

Notes on Sailing the Elliot 6M

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Anna Tunnicliffe (USA) rounded the leeward mark ahead of Julie Bossard (FRA) in the 2011 Buddy Melges Challenge at Sail Sheyboygan. Tunnicliffe defeated Bossard 3-0 in the semi-finals and went on to win the regatta.

These notes are for the version of the Elliott 6M sailed in the Women's Match Racing event of the 2012 Olympic games. The women sailed with three in the boat (driver – middle – forward). These notes are based on that number.

Upwind

Usually the middle person trims the main. In lighter conditions when the middle person is sitting to leeward where it is tough to see the main, the driver trims the main.

The driver usually adjusts the traveler.

There is no backstay.

Keep your weight together and forward when possible.

Keep the boat fairly upright, though they seem to go OK with some heel (but not much). That means HIKE HARD (flat backs) and adjust the main to balance the boat.

Mainsail

As the breeze comes on and you need to depower, this is the order to do that:

- 1) Outhaul tighter and tighter (you can get it pretty tight in general as the boat doesn't need a lot of power to get it through the water)
- 2) Drop traveler to centerline, and then adjust mainsheet beyond that (the women rarely drop the traveler below centerline which puts the end of the boom a foot or so below centerline)
- 3) Start cranking on the vang (*but be sure to let it off before rounding the windward mark*). This is very important. Like the Laser, this can result in a broken boom—although much more expensive.)
- 4) Pull down on the Cunningham (main downhaul) harder and harder

To add power, reverse these steps.

Tacks

In the tacks, usually the driver releases the traveler and pulls it to the new windward side (while sitting on the old windward side and rolling the boat). Then the middle person reaches back and simply holds the traveler line as the driver crosses the boat and sits down on the new windward side. Then the driver simply reaches down and cleats the traveler. The middle person also eases the main slightly in the tacks (again, be sure to have a couple of reference marks on the mainsheet for consistency and accuracy of trim and release). In light air, if the driver is trimming the mainsheet, the middle crew tacks the traveler and the skipper cleats it.

Like any keelboat, don't pinch – get the boat rolling FAST and then you can sail in Hi mode for short periods of time if needed. Out of tacks, ease main and let flow grab the keel; then slowly trim in. Otherwise you go sideways quickly.

Jib

The jib leads are pretty critical. It is OK to have the foot of the jib fairly flat (like a tight outhaul on the main for the same reason). 0-1 hole in front in light air; 1-2 in medium; 2-3 in heavy; 4 when very heavy and flat water.

The jib leech should be pretty straight back at the spreaders, or slightly open, and never curling or hooking in. A small adjustment in the jib trim makes a huge difference in leech tension, so be sure the jib trimmer has a reference mark on the jib sheet, and make small adjustments as needed. It may be tough to cleat the jib sheet, but in big breeze it is probably worth cleating it so it stays in a constant place.

Downwind

Spinnaker Work

Some set the spinnaker from the windward side (no pole up until after the chute is up); some set from the leeward side (traditional) with the pole already up before the set whenever possible. The US women are all pretty much leeward setters now as it gives you more options coming out of the windward mark.

The key to any set is to pull the guy back quickly and before the head of the spinnaker reaches the top of the hoist – and to have the spinnaker sheet pre-cleated before the set, so the spinnaker POPS full when the guy is pulled back.

On the Elliotts, generally the skipper hoists the spinnaker (tiller between her legs) and then sits down on the leeward side. The middle person pulls the guy back and the forward person helps the chute out of the bag, can help pull the guy back by reaching in front of the windward shroud and pulling it back, and then immediately drops the jib (very important to get the jib down quickly).

But in a close race, when it is critical that the driver watch the other boat (which hopefully means looking back) so you don't get rolled, etc., the middle person can hoist and the forward person can pull the guy back and temporarily fly the chute until the middle person can take over.

