

A SAIL MANAGEMENT SYSTEM FOR SAFER DOWNWIND CRUISING

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(Iain contributed to Flying Fish on several occasions between 2003 and 2014, first from his and Jan's Najad 460 Song of the Sea, and latterly from their Najad 570, Song of the Ocean. Neither is this the first time he's written about the Simbo Rig, but it's obviously been refined since he last did so in 2010, not to mention that the OCC has gained nearly a thousand new members since then. For more information visit www.rhbell.com/simbo.)

The Simbo Rig has been developed as a sail management system centred around the flying of identical 106% twin jibs with their higher cut clew. The system enables the short-handed yachtsman or woman to sail efficiently on all points of the wind with minimal foredeck work, controlled from the security of the cockpit. Simbo Rig – which is an acronym for Simple Bow Rig – may be of interest to cruisers who are not only

sailing larger and more powerful yachts these days, but also undertaking longer passages, often involving many weeks at sea. The merit of the rig is that it enables the crew to sail dead downwind efficiently and safely without resorting to coloured sails, whilst retaining control of the working rig which is always on hand to make immediate course corrections to avoid collision or return upwind to retrieve a man overboard.

The system permits you to complete a passage, or season, with just the one suit of sails that remain rigged to meet your needs, no matter whether sailing to weather, bearing off to a reach or running dead downwind. Apart from the raising and stowing of the whisker poles, no further foredeck work is required and

Twin jibs and mainsail work in harmony to produce maximum downwind drive





*The mainsail directs its wind around the mast into the weather jib,
which redirects its total accumulation into its leeward twin*

with in-mast mainsail and jib furling, one person can control the rig day and night, in fair or foul weather without needing to call upon off-watch crew – assuming of course, that the yacht is under the control of a reliable autopilot.

The identical jibs are hoisted up the twin grooves of a furling forestay on a single halyard. On the wind, the sails fly together with no appreciable additional wear over a solo jib. The jibs and in-mast furling mainsail in the photographs were constructed in Dimension-Polyant's Hydra Net® woven cloth, which is a hybrid of woven polyester with a spectra ripstop. On the wind, the twin jibs enable you to rest the upwind sail on its downwind partner to re-lead the sheet from outside to inside the cap shroud for

*The twin jibs flying in tandem,
with their own colour-coded sheets, fairleads and winches*



The twin jibs present a powerful wall of sail downwind, which can instantly revert to upwind headsail trim on releasing the backed weather jib to leeward

a tighter sheeting angle. In the same way, you can also run an otherwise loaded jib car up the track without, in either case, incurring flogging sails or loss of boat speed. On tacking, the upwind leeward jib sheet is eased to rest on its downwind twin, to leave just the downwind sheet to release on coming about. Once through the wind the new downwind jib sheet captures its upwind partner and, trimmed to the new course, the upwind sheet takes over final tweaking. On reefing or striking the jibs, both sails furl together around the forestay in the same way as a solo jib. In strong winds, however, it may be preferable for a larger yacht with greater sail area which requires powered furling to furl the jibs from around the leeward bow, to enable

the skipper to luff the sails and reduce the pressure on the furling mechanism, rather than furl them from across the foredeck directly into the wind. As both sails have their own pairs of sheets there is double the quantity in the cockpit, but this can be simplified by their being colour-coded.



No need for a leeward whisker pole unless wanting to gybe, when it can be rigged whilst the leeward sail is temporarily secured by its weather sheet

The system excels when the yacht bears away onto a run. The twin jibs separate to their respective sides to create a powerful cloud of sail in tandem with the mainsail to power the yacht downwind. With the mainsail eased to 45° off the centre-line the following wind is directed around the mast into the windward jib from which, together with its own accumulated wind, it is redirected into the leeward jib, which would otherwise be blanketed by the mainsail. To gybe, simply haul and trim the mainsail onto the new course – the whisker poles and jib sheets remain unaffected.

