

1 Boat Set-up and Gear

I Sail a Working Man's Dinghy

"This sh*t box won three races!?!?" was the critique overheard by my crew, Erik Yeo (*below*), during the 1971 Canadian Wayfarer Nationals at the Kingston YC. As Erik approached, three fairly hot U.S. sailors were checking out our boat which had won the day's three races.



Erik and Al have just won the '71 C Nats

In my early Wayfarer years, I became adept at jury rigging, because I tended to have cheap gear that often broke down. It was not until 72-75 in tippy Fireballs that I discovered the joys control lines that run efficiently to both sides - a necessity on a performance boat like the Fireball.

In 1975, I bought a new Wayfarer, a composite Mark II, built for me by Gene Smyers of Avon Sailboats in Michigan. Inspired by the Fireball rig controls, W4000 became the best-rigged North American Wayfarer of its time. Sadly *Beaver Blues* weighed 50+ lbs over minimum and after three semi-successful seasons, I sold her and went back to wood, W3854 which I bought for \$3000 from Ron Gillespie at the end of the 1977 season.

As a teacher and as Class Coach (1979 >), I always try to simplify things for people. In that spirit, I started a small rigging business, installing gear that made good boat handling easier, especially for weaker crews. My attitude in sailing as in life keeps me firmly in the KISS (Keep It Simple, Sailor) category. The dinghy sailors whom I know tend not to be rolling in money, so I still try - wherever possible - to recommend gear options that avoid needless expense.

Unless you have the Rolls-Royce of Wayfarers, the Mark IV with all imaginable "bells and whistles", you may appreciate my A list and B list below - what matters to *this* racer and what does not.

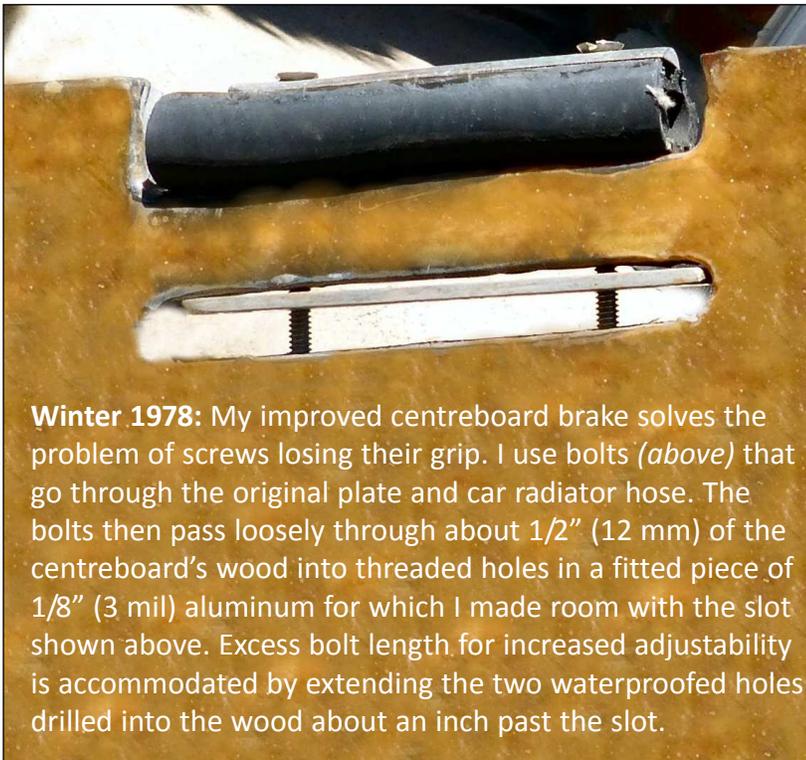
A list: Crucial Items: worth money and effort to get more quality and less frustration

1. top flight, strong **centreboard, rudder & tiller**
2. powerful **vang/kicker & jib halyard tension set-up:** cascade system gives these at modest cost
3. reliable **main and jib halyard** - enough said
4. functional **sheets, sheet cleats** plus **durable jib sheet fairleads** and **mainsheet swivel block**
5. if you race with a **spinnaker**, go first-class with all spi rigging; likewise if **furling gear** is in your plans, I recommend the *Aero Luffspar* system
6. use **shroud adjusting plates** not turnbuckles
7. **compass; hiking straps; spinnaker bags**
8. **uncompromised buoyancy compartments** that meet the requirements of the wet test outlined in Class Rule 34.8 - **my cautionary tale** on p.53!!!
9. a large **bailing bucket** that is firmly tied to the boat



B list: anything functional will do

1. **outhaul, main and jib cunninghams, bridle**
2. **jib lead position:** a non-adjustable lead-and-cleat combination is enough (*photo p.7 #20*) - place the lead more or less where an imaginary line from half-luff through the clew would meet the surface on which the lead will be located but is OK to be moved for better crew comfort.