The topping lift and foreguy are led amidships on either side of the boat. This is a pain. Usually the tails of the two controls are tied together (i.e., on each side the tail of the topping lift and the foreguy are tied together), and the slack is coiled around itself just tight enough to pull the foreguy up out of the way of the forward crew, and just enough to allow the pole to be put on the mast.

Usually the foreguy is loose, but in a breeze you need some foreguy tension (but not so much the pole can't be gybed). Often, the forward crew can lean in and "banjo"

(pull up) on the foreguy to tension it. The middle person needs to pull the topping lift up when the forward person puts the pole on (driver trims main during that 6 second operation). If you come into the top mark on starboard and go for a no-pole tack set, then the driver will need to pull the topping lift up after finishing hoisting the chute.

Put the pole up before mark, and on the last port tack if needing to sail on starboard layline to get to mark

Don't let jib out on set. You can cleat it on the starboard (leeward) side by wrapping it around starboard cleat.

Gybes

The middle person (trimmer) usually does both twings while holding sheets in their hands, or utilizing the cleat.

The forward person has several options for getting to the pole.

- 1) Light air – sit to leeward in front of the boom on the foredeck. Stay on the foredeck for the gybe and end up on new leeward side.
- 2) Medium air – forward crew is usually in cockpit on windward side. They can release pole off mast, then duck through the vang (between the vang and the mast) and pop up on new windward side to finish the pole switch.
- 3) Heavy air – the forward crew crosses the boat behind the vang, then goes for the pole on the new windward side.

In big breeze, leave the jib up on the first run and drop it on the second if a close race. Staying BACK in these boats is not only fast, but often essential to keep from nose diving. You can also not use the pole altogether in big breeze – the chute flies just fine without it, and you will likely only be gybing once.

Drops

Be sure the forward person pulls the spinnaker halyard out through the little turning block behind the halyard cleat, so that the line doesn't have to run through that block on the way down. Try to keep all the halyard tail to one side or the other of the boat, so the driver or middle person doesn't stand on it when trying to drop it.

The middle person usually reaches in and releases the halyard but if you get late and the middle person has to pull the chute in, the driver can release the halyard.

Typically the forward person pulls the jib up, takes the pole off (and always store it on the windward side of the boom, whichever that side is), then grabs the chute and pulls it down. Be sure the forward person has it in their hand and is collapsing it before blowing the halyard or the sheet can go over the bow. If the forward person

is still stuffing chute when it's time to round the mark, the middle person trims the jib in and the driver trims the main. The goal is to get the chute down and stowed in time for the forward person to trim the jib – and HIKE – around the leeward mark, in which case the middle person can trim the main and then pull the vang back on if it's breezy. Bottom line in breeze – get the chute down EARLY.

The driver pre-sets the traveler for the rounding.

The boats sail pretty well dead downwind. They possibly plane around 18-20 knots and up, but before then I wouldn't expect to see people reaching up and trying to plane on the runs.

Prestarts

The boats have a very thin keel and a deep rudder. So the boats will slip sideways a lot when downspeed. Bottom line – if you are downspeed and the windward boat – GET OUT! If you can keep your boat moving, you'll have more options. When circling, sail slightly wider circles so you don't park the boat coming out of your tack.

The boats are pretty quick to accelerate, so do a lot of time and distance work, both from a stopped position, and from a distance away from a fixed object. It is easy to get hooked if the pusher gets their bow down before yours. Match their "downs" so you don't get hooked prematurely.