Prior to bearing away onto a run one can raise the weather whisker pole on its boom-lift with attached fore and aft guys, and run the weather lazy sheets of the two jibs under the pole's retractable bolt. This enables the twin jibs to be separated immediately on coming onto a run. If remaining on that tack there is no need to hoist the leeward pole as it is the redirected wind from the windward jib that sets the sail. On subsequently requiring to gybe, the leeward pole can be set without loss of drive, by restraining the sail by its weather sheet whilst rigging the leeward pole on its boom lift with fore and aft guys, following which the sail's retention can be transferred back to the poled-out leeward sheet. A more relaxed approach to rigging the whisker poles is to furl away the jibs on bearing off onto a run, hoist the whisker poles, and then unfurl the sails to their respective side. However if running dead downwind – ie. with the true wind no more than 25° off the stern – the twin jibs will set without the poles by running the jib sheet cars forward on their tracks to tighten the sails' leeches down to cup the sails.

If hit by a squall one can immediately dump half the sail area by coming onto the wind to back the weather jib to join its leeward twin. The jibs can then be reefed under the lee of the mainsail before separating them again on returning to the run. If running in severe weather, when the mainsail has been struck in favour of the twin jibs, it is consoling to know that the remaining sail area can be reduced by half merely by backing the weather jib and continuing to run with both jibs poled out in tandem to leeward. Following on from this, the twin sails can either be reefed in unison or struck without incurring any foredeck work. The whisker poles can be retained on a reach until the apparent wind is approximately 60° off the bow, when the leeward sheets are released by withdrawing the restraining bolt at the pole's

Reefed twin jibs. Note the five tell-tails streaming off the leeward jib leech



Speed 12 knots, speed over ground 10.6 knots, true wind speed 34.8 knots, apparent wind speed 25 knots

claw via a line run to the inboard end of the pole. The poles can then be stowed up the mast or left in situ for later.

The Simbo Rig can be retained, albeit reefed, without undue anxiety up to gale force. I experienced this sailing a Najad 460 between the Azores and England some 15 years ago, when we were caught out by a 50 knot squall under full Simbo Rig. It lifted the yacht onto a plane, but she continued sailing dead downwind at 15.5 knots without any inclination to broach or deviate off course. Since then I have sailed all three of the yachts I have owned – the Najad 460, a Najad 511 and my current Najad 570 – through several gales with confidence from the safety of the cockpit.

As there is no significant pressure on the mast from the leeward pole, and the main boom opposes the weather pole at only 45°, downwind rolling is reduced to a minimum. The main attributes of the Simbo Rig, however, are that it permits the skipper to sail on all points of the wind with the one suit of sails with minimal foredeck work and most importantly, power downwind without compromising the working rig which is always at hand to deal with unforeseen circumstances.

On yachts with forward lowers the whisker poles are jointly stowed up a forward-mounted mast track and lowered like wings to pre-marked settings on their boom lifts,

The twin jibs become dominant sails, lifting the bow and creating course stability



The Simbo Rig without whisker poles or need of foredeck work. Note the apparent wind angle on the ensign compared with that on the courtesy flag, which indicates the additional flow of wind accelerating off the mainsail



with fore and aft guys which ensure the poles are at right angles to both the yacht and mast. For yachts like the Najad 570 the poles are manually stowed up the mast, and subsequently rigged between the fore and aft lowers by attaching the inboard end to the hinged male mast fitting. In either case, carbon poles are to be preferred, and should be 50% of the length of the jib's foot measured from tack to clew.

For further information, including articles on the Simbo Rig in the international yachting press, visit www.rhbell.com/simbo. You will also find a video of the twin jibs being unfurled to their respective whisker poles in 10 knots of true wind speed, from which you can see the immediate acceleration in the yacht's speed once the jib is set.

The leeward whisker pole secured by a boom lift plus fore and aft guys, the jib sheeted by a red running sheet. Its lazy blue partner crosses via the weather pole in preparation for sailing on the wind