Winter 1978: My improved centreboard brake solves the problem of screws losing their grip. I use bolts (*above*) that go through the original plate and car radiator hose. The bolts then pass loosely through about 1/2" (12 mm) of the centreboard's wood into threaded holes in a fitted piece of 1/8" (3 mil) aluminum for which I made room with the slot shown above. Excess bolt length for increased adjustability is accommodated by extending the two waterproofed holes drilled into the wood about an inch past the slot.

Vital #2: Centreboard, rudder/tiller

Your centreboard, rudder and tiller should be the finest sample of the art that you can make or buy. Anything less tends to lead to frustration every time you sail. More than all else, these items are the heart of your boat. Top drawer gear here is not just vital for racing but also an essential safety precaution.

Gudgeons, pintles, blade, head, tiller, extension and rubber universal should all be first-class. Flash!! After decades of struggling in vain to keep a snug tiller fit, I have just switched to metal rudder head and tiller to match. Already I am a complete convert. And if your foils are not yet glass-coated, safety demands that they should be.

Vital #3: Main and jib halyard

Live and learn! I have been warned by those who know: Spectra and Dyneema ropes are subject to slow stretching called "creep". So now, after ten years of racing with Dyneema jib and main halyards - the latter with occasionally visible heavy-air "creep" - I will return to halyards that have 7 X 19 stainless steel loaded portions: 1/8" for the jib halyard, 3/32" for main. Since hollow core dyneema is so easy to splice, I highly recommend using dyneema halyard tails which are easy to eye splice through the loop in the each halyard wire (*right*).



As you can see in the image, my jib halyard wire loops over the same old magic/muscle box that I got for \$10 in the remainder bin at Tom Taylor's 1978 going-out-of-business sale. My magic/muscle box and main halyard rack (HA23671) are mast-mounted below the gooseneck where the halyards used to exit from the mainsail groove on the Proctor golden oldies.

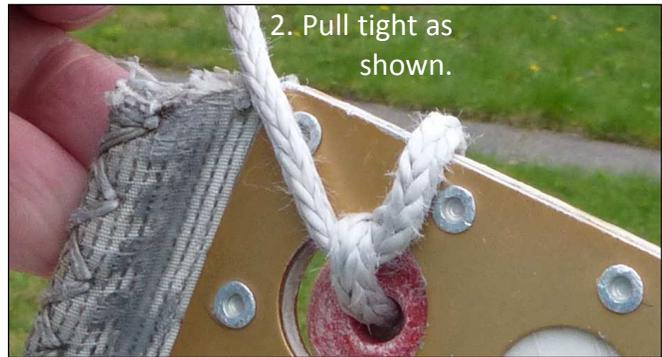
The newer Selden masts are far better rigged with exit blocks at the mast foot so that nowadays, most people just put their halyard hooks and their tensioning system along the centreboard box as shown in photos at the bottom of the next page.

Halyard Length: My main and jib halyards must be fairly precise in length since they go from the sail-head to relatively fixed hooks: on my jib halyard magic box or, in the case of my main halyard, one of the hooks on my main halyard rack (*to the right of the Frog above*).

And speaking of wire ... I may soon replace my jib luff's stiff 1/8" 1 x 19 shroud wire to bendier 7 x 19 halyard wire. Much easier to roll your jib before bagging with the more flexible wire.

<https://www.youtube.com/watch?v=M9klmggLWUQ> teaches us how to do the brummel lock splice.

A blindingly simple solution to lost halyard shackles: our sadly departed Dutch Wayfarer, Ton Jaspers, shared a fine way to replace the loop and shackle at the sail end of each halyard with a ball and stopper knot. The halyard is attached as illustrated below.



Vital #4: Jib Halyard Tension

Unless you race purely for the joy of being out on the water with friends, you must have a way of tightening your jib halyard well beyond what human muscle power can achieve. The jib halyard should control your rig tension - taking over from a fairly loose forestay as soon as the jib is up. Photos and a description of the Wayfarer system of choice follow:

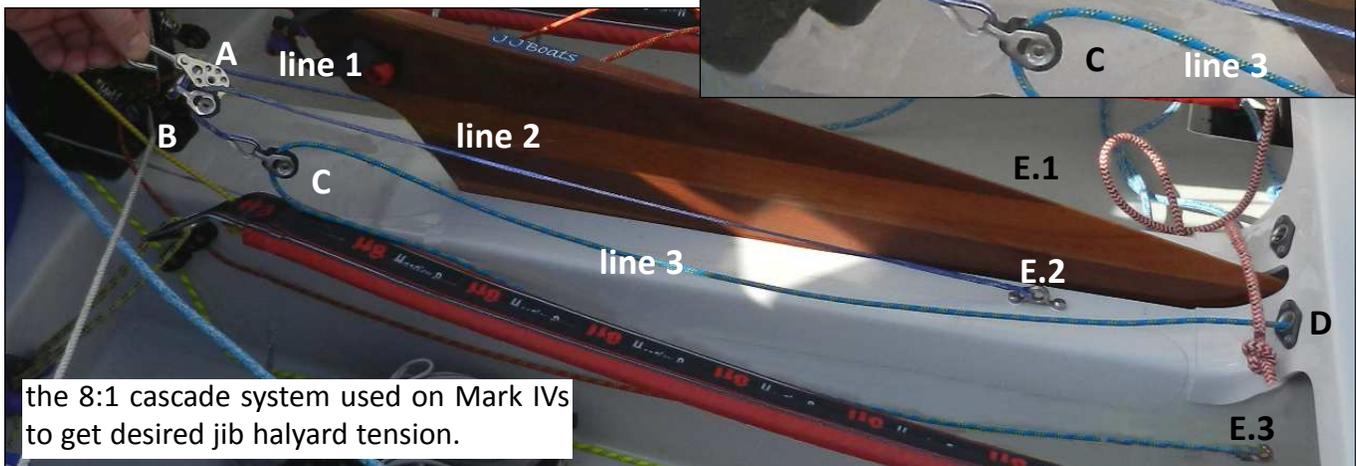
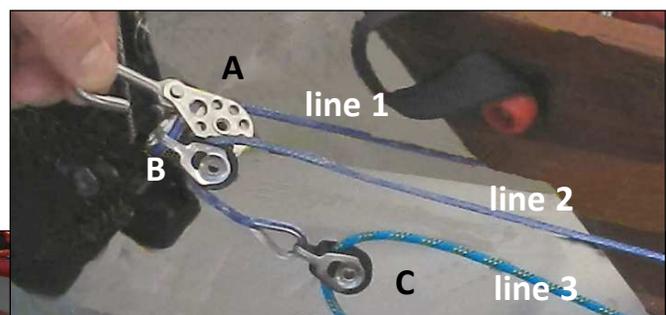
The 8:1 cascade system used to get desired jib halyard tension on the Mark IVs.

Line 1 starts at **E.1** (starboard equivalent of eye strap **E.2**) and runs through block **A** which will be

hooked into the loop at the bottom end of the wire jib halyard. **Line 1** ends with block **B**.

Line 2 starts at eye strap **E.2** and runs through block **B** before ending with block **C**.

Line 3 starts at the eye-strap **E.3** and runs through block **C** before coming aft through the thwart at **D**. From there the loose end runs to a cam cleat with a becket on the aft face of the centreboard box.



the 8:1 cascade system used on Mark IVs to get desired jib halyard tension.

Trim:

All sails perform best when trimmed to the edge of a luff. This means steering to the edge of a luff when close-hauled, and at all other times letting the sails out to the edge of a luff. Proper trim is easy to achieve and maintain, but does require constant attention on the part of the sailors (which is more difficult to achieve!)

When in doubt, let it out!!

A sail loses power if some of it is luffing. That is easy enough to see, but stalling - a sail in too far - is invisible. The boat won't crash like a plane but the power loss kills your speed! Upwind, your lee telltails will warn you, but on reaches you must keep checking by easing the sails to the edge of a luff. On a run, a stall is inevitable.

Telltails

What you should know about telltales. If you don't make a little effort to get the right kind of telltales and to install them the best way, telltales are going to annoy you each time you sail.

Materials: While sticking telltales onto the sail with tape is the easiest, it is not the best way to install them because their loose ends tend to get stuck on the tape (*right*) at inopportune moments. Telltales made from spinnaker cloth, your favourite Elvis tape or best of all from a cassette entitled *The Mud Yelper and Other Turkey Calls* may be the lightest and most wind-sensitive, but they too, have their Achilles' heel. When they get



wet from rain or spray, they stick to the sail cloth tenaciously and at length! No, the ideal solution is virgin wool which is water resistant due to its oil content and will fly again surprisingly soon after a soaking. The upper two telltales (leech and luff) (*above*) are wool "sewn" into the sail and their dark colour makes even the leeward telltale visible through the sail cloth.



The circles show where to put the only needed telltales. My recently added window (*r*) for the lowest jib luff telltale has been a fine addition for those days when sun glare makes lee ones hard to read.



Bonus: Borrowed from Interlakes at Clark Lake: a telltale window (*left*) that lets me track a lee telltale even in extreme glare of sun.