Pre-Race Boat Set-Up

Traveler

- Shorten the length of the continuous traveler line by tying a knot in the middle of the line such that the skipper can be hiked to leeward in a roll tack and just be able to hold the line and pull the traveler to windward
- Centered for pre-start maneuvering

Topping Lift and Foreguy control lines

- The control lines are led to the middle of the boat and are continuous. Tie the tails of the lines together on each side (i.e., the tail of the topping lift and foreguy are tied together on each side), and then coil the slack up and wrap it around itself so that with the pole on the boom, the foreguy does not interfere with the forward crew, and there is just enough slack to get the pole on the mast.
- Be sure the “throw” is even side to side

Spinnaker halyard

- Put “knots” in tail to shorten it up and make it easier to handle
- Tie end off at mainsheet ratchet or off to hiking strap eye
- Tie head as close to stopper ball as possible

Jib halyard tail

- Put a slip knot in the halyard when the jib is about 6ft from all the way down. Then tie the tail to the eye of the spinnaker bag and coil the rest of the halyard and stuff it in front of the spin bag. It is important to keep this clean and out of your way or the front is really hard to deal with. Not dropping the jib all the way keeps things cleaner as the halyard is not flying around and the jib is not falling off the deck.

Hiking strap length

- Adjust to permit max hiking. The middle crew’s strap is the trickiest. Get the middle ones right, then adjust the front and driver’s after.

Spinnaker sheets

- Some racers pre-feed the guy into the end of the pole before the start

Spinnaker in bag

- Be sure to put the aft leech and cloth in first, then the leading leech and cloth in on top.

Jib sheets

- Put a knot in each end and then tie them together so they become a continuous sheet.

Y flag

- Wear on the sailors; do not use a Y flag that is loose in bilge. Or you can tie it to the lifting eye in the back by the main sheet block with enough slack to raise it high enough for umpires to see. Best if all three sailors wear a flag for quick and undistracted flying.

Vang control line

- Evened up before start, and again on the second beat.
- Set for fast broad reaching in pre-start

Mark with tape:

- Max eased on mainsheet
- Max trim on mainsheet
- Traveler centered
- Hot gybe location on spinnaker sheets (max eased)

Forward Crew *Sets and Gybes*

Light Air (4-7)

Spinnaker Sets:

Windward mark rounding

pre-set twings (windward on; leeward off)

pre-feed guy/sheet

pole up (leeward hoist)

ease jib a couple of inches and cleat it

Windward Hoist

spin out of bag & throw forward

Pull sheet around (if Middle hoists)

Free-fly spinnaker (if Middle hoists)

pole up

jib down

clean jib, spin sheets, halyards

ease outhaul (2nd run)

Leeward Hoist

spin out of bag and help it go forward / out to leeward

help pull guy around (esp if Middle hoists)

pole up (if not pre-set)

pole forward

jib down

clean jib, spin sheets, halyards

Gybes:

VMG

gybe pole

- step through or behind vang, roll w/ windward foot

OR, be on foredeck and sweep pole aft before tripping

- trip pole on new windward side, or from foredeck

- gybe pole

balance weight, stay forward

twings? - usually middle can get them, but be on

backup

Hot

gybe pole

- step through or behind vang, no roll

- trip pole on new W side

- gybe pole

- if pole not on mast, hold guy down by hand

help flatten

twings? best if middle gets it early

Deep

gybe pole

- step through or behind vang, roll w/ W foot

- trip pole on new windward side

- gybe pole

Forward Crew

Drops

Spinnaker Drops:

Starboard approach Windward drop

jib up
pole down to windward
hold guy out
gather spin to windward
take jib sheet from Middle

super light option:
pole down to windward
gather spin to windward
Middle puts jib up (hand halyard back to her)
take jib sheet from Middle

Starboard approach Leeward drop

jib up
pole down to windward (or after rounding)
gather spin to leeward
take jib sheet from Middle

super light option:
pole down to windward (or after rounding)
gather spin to leeward
Middle jib up (hand halyard back to her)
take jib sheet from Middle

Port approach Windward drop

jib up
pole down to windward
hold guy out
gather spin to windward
weight to leeward for roll gybe
take jib sheet from Middle

Port approach Leeward drop

jib up
pole down to windward
gather spin to leeward
weight to windward side for gybe
take jib sheet from Middle

Leeward mark rounding

trim jib
balance boat
sheets, twings out of water
jib sheets ready to tack

Forward Crew *Sets and Gybes*

Medium Air (8-11)

