I single-hand a lot under spinnaker. I have for much of my life; most recently single-handing on my previous boats, a 25 foot Kirby, and 28 foot Laser, and now on my current 38 footer. All of those boats had symmetrical chutes and were set up for end for end jibbing of the pole. Only the 38 footer has an autopilot. The other boats were tiller steered and I steered with the tiller between my knees or held the tiller with shock-cord (bungie) run across the cockpit. I also have experience sailing short-handed with asymmetrical chutes and cruising asymmetrical chutes.

In discussing this topic with other experienced sailors, I have come to realize that, like so many topics that are sailing related, this topic can result in very strong opinions and that these strongly held and completely defensible opinions do not always agree. While my opinions on this may be at odds with those opinions of folks who I respect and who also have a lot of experience, that does not make either my opinion or their opinion universally right or wrong.

This is one of those cases where an argument can be made for any number of possible approaches and the reader probably needs to evaluate some of the ideas being presented for themselves. In fairness, some of the disagreement on flying spinnakers short-handed results from differences in the size of the boat, the layout of the boat, its equipment and the skill level and physical condition of the skipper and crew, but others are merely a matter of personal preference.

I use the spinnaker short and single-handed both when I am cruising, but also in the CHESSS spinnaker class usually single-handed. Carefully setting up the boat in advance to fly the spinnaker short-handed can make the flying the chute easier and safer.

Due to my personal preferences, my boat is set up with all of the halyards led aft across the cabin top, including the spinnaker halyard. Similarly the pole lift and foreguy/pole downhaul is lead aft. I personally believe that this is the safest and easiest way to fly a spinnaker short-handed since it allows you to be able to reach the sheets and guys during the raise and drop. While I have heard the concerns about the increased friction of leading the halyard aft, I use low friction roller blocks and I am generally able to hand over hand the spinnaker halyard all the way to its full hoist. More on that later, except to note that my boat does not have a dodger or Bimini which potentially might impact the advisability of all lines run aft on some boats.

I personally believe that a symmetrical chute is far easier to single-hand than an asymmetrical. The asymmetrical has a narrower range of wind angles that it can tolerate and are more prone to getting a wrap when jibing. A wrap when you are single-handing can be an extremely dangerous situation because it requires so much time on the bow to clear.

I don't use a sock as I find that socks more prone to sending the sail up with an hourglass, which again is a major issue when you are single-handing. But also in my experience, the recovery line on a sock can get fouled leaving you with a half in/half out chute and nothing that you can quickly do about it. While socks have gotten better than the last ones that I used, I found that socks were next to useless when the wind really pipes up unless you can get the chute in the lee of the mainsail. So I for myself, I have concluded that asymmetrical spinnakers and socks are fine for boats with crews

but really are less than ideal for single-handing. I understand that this opinion is not consistent with the currently popular view on these issues.

A word about winch handles while I am discussing hardware. Fully crewed race boats typically use handles without locks since they are faster for the grinder to insert or remove. Short-handed I have lock-in handles for each of the winches that I use under spinnaker. I leave two handles in the winches at the aft end of the cabin-top so I can quickly adjust control lines. Upwind, I typically only use one winch handle on the sheets and carry it across the boat on each tack. But downwind I leave a handle in each of the sheet and guy winches.

Standard full length winch handles are 10" long. That is an ideal size for most people to use sitting down. Longer than that, it is much harder to move your body and maintain constant force and speed. Shorter than that, and you are giving up leverage.

But for halyards and reef lines, where the loads can be larger and there is a lot of line to move, I have one ancient Barient 12" long, two-grip winch handle. Because of the configuration of my deck, I am able to stand over that winch with the handle at elbow height and use my whole body to swing that handle full circle. The extra 20% leverage of that handle allows me to crank at the high speed setting on this two-speed winch rather than switch to the power speed when trying to quickly bring in a lot of heavily loaded line. If your winches are located where you can use your whole body, then keep your eyes out for a 12" handle.

No matter what type of spinnaker you fly, prep work before the start of the race is essential to successful spinnaker work. Before the race and before each raise, I always 'run the tapes' no matter how carefully I think the chute was packed last time it was used. On small boats the chute can be raised from a 'diaper' in the companionway or forward hatch.

On a bigger boat, where a turtle is necessary and the turtle is stored below until needed, I like to store the turtle next to the companionway steps and clip the turtle to a sail tie that is tied to the grab bars at the companionway so I can easily bring the turtle on deck without going below. That said, just before the turtle is brought on deck for the raise, I typically grab a cold bottle of water from the icebox and put it by the helm. Nothing depletes fluids like a mid-summer spinnaker raise.

