J/70

TUNING AND HOW-TO GUIDE

QUANTUMSAILS®
TO THE NEXT CHALLENGE.

J/70

Since the beginning of the J/70 class, Quantum has worked closely with J/Boats to be one of the lead sail developers for the class. Because of our devotion to the J/70, Quantum has been able to partner with some of the top experts; sailors who are passionate about supporting the continued growth of the J/70 class. This eBook shares knowledge from our J/70 class expert partners. It includes information on preparation, Quantum's sail rig tuning and sail trimming techniques.

We have also included other helpful tips to make sure you're ready to meet your challenge in today's competitive J/70 fleets.

BOAT PREPARATION

Check the J/Boats website for information about the basics of setting up your J/70 for racing; you'll find many articles and interviews with top sailors in the J/70 class. Here we're offering ideas for setting up the rig and sails to go fast and how to use your team to their fullest on the race course.

Preparation is fundamental to improving boat performance. Proper boat setup allows you to adjust to changing conditions smoothly and sail fast consistently. Fast boats make sailors look smarter, making it easier to gain when going the right way and lose less when not in the perfect position on the course.

MAST

Proper mast setup is the cornerstone of good sail shape and speed. Here's how our team likes to set up the rig.

HEADSTAY

Before the mast is up, pull the headstay straight down and tight along the front of the mast. Put a mark on the headstay in line with the top of the white band near the goose neck. Once the mast is up, measure from the mark you made on the headstay to the bottom pin on the jib furler. This measurement should be 58 inches to start. If needed, use a toggle to lengthen the turnbuckle to 58 inches. (The tuning chart on the next page will help you get this right.)

CENTER THE MAST

Set the upper shrouds at 22 using a PT-2 Loos gauge. On both sides of the boat, run a tape measure eight feet aft from the bow aft along the sheer, and mark the intersection of the deck and sheer. Hoist a tape measure up the mast on the jib halyard to measure each mark on the deck sheer, and adjust the uppers so the measurements are equal on port and starboard. This will ensure that your mast is centered even if your shrouds may not be the same length. Now you have set your mast to base with the upper shrouds at 22 and the forestay at 58 inches.

Check to see if the mast is centered. Before the boom is on and with your eye next to the main track, look up the backside of the mast. If the shroud tensions and forestay are set to base, the mast should be straight. If the standing rigging is set to base and the top bends to starboard or to port, it may be time to order a new mast.

SET RIG TENSION

With the mast centered, tighten the lowers to 14 on the PT-2 Loos gauge. It is important to make adjustments evenly on both sides to keep the mast straight. A tip for making adjustments when on the water is to make place marks on the deck showing which rotation direction puts tension on and which takes tension off. Most boats have these marks, but keep this tip in mind if the marks are missing from your deck. Marks take away any question about which way to turn.

You are now at the base setting for the rig–22 on the upper shrouds and 14 on the lower shrouds. Use a caliper to measure/record the turnbuckle barrel lengths at base and then up each step to give you more consistency when changing the rig tension and quicker rig setup after traveling or storing it for the winter.

QUICK TUNE CHART

This chart details the steps the Quantum experts follow to tune the rig for the winds they're racing in.

TWS Knots	UPPERS Turns from base	LOWERS Turns from base	UPPERS Tensions PT-2	LOWERS Tensions PT-2	JIB LEAD Holes showing in front	WIND SHEET Weather Jib Sheet on	TRAVELER Upwind	VANG Upwind	BACKSTAY Upwind	JIB FURL Downwind
0 to 4	- 7	- 4	9	3" of Slop	8	Play	Max	0	25%	In
5 to 6	- 5	- 3	15	6	8	Play	Max	0	25%	In
6 to 8	- 3	- 2	18	8	8	Cabin Top	Max	Slack Out	25%	In
8 to 10	- 2	- 1	20	12	9	Cabin Top	Up 8"	Just Firm	25%	In
10 to 12	Base	Base	22	14	9	Cabin Top	Up 6"	25%	25%	In
12 to 14	+ 2	+ 1	24	16	10	—	Up 6"	50%	50%	In
14 to 18	+ 3	+ 2	26	20	11	—	Up 4"	75%	75%	In/Out
18 to 20	+ 5	+ 3	28	24	11	—	Center	80%	80%	Out
20 to 23	+ 7	+ 4	29	26	11	—	Center	100%	90%	Out
24 to 26	+ 7	+ 5	29	28	11	—	Center	100%	100%	Out
26 +	+ 8	+ 6	30	29	11	—	Center	100%	100%	Out