Spinnaker Sets:

Windward mark rounding

pre-set twings
pre-feed guy/sheet
Pole up (leeward hoist if a lull)
ease jib a couple of inches and reseat

Windward Hoist

spinnaker out of bag & throw forward
pull sheet around (if Middle hoists)
free fly, pass sheets to Middle (if Middle hoists)
pole up
jib down (2nd run)
clean jib, spin sheets, halyards
ease outhaul (2nd run)

Leeward Hoist

spinnaker out of bag and help it forward/ to leeward
help pull guy around (esp. if Middle hoists)
pole up (if not already up)
jib down (2nd run)
clean jib, spin sheets, halyards

Gybes:

VMG

gybe pole
- step to new windward side; no roll
- trip pole on new windward side
- gybe pole

Hot

gybe pole
- step to new windward side, no roll
- trip pole on new windward side
- gybe pole (on new guy at a minimum)
- if not on mast, hold guy down by hand, hike from deck cover
- if on mast, hike from straps; help with guy

Deep

gybe pole
- step to new windward side, no roll
- trip pole on new windward side
- gybe pole

Forward Crew Drops

Spinnaker Drops:

Starboard approach Windward drop

jib up
pole down to windward
hold guy out
gather spin to windward
take jib sheet from Middle

Starboard approach Leeward drop

jib up
pole down to windward
gather spin to leeward
take jib sheet from Middle

Port approach Windward drop

jib up
pole down to windward
hold guy out
gather spin to windward
take jib sheet from Middle

Port approach Leeward drop

jib up
pole down to windward
gather spin to leeward
take jib sheet from Middle

Leeward mark rounding

trim jib
hike
sheets, twings out of water
Jib sheets ready to tack

Medium Air (8-11)

Forward Crew, *Sets and Gybes*

Heavy (12-18)

Spinnaker Sets:

Windward mark rounding

pre-set twings
ease jib a couple of inches and reseat pole up?

Windward Hoist

spinnaker out of bag & throw forward
pull sheet around (if Middle hoists)
free fly, pass sheets to Middle (if Middle hoists)
pole up
jib down (2nd run)
clean jib, spin sheets, halyards
ease outhaul (2nd run)

Leeward Hoist

spin out of bag and forward/to leeward
help pull guy around (esp. if Middle hoists)
pole up (if not already up)
jib down (2nd run)
clean jib, spin sheets, halyards

Gybes:

VMG

gybe pole
- step to new windward side, no roll
- trip pole on new windward side
- gybe pole
weight back

Hot

gybe pole
- step to new windward side, no roll
- trip pole on new windward side
- gybe pole (on new guy at a minimum)
- if not on mast, hold guy down by hand, hike from deck cover
- if on mast, hike from straps; help control guy

Deep

gybe pole
- step to new windward side, no roll
- trip pole on new windward side
- gybe pole
weight back

Forward Crew

Drops

Spinnaker Drops:

Starboard approach Windward drop

jib up (if down)
pole down to windward
hold guy out
gather spin to windward
take jib sheet from Middle

Starboard approach Leeward drop

pole down to windward
gather spin to leeward
take jib sheet from Middle

Port approach Windward drop

pole down to windward
hold guy out
gather spin to windward
take jib sheet from Middle

Port approach Leeward drop

pole down to windward
gather spin to leeward
take jib sheet from Middle

Leeward mark rounding

trim jib
hike
sheets, twings out of water
jib sheets ready to tack

Heavy (12 -18)

Forward Crew *Sets and Gybes*

(18+, no pole)

Spinnaker Sets:

Windward mark rounding	same as Heavy
Windward Hoist	same as Heavy human pole if possible
Leeward Hoist	same as Heavy

Gybes:

VMG	new twing down release old twing help on guy if needed weight back
Hot	new twing down release old twing hold guy down by hand hike (back if possible)
Deep	new twing down release old twing help on guy if needed weight back

