



Owain Peters brings a wide range of experience to bear from a lifetime of cruising and racing yachts from Sonatas to Superyachts. Here he discusses the history of the “Code Zero”, and choices facing sailors looking to invest in the new ‘crosswind’ sail sector.

It started – as it often does – on racing boats.

THE “EF” sponsored teams in the 1997/98 Whitbread Race had discovered that a very flat spinnaker could be used at wind angles that were previously only the preserve of upwind headsails, but with no rating change.

The advantage was only available in the zone between beating and being able to get a ‘normal’ asymmetric spinnaker up, and only when the windspeed allowed it: however with oceanic length legs this advantage was sometimes significant.

The expression “Code 0” was coined by a nameless joker who had spotted that these sails were bigger than the “No.1/Code 1” headsail, and the term has now become lodged in our collective consciousness.

Shape Choices

In order to measure as a spinnaker under most rule systems - and enjoy the rating benefit this offers - a minimum mid-girth measurement (i.e. half way up the sail) needs to be observed: this can create a difficult-to-support span across the middle of the sail depending on the rule.

Under IRC this measurement must be at least 75% of the foot length, plus the leach must be no longer than 95% of the luff length: this requires skill to design well and concentration to trim. These types of sail have become defined under the current IRC rule as a ‘Code 0’.

A mid-girth limit defines other types of sail too – for example a ‘Screecher’ under the later VOR rule allowed girths between 50 and 75%. However the shape restriction imposed by this, and the consequently relatively narrow effective wind range mean they all remain fairly specialist sails which also occasionally make big differences to race results and passage times.

Complementary hardware

Simultaneous with the development of these sails has been the trickle down of the furler technology. Superyachts were already dabbling in the late 00’s and the open 60 class were also pioneering structural furlers (which replace the forestay) around the same time. Both proved the ‘free flying’ concept for others to follow.

These have rapidly taken over from the various powered launch and douse systems previously seen on classes like the V5 AC boats due to their ease of handling and speed of deployment and furling downwind sails have now become a common sight on cruising boats and club racers.

These free flying furlers rely on an aramid-based ‘anti-torsion’ rope instead of the standard aluminium foil (wrapped around the structural forestay) that a conventional headsail relies on at the leading edge. This allows the creation of sails that furl around their own luff, and which can then be conveniently dropped as a tightly wrapped coil on to the deck for stowage.

What's in a name?

Modern fractional rigs (with either non-overlapping or self-tacking headsails) generally sail upwind much more easily than traditional IOR-era rigs: those older overlapping, masthead genoas will make some readers' arms ache at the memory of the winching required when short tacking!

When fractional rigs bear away the jib gets blanketed or "twists off" more readily than their masthead counterparts, especially if it is a non-overlapping or self-tacking headsail. This tendency has driven an evolution in alternative 'crosswind' sails that echo those Whitbread sails from 20-odd years ago.

Cruising owners tend to require an all-purpose offwind sail offering a wide range of options in use, rather than the last 0.05kt of boatspeed on a given leg. Combined with a furler, they can also be a useful short-handed upgrade for the typical couple/family due to their ease of use.

Given the measurement restrictions are only relevant if you are racing, other names are more appropriate for these more versatile sail shapes. 'Gennaker' is an unspecific portmanteau describing any asymmetric shape between a spinnaker and a genoa and 'Cruising Code 0' is a seductive but misleading term, with implications of rules compliance whether or not it is!

More precisely, a 'G-Zero' refers to one option within a range of cruising shapes that tends to have a straight luff, and 'Ultra Light Genoa' (or "ULG") is a modern sail that harks back to those monster IOR headsails: both these types also furl much more easily than fuller shapes and have a wide range of effective wind speeds and angles too.

The common thread is in describing a cruising version of the racing sail and the distinction is important: whilst the jargon of sails can seem ambiguous and occasionally contradictory, sailmakers generally aim to use terms with quite narrow descriptions.

Glimpsing the future

So where will this lead? In 2019 the IRC/UNCL announced they would be rating these 75% mid girth sails differently in future. In the same year the ORR (Offshore Racing Rule) in the US began pioneering the rating of 'large roach headsails' which reside in the "no-man's land" between upwind headsails and spinnakers. The ORR believe they can now fairly rate these sails at between 50-75% of the foot length, when measured as a spinnaker: the world of racing is watching developments in both systems with interest.

In practice and especially if not constrained by rules, there is almost an unlimited range of designs between the jib on your forestay and the largest racing asymmetric spinnaker. These incorporate every weight of cloth from hardwearing to super lightweight and every nuance of shape from flat to full. Trusting the person specifying it on your behalf remains a hugely important component of your relationship with your sailmaker!

The language in this area is still new though, so when you're having your sail made be kind to your sailmaker by being as accurate in defining your needs as you can. Until the design for a Magicsail™ is finalised ("Performs best in all conditions! Sails directly in to the wind! Free sky hooks with every order!!"), purpose should be your watchword...

Very similar sizes. Very different sails!

Right: "ULG"

A 43% mid girth headsail design, with a UV protective leech and foot allowing it to be left up furled for longer periods.

Bottom Left: "Code 0"

Precisely 75% mid girth: note the large roach on the leech, and projecting luff round, it is also numbered for racing.

Bottom Right: "G-Zero"

The smaller 63% mid girth, and straighter luff are evident next to the Code 0, but this is an easier sail to use.

