it to the bow. Avoid touching the deck so you do not put a kink in the stay protruding from the bottom of the tube. 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.)
- 2. The boom is vertical alongside the mast. On factory pre-rigged boats, its goose neck is connected to the boom slider and the topping lift line is tied to the straight, rotating tang on the outer end of the boom. So the boom can not fall after you remove any remaining tape or lines. Uncleat the topping lift line from lift line when the boom is about horizontal and feed the free end of this line thru the fair lead on the port top of the mast step then back to the cleat on the port, mid cabin top, and Permanently uncleat the topping lift line from the mast cleat and horizontal position. Check it out: The topping lift should be running from the straight tang at the end of the boom, up to the top front of the spreaders), through fair leads on the mast and through two fair leads on the mast and through two fair leads on the mast and through
- 3. If your boat is factory pre-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 cleanly to its appropriate transom corner chain plate. Fasten the bottom hole in each adjuster to the top hole in its chain plate with clevis and cotter pins, or fast pins. (Have the open side of the adjusters facing inward just for the aesthetics of it.) If the back stays seems very slack, lower the stays an equal amount of holes in each

# TUNING THE MAST

This is not a critical operation and it can be done single handed. What you want is a perpendicular mast, a straight mast and a non-sagging jib luff. 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.

What you need is the traveler bar and the white, 3/16" X 15' backstay tension line. Insert the traveler bar into the sockets already attached to each backstay. You want to orient the installation of bar and sockets so that, the cam cleat on the fiddler block on the car on the bar, is facing the bow when the fiddler block is standing up. (You can do that.) Line up the holes in the sockets with the holes in the bar, and push in fast pins.

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; the other has a block with a becket (a loop at its bottom to attach a line to). The double back stays can be attached to the top of the mast so that the stay with the block with becket is on the port side, or visversa, and this would affect on which side of the transom the cleat for the tension line should be. We wouldn't want you to have to lower the mast on our account, so there is a tension line cleat on both corners of the transom, and one will not be used.

Take the 15' backstay tension adjuster line and tie it to the becket on that block attached to one of the back stays. (A bowline will do. We use this knot because it is easy to take apart and is the only knot we know.) Run the line across to, and up thru the block on the other back stay, then across to and down thru the sheave in the block with becket on the first back stay, and then down to the cleat on the transom. 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.

These are a lot of words on our part, but with one pull of a line, you have just tuned the two back stays and the jib stay. Now tackle the two upper shrouds. Hold the wire in one hand and turn the turnbuckle barrel clockwise to take up any slack. You are looking for a perpendicular mast. Adjusting for an equal amount of exposed thread into the port and starboard turnbuckle barrels, is a good starting guide. Hand tighten. Do not use tools. A naval academy son of one owner, adjusted dad's stays with a plier 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 boat. When wind hits the sail 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. Take out their slack to give you a straight mast, port to starboard and bow to stern. Once you are satisfied with your mast tune up job, lock it in with cotter or ring pins thru the holes near the ends of the threaded terminals in the turnbuckle barrels. This stops some one from undoing the turnbuckles without first removing these safety pins. Stays are twisted wires and they 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 turnbuckles. Pinning, wiring or taping the stays and turnbuckles will discourage this. This precaution is not necessary if you trail and are tuned in to this possibility.

There is one pain in the neck adjustment you probably won't have to make. If the performance of your boat leads you to believe changing the rake of the mast is necessary, there is an adjuster at the top of the jib stay that will let you do this. Shortening the jib stay decreases weather helm and vis-versa. Almost none of these adjustments have be done again, after the initial tuning. The thanks goes to the rapid back stay adjuster, which relaxes all turnbuckle tension in a flash for easy clevis pin or fast pin removal, without disturbing the turnbuckle setting.

# CONNECTING AND OPERATING THE POP TOP

To proceed in more comfort you may want to raise your pop top now. Whether your boat comes factory pre-rigged or not, the pop top will not be connected to the mast. The one cardinal rule you must remember is that the pop top must be disconnected from the mast whenever the mast is raised or lowered. Otherwise you will damage the pop top or the mast, or both, not beyond repair of the boat, but perhaps beyond repair of a captain's pride.

On the aft side of the mast, below the boom, is the pop top slider. This slider has a sort of a nose attached to it. Pull the pin starboard of the nose, and the slider will lower on the mast until the nose fits between two arms protruding from the front of the pop top. Line up the holes in the bent arms on the pop top with the hole in the nose on the slider and insert a supplied fast pin. The pop top is now connected.

The pop top must be operated in the proper sequence: Unlock the sliding hatch. Slide it as far forward as it will go. the cabin. Place one hand on the stainless steel horizontal bar in front of you (this is part of the pop top arm mechanism) and the other hand on the snap-pin welded to the lower pop top arm. this pin and raise the pop top slightly. Now hold the cross bar with the other hand and use your free hand to pull the snap-pin on the opposite lower arm. With the pop top now unlocked from its down position, place both hands on the cross bar and raise the aft end of The aft end of the top will automatically stop and lock its up position. If you hear one locking click, take an "A". If you hear one click quickly followed by a second click, that is also passable. If there is a delay between the sounds of the upper pop top arm clicking into the lower arms it means you have raised the top unevenly (side to side) and this may result in failures all around. You can test the up position by pulling down on the cross bar and finding that it will not come back down.

With the aft end of the pop top raised and secure, walk further into the cabin. Place one hand on the raised crossbar and the other under the front end of the pop top. With the cross bar hand pushing slightly aft, raise the front end of the top with the other hand until the snap pin on the pop top slider engages its hole in the mast. Again test for security by trying to pull the front end of the top back down (you can also feel to see that the pin has gone fully into its hole.) These steps are only guides and you may develop your own style that better suits your own physical attributes.

Lowering the pop top must also be done in the proper sequence. Support the front end of the pop top with one hand and pull out the pop top/mast slider pin. (CAUTION: Pulling the pin that connects the pop top to the pop top slider, causes the boat to blow up, to keep this feature from enemy hands, or at best causes the pop top to fall on your head.) With the slider pin released from its mast hole, use both hands to lower the top. Step to the aft of the cabin and with one hand on the cross bar, release one snap-pin on a lower arm and let the top lower slightly. Then switch hands and pull the opposite snap-pin. Then, with both hands spread on the cross bar, lower the top evenly until it locks in its down position.

To secure the cabin for the day, the companionway (cabin door) must be in position before the sliding hatch is moved aft and the lock pushed in. The key is not needed to lock the hatch.

# SETTING THE FURLING LINES

On factory pre-rigged boats, the main sail furling line is already installed thru the boom for you. The jib furling line is already attached, coiled and taped to the furling tube. Your job is to untape and uncoil it and feed it thru the fairlead on the bow deck, then thru the fairlead on the front, starboard cabin top and then to the furling cleat on the starboard aft cabin top. Take the slack out of this line and temporarily secure it here. If you have stainless steel grab rails, they look and act as super cleats and you can coil and hang excess line here.