If you choose to use a symmetrical chute, there are some additional set up and tweaks which can make using the pole easier. Before the race, I rig the pole to the mast and raise it with the pole lift and foreguy/pole downhaul attached. I check that the leads are clear and that the bridles are not twisted. When rigging the pole, it's important that the jib sheets are run forward of the pole downhaul/foreguy in order to allow the jib to be flown on either tack at the end of the drop. With the pole up I check that the end fittings work smoothly. A loop of shock cord around the pole will keep the end fitting retractor lines near the pole so they are less likely to get caught on anything.

Once the pole is rigged and checked, I stow the pole without removing the lift or downhaul. Depending on the boat, there are several tweaks which further allow the pole to be quickly stowed fully rigged but without fouling the jib sheets. On a boat the size of my prior boat, a Laser 28, pole storage on the boom (AKA a pole launcher) works extremely well. On the Laser 28 this consisted of two short lengths of 4" diameter PVC pipe that was strapped with webbing to either side of the boom a little more than half the pole length aft of the gooseneck. The way this is used is that after the drop, the mast end of the pole was slid aft into the tube and when once the pole was fully slid so that the forward end of the pole was slid aft of the gooseneck, the forward end of the pole was held in place by being slid behind a loop of heavy shock-cord that was wrapped tightly around the boom. The pole lift was hooked into a plastic hook that hung from the gooseneck on piece of shock-cord. The pole lift was then tensioned which kept it against the mast and out of the way of the mainsail and jib.

A launcher is not practical on a bigger boat. On a bigger boat a series of small loops of light line secured in a number of places around the boat can provide a quick place to secure the pole. On my boat there are three sets of small loops which are located on the toerail near the bow, another set aft of the shrouds at the chainplates, and one at the base of the mast. I use these as quick places to clip the pole end in a hurry to get it out of my hands.

The key is to have the loops placed where the other end of the pole is captive and can't slide over the side. So, for the forward loop, I make sure the after end of the pole is inboard of the shrouds, for the loop at the chainplates, the aft end needs to be inboard of the a particular stanchion, and for the loop at the mast, the aft end of the pole catches on the cabintop-mounted winch on one side and the companionway spray hood on the other side. With practice you can quickly slide the pole into place without fouling the jib sheets.

If your pole eye is on a track on the mast, and your deck configuration permits it, you may also simply leave the pole attached to the pole eye and lower the aft end of the pole to the deck and slide the forward end of the pole into the pulpit below the jib and stow the pole that way. (It gets pretty beat up that way)

No matter where the pole is stored, the pole lift is stored attached to a small plastic hook that is tied on a shock-cord lanyard near the base of the mast to keep the lift against the mast and out of the way of the mainsail and jib sheets. When everything has quieted down and I find myself near that corner of the cockpit, I tension the lift at leisure. The shock-cord allows me to release the lift from the hook without releasing the pole lift when the time comes for the next hoist.

When racing with any regularity, I strongly believe in marking the positions of general control settings for various wind speeds. The usual method on fully crewed boats is the use of numbered strips and elaborate matrixes for each wind speed. But as a single-hander there is no time for that level of precision, so I use markers made from colored electrical tape. I personally use a system of green tape for light air, black for normal breezes, yellow for a bit more breeze, and red for heavy air. At a glance, I can quickly set the control in the right general neighborhood and keep moving to the next item screaming for attention.

An example of how this works would be the row of small tape marks for quickly setting the spinnaker pole eye at the right height. I put a short strip of tape of the right color in the right spot

on the mast next to the track (rather than trying to mark the track itself). It makes it quick to adjust the pole height for the wind speed before the raise. I also put the same color tape marks on the pole lift so I can quickly tell when the pole is at the correct height without having to watch the pole and guess.

While a little off the topic, I also use the same system of colors to mark my backstay adjuster, outhaul (tape marks on the boom), main halyard (with a whipping on the halyard itself and the color tape stripes on the deck)

The three (obviously) hardest parts of flying the chute is the raise, jibe and drop. Being able to either have a tiller that you can steer with between your legs during the raise and drop, or a good autopilot are critical to flying a chute single-hand.

The key to these types of maneuvers is to develop and practice the sequence of events and learn how to safely and efficiently move about the boat during the sequence. Spinnaker work is an elaborate dance and doing it well is all about the choreography. As with all good choreography, it is all about timing and being in the right place at the right time. It is easy to feel like you need to rush, and with the adrenalin of a spinnaker maneuver it is easy to act in haste and repent at leisure.