*All turns from Base Settings of 10 to 12 TWS

BASE SETTINGS

CALIPER #'S	UPPERS	LOWERS	HEADSTAY	RAKE	SPREADER SWEEP
PORT				58"	2" or 51 mm
STARBOARD				Headstay PT-2#	
LOOS PT-2 #	22	14	____ mm	15	

**Use Calipers to measure distance between turnbuckles once rig is set up at base for repeatability. Record here on this chart.

Also add colored tape marks to your spreaders at 18", 20" and 22" from the side wall of the mast. This will help with jib leech set up and quick leech adjustments upwind.

To measure your rake, mark the headstay at the top of the white band on the mast near the gooseneck. Measure from this mark to the center of the bottom pin in the jib furler. This is the pin just below the headstay turnbuckle. This number should be 58" at the base set up and will not change.

To measure your prebend place your main halyard at your goosneck and pull tight. Then measure from the back of the mast track to the edge of the main halyard right at the spreaders. This number at base for the Seldon mast should be 1 3/4" and for the Southern mast 2 1/4".

RIGGING TIPS TO PROTECT YOUR SAILS

Remember to tape the spreader pins before the mast goes up, but if the mast is already up, send someone up on a harness to tape the spreader pins. Once the mast is up, put a cover around the base of the mast to help the jib sheets move freely during tacks and jibes. It's one less thing to worry about the spinnaker getting caught on.

Remember that you can never tape too much. Be sure to pack electrical tape in your onboard tool bag. Anything sharp, pointy, or has a small gap should be taped to make it a lot less likely that a sail will rip. Items to tape include headstay connections, shroud pins, stanchions, and the ring dings forward of the winches (they look like key rings).

MAINSAIL TRIM

The mainsail is the primary source of power when sailing upwind. If you feel slow, think about making adjustments to the mainsail that will help you move through the water better. The mainsail needs constant attention and adjustment for different conditions. Before trimming the mainsail, be sure you have a good mark on your halyard to show when the sail is at the top of the rig. In very light wind, do this at the dock by hoisting the sail all the way up and putting a mark on the halyard near the cleat. Having your halyard fully hoisted helps all the other mainsail controls work properly.

LIGHT AIR (0-7 KNOTS)

Straight Line Speed:
In light air, the main is set with the traveler to weather to keep the boom on or just above centerline. For the best combination of speed and pointing: The top batten is parallel with the boom. Crew should lean in as far as possible, keeping a good consistent heel angle and minimizing the lateral pressure of the helm. The outhaul is eased two inches from the back band to power up the bottom sections and round up the lower leech. The top telltale on the leech will be streaming 80 percent of the time.

In Pointing Mode:
The boom should be pulled up about three inches to weather of centerline. The mainsheet should be sheeted hard until the top batten is closed (aiming to windward of the boom) by as much as six degrees. Sight up the middle of the sail using the boom as a guide for the top batten. The top telltale will fly about 50 percent of the time, and the boat will point higher but go slower.

To build speed after tacks, through waves, or when the boat is slow, ease the mainsheet so the top batten is parallel to the boom, and then drop the traveler a few inches until the boom is on the centerline.

MEDIUM AIR (8-14 KNOTS)

Straight Line Speed:
Set the traveler near centerline, and ease the mainsheet to leeward when the larger pressures hit. The top batten should fall off slightly to leeward, the outhaul should be one inch from the back band, and the crew weight hiked out. The goal is to generate the maximum load on the keel to create lift or the maximum amount of power without the boat heeling too far.

In Pointing Mode:
The traveler should be set to near or slightly above centerline, and then the trick is to play the sheet to get extra height in the flat spots. The goal is to get the top batten telltale to stall 50 percent to 75 percent of the time.

Speed Build:
Move the traveler down a few notches and ease the main a bit so that all the leech telltales are flowing 100 percent of the time and you feel the boat speed up.