# SETTING THE JIB SHEETS

An extra big jib sail is called a genoa because its origin had something to do with Genoa, Italy. "Main" for the sail that goes up the mast makes sense. The name we gave to our main, "Sally Sail" means "bursting forth, witty, imaginative, off the beaten (sail) track". All appropriate. But "sheets" for the ropes that position the sails; I suppose that came about because sails looked like sheets before we named them genoa, spinaker and Sally. The Rhodes has a jib sheet, about 60', and a main sheet about 35', both of the best quality black 3/8" braided dacron.

If your boat has not arrived with its genoa jib sheet already attached, take this black coil of line from your parts, uncoil it, put the two ends side by side and work your way along the doubled line to locate its mid point. Insert the mid point of the folded-in-half line, thru the large exposed grommet of the furled genoa sail so that you have a loop of line on one side of the grommet and two equal legs of line on the other side of the grommet. Insert the two ends of the line thru the loop and pull them to close the loop. You now have two equal lengths of black line firmly attached to your jib. Coil this line (for ease of handling) and wrap the two legs about six clockwise turns around the sail in anticipation of the looseness of the initial furling of the sail on its tube.

6 At.

Release the jib furling line from its cleat so the jib tube is free to rotate. Pull the jib sheets to undo the six turns you just took on the tube. This action will rotate the tube causing the furling line to partially wrap around the tube. With the jib sheets no longer around the sail, but none of the sail yet unfurled, again lock the furling line in its cleat. Untwist the two jib sheets, if that they be, and pass them outside the upper shrouds, thru the genoa leads riding on the aft set of genoa tracks, then clockwise around their respective winches and into their cam cleats. Excess jib sheet can always be tucked into the coaming compartment below the winch, because neatness counts.

You can now test the furling operation. Free that genoa sheet that is on the windward side, (the side the wind is coming from). This means you do not want this line in its clam cleat, around its winch, or under a crews' end. Uncleat the jib furling line and hold onto it with a very light pressure. Free the leeward jib sheet (the one on the side where the wind is going away from the boat), and start pulling it. The jib sail will begin unfurling, the furling line will begin furling, and the trailer will begin rolling. So if it is a windy day, testing for a storm jib size will suffice.

You can lock the furling tube at any sail area size you want merely by putting the furling line back in its cleat. You will not use this line again until you want to change sail size or put the sail away; in which case you either head into the wind or release the appropriate jib sheet so the sail can swing out into the wind, and then pull in on the furling line. If the line does not respond look for a fouled furling line, or, a sheet still not free from a winch, or clam cleat, or coaming box, or crew's part. Unless it is an emergency furling, the leeward jib sheet should be held with a light pressure on it to insure the sail furls neatly on the tube.

# SETTING THE MAIN SHEET

If your boat did not come with its main sheet pre-rigged, do not be If our PhD owners can thread this line, anyone can. the aft end of the boom is a second rotating tang, this one with a bend in it. Affixed to this tang is the boom block with becket. (If the boom block is not on this tang take it from your supplies and In your supplies is a second 3/8" attach it to this bent tang.) black braided dacron line, this one about 35' long. This is your main sheet and it begins its journey with a bowline or other knot at the becket on the boom block. From there it goes down to the fiddler block on the traveler bar and first passes thru the upper sheave of the fiddler block entering from the aft side of the (Tip: hold the fiddler block up vertically from its limp block. position on the traveler bar car so you can see things more clearly.) The main sheet then heads upwards to the boom block, passing through its sheave entering from the bow side, then back down to the fiddler block's large and lower sheave entering from the aft side and exiting through the cam cleat affixed to the fiddler Take up the slack and you should have three parallel lines between the boom block and the fiddler block and an approximately horizontal boom at rest over the center of the cockpit.

# THE SALLY SAIL MAIN

Pre-rigged boats come with the main in the mast and the boom connected to the mast. The end of the main sail furling line comes out of a slot in the bottom of the boom, just aft of the cabin. The outhaul line is colored and provides a two to one mechanical advantage by starting at the car on the boom, going through a block on the clew of the sail and returning to and through a sheave on the boom car and then to a turning block at the aft end of the boom where it exits and can be formed into a loop handle. The boom has a series of cleats for locking the furling and outhaul lines, both to secure the desired sail size and set the wanted sail shape. An adustable stop in the boom track allows the car to be stopped at any position along the boom for whatever main sail size you elect.

The difference in operating the main sail (as compared to the furling jib) is that, when the main sail is pulled out, the furling line is not held. This makes it possible to go from the stored position to full main in two seconds flat. If only a portion of the main is to be employed, the furling line can be pre-locked with a pre-set length on one of the boom cleats. Putting the sail away is just as quick. The colored outhaul line is uncleated and left free while the furling line is pulled.

Tip: In light airs the furling main can be set or stored regardless of the boat's approach to the wind. However, in heavy airs, the friction of the sail against the mast slot makes the operation less inconsequential, so it is good practice to turn the boat into the wind (as you would have to do with a conventional sail anyway) at such an angle that the boom is slightly off to starboard, so the sail exits or enters the mast slot freely.

The topping lift is an integral part of the Innermast Furling system and that is why it is so conveniently led back to the cockpit. If you furled the main and did not have a topping lift, the boom would fall on your head. So the topping lift should be set to support the boom before you pull the furling line. On the other hand, if you left the boom supported by the topping lift, the mainsheet would not control mainsail shape since it would be acting directly against the topping lift. So the topping lift should be slackened just before you actually start sailing. The topping lift controls the angle of the boom and we have found it best to have the boom end slightly above horizontal when furling and unfurling the main.

Now that you know all this, it is all very easy: Uncleat the furling and outhaul lines. Pull out the sail with the outhaul line. Release the topping lift. Want to sail with a shortened main? Move the boom stop to a more forward position. Pull the furling line for the desired sail area. Adjust the outhaul line for desired sail shape. To stop sailing or to dock or to put the sail away for the day, pull the topping lift to raise the boom above horizontal. Release the outhaul line and hold it until you feel the boat has sufficient momentum left to complete its mission without further sail power. Then pull the furling line.

# OPERATING THE CENTERBOARD

You may never get to see your centerboard so let us tell you that it looks just like the rudder blade except that it is much heavier. The board is pre-painted at the factory so that you can go through your first season without worrying about it. If you sail in waters that require yearly bottom paint, the board can be painted and the inside of the centerboard well swabbed with anti-fouling paint with the boat up in slings and the board down. Or the board can be painted, without the aid of a hoist, by lifting it out of the centerboard trunk from inside the cabin while the boat is on its trailer. (see maintenance section).

When the boat is in forward motion, the board freely swings up if the boat strikes an obstacle. The board should be raised if the boat is forced backwards in shallow water since it will not pivot forward. The board should be left in the fully up position when the boat is in the water at rest or under motor. In our "preparation to launch" coverage, the board must be locked in the up position since the boat will be going backwards off the trailer.

