

The Envelope Expands, by Chris Waite

Chris Waite's lovely home-designed and built Tit Willow: Chris at the helm, on the lake at Beale Park



There was a very flattering e-mail from editor Keith recently, inviting me to expound on my boat, *Ms. Tit Willow*. My initial reply was that she is hardly a shining example of an open dinghy, but he assures me that the DCA is a 'broad church', sufficiently beamy to include my pocket cruiser, so here is the story.

My own origins are dinghy enough: taught to sail by my father in a Chichester Harbour Fourteen Footer, I was basically competent (though decidedly undersize) by the age of six or so and have been trying to stay afloat happily ever after, interfered with only by the necessity to earn a crust. There have been a string of dinghies since, some of them racers I have to confess, but the pride of this serial fleet was actually rather larger – a twenty-eight foot gaff-rigged Falmouth Oyster Dredger.

(Don't worry, my Dear Old Dad hates racing as much as the best of you and I was given a number of very exacting instructions in this regard. My current theory on racing will have to be presented under separate cover and you might not like it; there's a challenge.)

My Honey and I took the Oyster Dredger on an adventure down to the Mediterranean and back and sadly sold her thereafter for lack of use. Immediately we took a job in Muscat, Oman, and wished we had a cruiser to take advantage of all the sun, sea and sand we were presented with. Well bother.

So, daydreaming on a desert shore, I wondered about an ideal cruiser and doodled a simple, three strakes a side, steel hull with an extensive list of 'druthers' incorporated, intending to take advantage of my situation at the Royal Navy of Oman's main base and maintenance yard. This vessel would have been thirty-two and a half feet long with a centreplate for windward work and tandem rigs to keep the sails small enough to be sat upon in an emergency – ideally two hundred squares each, but

in view of the bulk of the beast, two hundred and fifty; a total of a thousand square feet in four sails, including a mizzen staysail. Anyway, that was the theory.

While I have sailed a fair selection of worthy craft and have more marinated opinions than a buoy has barnacles, I have never had any lessons in Naval Architecture; so this could reasonably be designated as guesswork. I was satisfied with the look of what I had drawn, so I reckoned the next step was a model. Fiddle, fiddle, fiddle, and I produced a four-foot radio-controlled version, which obligingly encouraged me to continue.

Only an annually renewable contract at the approval of the Omani Navy and at least a two-year build. I had better be pretty sure; who needs that much 'egg on their face' and several tons of potentially useless metal sitting on a beach in the Middle East? I reckoned on a half-scale prototype to test the hull shape, as being the more sensible option.

A Half Scale Prototype

Now we're getting down to DCA sizes. Such a boat could be built in the garden out of something I could manage. The local one-camel village had several builders merchants stocking weather-proof ply, so I chose a representative sample and boiled small chunks of each in salt water – last one to fall apart got the order. They also stocked Redwood Bare Ungraded and I spent hours rifling through the

stacks choosing the best bits. Interestingly softwood was more difficult to come by. I was given some seriously out of date West epoxy, which had been kept in a sweltering garage for rather over five years and found that, down near Muscat, Jotun Paints were selling two-part epoxy for sealing concrete floors, as well as two-part polyurethane paint.

My supply lines were secured.

Opting to omit alternate frames from the original design, I slightly foreshortened the half-scale for two good reasons. Firstly it would allow for a single butt-joint in the top plank and secondly she would fit in the garage at home. Taking the space between frames from one metre (39ins) down to a yard (36ins) proved to be a waste of good boat, so I struck upon 37.5ins. This allows six foot three inches between two frames and that is enough for an average sort of bloke to lie down in.

The Minister of the Interior had decided that though we had access to Naval Drascombe Longboats, she wanted something with a modicum of shelter, so I reckoned to complete this prototype as a well-cuddled gaff sloop. *Tit Willow* has a locker right up behind the stem, then her 'saloon' starts at the first bulkhead – wide enough for two pairs of feet. This less-than-entirely-voluminous space reaches back two frames further to her widest beam – sleeping length. It has a sole, a mast strut and the forward end of the centreplate case, which angles down from the companionway to the keel moderately steeply. This provides a location for a small central perch from which to survey one's domain. Bunks take the form of demountable net pipe-cot berths on each side, of which the port one is only set in case of guests and usually gives way in favour of a small gas stove on a folding gimbal.