MAINSAIL TRIM

HEAVY AIR (15+ KNOTS)

Straight Line Speed:
Ten degrees of heel is fast. The traveler should be centered, and the vang and backstay should be on hard. The key is to keep the boat balanced with the main trim. The backstay should come on to maximum when the big puffs hit and off when it softens a little; the outhaul should be maxed; and the crew should be hiking 100 percent of the time. As a driver, the boat should be a combination of low mode (speed build) and high mode (point mode) to get the most when sailing in a straight line in any condition. Tip: drive high in the flat spots and low before the big waves hit.

In Pointing Mode:
At this point your rig should be tight, outhaul almost strapped, and cunningham tight. If you're looking to point in this condition, the backstay should come off a little, the mainsheet trimmed in, and the in-hauler tightened. This will increase the heel but will let the driver point better. It's the trimmer's job to maintain about 10 degrees of heel angle.

Speed Build:
With the vang and outhaul on hard, the main should be eased to heel less and allow speed to climb. It's important that the skipper and main trimmer coordinate in this mode. Before the skipper turns down slightly, the main trimmer should be easing to keep the boat balanced. It's the main trimmer's job to keep the boat balanced and fast in all conditions. To help the boat accelerate and point lower, pull the backstay on more. Overbend wrinkles are a good thing in this breeze condition, just be sure to take the backstay off a little before rounding the top mark.

When in doubt, err on the side of speed and keep the leech of the mainsail open. In flat spots, you can try to point and then build speed again before the next big wave or when the wind drops.

TIPS FOR SAILING IN 10-14 KNOTS

Sheet tension is the secret when sailing at 10-14 knots: tighter to point and looser to go forward faster. When you begin to de-power at this speed, tighten the outhaul to the back band and use a combination of backstay, traveler, and mainsheet to flatten the sail and keep the boat on its feet. The first adjustment to make is to ease the traveler down a few inches. The boom position will vary from centerline to leeward of center. The traveler should be near the center for the lighter spots, and as it gets windier the boom should go out either by traveler or mainsheet ease.

If you're looking for power, bring the traveler up. If you want to balance the boat, pull the backstay on or drop the traveler. The main and backstay should be played together in the higher ranges of medium air.

MAINSHEET MARKS

A mark is a good reference point when you are set up for maximum speed upwind. This mark is useful coming out of a tack, off the starting line, or even after rounding a mark. The mark should be on the mainsheet and just past the mainsheet cleat so it's easy to see. Set this mark when sailing upwind before the first race. Add another mark for downwind sailing in light breeze. Marks can be made with a Sharpie pen if your lines are a light color, with a thin piece of electrical tape, or, if you want to get fancy, splice a mark into the sheets for repeatable trim. (Marks like these can also be placed on the jib sheets.)

BACKSTAY

The backstay plays a crucial role in depowering a boat. The more you pull on, the flatter the boat becomes, resulting in the driver being able to head lower. If you need to point and increase heel angle, ease the backstay. Add mainsheet whenever backstay is added; the increase in mainsheet trim will keep the boat pointing. Add power when the wind drops by easing the backstay and trimming the sheet. Backstay should be used when the crew is hiking against the boat's heel.

If the backstay is maxxed out and the boat is still not flat, consider putting more turns on the lower shrouds (within reason). Another tip is that you can also adjust the gross tune on the backstay to make it easier to tension.

LEAD POSITION

The jib lead position is the first step of achieving the perfect setup for your J/70 jib. Our Quantum experts measure car position from the front of the track. Start out with six to seven holes showing in front of your jib car, which lines up with our base wind range settings. As it becomes breezier, especially in flat water to moderate chop, we pull leads back one hole at a time. As wind gets lighter, we push leads forward one hole at a time. Pulling the lead back makes the bottom of the jib flatter; pushing the lead forward makes the bottom of the jib fuller. Find what car position best fits your sailing style and the conditions.

HEADSAIL

The four key components to trimming a jib on a J/70 are lead position, sheet tension, weather sheet tension, and halyard tension. The trimmer must be in tune with the balance of the boat and understand the skipper's driving style. It's a critical role on a J/70.