Installation: A sailmaker's needle will - grudgingly - accept the wool's diameter. I put a loop of thread through the needle's eye, insert the end of the wool through the thread loop, and then use the thread to pull the wool through the eye of the needle. Thinking ahead, I cut off a length of wool - one or two metres - which is sure to avoid my having to do more threading any time soon and will certainly be more than enough to provide three 20-cm. telltales and two at 15 cm. for the leeches of the main and jib.

Self-Rescue

Anatomy & critique of a capsize recovery

FLASH!! Beware!!! A very lucky escape for the crew of W3854: Shannon, and I saw right after a 2019 capsize on Conestoga Lake that my aft hatch had been improperly fastened. That buoyancy tank was soon flooded, making even the cure-all Rest & Relaxation (R&R) position [p. 42(b)] useless. Several capsizes later, we got a short tow to shore from a rescue boat without which we would have been scuppered. **Please make adequate buoyancy your pre-launch priority #1 every time you sail.**



Sunday 2 June 2013, Detroit River off the Bayview YC: (photos: Photoelement, Martin Chumiecki) Mark Taylor and his brother, Paul (W7673) have just capsized. Spinnaker was involved. Under the Racing Rules of Sailing and Law of the Sea, Robert and Nikos in W3445 have an overriding duty to try to help - if it appears that help may be needed.

RRS #1: SAFETY

1.1 Helping Those in Danger

A boat or competitor shall give all possible help to any person or vessel in danger.

Robert reacted perfectly: I thought of the rule but felt we would only add to the problem at that point. The rescue boat was out and the photo boat was there. I did change course to come close and check out how they were doing. *Robert*



Left: Crew Paul has done job one flawlessly: He is on the fully lowered centreboard. As usual on a spinnaker run, the helm was sitting to leeward - and in a way, still is. At this point, Paul and Mark are placed perfectly to try the **scoop method** by having Mark stay where he is while Paul uses his weight on the centreboard to lever the boat back upright. This method offers several advantages:

8 What the beginner needs to know about the racing rules

Rules applicable when boats meet

updated for 2021-2024 RRS

2A: basic right of way between boats racing

10. port keep clear of starboard
11. windward keep clear of leeward
12. same tack > overtaking boat keep clear
13. tacking boat keep clear

2B & 2C: limitations (mostly on r-o-w)

14. avoid contact
 15. acquiring right of way
 16. course change by r-o-w
 17. same tack > proper course
- 2C (18-20 basically do not apply at start)
18. mark-room (more below)
 19. room at obstruction
 20. room to tack

2D: 21, 22 override 2A, 2B

21. *keep clear* if returning from OCS, doing turns, or sailing backwards
22. *keep clear* of capsized, rescue in progress
23. not *racing* keep clear of *racing*

fouls, exoneration & atonement

31. touching a mark > one-turn penalty
43. exoneration if foul was forced by other boat
- 44.2 other foul > two-turns penalty

18 Mark-Room (largely protections for give-way boat)

18.1 does this rule apply?

- * as soon as first of an *overlapped* group enters *zone* around any *mark* of the course? **yes**
- * between port/starboard beating? **no**
- * at start mark? **almost never**

18.2 giving *mark-room*: freeze-frame as first hull enters *zone*: outside *overlapped* to give *mark-room* to inside boat > *mark-room* rights/obligations remain regardless of subsequent changed overlap status unless *mark-room* boat passes *mark*

18.3 completing tack to starboard in *zone* near a boat already laying *mark* to be left to port: the tacking boat must

* **not** make the other boat sail above close-hauled to *keep clear*, and

* must give *mark-room* if other boat becomes *overlapped* inside > the real killer here is that the tacker loses the protection of rules 16 and 15 *Acquiring Right of Way*

18.4 at a gybe *mark*: inside *overlapped* boat must sail *proper course* until she gybes

Oct. 2012 HOT Regatta
action on Lake Townsend

We **finish** when any part of our hull crosses the finish line from its course side. But if we hit the mark or foul another boat before clearing the line, we have to take our penalty and then re-finish.



(left) Stephan Nandrup-Bus (W4898) is finishing at this exact instant because his bow is just now breaking the plane of the finish line.

(right) If this were a "buoys to starboard" course, then this RC boat would be anchored on the "wrong" side for a "buoys to starboard" finish. This happens frequently for a variety of reasons, and is not, in itself, considered grounds for redress. The finish definition makes it clear that in such a situation, the side the mark was to be left on no longer matters, because a boat finishes when she **crosses the finishing line from the course side**". Thus CL1050 (Rob Wierdsma with son, Ben) is finishing correctly in the photo above, regardless of whether it was a buoys to port or starboard course.