# OPERATING THE RUDDER

If your tiller has a hiking stick, lift the ball end of the stick from its locking clip on the tiller, rotate the ball and extend the length of the hiking stick until it reaches its port or starboard friction lock on the stern rail. Push the hiking stick shaft, just below the ball end, into the tller friction lock and turn the ball again to lock the hiking stick and keep the rudder blade from turning during the launching.

The rudder blade is controlled by two lines. One comes off the leading edge of the blade and up behind a clutch plate on the front edge of the rudder head. When in use this line should be turned back after coming through this plate so it passes in back of the plate again. Tension is applied to the line by adjusting a wing nut on the plate and this keeps the blade in the down position against the flowing water pressure, yet allows it to freely pivot up if it hits bottom or a trap line, etc. Like the centerboard it does not pivot forward, therefore with the boat moving backwards during the launch you want the blade to be in its up position. So release the tension on the clutch line and pull on the second control line. This line comes from the aft edge of the blade and goes through a cleat on the aft edge of the rudder head. The blade can be pulled horizontal so it can be completely out of the water when not in use but you may want to apply some downward force on top of the rudder head when pulling this line up, if you feel you may be lifting the entire rudder assembly out of it transom gudgeons.

If you find the need to do any extensive sculling, you will probably find the rudder works best at 30 to 45 degrees, and you can obtain this setting by employing both control lines.

# OPERATING THE MOTOR LIFT

For ease of lifting the motor onto the motor lift, lower the lift. Center the motor on the motor bracket pad and tighten the motor clamps. AND PUT A SAFETY LINE FROM THE MOTOR TO THE TRANSOM EYE in case the motor clamps loosen or the outboard lift has a failure. Prepare and test the motor's operation before the launch. (It is worth a test start, even if it is out of the water since you will turn it off just the moment it shows you it is willing to start.)

Most motors have adjustments that will let you set the proper propangle, and let you put tension on the steering shaft so the motor will not wander if you elect to steer with the boat's tiller. Hopefully you have selected a motor that has a series of stops that allow you to tilt the motor when not in use. Motors that have only a single tilt position may not have the space for being angled out of the water when in the up position.

With motor having been tested, secured and roaring to go, turn it off and pull the out board lift control line so the motor locks in the raised position. The control line can be locked at any point along its lift range so as soon as you launch you can use the motor in shallow areas.

# PREPARING THE TRAILER FOR LAUNCHING

If you have gotten this far and the sun has gone down, you might want to put the launch off 'til tomorrow. Seriously, folks, you will find you can get through all of the above verbiage doing it yourself, in about twenty minutes. If you did not have the mast hoist, you may have had a little assistance for this one part of the operation. It is amazingly easy and fast to do. We just want you to understand the reasoning so you can handle all contingencies, if ever any should arise when you are on your own.

So let's examine the trailer. If you are not as lazy as this writer, you should, as a matter of good practice, use a portable grease gun to check your wheel bearings. There is a viable plate in the bearing cap and when the grease gun has removed any air in the bearings, this plate will begin to move toward you, indicating no additional grease is required. If the trailer wheels were hot after your drive to the ramp, the cold water would cause any air that was in the bearings to contract and form a vacuum which would draw in the sea water, and eventually lead to breakdowns.

Disconnect the trailer wire harness from the car. You have to do this anyway if you are using the extension tongue but you do not have to physically do this if you do not extend the trailer. But you should do this in either case because the lights become submerged and when you put your foot on the break to keep from submerging the car, the trailer brake lights go on, heat up and break.

You will also have to disconnect the chains if you are using the extension. To use the extension, disconnect the trailer from the car using the trailer jack, and pull the car at least 10 feet forward. In most cases you will find yourself using the extension because most ramps are not very steep and it is nice not to bury the rear of the car in the water as so many trailer people do. Pull the safety pins at the bottoms of the two bent pins that secure the extension tongue to the trailer, and when the bar is all the way out, reinsert one pin in one of the two holes at the end of the bar. It is very easy to do this single handed, particularly if you keep this extension bar greased. If you do have a helper, he or she can tell you when you are getting close to the aft pin holes so you stop short of pulling the bar completely out of the trailer. Back up the car (or roll the boat forward) and put the trailer back on the car hitch.

Three more trailer steps: Unsnap the winch line from the boat's bow eye. Unlock and slide the trailer bow arm (the horizontal bar that has the rubber bow socket on its end) as far toward the car as it goes. Crank up the trailer jack wheel as far as it goes.

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 along the ramp, or whether you are accepting the challenge of launching single handed.

If you are launching single handed, attach a slack line of about 25 feet from the bow eye to the trailer bow post and be prepared to get wet (unless you can attach the slack line to a dock) and go to the next paragraph. If you are launching with a helper on board, put that crew member on board now and forget about any retrieving If you are launching with a helper off the boat, use a 30 to lines. foot line with one end to the bow docking cleat and the other end aft docking cleat. Use the cleats on the side that will be against the float or the dock your helper will be walking onto and, situation allows, plan to use a dockside that will have the if the wind keep the boat off the dock. Instruct your helper to hold the endless guide line firmly so that by pulling with one hand or the other there will be complete control to draw the boat alongside 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 stop the boat from floating off the trailer so that the bow of the boat gets picked up by the trailer as the trailer is being pulled up the ramp. On the other hand, the pressure on the line could be considerable, taking a lightweight helper right off the end of the dock for an early swim. This can be avoided if the helper is aware that the line can be dropped over a dock cleat or pile if the pressure feels too great. With both ends of the continuous control line connected to both ends of the boat, the operation will still come to a happy ending.

Having chosen your mode of launching and taken the corresponding steps, it is time for the final check list: Are there any overhead wires between you and the water? (It is a good idea to check this before raising the mast.) Is the centerboard locked in the up Check to see that the ladder, rudder and motor are all Also, fenders may very well be appropriate depending on dock Look to see that no other boat is planning to come construction. in while you are going out because you are about to participate in one of the fastest launchings on record.

With all systems go, slowly start backing toward the ramp. Aim between docksides if a crew is onboard or close to a dockside if a helper is walking alongside the boat with 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 raise, and then you will apply the brakes (with a reasonable pressure). The trailer will stop and the boat will continue. Drive car and trailer back up the ramp just as soon as the bow of the boat clears We suggest this early trailer withdrawal so the boat the trailer. is not drawn back onto the trailer when the dockside helper prematurely coaxes the boat to the dock. This is not a requirement when a crew member is on board since the motor will be lowered and started (or started and lowered), and the boat will be under its own And this is positively not a requirement if you are launching single handed because as soon as the boat leaves the trailer you will want to leave the car and take the bow line off the trailer to guide the boat to the dock.

If the boat is coming out the same day or the trailer is to stay in the ramp area and not going back onto public roads, you may want to leave the tongue extended to save some duplicating efforts later. To put the tongue in, jack the trailer off the car. Pull the safety pin from the bottom of the locking pin and slide the bar aft. you are lucky, it will go right into its socket on the trailer cross member. Otherwise, a sideways nudging may be necessary. The aft end of this bar must be fully in its socket for the two securing holes to align with the two holes at the forward end of the bar. With the holes aligned, insert the locking pins and their safety pins. good way to frustrate potential trailer snatchers is to leave these two pins out. They will discover their mistake at an inconvenient intersection and probably give up the idea.