Middle Crew

Before racing

- Mark with tape
 - Max eased on mainsheet
 - Max trim on mainsheet
 - Traveler in middle
 - Hot gybe location on spin sheets
- Tie pole down haul and topped together

Pre- Start

- Traveler is in the middle unless tight situations needing height
- Set vang for a broad reach

Entering

- Yellow- RC- know the RC's scope of line
- Yellow- Don't hit the boat with main
- Help boat carve down with slight windward heel
- Watch tell tales and know what shift you are in when entering- do not over or under ease the mainsheet

Dial Up

- Yellow- Slow early to not over run Blue
- Blue- Ease main when tacking
- Back main – stand and push main against the wind (backwind)
 - Light- Watch slowing too hard and getting dead in the water
 - Med-
 - Heavy- Too hard of a back wind on main will spin the boat – watch weight placement along with backwind...
- Stopped- Trim slack in from main sheet
 - Watch transom and keep boat flat with your weight
 - If lost all flow, give slight trim in on main
- Steel Balls/Anti Steel Balls/Aggressive bear-aways...
 - Locked in windward hiking straps
 - Once boat begins to bear away – ease main out to get tell tale flying
 - Leeward weight / Windward weight as needed
 - Put main on starboard side to allow boat to turn up to a close reach on starboard tack while sailing backwards with the main backed to windward

Final Approach

Ready to go traveler up for height
Ready to pull vang on for final push/pull
Med/Heavy- locking into hiking straps

UPWIND

Boat flat
Med/Heavy- heel factor is controlled with main
Always looking at the top tell tales
Flat main
 Light- ease to max out early...get tell tale flying
 Med/Heavy- pull harder to max trim
 Med/Heavy-flat- playing main for heel factor- never too eased
 Med/Heavy-Wavy- playing main for height over waves
 In up the front of the wave; eased/full hike down the back of the wave

TACK –Cross backwards

1. Light
 - i. Take main from driver if not trimming main (or driver keeps main and middle just rolls boat and tacks the traveler)
 - ii. Trim up in the turn
 - iii. Roll off sheet, hiking straps and forward hand on blocks
 - iv. Grab traveler line / Ease out main
 - i. PORT to STB – Right hand holds main AND grabs traveler – After pivot then, left hand holds traveler for skipper to cleat
 - ii. STB to PORT - Left hand holds main, right hand grabs traveler and hold tight- skipper cleats
 - v. Boat is flattened (staying to leeward)
 - vi. Trim main in ½ way – Hand off
 - vii. Move forward

2. Medium breeze to heavy breeze
 - i. Trim up with the turn
 - ii. Roll off sheet, hiking straps and forward blocks
 - iii. Ease main out – more than an arm length
 - i. PORT to STB –Right hand holds main AND grabs traveler – After pivot then right grabs main, left hand cleat traveler
 - ii. STB to PORT- Left hand holds main, right hand grabs traveler and cleat
 - iv. Trim main

3. Heavy breeze – Watching heel factor
Be ready to drop traveler

Sets

Cleat main to mark so it does not go too far out in light air

Light – Prepare for a leeward set

Raise topper for pole

Hand off main and trim jib ...”My jib...Your jib”

Med- 5ish-10ish- leeward set—10 and above windward set (unless staying with leeward set)

Raise topping lift

Hand off main

Hand on vang around mark- slight ease

Heavy – Windward set (unless staying with leeward set)

If you have time for the pole--help topper and foreguy. if not, not a big deal

Hand off main

Drop traveler

Hand on vang...FULL hiking and release vang around mark (both sides of boat!)

Tight Situations around mark when leading....