Working in a Thatched Shed

At this stage I had no more excuses, so helped by the cat, I started to build. Summers in Oman are horrendous, soaring temperatures and incredible humidity – going outside is akin to being mauled by a pack of freshly boiled kettles. My darling missus was still home in England, so I rolled back the lounge carpet and boded out a keel, complete with stem and stern posts, a centreplate case and a skeg. I also knocked up the necessary frames and taking a suitably shaped piece of half-inch ply, I Spanish-windlassed it groaning across a baulk of driftwood, then threw it out into the garden for a week or two, regularly hosing it down to produce a gently curved transom. On the return of the Minister of the Interior, I was similarly cast out and forced to continue under a home-made, open-sided shed thatched with palm fronds.

Feeling my inexperienced way along, I framed and chined her upright. Realizing it would be easier, a cockpit which accounts for two more lying-



The endearing lines of TW, seen to perfection from this angle. (They're enough to inspire a man to song ... -Ed)

out inter-frame spaces was also installed before I decided to drag her out of the shed and turn her upside down for planking up. Experts will have already noted the distinct lack of support. Though things might have gone a bit wavy, it required less accuracy in lining it all up over multiple frames, having only four in total; the notion was to go on thickening up the planks until framing was almost a luxury. Garboard first; as it has quite a twist under the forefoot; I eventually laminated it up from three layers of six millimetre ply. The bilge strake got a layer of nine millimetre plus one of six and the shear strake was a single twelve millimetre thickness. Everything above the gunwale – decks, cuddy and cockpit coaming was all from nine millimetre board.

Afloat To The Sound Of Music

Boat building is a long and tedious business, particularly when you haven't a clue what you're up to; some two and a half years of generous spare time in this case. Eventually she was ready for the water, minus rig, rudder and plate, but with her tune (thank you Mr. Sullivan) played by a small brass ensemble, she took to the briny with head held high. Rampant in fact; she needed a load more ballast forward to bring her down to her marks. I reckon she has about a third of a ton; most of which is removable.

While home on leave, I bought a previously-loved gunter lug main from a Westerly 22 and a jib from something else, as I wasn't sure enough to lash out on a new custom fit. Dragging my trophies back out to Muscat I set them up, and with my girl on board, we tentatively cast off. Our little boat obligingly slid from her mooring, tacked without hesitation in the lee of a motor gun-boat on the next pontoon and lolloped off upwind; I was thrilled. We spent the next few hours, well into the darkness, pootling around the harbour, guffaws of relieved laughter echoing into the gloom and disturbing roosting seagulls.

New Tan Sails

After the next home leave, I returned with a brand-new tan twin-set – a high peaked gaff and working jib; 120 and 40 square feet apiece. Actually, I also brought with me a new 80-foot genoa, which she loves, and better still a boom-mounted, top-opening, sail cover that works with double topping lifts and a couple of pairs of lazy-jacks. This has to be the, but *the*, best piece of sail handling kit you could own, rendering the main exceptionally well-behaved under any conditions you care to mention; reefing is a doddle. We did some stuff out there, but the wind tended to be light and fluky, whatever you were sailing, though she rapidly shaped up to be, in the words of another old gaffer: 'no slouch', and able to cope with a breeze.

Next, lifting the forty-pound model from a high



The cosy & clean cockpit design

shelf and twisting round, while standing on a table and surrounded by paint pots, I slipped a disc. With the disc went my window of opportunity to build the original steel notion; that will remain for ever the one that got away. A shame, because I think she would have been quite the boat.