The ideal shape of a Quantum jib is achieved when the primary sheet is pulled in until it's taut and the windward sheet pulled in until the top telltales begin to stall. The top should be slightly open as you trim the in-hauler. The sail will move more inboard while also tightening the upper jib leech. Remember in all conditions to sail with the top two leech telltales flying nearly 100 percent of the time. Trim the jib so the top leech telltale stalls, then ease until the telltale starts to fly again. This is the maximum trim. Marks on the deck and sheets will help the trimmer know when they've reached this point. When in doubt, mark it. Without a mark, it's nearly impossible to get controls back to the same point after a maneuver.

If the in-hauler is too tight, the boat will point but not go fast because the jib is stalling out the mainsail. But if the in-hauler is too loose, the boat will go faster forward but suffer when it comes to height. The section below will help you more accurately get your jib to the perfect shape in every condition.

SHEET TENSION

Sheet tension is critical, as the proper tension allows the boat to go fast and point well. When looking up at your jib leech, trim your jib so that the leech is somewhere between the trim marks on the spreaders. The trim will be dependent on the boat mode, the breeze strength and the sea state. For the Quantum jib, we have three trim marks, one at 18 inches, one at 20 inches, and another at 22 inches. We measure the spreader marks from the center of the mast track. In waves, we usually trim the sheet to the 18 inches mark and weather sheet the rest of the way (see Weather Sheeting section on the next page). This puts shape at the bottom of the sail and allows for some punch through the waves, though this is also car dependent. In flat water, we pull back the car, trim the primary sheet between the spreader marks of 18-20 inches, and pull the in-hauler the rest of the way. The lead back ensures a flatter foot even when weather sheeting. When sailing upwind in a J/70, both sheets should be tight. If you want a flatter jib, let the in-hauler out while trimming the leeward sheet in. Both sheets should be trimmed and eased in unison so that the sail retains its shape.

HALYARD TENSION

Jib halyard is the final piece to the puzzle of perfect headsail trim. The jib halyard affects leech tension and the entry shape of the jib. If you are moving the car forward on the jib because the wind is lighter, you should also ease jib halyard to prevent the leech from closing and the entry from softening. If you move the car back due to more breeze, you must also pull halyard tension on, which will flatten the sail and keep the leech tight. In light air, you are looking for small wrinkles to come from the luff, but only go about four inches to six inches aft of the luff. In moderate conditions, pull the wrinkles out, and in windy conditions, pull on the halyard to help reduce head stay sag.

MARKS

Mark every single trim position you can so that you have the capability of repeating settings. Make a mark on your sheets for leeward and weather sheeting. Make marks on your deck forward of the jib blocks (usually one through 10), and use the same scale side-to-side so that you can see where your trimming without having to sight your leech. Make marks on your jib cunningham to know exactly where you're putting your halyard tension in each condition. Mark jib car position so that you can see clearly where your cars are.

SETTING THE SPINNAKER

Make sure to pre-feed the tack of the spinnaker before you round the offset mark. Pull the tack out so that the pole is fully extended and the spinnaker is tight to the end of the pole. Make a mark on the tack line so that the crew knows where to set it before the pole is extended.

As you round the top mark, the tack should be fed out, then halyard up. Once the halyard is halfway up, the pole can be pulled out. Then the sheet comes on and the spinnaker fills. Most of the time the jib should be furled at the moment the spinnaker is up.

The jibe set follows the same steps but with a few tricks added into the mix. First, the driver should make the turn as slow as possible to give the crew ample opportunity to get the kite up, out, and filled. A slow turn makes everything easier. As the pole and halyard go up, the starboard sheet needs to be overhauled so that the spinnaker can rotate to the opposite side. As all of this is happening, the crew furthest forward (if they can) should throw the spinnaker away from the boat when it's about halfway up so that it can rotate and fill faster.

A tip is to cleat and mark the leeward spinnaker sheet (port sheet) so that when the kite is out and up it will fill on its own. This trick works well for boats that are understaffed (three-person crew) in light-to-medium air. In bigger air, it's better to have the sheet in someone's hand so it can be eased if needed.

DOWNWIND MAINSHEET TRIM

LIGHT AIR (0-7 KNOTS)

Ease the mainsheet so that all leech telltales are flowing 100 percent of the time. The vang should be off, and there should be a good amount of twist from the bottom to the top of the sail. The backstay should be completely off. Play with the mainsheet trim, it should be out past the corner of the boat and the traveler should be centered so that you can get the most power out of trimming the sail in. This trim should be dynamic and in reference to the angle of the boat and the breeze.