If all trailerable boat races started and ended on land, the Rhodes would win easily. To review: Decide if your ramp requires use of the extension tongue. Decide if you are launching single handed, or with crew on board or with a helper on the dock. Disconnect the kyllis winch line and pull back the bow arm. Check to see that the centerboard is locked in the up position and that the rudder is up. Get in your car and go down the ramp, picking up speed until the transom starts to float. Put on the brakes.

# TIPS ON SAILING

We thought we would go for a hypothetical sail with you that might prove partly a review and partly an introduction to some new points. We will consider light airs and heavy airs and let you internalize for conditions inbetween. We will touch on tacking, running, reaching, coming about, jibing, and showing off.

# Light Airs:

Put up the pop top, particularly if you have guests. The up top will not hinder your sailing or your visiblity and actually makes it easier to walk to the lounging foredeck. Lower the centerboard. The lighter the airs, the slower your boat moves thru the water, so the larger the fin area required to counteract slippage (remember the glider). When ready, take out sails without considering wind direction. Set the main outhaul line to allow a fullness in the sail shape (large draft). Release the topping lift. Use a genoa size jib with the outer genoa cars forward to allow a fullness in genoa shape. Use the cockpit cushions and encourage your relaxed crew to arrange themselves so the boat heels. This hull angle reduces wetted surface for a little more speed.

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 stranger, we suggest that you restrict yourself to sailing on light air days (in the 10 knot wind vicinity).

# Heavy Airs:

Compared to motor boats, sailboats are built very close to the water (have a low freeboard). Sailboats with 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 speed limitation. With the Rhodes, this happens when the winds approach 30 knots. Some sailers use the length of the boat as a guide to its safe top wind speed. This does not mean the boat will not go like and with the wind in 50 knots, but tacking would be impossible and control would be limited.

In 15 to 25 knot winds we suggest you consider sailing with the pop top down to cut the hull's wind resistance, and with the boom lowered to its bottom hole to increase stability. The boat is like a see-saw. The higher the sail on the mast (the further out on the see-saw), the more the sail can pull the boat over. Pulling out the spring pin on the boom slider and lowering the boom to the lower hole for this slider, automatically lowers the main sail without altering sail area. This can be done with the sail in or out and with the boat under power or under sail. Under sail, it is easier to do this into the wind with the main sheet slack. With the boom at a lower level, the topping lift may require more slack.

Two things happen: The person on the see-saw moving in towards the folcrum becomes less effective in raising the other side, and so the same size sail moving closer to the deck looses some of its ability to heel the boat. However the total energy striking the sail has not changed and must be used up some other way, so the boat goes When the boat goes faster, it requires less underwater fin faster. area (remember the jet and its smaller wing span). So in heavier may elect to raise the centerboard. Raising the centerboard cuts down the overall wetted surface (water friction on the hull) and the boat goes faster. When the boat goes faster, you need even less centerboard. This cycle feeds on itself so you will find many times that you do not need the centerboard at all.

When the boat goes faster, it tends to lift out of the water. (High speed motorboats sometimes leave the water.) This reduces wetted surface even further and happens more readily if the boat is kept In light airs at slow boat speed, wetted surface was reduced by sailing on a different part of the hull shape by intentionally heeling the boat with the crews' weight. In heavy airs, you want to keep the hull flat. (Sailing is full of conventional wisdom contradictions.) In the Rhodes, you do this with a lower boom, the crews' live ballast on the gunnels and possibly less sail area.

If speed is what you want, lowering the boom is the first of the steps to take to keep the boat flatter. steps to take to keep the boat flatter. What you sacrifice when you lower the boom is head room. However, there is still plenty of sitting headroom with the lower boom level and heads should always be on the lookout for booms no matter what level each is at. An advantage to the lower boom position is that if you accidentally jibe, the chance of the boom snagging the back stays is eliminated.

speed is what you want and you have lowered the boom and the boat still requires flattening, put away the cockpit cushions. There are grooves in the fiberglass cockpit seats that not only add strength and drainage, but provide a support for heels when the crew is sailing from the comfortable gunnels. Because of the flare in the hull, when you sit on the gunnels you are out beyond the boat (further out on the see-saw) and live ballast becomes very effective in keeping the boat flat. Even lightweights 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 gunnel 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 wall to cling to. Hands can go under the rub rail. Arms can go around the stern rail (which has been mounted off the top of the gunnels for additional seating). Visibility is great. You can control the main sheet from any gunnel seat by adjusting the angle of the cam cleat on the traveler fiddler block. You can steer from any gunnel seat with the adjustable length tiller hiking stick. Go for it.

Strangely enough, you might get even more speed by shortening sails. If the wind is driving the boat on its side in spite of your efforts so far, the boat will tend to protect you by turning into the wind and this will slow it down. Shortening the sails will help keep the boat upright and on course and therefore give you a faster course While you can shorten sail area by sailing on jib or main alone, it is better to shorten both sails and keep a better balance.

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 cleat and pull this line until you have the sail area wanted. In heavy airs, the pull can be substantial. In most instances on your Rhodes, if something does not work very easily, don't force it. Something is wrong and must be checked out. In heavy airs the furling genoa 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, try the winch. In standard airs its anyone's assignment.

Shortening the main: Put tension on the topping lift so the boom does not have to be supported by the sail. Move the boom stop forward to the desired new sail size. Release the main outhaul line so the sail swings into the wind. In heavy airs, turn the boat into the wind so that the sail is coming cleanly out of the mast This can be done with the motor. But the whole operation is so fast that furling the main sail can be done under sail when the boat passes into the wind as it comes about. In either case, you uncleat the furling line and pull it when the wind/sail relationship has the sail coming cleanly out of the slot. While this furling line does not have to be locked when the sail is fully out, it does have to be locked once you have established the shorter sail size you want, lest the wind pull the sail out to full size again. With this line locked, reset the out haul line. In heavy airs, sail shape should be flatter (ie. have less draft). Release the topping lift tension and you are ready to continue your journey.

# Trimming the Sails

You must know where you are going to and where the wind is coming from. It is easy to have this information and imperative to have it since these directions are interrelated. But in this new fluid element, new sailors tend to get confused. One way to stay on your 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 or a wind vane on the mast. Another: slowly turn into the wind until the leading edge of the jib starts to flutter (luff) and then make note of that direction in relation to a land mark. Once established, wind directions remain amazingly constant for the day or for many days. New sailors are always complaining that the wind is changing, but it is not. They are changing and are not aware of it. Winds do get fluky in close quarters because of land obstacles but the basic direction still remains the same and the fluke direction quickly passes, so you stay with the basic information.

Let's assume you have conquered this beginners' dilemma; 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 you over your transom. It feels like the wind has stopped or at least let up considerably. It has not. You are simply moving with it 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 we came about. If you have any doubts, just make a 90 degree turn and see how the wind suddenly starts again.