However, I still had *Tit Willow*, so I brought her home and after a few other temporary locations, she has eventually ended up spending her seasons at Dell Quay Marine. At this stage I have some discouraging words for anyone eyeing her too carefully – she's lovely and good, but sitting, in cruising trim, in excess of the launching trolley she sits on, she weighs in at around a ton and a quarter. So far every interested party has turned away at this point.

Trolley, Not Moorings

Despite her avoirdupois meaning I have to float her on and off her conveyance, I still keep her on a trolley because I don't like scrubbing weed, I don't like antifouling, I don't like paying those insurance premiums, or mooring fees, and I don't like the thought of her going adrift. Also, I'm not keen on her grinding around on the foreshore with the tide and I suspect that more boats are broken into on their moorings than ashore; not that there's much to nick.

Anyway, I think she has become my favourite out of the entire Waite fleet. I suppose like the fruit of one's loins, (not that I have ever been mature enough to have any), she is entirely my own, she is the bravest, sweetest little vessel imaginable. She has a hull speed of about five knots which she approaches easily with even the lightest wind; though no faster (it would not be ladylike). She has been out in a capful of wind and reefed down to 40 square foot on the main with 10 on a spitfire jib and still tacked – carefully, but without question. Checking on the Bramblemet archives, while we were out during the Solent Old Gaffers regatta this year it actually gusted to 37 knots at one stage.



Although Tit Willow is unique & a credit to her designer/builder, she is clearly located in the British small boat tradition, as her side elevation shows –Ed

She has comfortably brought me back over Chichester Harbour bar when I have been scared stiff, and yet will willingly sneak up to the head of the Beaulieu River. I must say she is a small yacht, not a large dinghy, and carries her way; also we do not do corners, we do graceful swoops.

Would I change anything? I moved the scuttles from the top strake up to the cuddy sides a couple of years ago, but otherwise I don't think so, actually. CW

	ft-ins	metres
LOA	18	5.49
LOD	15 - 6	4.73
LWL	14 - 6	4.42
Beam	6	1.83
(Excl. rubbing strakes)		
Draught, Plate Down	4	1.22
Draught, Plate Up	1 - 6	0.46
	Sq ft	Sq m
Sail Area		
Main	120	11.15
(Full, & reefed in 3rds)		
Genoa	80	7.43
Working jib	40	3.72
Total	200	18.59
Ballast	770lbs	385kg
(Partly Removable)		
-Centreplate		53kg
- Forefoot		45kg
- Fwd Bilge		200kg
- Mid Bilge		37kg
- Fixed concrete in skeg		50kg
Displacement	2800lbs/1272.72kgs	
(in cruising trim)	1.25 tons	
(For racing trim I hunch forward a bit and swear like a trooper.)		
She also has oars for rowing, or more usefully, for sculling, and a 3.3HP outboard.		

TIT WILLOW – The Song

At a dock, by a river, a little boat lay
 Named – Willow, Tit Willow, Tit Willow.
 And I thought as I went wand'ring past her one day
 Oh, Willow, Tit Willow, Tit Willow.
 Are you Dabber or Crabber, I tried to decide
 Or Winkler or Shrimper or odd Eventide?
 With a shake of her little tan sails she implied,
 No, I'm Willow, Tit Willow, Tit Willow.
 The waves lapped at her chines as they slid past her bow
 Chuckling – Willow, Tit Willow, Tit Willow.
 And precipitation bespangled her prow
 Wet Willow, Tit Willow, Tit Willow.
 Some weird gaff-rigged clog's the impression she gave
 As she made her way out o'er the billowy wave
 And a picture arose, for the memory to save
 Of Willow, Tit Willow, Tit Willow.
 Now I feel just as sure as I'm sure that my name
 Isn't Willow, Tit Willow, Tit Willow
 'S'n improbable name for a boat just the same
 To be Willow, Tit Willow, Tit Willow.
 Made from suspect epoxy and very cheap ply
 By a rather strange doctor, though heaven knows why,
 I can see that she floats, but she surely won't fly –
 Wee Willow, Tit Willow, Tit Willow.

CW