MEDIUM AIR (8-14 KNOTS)

The vang should be played a bit more so that it limits the twist of the mainsail. If you trim the sail in but you still have no extra surge forward and the top telltale is flying, you might want to add more vang. But if doing that stalls the top telltale, you may have the vang on too hard. Stabilize the boat as the breeze comes up by adding backstay. If the boat feels like it wants to fall over when the trimmer pulls the main in, add more backstay. If you feel slow downwind in medium air, let the backstay off and play with the vang. Help the boat speed by pumping the main once per wave, also try to coordinate with the spinnaker trimmer to simultaneously pump to ride the larger waves.

HEAVY AIR (15+ KNOTS)

In heavy air, the vang should be on tight, not as tight as the upwind, about 50 percent of the upwind tension would be sufficient. When the boat starts to heel too far on the run and slows down or a big puff hits, let the vang off so the main dumps a bit of power off up high. If the boat is unstable, add more backstay; when it slows, take it off again. The goal is to minimize the amount of time that the boat is slow because that is the precise moment that it may fall over, like riding a bike, the faster you go, the more stable it becomes. The mainsheet in this breeze should be in close to the corner of the boat, the traveler should be moved all the way to the leeward side. The trimmer should be constantly trimming the main to balance the boat and give it the maximum speed going downwind.

In all conditions, the cunningham and outhaul should be eased around the top mark and pulled back on before rounding the bottom.

DOWNWIND JIB SETTINGS

In 0-13 knots, the jib should be furled as soon as the spinnaker is up.

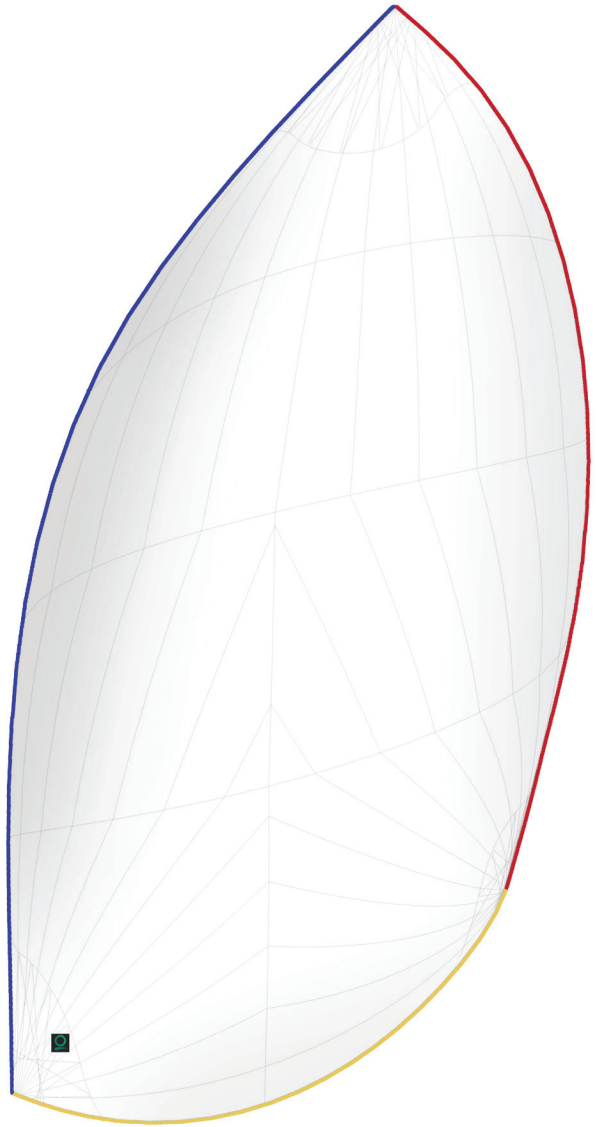
In 13-15 knots, the jib should be out and loose; you want the jib shape to mimic or be looser than the spinnaker shape. The top quarter of the sail should be luffing while the bottom three quarters has a nice shape, similar to the spinnaker twist. The jib should be furled through the jibe to allow the spinnaker to fill more easily.

