SKIP NOVAK

IN PRAISE OF TUMBLEHOME: WHY ROUNDED TOPSIDES CAN BE A SAVING GRACE

ore often than not when *Pelagic Australis* is in Cape Town for her annual refit, we're docked at right angles to one of the elegant locally-built Southern Wind Shipyard yachts. They share the same pontoon berth for their commissioning. This September it was with the impressive Farr-designed Southern Wind 96.

Southern Wind and *Pelagic* know each other well and I like to refer to this mating of opposites as the 'beauty and the beast.' There are no comparisons worth making, but we often like to stare at each other in wonderment.

We comment politely on the attributes of these two chalk and cheese yachts; one a belt and braces practical workhorse, the other a cutting edge technological emporium and *objet d'art*.

Always interested in our somewhat unusual features, many of which ain't all that pretty, the Southern Wind commissioning skipper noticed the tumblehome

'Sometimes we're caught out and blown onto jetties'

we have in the hull, which might be considered generous, but not excessive compared to some of today's designs of smaller yachts. Meanwhile his crew was trying to figure out how to keep their fender lines from chafing at the sheer of their vertical topsides. It might not be obvious this article is all about fenders... but read on.

By strict definition in naval architecture tumblehome is where the maximum beam is at or just above the waterline and then the beam measurement diminishes in the uppermost portion of the hull. It's that 'pregnant guppy' look.

Adding in tumblehome was, in the days of the International Offshore Rule, a method for fiddling with the rating, or rather taking advantage of a beam measurement in the formula. In fact, on *Bea Bay*, a 50ft Sparkman & Stephens design from the late 1960s that I sailed on as a young lad, Pat Haggerty from Texas Instruments was one of the first owners to radically tinker with and find loopholes in the IOR. He added substantial tumblehome to the original design by using ping-pong balls in among the filler (to reduce weight) to the outside of the aluminium hull. It's a great story that

went from legend to myth but was in fact reality – I helped fair that hull in Sturgeon Bay, Wisconsin.

But the story of tumblehome is also historical and goes back to ships of the line in the days of sail, motives being gun deck placement with respect to weight and being able to fire when at heel. The debate of tumblehome's pros and cons is alive and well, and never more so in modern yacht design. Some designers just like the look of it.

In *Pelagic*'s utilitarian world it has nothing to do with aesthetics. Because we spend the majority of our time alongside walls and jetties that are often rough as guts, having that pregnant guppy look gives us a margin of security for our stanchions and shrouds. Sometimes we're caught out and blown on to these jetties with an alarming

angle of heel. The extra gap that tumblehome provides makes this, if not a pleasant experience, at least a survivable one.

The other feature of note is a continuous toerail with holes at least on 200mm

centres: useful for not only unlimited outboard sheet leads, but also for hanging fenders. Again, a design feature rarely thought about but not to be underestimated as important. When going foreign you never know what situation you'll find at the dock and being able to hang a fender anywhere on the hull is a must. But this must be attached to something solid, not on lifelines and stanchions.

A horrendous night in Port Stanley in the Falklands comes to mind to demonstrate this argument. We were inside a raft of four smaller yachts on the East Jetty, which has protection from the prevailing westerly.

Maybe it was the pub session that precipitated a panic, but we all got caught out when a nasty easterly filled without notice making it impossible for the rafted boats to peel off

and go to anchor. The carnage was substantial. Broken stanchions, bent chainplates and dented hulls – them not us. We were riding to a Yokohama fender and took it all on the chin, despite being heeled over 10°.

If you're commissioning a world cruiser and the designer starts wincing when tumblehome is mentioned, insist on giving it heaps. You won't regret it.