If you set your main sail so the boom was down the center of the cockpit, the wind would be striking the edge of a 5 ounce piece of cloth; obviously not the proper trim for running. You want the wind to strike as much sail area as possible so let out that boom as far as it will go just short of rubbing against a shroud. If the jib sail is on the same side as the main it will go limp as soon as the boom is let out because the main will then be blocking the wind from filling the jib. (The wind has not changed!) Put the jib out on the opposite side so the wind can strike as much area of the jib also. It is not always easy to keep both sails "wing and wing" or "butterflying" because the boat must be kept on a course where the wind is exactly in line with the bow/stern axis. Leaving the course slightly in one direction will collapse the jib, and leaving the course slightly in the other direction will invite a jibe Running with both sails set properly becomes a little easier when you graduate to using a "whisker pole", (a "boom" for the jib).

Running is the easiest point of sail because you are not sailing at all, just being pushed by the wind. But beginners have trouble with it. I think it is because you feel you are going faster if the boat is heeling. Sailing downwind there is no heeling so there is a tendency to pull in the boom to heel and feel like you increased speed. I was in a fun race once and looked over my shoulder to see the rest of the amateur fleet falling behind me. "Let out your sail.", I graciously shouted. With instructions from the front office, they all instantly obeyed and they all started gaining on me. Having gained their confidence with this rewarding advice and seeing an embarrasment closing in on me, I shouted, "pull in your sails." which they dutifully did and I went on to win. The point is, don't let your feelings, or experts who want you to lose, mislead you. On a run, you want the sail perpendicular to the wind.

With the wind in back of you, there is no side thrust on your boat (no slippage) so you do not need under water fins. Here is an opportunity for you. Keels can not be jettisoned, but the Rhode's wetted surface can be decreased by raising the centerboard. In fact if you do not pick up the centerboard it will probably start talking to you and until you learn boat language, let me translate this noise for you: "Under this point of sail I am not needed so pick me up." The raised centerboard goes into a "V" fitting inside the centerboard trunk and the noise stops.

### REACHING

Reaching is when the course you are on has the wind coming from your side. It is the most fun way to sail. When the wind is coming from between your side and mid transom, it is called a broad reach and is even more fun. Most of your sailing time will be spent reaching, because, after all, the boat does have two sides. Generally, you will be seated on the windward side (the high side) although in light airs, you may enjoy a change of pace on the low side.

Both sails are trimmed the same way. Being very careful not to alter course while trimming, you let out a sail until its leading edge just starts to luff (flutter in the wind) and then pull it in until it stops luffing. You can see that, if you inadvertently changed course while you were doing this, when you went back on course your sails would have the wrong trim for that direction.

Ribbons on the sail can help you. When the ribbon on the leeward side of the cloth (the low side of the boat, the side the wind is leaving from) straightens out in a horizontal plane, (you can see this through the sail cloth) you have trimmed for the proper airflow and get an "A". If you also get the ribbon on the windward side of the sail to fly horizontally you get an "A+". Be happy with the "A".

# TACKING

A sailboat sails like an airplane flies. You know: The air dividing at the leading edge of the wing or sail wants to re-unite at the aft end of the sail since all the rest of the air around the world can not be displaced. So the air going over the curved side of the sail, having a longer distance to travel, goes faster. The airflow on the concave side of the sail goes straight (dead air has filled the concave area of the sail so moving air sees this side of the sail as straight, like an airplane wing), and thus, having a shorter distance to travel, goes slower. By a decision of physics, air movement affects air pressure. The faster airflow side creates a lower pressure than the slower airflow side and the net difference in pressure moves the wing or sail. Or you might look at it as air flowing over the sail creating a vacuum and sucking the boat into it. And if you missed something here, forget about it. The message is that you need air flowing over a curved surface. If you point the boat directly into the wind, the sail loses its shape. pressure on both sides of the sail equalizes and the boat stops.

if your destination is in the direction the wind is coming from, you will have to use a zig zag approach. But how much to zig and how much to zag? If you sail too close into the wind, the pressure differential decreases and you slow up. If you zig zag into the wind at too broad an angle, you go fast but then the distance you have to cover gets longer. In most boats a 45 degree approach to the wind is the best compromise. This means that every time you come about you will be making a 90 degree turn. With the zigs and zags making the same angular approach to the wind, once you trim the main, you do not have to touch it again while you are tacking.

The jib does have to be brought over on each tack so, for this and other reasons, most of the time you will shorten your genoa to a working jib when doing serious tacking.

For running the sails are way out, for reaching they are partly out and for tacking sails are trimmed as close to the centerline as practical. With the jib, this means using the inner set of genoa tracks and cars. With the main, this means using the traveler to be able to bring the boom almost to the center of the cockpit.

What we have covered so far 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. Generally speaking, you want full sails for light airs and flatter sails for heavier airs. The location of the car on the genoa track will help in shaping the jib. The outhaul tension and the traveler will help shape the main. Experiment or read a good book or 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 contribution from the skipper that I have noticed new owners continually working the tiller back and forth just to feel they are doing something. If you need proof that the Rhodes can sail without continually pumping the tiller, lock the tiller hiking stick to the stern rail and watch the boat sail hands off. The tiller has almost a neutral helm (unless you set the blade otherwise) and it feels like power steering so there is a tendency to oversteer at first. If oversteering gives you a sense of satisfaction, do it. In moderation, it causes no special harm other than slowing the boat a bit. This is because, when the rudder blade is at an angle to the flow of water, it acts as a brake. More on this below.

While the tiller is ocasionally used to fine tune your direction on a particular course, coming about is its big number. The first consideration is the centerboard. 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.

The second consideration is speed. To effectively steer a boat with a rudder, the boat must be in motion. The faster the boat is moving through the water, the more effective is the rudder. Things get a bit complicated here and it could all be defined by a computer and equations, but you will quickly get a feel for the right combinations. If you are moving slowly in light airs and a calm sea, you will have no trouble coming about at slow speed. But as the wind or sea or both pick up, they tend to work against the hull changing its direction, so you need more speed to pick up enough momentum to carry the boat past the point where it is directly into the wind when coming about.

Should the boat stall in an abortive coming about because the speed before turning the tiller was too low (this is known as being in "irons"), the wind will start to move the boat backwards. Remember, you can only steer a boat or a plane if you have motion and this goes for backward motion also. So once the wind has started moving you backwards with enough speed, all you have to do is move the tiller in the opposite direction and the boat will come about in the original direction you wanted. You will be on your new course as if you had planned it that way.

idea of speed and maneuverability and stalling is so important there will be times when you will have to put it into play to the day, even though it might appear to guests that you have pulled a Queege and lost your marbles. For instance, suppose there is a jetty of rocks to starboard but you do not have enough speed on your present course to guarantee a successful coming about. 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. Once in a stall, the wind will surely push you onto the rocks before you could get the motor going. The solution is simple but gutsy. You have to turn more in the direction of the rocks as if you were bent on self destruction. There is the risk of having guests abandon ship so you might want to advise them of the Once you set yourself steady on this new course the boat will pick up speed and you will be able to turn in flash long before you dock on a rock or end in a crash. Warning: Pushing the tiller hard over without sufficient forward motion is deadly. With the rudder blade pushed over so it approaches a right angle to the flow of water, what you really are doing is putting on a brake and this braking action slows you down even more, making coming about even more unlikely. Yet it is the most common mistake of a beginner trying to come about, in light airs, at low speeds.