With practice the speed and positioning becomes more natural. Approaching the maneuver I think through the steps in my mind. To fight the urge to move too quickly, once in position to start the maneuver, I typically stop and slow my breathing for a couple seconds before starting the maneuver. I also sometime hear the 'Blue Danube Waltz' playing in my head as I try to move smoothly and steadily from the one task and one position to another. (Anyone who has sailed with me knows there is nothing graceful about the way I move around the boat, but goals are helpful to have.)

Before the rounding, I begin setting up for the raise. On the tack prior to the last tack to the mark, working on the windward side, I set-up the spinnaker turtle so that it will be to leeward and forward of the shrouds and outboard (to leeward) of the foot of the jib once on the final tack for the mark. I pre-feed the guy in much the same way as any race boat, except I try to leave enough slack that when the pole is still against the forestay, the chute's tack can sag to leeward perhaps a foot or two behind the jib. Ideally, if deck layout permits the guy is secured on a self-tailing winch within reach of the helm with a handle locked in place. I leave the sheet loose but wrapped around a winch uncleated and again with a handle locked in place. The number of wraps on the winch varies with the wind speed; using more wraps for heavier air to create more friction and ideally keep the sail closer to the back of the mainsail and jib. Until the guy is adjusted, the chute is purposely kept collapsed behind the jib. The idea is to keep the foot of the spinnaker pretty tight against the leeward side of the mainsail and jib to keep it blanketed and empty.

As soon as I am sure I can lay the mark, I set and raise the spinnaker pole. That may be a few hundred yards out. I try to plan my last tack or jibe to the mark so that I have plenty of time to set up for the raise, but if I think I will be forced into a jibe set or tack/bear away set, traffic is light at the rounding, and I'm not using an overlapping headsail, I rig the pole between the leech of the jib and the shrouds out to leeward. It looks really ugly with the pole abeam of the boat, but the pole is

all set to go once the tack or jibe is completed. All I have to do is tension the foreguy to pull the pole forward to the forestay after the tack/jibe and take the slack out of the guy.

On the rounding, I put the boat on as deep a broad reach as possible while keeping the jib solidly flying. As I am setting the autopilot, (or steering a tiller with my knees) I ease the mainsail all the way for speed but leave the jib slightly over trimmed. I catch my breath a second or two. It is only then that I raise the spinnaker halyard hand over hand as fast as I can. Once the halyard is two-blocked, I grind the guy and pole to their proper position and then adjust the sheet filling the sail. Once the chute is full, the jib is furled and I tweak the final course adjustments.

On an asymmetrical chute, I prefer to use a 2:1 on the tack line that is then lead it back to a winch aft. Similar to the raise on a symmetrical chute, I raise the chute under the foot of the jib. In the case of an asymmetrical spinnaker it is harder to avoid filling the chute before it is fully raised. One way to reduce the opportunity for the chute filling before fully hoisted is to ease the tack line enough that the tack of the chute is a couple feet after of the jib tack, and then tighten the sheet so that the foot is relatively stretched along the deck. I double wrap the sheet on a winch but do not cleat it. The friction on the winch will ideally hold the sail against the lee side of the jib and prevent it from filling. Not cleating it allows sheet to run and allows the sail to 'flag' in case it starts to fill before fully hoisted. Once hoisted I tension the tack line and then the sheet.

As soon as things settle down I make sure that the tails of the sheets and halyards are free to run, and are not underfoot. To keep the lines from being underfoot I have previously identified locations around the cockpit to place the various control lines so that they do not cross each other and are free to run.

As a short-hander you need to be able to count on lines running free when released. Jambs can be dangerous if they occur at the wrong time. There are a number of ways of preventing 'hackles' (AKA pigtails) and other jamb causing phenomena. My preferred method is to coil lines in a Figure 8. The fastest way for me to do that is to start from the working end of the line, hold one hand with palm up and the fingers curled upward, facing a winch handle that is locked into a winch. You then flake the line in a figure 8 between the winch handle in the winch and your curled fingers.

This technique is very fast and with a little practice it quickly takes the twist out of the line. Then carefully place the line on the deck so that the line is free feed from the top rather than emerging from the bottom of the flake. I use this for all halyards, sheets and longer control lines like the traveler. It is especially important on the mainsheet and traveler to prevent friction causing twists in the tackles.

I use twings with both symmetrical and asymmetrical spinnakers. In the case of a symmetrical chute, twings allow lead changes for the sheet when close reaching, but more significantly they eliminate the need for of lazy guys. Lazy guys are great on fully crewed boats and larger boats, and are critical for dip pole jibes, but do not work as well short-handed. Lazy guys are impossible to use single-handed without the equivalent of an outboard 'bell fitting' on the pole, since dip pole jibes require

the solo-crew to simultaneously be in too many places at once and there is little advantage to a lazy guy on a boat that is small enough that the pole can be jibed end-for-end. .

