

Intrusion Sailing Guide

For the two Range races on Saturday the 5th of March the writer sailed in the mast position on Intrusion, our current State Champion. The official reason for this was so that I could write up an article for use by the S80 Association on their web site, but the true reason was to spy on them and get the boat I sail on (Mood Indigo = MI) going faster.

Needless to say I hope that both aims are achieved and more of us can give Luke, and Gary and their teams a better run for their money in races to come. Having only sailed on MI I am not fully aware of other boats set ups and techniques and so I have phrased these notes to show up the differences between what they do on Intrusion and what we do.

The boat itself

The external hull is immaculate. One of Luke's crew (Mike) swims on the boat to clean it by hand each week before sailing. They use the Teflon anti fouling called Interspeed 2000.

Crew Positions & Roles

The foundation of the crew has been sailing together for about 6-7 years. They are Mike Keusgen (cockpit), Luke's bother Mick (mast / bow), James Livingston (bow) and Robi Stauber (cockpit). All the crew are interchangeable (other than Luke!) so that if someone cannot make it on the day, anyone of the crew can do bow, trim, etc. Both Mike and Robi's roles are trim and strings, with Mick responsible for gusts, wind direction and wave warnings, back to skipper.

Strategy is set before the race but during the race all crew are responsible for tactical input which Luke then filters and if it makes sense, he acts upon it. Luke handles the main trim of traveller, sheet, fine-tune and backstay (with no assistance) so that the connection between trim/power and steering is immediate. He is the only one facing inwards. This enables all 4 crew to be on the rail with heads out of the boat.

Crew Weight / Leverage / Positions

All four crew are expected to sit facing out, legs over the side and torso's under the top safety line leaning out arms stretched in gusts. All sit together from the shrouds to skipper. Luke sails with his torso outside the top safety line, to get best view of the jib tell tails and waves.

Once they start downhill they get their weight forward immediately. Two crew, being bow & mast, are forward of the mast and they stay there till the drop. They put a significant emphasis on this aspect.

Spinnaker

Hoists

The pole is put up as soon as they are sure they will lay the mark. The spinnaker bag is permanently fixed to rope/rails in the cabin. It is relatively large compared with standard sail-maker bags. It fills the full space with the hatch slid back. They hoist from the cabin. The cockpit crew lifts the spinnaker out of bag and virtually throws it once the hoist has started. The mast man does the hoist, jams into cleat on the mast, while cockpit crew do brace and sheet.

Running

Intrusion constantly jibes for position and gauge, particularly on all significant windshifts and to gain free air. They use the main winches for both brace and sheet. Cabin top winches are not really used.

Dropping

All pretty typical, except that they try to get the pole away as soon as possible with the mast man acting as a human pole between brace and shroud, while the bowman gets it stowed and clear of jib sheets etc. The mast man returns the brace to the cockpit crew who then drops the spinnaker directly into the fixed bag. Mast & Bowman go straight to rail for weight while rounding.

Sails

Mainsail

Is very flat and sheeted into the centre line of boat. Intrusion only drops the traveller in strong breezes. Foot was sheeted very tight in the 15 knot breeze. Had horizontal creases along foot, and leach had very little twist.

They have a fine tune sheet system and traveller both of which are operated by Luke. Luke releases main only slightly on each tack if needed to help the mast-man get under the boom! (Very necessary for the girth of their stand-in mast man).

Jib

Pretty typical North Sails set up. Leach about 40 mm off spreader, and foot about the same off shrouds. They watch luff tension closely to ensure depth position & shape. They use hanks and this enables quicker drops and hoists and it also looked like the jib needs no ties to stow when dropped. Just gets pushed into pulpit zone.

Helm & Crewing

Up wind, they have slight weather helm. In 10 knots I estimate that boat would round up in about 3 to 3.5 boat lengths. Downwind, Luke steers ahead of the boat and this drastically reduces the drag and improves stability greatly. I noted that his tiller arm was some 150 mm shorter than MI's.

Tacking

I was so busy going under boom I didn't see how big his tacking circle was however Luke tries to use minimal helm with the crew rolling the boat into tacks. On tacks the shift of crew weight is seen as critical. Bowman goes under jib or steps around mast. Only goes back to skirt if required. Tacking method results in 60 % of tacks not needing skirting. Mastman goes under boom and straight to rail. Cockpit crew releasing jib goes straight to rail. Other cockpit crew (trimmer) sheets jib in on their own with the winches being standard non-self tailing.

Luke always looks to tack with up-range speed and picks favourable wave patterns.

Equipment

Compass

They use a conventional compass and a Tacktick digital display compass fixed on the back of the cabin. It is compass only and has no speed log.

Radio

They have no fixed radio. They use a hand-held VHF which is placed in a sheet-bag on the cabin face. Log: They have no log. Luke believes it is better to concentrate on speed relative to other boats and not a log.

Boat Weight

Intrusion was in great condition when Luke purchased it 12 years ago and then he completely refurbished it with its signature metallic silver/blue paint-job about 4 years ago prior to Luke trucking Intrusion up to FNQ to do the Hog's Breath IRC regatta (the lead-in event to Hamilton Island Race Week). Intrusion is about 40 kg. underweight with lead compensation.

They have no batteries, or internal wiring and no Nav lights as Intrusion now only races Category 6. They have closed all underwater hull openings.

Below decks the boat is very basic, with no bulkheads and bunks are simple. The outboard motor is stowed down on the floor over the keel in the middle of the cabin. Jib sheeting tracks are only 500mm long just for #1 and #2.5 on cabin top.

I hope this gives you an insight into how Intrusion has been put together and is sailed. As stated up front this is for us all to learn from. Not all these things will suit every boat and crew, but there will be something in here that should give you some speed tips.

Next month I hope to do a similar story on Up n Go & Gary's team.

We also plan to have a couple of talks Q&A sessions during the winter months where we can all ask more and listen to the horse's mouths.

Regards

Roger Byrne

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