In 15+ knots, the jib should be out all the time since its job is to help balance the boat and make it easier for the driver to stay downwind. Again, the top quarter of the sail should be luffing while the bottom three quarters has a nice shape that mimics the spinnaker.

SPINNAKER

The goal of sail trim and crew weight coordination downwind is to achieve as neutral of a helm as possible. A flatter boat is normally faster when reaching, a boat that is heeled slightly to windward is fast when running. Trim the spinnaker for a curl along the top 50 percent of the luff. When in doubt, ease it out. When you see the curl, trim it back in.

When trimming in a straight line on a downwind VMG course, the trimmer should be communicating the amount of pressure in the spinnaker. A lot of spinnaker pressure means the boat can sail lower; light pressure means the boat can come up a bit. Body weight should be moved in and out and forward and back relative to the boat's heel so that the rudder is used as little as possible. Heeling to windward helps the boat turn down, and heeling to leeward helps the boat turn up. Move forward to help lift the transom out of the water in light winds, and move aft to lift the bow up when it's windy.



FIND YOUR DOWNWIND MODE

WING-ON-WING MODE

Mastering the wing-on-wing position in 8-14 knot ranges can gain you a lot. This mode has the main and spinnaker on opposite sides as you head nearly straight downwind. The jib should be furled before this maneuver. Wing-on-wing mode is a tactical resource on the J/70; use it to move down a lane into clean air or lay the gate marks without jibing. At the higher end of this range, carry wing-on-wing the entire leg of the course to make huge gains on the fleet. When sailing wing-on-wing, the boat will sail less distance but at a slightly slower speed.

Keep in mind that wing-on-wing may not always be the fastest mode, so experiment to learn when to use it. Many top sailors sail in this mode when planing conditions are marginal; they feel that if you can keep a boat at 5.5 knots or more while wing-on-wing, you should see a gain. If you are sailing slower than that, consider going back to normal downwind mode.

The easiest way to execute wing-on-wing is by jibing the spinnaker, not the mainsail. A quick kite jibe and ease of the sheet fill the kite faster and more efficiently and without worrying about flipping the battens and trying to jibe the main.

To initiate wing-on-wing, the driver should turn straight downwind (look at the wind pennate). The trimmer and bowman then pull the spinnaker around and fill it on the opposite side of the mainsail. The driver in this mode should hold the windward sheet of the spinnaker down and away from the boat to keep it filled. Do this with either a hand or a foot, whichever is more comfortable. One crew member should have their hand on the boom so that it doesn't accidentally come over. The spinnaker trimmer should communicate left or right turns in reference to the wind pennate so that the spinnaker stays full and the main doesn't come over and accidentally jibe.

Use wing-on-wing mode when the sailing angle allows for better VMG to the mark and there is enough pressure to prevent you from losing more than a couple tenths of a knot of boat speed. You will want to practice this before trying to use the technique in a race.

DISPLACEMENT MODE

Displacement mode is best sailed in the 5-15 knot range. Crew weight should be forward enough to keep the knuckle of the bow in the water, and the skipper and trimmer should be to weather. The trimmer should move their body weight to flatten the boat when it heels. The bowman should either be to leeward or in the companionway. Use displacement mode to sail as low as possible while keeping up your speed. This mode has you going halfway between a hard reach and wing-on-wing. The boat should be slightly heeled to leeward. Crew weight and trim should keep this angle of heel constantly with little-to-no rudder movement. The jib should be furled when sailing in this mode.

FIND YOUR DOWNWIND MODE

LAZY PLANING MODE

Lazy planing means sailing on a plane but as low as possible without dropping back into displacement mode. Use this mode when you can bring the jib out to help balance the boat when the breeze is above 14 knots. The boat is most stable with a bit of heel to leeward. It is also the fastest at a constant heel angle. When lazy planing, position the crew to get the boat to about 5-10 degrees of heel without being fully hiked. Some teams place crew on the edge of the bench seat to help the skipper keep a low planing mode.