The choreography for a jibe will vary with the boat, but on my boat, the sequence works like this:

To make it easier to jibe the chute single-hand, I have marked the sheets for the proper setting for the jibe. (I use either tape or a whipping so I can feel the spot as it runs through my hand at night) Before I jibe, set the boat on a course a few degrees above dead downwind and set the sheet and guy to their marks.

I then bring in the twing on the leeward side of the boat. With the twings set, the pole cannot sky, so I then release the downhaul/foreguy, to provide enough slack to allow an easy end-for-end. I walk forward along the windward side keeping a wary eye on the boom. I transfer my teather to the jackline on the old leeward/new windward. I get the old sheet-in one hand, before blowing the pole off the mast, which I do with the other hand. The end for end jibe is would be the same as on any fully crewed boat. Once the pole is made, I start back to the cockpit on old leeward/new windward. When I reach the middle of the boom I push it across the boat to start to jibe the mainsail. The boat will begin to head up on its own keeping the chute full. Once at the wheel, I blow off the twing on the new sheet and trim guy and sheet as I come to course.

I find this easier than jibing an asymmetrical because asymmetrical requires you to haul in so much more line and the timing is so critical. My one tip on jibing an asymmetrical is to let the old sheet run, feeding the line out quickly and keep an eye on the clew. Make sure that the clew floats well forward of the luff before trying to pull in the new sheet. One mistake that short-handers tend to do is to pull in the new sheet too quickly and that can cause the sheet to jamb on the luff of the sail and allow a wrap. It you are using a cruising chute with the tack close to the forestay, it can be helpful to roll the jib part way out so it prevents the bottom of the chute from wrapping around the stay.

To douse the chute set a course just above dead down wind and deploy the jib to help avoid a wrap. Starting out, on an asymmetrical I release the shackle on the tack line, or on a symmetrical chute I release the shackle on guy. The sail then "flags" with no load on it. I then grab the sheet and pull the chute close into the lee side of the mainsail. I gather the foot together. Only then, sitting on the house, facing to leeward and forward, with my harness attached to windward, do I release the halyard. I then haul the chute down like a rope, hand over hand, stuffing it down the companionway.

On my boat I am able to sit on the cabin op and can reach of the halyard stopper during the drop and so can lock and unlock the halyard should the sail come down too fast or start to fill. Once the chute is down, I then drop the pole lift allowing the outboard end to drop to the deck, settle the boat in on her new course and then go forward to stow the pole. Per the tips above, it is important to pick a place where the pole can be quickly stored aft of the jib sheets so the boat can be tacked quickly after the drop. On a tiller boat, I can usually do the drop within reach of the helm with the tiller between my knees. To me, a conventional drop is a much faster and reliable operation than trying to stuff a chute in a sock and then lower the sock. I know others may differ. Safely dousing the chute gets much easier with practice. It's only by practicing that you learn the choreography involved in making a smooth and quick drop. It can be helpful to practice with someone on board watching your moves and taking notes of the sequence of your moves, where you were on the boat and any potential glitches. I have never done this, but if you have a small video camera, a video can be very helpful.

Once you have a little confidence, as a part of your practice it is important to start the drop as you pass near some standing mark. As soon as the chute is down and boat is ready to harden up, look back at the mark and try to memorize the distance from that point back to the mark. That will allow you to approximate the distance that you need to get your chute down in a race. I typically find that my drops during a race are a little more cautious. As a result I give the drop a little more distance and I drop a little earlier when racing than cruising. When cruising sailing a short distance past the mark is no big deal. But when racing it can mean sailing in the lee of another boat or having to throw in a couple clearing tacks.

Another suggestion for a practice session is to look at your speed before a jibe, click a stop watch and start a practice jibe, and start the jibe next to a fixed mark, then see how far the boat travels to complete the jibe and how long it takes to get back to that speed again. It is surprising long. Remember that lost time and distance in weighing the decision on whether to do a series of short jibes vs sailing deep. It can be a very tough call but having a sense of the timing can help.

I have tried going wing and wing with an asymmetrical chute and it works reasonably well for short distances such as burning off distance when on port and choosing to cross astern of a starboard tack boat. If you have a cruising chute and enough wind you can run wing in wing for longer periods but ideally need a special length whisker pole since a spin pole or a whisker pole are usually too short. I do not believe that it is legal to use a whisker pole with an assym when racing, but I could be wrong on that.

That's about it. Your mileage may vary