Another consideration is: Should you come about in a broad arc or on a dime? The boat will do either and the choice depends on weather and location.

Weather: As the boat is coming about, at one point it will be headed directly into the wind, and it must be able to coast through this "directly into the wind" point. So it must have momentum. The amount of the momentum needed depends on how windy it is. This is because the wind is not only putting pressure on the sail, it is because the wind is not only putting pressure on the sail, it is pushing against the hull. This force can be considerable. So the windier it is, the quicker you should bring the boat to the other side of dead-into-the-wind. On the other hand, while the wind forces on the boat vary, the momentum of the boat is constant for similar speeds. So on light air days, the boat can travel for a long distance before wind force against the hull stops the momentum. You can come about in a much larger radius, and this may be desirable.

Location: I like to cite the illustration of a submarine suddenly surfacing in front of you. Push the tiller hard over either way and the boat will come about in its own radius. It is comforting to know that the boat will reduce your collision suits by responding to your alert instructions to either jibe or come about on a quarter (inflation) in a tight situation. On the other, hand the less tacks you have to take, the better (for obvious reasons) so if you could come about in a broader arc, the boat would cover more forward course territory before you start on the next tack. This is particulary useful in narrow waterways or where the slower, broader coming about technique will allow you to pass a land mass that otherwise would require still another tack.

Trick: Say you are in a narrow channel with the wind off your starboard bow. Your tack has taken you as close as you care to come to the port shore line and you prepare to come about. You can fool the boat by making a wide coming about arc but never turning through the wind to actually come about. This way the momentum of the boat will carry you far enough toward the starboad side of the channel so you can use what remains of the momentum to fall off the wind and continue on the same tack without ever having really come about.

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

I have not had the time yet to read a book on sailing. (That is probably 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 is not necessarily a text book technique. Rather it is based on my years of watching beginners and then doing the opposite.

After dutifully 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-inmotion, eyes never leave the view across the boat's bow. Not since the "Exorcist" have heads been known to rotate 360 degrees. This means the skipper's two hands have had to remain in back of the body switching tiller from hand to hand, a very awkward maneuver. Once planted on the other side, novices become distinguishable by their next step.

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

Others do not straighten the tiller until they have straightened out hands, feet and mind and 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".

Suggestions: In good sailsmanship, neatness always counts. The main sheet rarely has to be handled when coming about so it should be out of the way in a transom seat corner. We will assume that a crew member is handling the jib in this first try so they should have the jib sheets neatly under control.

the tiller away from you, either rapidly or gradually, depending on your decision for a sharp or broad turn as previously In either case, STAY WHERE YOU ARE. And stay there discussed. until the boom comes to the center of the cockpit. As the boom crosses the center line of the boat, you simultaneously cross to the There are two reasons for this timing: First is opposite side. maintaining the balance between the heeling forces and your live The less the change in the angle of operation, the easier ballast. the operation will be for everyone. The more important reason for sitting tight and then exchanging positions simultaneously with the boom is that you know when the boat has actually come about and that you can straighten the tiller as soon as you are in your new seat. Hands do not get tangled because this pivoting motion from one side to the other is done with the back of the body facing the bow (instead of the other way around) so it is fast and easy to transfer the tiller from one hand to the other. (You can afford to lose sight of your forward view for these few seconds, and the rare view over the transom may prove interesting.)

If you are sailing single handed and handling the jib sheets when you come about, remember the idea of using the opposite winch as a turning block so the jib sheet comes across the cockpit to the winch on your side and into its clam cleat. Then when you push the tiller to come about, you can release the jib sheet without having to prematurely go to the other side. When the time does come to shift to the opposite side (as covered above) simply take the slack, opposite jib sheet with you.

Jibing is coming about in the opposite direction. It is not a big deal and sometimes it is very usefull to have this option. An uncontrolled jibe can result in the end of the boom rising so high as it crosses the cockpit, that it hits the back stays. You would then have to reach up and release it by hand or come about again. A controlled jibe is more desirable. Unlike coming about into the wind, jibing about brings the boom over very rapidly. You can anticipate and avoid this violent action by using the main sheet to pull in the boom and let out the boom as the wind moves to the other side of the sail. You will manage this with a bit of practice.

# RETURNING TO PORT

This is a sailboat, not a motor boat so learn to rely on the motor less and less. Time will decrease your motor's reliablity and increase yours.

The problem with docking is you have to bring the boat to a stop and using the dock to accomplish this is the least desirable technique. I have seen owners sail into their dock or slip with the wind behind them and destruction in front of them.

Fortunately, with your boat there are several other plans. conventional one is to make your final approach so that you come alongside the dock (or up to the mooring) headed into the wind. Sailboats quickly exhaust their momentum into the wind and this braking action can take you to a perfect stop. It is just a matter of a little practice to become familiar with wind versus momentum velocity and similar to the time it takes one to adjust to backing a The mistake beginners make is to not car into a parking space. trust the boat's maneuverability and to turn parallel to the dock at distance too far from the dock (too far from the curb). Head right into the dock and turn at the very last minute, or if space allows, make a wide swing into the wind, gradually closing the space between dock and boat. The motor should be up so prop drag does not In either approach the boat will do its thing if affect steering. you have the nerve. If you cannot land directly into the wind, you do have some latitude by simply letting out the boom and jib sheets that at least the sails are into the wind. (Just be careful that an extended boom does not clear the dock of spectators.)

You have decided to land so your Let's back track a little. computer docking program goes into action. Is the wind direction such that you can dock with the bow reasonably into the wind? Which side of the boat will be making contact with the dock? out the fenders to cushion miscalculations. Have docking lines ready to snag cleats or piling tops if docking speed is too high (like the deck wires on an aircraft carrier) or if the parking space limited and you do not want to disturb the boat in front. deep is the water at the dockside? If deep enough, come in with centerboard and rudder fully down for maximum maneuverability. shallow, consider dropping the centerboard at the right moment so it hits bottom and acts as a brake. How heavy is the wind? It is rare that the wind is so light that you will need both sails to dock, so furl the jib to zero and make the job much simpler. If the wind is very light, set the rudder up slightly and rely on some last minute sculling to complete the landing. When you get things down pat, you will be able to dock single handed, bring the boat to a perfect stop and step off the boat onto the dock to secure the lines, and walk away with a very satisfied feeling.