Be ready to go for the hoist instead of skipper

On Set

Windward - 10ish and ++ breeze

Release leeward twing

Sheet on until you have a kite

Leeward – 10 and below

Release leeward twing

Guy on until you have a kite

Gybes

VMG

Light-

Release twing

Take out slack from guy to compensate twing release

BIG ease on sheet (clew to forestay) to allow kite to rotate/fall onto other gybe

ROLL

Cross – Crossing forwards

Outside hand grabs new twing

Inside hand holds both guy and sheet across the boat

Flatten appropriately

Ease both sheet and guy for pole

Med- Same except faster and less rotation

Heavy- Faster crossing and flattening, no roll and less rotation

HOT

Light- Same as VMG

After flatten- hard sheet on

Cleat guy; keep 6" of tack wrapped around forestay (a mark is useful)

To square, big ease on sheet and forward crew help with guy back

Med- Same – Vang in hand and feet ready to lock into straps

Heavy- Same- Have vang ready. Locked into straps and weight back

Always easing sheet as much without collapsing, communicating when strapped.

Shit Fight

Pole off early- ready to release topper and foreguy

Kite closer to boat

Ready to release halyard and start douse by yourself.

Go for main – 80% in

Traveler up

Go for jib sheet around mark

Watching other boat

Leeward Mark

Behind on take down...

Pole off...release topper and foreguy

Kite closer to boat

Once forward crew has a hand on it – blow sheet and go for halyard

Traveler up

Driver trims main around mark and hands to middle after they have passed the jib off

Weight to leeward then up
Trim jib, then hand off and tack main
Set vang after main trim
Watch other boat

On time take down

Pole off, release topper and foreguy
Kite closer to boat
Once forward crew has a hand on it – blow sheet and go for halyard
Drop spinnaker
Main in
Weight placement appropriately
Set vang after main trim
Watch other boat

Driver

Spinnaker Sets:

Windward mark rounding

Windward Hoist

Leeward Hoist

Gybes:

VMG

Hot

Deep

Leeward Mark approach

Spinnaker Drops:

Starboard approach Windward drop

Starboard approach Leeward drop

Port approach Windward drop

Port approach Leeward drop

Leeward mark rounding

Light (4-7)

drop traveler – no need to cleat it
ease main – no need to cleat it
vang off and recleat it (usually middle does this before rounding then helm adjusts down the run)

Try to recleat traveler in center

hoist spinnaker (close race Middle hoist?)
locate opponent

pole topper and foreguy if not on yet
find leeward mark; check skew
sit to leeward / balance boat

same as above
pole topper and foreguy (but should be done already)

trim main, balance boat

Grab mainsheet from block

set traveler (if not done already)

pole topper and foreguy, if on the side you're sitting on

give port sheet a couple of pulls

All drops similar process

trim main, unless Middle already has it

Driver

Medium (8-11)

Spinnaker Sets:

Windward mark rounding

ease traveler and main
vang off and recleat

Windward Hoist

hoist spinnaker (close race Middle hoist?)
locate opponent
Pole topper and foreguy
find leeward mark; check skew
Sit to leeward / balance boat

Leeward Hoist

same as above

Gybes:

VMG

trim main / balance boat

Hot

Deep

Leeward Mark approach

set traveler

Spinnaker Drops:

pole topper and foreguy, if slack on your
side
Give port sheet a couple of pulls

Starboard approach Windward drop

Same system for all drops

Starboard approach Leeward drop

Port approach Windward drop

Port approach Leeward drop

Leeward mark rounding

Trim main, unless Middle already has it

Driver

Heavy (12+)

Spinnaker Sets:

Windward mark rounding

drop traveler
ease main
vang off both sides!

Windward Hoist

hoist spinnaker (or Middle or Forward hoist?)
locate opponent
pole topper and foreguy
find leeward mark; check skew
balance boat

Leeward Hoist

same as above

Gybes:

VMG

trim main; balance boat

Hot

release vang (might have to be front person
when all sitting back)

Deep

Leeward Mark approach

set traveler

Spinnaker Drops:

pole topper and foreguy, if on your side

Starboard approach Windward drop

Same system for all drops

Starboard approach Leeward drop

Port approach Windward drop

Port approach Leeward drop

Leeward mark rounding

trim main, unless Middle already has it