When a puff hits, instead of easing sails or hiking the boat down, drive the boat down and try to keep the heel angle steady. A constant angle of heel when lazy planing helps the boat to move better and drive more easily. The main and jib can be pumped once per wave, while the spinnaker can be pumped as many times as you see fit. In this mode the goal is to minimize your displacement mode, maximize the planing, this will help you see huge gains on the downwind.

FULL PLANING MODE

You're in full planing mode when the boat speed is over 9 knots and the crew is sitting outboard and aft as far as possible to help keep the boat under control. The boat should never stop planing when you're sailing in this mode. Keep the vang in hand to ease in the puffs and pull in for the lulls, and move weight aft to pop the bow out of the water. As wind speeds climb and you get overpowered, the vang should be eased first, then the main, then the spinnaker, and then lastly the jib. Unlike lazy planing where you are trying to sail as low as possible while still on a plane, full planing mode gets you down the course fast. It is best sailed in conditions over 15 knots, in this mode the driver really has to soak low when he can and come up when it's necessary. Be sure to watch for puffs and rely on your crew to help get the boat from the top of the course to the bottom. Call puffs and lay lines early.

DOUSES

There are a few keys to a successful douse. Assuming you are on port tack, the easiest way to have a safe and quick douse is to be able to turn the boat dead downwind so that the spinnaker can get behind the mainsail and not fully loaded with pressure. Next the trimmer releases the starboard sheet completely and overhauls the port sheet so that the crew can grab the spinnaker and douse it on the port side, making it set for the next windward mark. Once the port sheet is overhauled, the bowman must pull the spinnaker over the jib sheets and pull the sail into the boat. Most crews gather all of the foot, then call for the halyard to be released. At this point, the spinnaker should drop straight into the boat. On starboard tack, the only change is that the spinnaker must be rotated around the forestay and then dropped the same way that it would be on port tack.

In your practice sessions, try both the straight sets and the jibe sets, and time them to get an understanding of the time and distance each takes. Practice the four douses the J70 class uses- regular right hand turn, jibe into a right hand turn, normal left hand turn, and jibe into a left hand turn–and record your time distances as well. Be sure that both you and your crew have a solid understanding of what you all are capable of and how long it takes to execute each maneuver.

CREW POSITIONS

While each crew member has their own preferences and strengths, the standard positions have specific skills and responsibilities associated with them.

DRIVER

- Executes good, clean starts with the ability to get out if things go wrong
- Makes clean, smooth mark roundings
- Keeps clean and clear of other boats
- Keeps the boat moving fast and forward on the race course
- Trims mainsail downwind
- Communicates the timing on maneuvers

JIB TRIMMER

- Trims jib based on the driver's mode and situation
- Communicates sail mode and boat speed with driver
- Trim sheets using preset marks on deck and jib sheets through tacks and jibes
- Reports relative speeds against other boats: higher-faster, lower-slower

CREW POSITIONS

SPINNAKER TRIMMER

- Trims spinnaker
- Coordinates with crew to execute and optimize heel angle
- Controls boat speed downwind
- Communicates with driver about pressure in the spinnaker sheet to help find optimum sailing angle

TACTICIAN

- Plans strategy and makes tactical decisions
- Communicates with driver to handle place boat within traffic
- Calls upwind and downwind tactics
- Trims mainsail upwind
- Communicates steps for team maneuvers

BOWMAN

- Is responsible for all halyards and pole controls
- Calls waves and pressure
- Plans ahead for maneuvers
- Is responsible for vang, outhaul, and main cunningham
- Manages weight fore and aft, in and out

QUANTUM CLASS EXPERTS

We hoped you enjoyed the J/70 eBook and learned a thing or two. Like all tuning guides, the techniques, numbers, and settings shared here are just that: guides, not gospel. They have been developed to help you find the sweet spots and get you in the right range. Superior athletes in every sport often have slightly different styles or techniques that work for them. Remember that trim is dynamic. You can't just set it and go. Learn what tuning and trim controls do by watching how they affect the sails so that you can react and make changes in response to your actual performance at any given moment.

To paraphrase that famous West Coast credo, "Fast is fun." Don't be afraid to experiment and let us know what works. Quantum's class experts are your support team, providing you with real-time tuning data, sail trim, sailing technique, mast setup, and tips. We're here to help you enjoy your J/70. If you have any questions, be sure to call.

We'll see you out on the race course. Have fun!

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