But what if the wind is not accommodative? It is coming from the side or worse, from the opposite direction so there is no approach that will allow you to use the wind as your brake. The solution is simple: Wind off the dock: Sail parallel to the dock, turn toward the dock so the wind will slow you down, drop sails and turn alongside the dock at the last moment. Wind onto the dock: Drop sails earlier, use the wind to push the hull, turn at the dock a little earlier since the wind against your side will continue to push you toward the dock. Wind parallel to the dock but off your transom: In light airs use a furling sail, decresing it to zero. In medium airs drop sails and let the wind push the hull. Heavy winds may require proper use of the motor in reverse. With Innermast Furling, this whole jeb of docking gets to be fund.

# TAKING YOUR RHODES OUT OF THE WATER

# Hoists vs Trailers:

It is very easy for most marinas to take a Rhodes 22 out of the water, what with its shallow keel and it relative light weight. One strap goes in front of the keel, the other aft of the keel. The only objections I have to coming out by hoist are: 1. expense, 2. you may have to take the mast down in the water since some hoists do not allow for sailboat spars, and 3. there can be some accompanying damage. (ie. rub rail, bottom paint, waterline tape).

Raising the boat by the bow and stern eyes avoids these damage possibilities but this still seems like a scary procedure to me. I do not recommend it even though we load the boats on trailers at the plant this way and have never had a problem. So, in no case do we recommend lifting boats by any hardware, including the deck cleats.

The way to go, if you have the choice, is on the Uni-matic trailer. The mast stays up. Damages are usually zero. Fees are from nothing to low. And you can do everything single handed. And if there is a dock alongside the ramp, you need not even wet your toes. It just takes a little acrobatics.

Sail the boat to the end of the ramp dock and temporarily tie up or let the boat hang off the dock into the wind. Walk to where you left the car and trailer and, while the car is warming up, check two things: The adjustable bow arm should still be in its forward position, and about three feet of winch line should be left hanging from the winch. Then neatly back the trailer down the ramp, parallel and only a foot or two from the dock, until the 12' bunks are just about submerged. Brake the car and return to the dock where you now have three choices: You can walk the boat onto the trailer, you can motor on or you can be a sailor and sail on.

Walking on: Board the boat and lift up the motor and rudder and put down the centerboard (at least part way). If you have not done so already, also put away both sails. Put an endless control line from the bow cleat to the stern cleat with sufficient slack, and step back onto the dock. Untie the boat from the dock and walk it to, and guide it over, the trailer. The down centerboard will help you center the boat as you pull it as far up onto the trailer as possible. You are now ready to attach the trailer winch line to the boat's bow eye. You have the choice of wading out to the trailer winch or stepping back on the boat and making this connection by lying down on the deck. I mostly choose the latter, and tighten the winch line by using my foot on the winch handle or climbing out on top of the trailer winch post. It is then one step back onto the dock and a few steps to the car, and out comes the boat.

Motoring on: Board the boat, partially lower the centerboard and start your engine. Slip the docking line off your cleat(s) (you can always pick up lines later) and make a wide swing away from the dock so you can approach your trailer landing in a straight line. Go into neutral when you feel you have enough momentum to reach the trailer's bow socket. (Use a short burst of forward or reverse engine power if you have miscalculated.) When the bow connects with the rubber socket on the trailer's bow arm, go back into forward so the motor holds the boat in place while you walk forward to connect the winch line to the bow eye. After tightening the winch line, kill and raise the engine, raise the rudder and step back onto the dock.

Sailing on; Board the boat, put down the board and raise the engine. Cast off, pull out one or both sails, and go out far enough to sense the winds and to have enough time to plan your approach. As shown in the slide show, the wind can be coming directly off shore and you would sail parallel to the shore and then turn into the trailer (and the wind), just as you would do if you were coming up to a dock. The wind and the trailer bunks will be your brakes. If the wind is parallel to the shore, you can manage your approach with just the main or the main and a shortened jib. Allow for some side slippage, and release sail sheet(s), or furl, when you have sufficient momentum. If the wind is on shore, you can approach with just the furling jib (or the furling main, if you have Innermast Furling). In all approaches, the trick is to know when to furl the sails to zero so the boat will have the right momentum to gently reach the trailer's bow arm. Your centerboard and rudder will do Sailing on is the most impressive way, the most fun way and the easiest way, to put your boat on its trailer. Try it on a light air day and see if you don't agree.

# DERIGGING

- If you put your 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. Pull the pin that connects the pop top to the mast pop top slider. I suggest this as the first step so that you do not forget it, and so that this slider can be raised to its upper mast position before other parts are taped or tied to the mast. While you are at this location, disconnect any electrical mast/deck connections.
- 2. With the main sail <u>fully</u> furled, pull the pin that holds the boom block to the bent rotating tang on the end of the boom.
- 3. Go to the mast and pull the topping lift as tight as you can so the boom raises up against the mast. Secure the topping lift line to the higher cleat on the side of the mast. Remove the rest of this line from its cabin top locking cleat and fair leads.
- 4. Tape the jib at its grommet soult cannot unfurl and undo the jib sheets and jib furling line from their cleats and leads so they can be coiled and taped to the furlid lib.

- 5. Release the back stay tension adjuster from its transom cleat. This will release tension on all other stays with the possible exception of the aft lowers.
- 6. Pull the pins that hold the traveler bar to the back stays and remove the bar from its back stay sockets. Take the bar with its boom block, fiddler block, traveler car and main sheet assembly, and store it neatly on one of the shelves along the "V" berth.
- 7. Pull the pins from the bottom holes of the back stay adjusters so that the adjusters remain with the freed backstays. You now have the option of taping the back stays to the mast and looping them up for a second mast taping, or just letting them dangle overboard. Do not let them hang into the cockpit because they will catch under the sliding hatch lip when the mast is being lowered.
- 8. Pull the pin that connects the jib stay from its bow chain plate and lift and walk the furled jib to the mast so that its upper end goes behind an upper shroud and so that the hole in the bottom disc sits atop the lower cleat on the side of the mast. Tie the furling tube to the mast at this point. At a second point, as high as you can reach, secure the mast, boom and furling tube. You can use the excess topping lift line that is right there or tape or shock cords.
- 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 that time with a helper of any size. You now have to enlist a helper of appropriate size, or break out the hoist kit.

Drape a sail bag over the bow pulpit and have the helper apply a slight aft pressure to the mast bundle while you unpin the two aft lower shrouds. These are the only turnbuckles you may find it necessary to lengthen to relieve the pressure on their pins.

- 10. Join your helper on the bow deck and rapidly lower the mast forward. During the lowering, one person should be simultaneously moving toward the bow pulpit to insure a gentle landing.
- 11. At this stage, you can thank and dismiss your volunteer. Pull the pins from the remaining four turnbuckles and the bolt from the mast step, and slide the mast bundle aft along the bow pulpit until its bottom end rests on the stern rail. If you encounter any resistance, check for stays hung up on hardware. Move carefully and gently across the deck. You might want to "diagonal" the mast bandle across the deck to the motor side so that the cabin entrance and transom ladder remain accessible.
- 12. If you are moving the boat an appreciable distance, you should cushion key areas before securing the mast bundle to the boat: Under the contact areas of the pop top and deck, where boom, mast and appreader touch, under the mast at the bow pulpit and stern rail contacts, where one spreader will be tied to the cabin hand rail and under the mast bundle where it makes contact with the pop top. Scrap carpet or foam is fine.

