

HAPPY TO CROSS TO THE DARK SIDE



Photo: Dashew

Yacht designer Steve Dashew on why he's given up fast sailing for an ocean crossing motorboat – one that can put in a 265-mile day

A warbled warning from the B&G wind instruments announces a gust of over 40 knots. The sea around us turns white as another squall approaches.

We're on the second day of a passage between Bay of Islands, New Zealand, and Fiji. A quick glance at the radar shows that the 60-mile long squall line, which has been bearing down on us the past hour, is about to make life interesting... At least, that would be the case if we were on one of our sailboats.

But this is a new era for us. We're aboard something that two years ago would have been heresy. Having spent our entire lives under sail – with over 200,000 offshore miles

racked up in the last 30 years – we find ourselves on a, well, non-yacht.

How have we fallen so far? *Beowulf*, our 78ft ketch, was the ultimate cruising machine. With just two of us aboard she'd average 300-plus miles per day on tradewind passages. But time marches on and it became evident some years ago that it was no longer prudent for two of us, grandparents now, to light such a rocket on our own. The choices were

stark: take crew, use smaller sails and go slower, or try something new.

For many years we've noted that our cruising sailboats powered better than trawler yachts. What about adapting this concept of high-performance ocean crossing to a power-only design? With no rig forces to offset the hull, it could be even more slippery.

Reduced hull stability would mean a softer motion in beam seas. VMG dead up and downwind could be really fast and very comfortable with the fine-ended design possible in this configuration. And we'd even have the ability to self-right in the event of a wave-induced capsize, something sailors take for granted but which is unheard of in motor yachts. The result is *Wind Horse*, 83ft (25.4m) of svelte ocean voyager.

Our 1,000 miles of sea trials have gone well, except that the autumn weather has been exceedingly pleasant for New Zealand's North Island. Which is why we're sitting

Steve Dashew and his wife Linda aboard *Wind Horse*



300 miles north of Opua with swells from three directions and significant wind waves of 6m (averaging 3m). This washing machine effect is what we've been looking for to really put this new design to the test.

Even though *Wind Horse* is dynamically stable at speed, she still responds to the waves. So we have a pair of active stabilisers to keep us comfortable. These look like huge spade rudders sticking out of the middle of the hull on each side. A solid state gyro senses motion and the



Under sail it is often necessary to head up and build speed so as to be able to get the bow to drop down the wave and initiate surfing. With *Wind Horse* we just kick up the rpms a hair.

If *Beowulf* were alongside us now, carrying both spinnakers, she'd be giving us a wonderful ride. She would also be faster. But as the angle is very deep, *Beowulf* would be gybing downwind. On this course *Wind Horse's* VMG is significantly faster.

One of the surprising things we notice is that *Wind Horse* is quieter

'We'd be faster under sail, but someone would have to go outside in the squall'

stabilisers generate a lifting force to counteract roll. They work amazingly well. Our motion-recording instruments show average roll of just four degrees in these confused seas – significantly less motion than we'd be experiencing under sail.

We're broad reaching at present, with the wind just aft of the beam. Wind waves are at an angle of 120°, far enough aft to allow occasional surfing. The engines are ticking over at 2,000rpm, boat speed is averaging a hair over 11 knots. *Beowulf* would be faster power-reaching under sail, but then someone would have to go outside and drop the mizzen, or pull in reefs before the full force of this squall line reaches us.

Under sail, we'd be worrying about the coming windshift, trying to hold our present angle as tight as possible in these south-west winds. But *Wind Horse* loves running angles, so we head 10° to leeward of the rhumb line.

Day three dawns and we have turned the corner on the high pressure system. The breeze is now embedded in the south-east – tradewinds have arrived. With the true wind angle at 165°, now at 15 knots, *Wind Horse* is surfing on almost every wave. Speed is up to 12 knots while exhaust gas temperature, which correlates to fuel burn, is down.

Setting the boat up for these conditions is totally different from what we're used to with sail. On



Above: *Beowulf*, the Dashews' 78ft ketch and top: time to try something new in their 83ft motoryacht *Wind Horse*, which Steve also designed

Beowulf, we'd be trying to maintain a true wind angle of 150°, constantly adjusting the autopilot to head up in the lulls and down in the puffs.

Acceleration during surfs would require aggressive steering to pull the bow down wave to avoid collapsing the headsails. We'd also be keeping an eye on any tendency to round up as the boat accelerated.

Wind Horse is better behaved. She tracks straight. The autopilot gain is set to its lowest level and we find our own way down the waves, showing us occasional bursts to 20 knots.

running at her 265-mile-a-day clip than was the case with any of our sailboats. The engines can barely be heard – the sound level reads just 58dB at this speed.

The weather forecast is still showing a convergence over Fiji late tomorrow. At our present speed we will be entering Suva harbour sometime around noon. We need to keep in mind that we can adjust our arrival time, up or down, by pushing or pulling the throttles, regardless of what the weather does.

At 1227 local time, the lighthouse marking the western side of the pass into Suva harbour is off *Wind Horse's* beam, three days and 22 hours after departing Bay of Islands, eight hours faster than *Beowulf's* best on this trip.

Fast forward with us now two-and-a-half months. We're 5,000 miles of upwind passagemaking removed from Fiji, finishing off the last leg of this cruise as we close with the coastline of Southern California. If this were one of our sailboats, we'd have taken a totally different route, limiting our upwind work.

Since New Zealand our average speed over the bottom has been 10.65 knots. We're more comfortable and obviously the work load is less. But something is missing. Voyaging on *Wind Horse* is just not the same as sailing. The satisfaction from a passage well made is missing. Is this a worthwhile trade? Only time will tell.

LOA	25.4m	83ft 0in
LWL	24.5m	80ft 0in
BEAM (MAX)	5.4m	17ft 10in
DISPLACEMENT	40,800kg	90,000lb
LIMIT OF POSITIVE STABILITY	135° (minimum)	
FUEL CAPACITY	13,635lt	3,000gal
ENGINES	2x John Deere 4045TFM	1750hp/2,500rpm
AVERAGE FUEL CONSUMPTION (PASSAGE BETWEEN NZ & CALIFORNIA)	28.6lt per hour*	

(*Includes hydraulic loads, windage and rough water drag, induced drag on the stabilisers, AC and DC power generation) at a speed over ground of 10.5 knots