- 13. Run all the stays aft along the top of the mast bundle, taping them to the bundle at intervals, until you reach mid cockpit. There they can all be coiled, shoved into a small laundry bag and hung from the mast. Caution: Any stays run to the end of the mast and past the transom, risk being lost, since if parts come loose, they will fall to the ground instead of into the cockpit.
- 14. Play it safe and secure the mast bundle to the boat at four points instead of just two: the bow pulpit, bow deck cleat, a line from the hand rail around the bundle and to the mast step to eliminate swaying, and to the stern rail. The spreader that makes contact with the port hand rail should be cushioned and secured to avoid rubbing. The protection between the bundle and the pop top should be taped or tied so it does not blow away. The centerboard pendant can also be wrapped around the bundle for good measure and to keep it from bouncing in the cockpit. All loose line ends should be secured to avoid their beating against the gelcoat finish.
- 15. Stow fenders, life jackets, lines etc. in the lazaret. Do not leave any loose, hard items in the cockpit. And check the cabin to see that nothing is left loose to bounce around and cause damage, including the rope locker, table, etc. The motor and rudder can be left in place but it is advisable to secure them for any extended boat moving; a line around the motor from the stern eye to the stern rail, so that if the motor lift line comes loose, the motor will still be supported, and a line through the loop of the rudder lifting line to the stern rail, so that pressure is taken off of the the rudder control line cleat. This line will also prevent the rudder from swinging. Push the ladder into its locking position. Check winch line, trailer lights, hitch lock and chains, and you should be ready to roll.

You will undoubtedly find your own ingenious ways to improve on our "15 step" breakdown and packing. We always welcome your ideas. Example: The laundry bag is an owners suggestion.

# TRAILERING

Trailering the Rhodes is so easy that you will forget there is a boat following you. Once I did glance out my side window and noticed my boat passing me. You don't want to hear about that. Just make certain someone locked the trailer coupling. If the back of the car goes down too low, either your shocks are shot or the boat is too far forward on the trailer. If the trailer fishtails, the boat make too far aft on the trailer. You can adjust the boat's position on the trailer without going back into the water and without a crane; just a little ingenuity and caution.

To shift the boat forward, move the trailer bow arm slightly forward, tighten the winch line and apply the car brakes when you are on a slight decline (and there are no cars in back of you!). To move the brakes aft (reduce tongue weight) put some slack in the winch line, go backwards on an incline and apply the brakes. Be careful that you do not surprise someone with a boat coming at them. To add tongue weight, we once placed a preschescen a tree and the transom and gently backed up the car.

Always stay within the speed limit. Swaying and fishtailing may develop at high speeds. Blowouts at high speeds can be dangerous. And don't forget to make wide turns. The trailer makes a shorter turning radius than the car. One of our drivers brought home part of an Indiana bridge and the state sent us a bill. Most all drivers will give you a wide berth when you are pulling your boat. We have been in car accidents, but never when doing the equivalency of our many, many times of trailering a boat around the world.

# MAINTENANCE

Cleaning: Most anything goes with few exceptions. Do not use anything stronger than alcohol or mineral spirits on the windows or window frames. All parts of the boat clean easily with soap and water. Fiberglass areas can take most anything. Fine scratches will come out with "Soft Scrub" type cleaners. Acetone or laquer thinner will dissolve tars. "Waxing" will make the boat easier to clean. Just be judicious regarding the areas to wax. Fiberglass is a slippery surface to walk on, particularly when wet or waxed, even the so called "non-skid" areas. So always move about your boat with caution.

Lubricating: Most any type will do. We carry a jar of "Vaseline" and a lubricant in a spray can. Areas to occasionally hit: Boom and pop top sliders, pop top arms, locks, o.b. motor lift tracks and tiller, (if it squeeks in the rudder head). If you have Innermast Furling, spray lubricant into the mast slot between and onto the two lower bearings and the furling line. The bow vent is removable and rotatable and plugable. Lubricating its friction socket won't hurt.

Anti-fouling Paint: Some locales require bottom painting twice a season, most only once a year, and some will let you get by with every second year. Growth on a boat's bottom is partly proportional to water temperature. If a boat is to remain in the water for more than two weeks, it generally should be painted. Check with other owners in your waters. If the boat came with bottom paint, it is of the vinyl-base type. The second time around should only require some light preparation. If the boat did not come with paint, the first time requires some extensive preparation to remove all wax before putting on a fiberglass primer before putting on the one or two coats of anti-fouling paint. One owner's suggestion: apply two coats in different colors so when the first coat wears out you can see the color change.

various suppliers that we put in the boat. We are concerned, however, that you enjoy your boat in safety, so don't skip the following section.

DANGER: Before raising your mast make certain you will clear all obstructions. Do not move the boat with the mast up in any area where it may strike anything. Always check turnbuckles to see that they are not unthreading. Examine stays for broken strands or strands coming out of the swaged terminals. Check the wood tiller for signs of delamination or splits.

Keep your head and guests' heads below boom level. Seat and support yourself (and particularly guests) in such a manner that a gust will not cause legs to slip and go under the opposite seat and scrape shins. Make sure that the three pins that secure the pop top in its up position are fully in their sockets so the top does not slide down unexpectedly on someone's arm or head. If anyone does fall overboard, throw fenders, cockpit cushions and life jackets overboard, if they are not wearing a life perserver. Kill or lift the engine if it is on and there is any chance they will be near it. Keep your eyes on them as you come about to pick them up. It is easy to loose sight of objects in water because of waves. Throw out an attached drag line and lower the ladder.

Tie the motor to the stern eye in case it walks loose from the bracket, or any part of the bracket fails. Use the bow eye if you use a mooring line, with a slack safety line to the docking cleat.

Read and follow Coast Guard rules and information pertaining to lightning, navigation and boating safety. I do not want to be an alarmist. In all the years we have been producing the Rhodes 22, no one has ever been really hurt. It is just that we want you to help us keep our perfect record.

# SERVICING THE CENTERBOARD

You will rarely, if ever, have to touch your centerboard controls. Removing the board is easy but time consuming. With the boat out of the water, fold back the carpet so the wood panel covering the centerboard trunk cap is exposed. Unscrew the few screws that secure the cowling that supports the entrance part of the seat and slide this cowling out from under the seat so the entire wood partition over the centerboard cap is reachable. Remove this wood panel taking out the screws holding it to the floor unit frame. The fiberglass centerboard cap will now be fully exposed. Remove all the screws (and bolts, if any) around the circumference of the cap. There are a lot of them so an electric screwdriver would says Release the centerboard pendant from its cockpit cam cleat as there will be slack in the line and gently pry up the centerboard cap being careful not to damage the reusable neoprene gasket. With the cap lifted, the centerboard and its pin can be lifted up out of the centerboard trunk. If you ever go this far to replace a line or centerboard, it is a good opportunity to give the inside of the trank a good swabbing of bottom paint.