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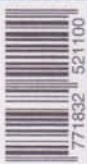
**TAKING THE SLOW ROAD**  
SERIOUS CRUISERS ARE CHOOSING THE PASSAGEMAKER LIFE

**UP AND AWAY**  
PUTTING THE FUN BACK INTO RECREATIONAL FLYING

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**CAPTAIN'S LOG**  
BARRY DE KOCK  
OF SY *VERTIGO*

**COMPANY PROFILE**  
FLYING THE FLAG FOR  
HORIZON IN AUSTRALIA

**REGIONAL REVIEW**  
DOES BRITANNIA STILL  
RULE THE WAVES?



084 : SPECIAL FEATURE

They are the grey nomads of the sea, who have swapped their sports boats and ocean racing yachts for more sedate craft, and just like their land-based cousins, who hook up caravans to their four-wheel-drives and tour the countryside, they're off cruising our coastline and waterways at a leisurely pace.

A sports boat may be the way to go for the younger set who enjoy short hops to a destination for the weekend, but for more mature boaters the trend is to displacement and semi-displacement vessels with all the facilities for extended cruising and living aboard comfortably. Gone are the days of roughing it on a boat.

While some of the more intrepid passagemaking yacht owners may hold ambitions of long journeys across the world's open oceans, for most this is just a dream. If, however, you are one of those folk intent on turning dreams into reality, there is much to consider before committing to that big expedition.

There are very few, if any, off-the-shelf stock boats capable of making long ocean passages safely. Most stock cruising boats are very good for short coastal hops of a couple of hundred nautical miles or so, where a friendly port is not too far away in the event that equipment breaks, supplies and fuel are needed or the weather blows up and a safe place to hide is required.

A true ocean passagemaker, on the other hand, needs to be able to be self-sufficient for many thousands of miles, and be capable of spending many days away from a safe haven and surviving whatever meteorological nasties the open ocean might throw at it.

That is not to say that long ocean passages have not been made in small boats. In 1902 a crossing was made from New York to Falmouth in England in a 38-foot boat powered by a kerosene engine, and a decade later a 35-foot vessel made the same trip in 28 days running on petrol. More recently in 1984, a Dutchman made a 200-day return circumnavigation from Plymouth in the UK in a 39-foot aluminium powerboat.

Without doubt the person who has influenced small boat passagemaking the most is the former US Navy Captain Robert Beebe. After World War Two he dreamed of retiring and cruising the world in a small boat. At the time, long distance cruising was mostly the province of sailing yachts. Beebe wanted to arrive at distant ports relaxed and on time, not battered by the sea and the fickleness of the wind.

However, in the 1940s no suitable long-range powerboat existed, so Beebe had to literally invent the modern passagemaking powerboat from scratch. After many years and some 60,000 miles of crossing the world's oceans with his wife in their boat (aptly named Passagemaker) he wrote a book, *Voyaging under Power*, which was updated in 1994 with the help of Nordhavn's Jeff Leishman. The book remains the 'bible' for any serious cruising couple and is still used as a guide by naval architects today.

Leishman has made his mark too. US-based Nordhavn is one of the few brands building stock boats designed for long ocean passages. To show that even their smallest ocean-going vessel could cut it with the big boys, a team including Jeff and his brother Jim circumnavigated the world in a stock 40-footer, covering some 24,000 nautical miles in 170 days without a major problem. They set what is believed to be a record for the fastest circumnavigation in a production motor yacht.

A true passagemaker, generally built of tough aluminium or steel, is a vastly different boat to a fibreglass stock boat. While most stock boats can perform well with semi-displacement and planing hulls, a true passagemaker designed to live on comfortably and travel long distances safely and economically is based on a displacement hull.



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A displacement hull travels through the water and displaces the water as it goes, not like a planing yacht which travels on top of it at speed with the resulting limits on range. This means that the speed of a displacement hull is limited to its calculated hull speed, but is much more fuel efficient.

Designers take into account displacement/length ratios, prismatic coefficients, engines and fuel economy, sea keeping, stability, and a thing called the "trawler truth ratio".

First let's look at displacement/length ratios or DL. This is a mathematical calculation to determine the heft or weight of a boat; the higher numbers determine the vessel's interior volume and load-carrying capacity. For example, a light racing multihull yacht has a DL of 40 to 50, where a Nordhavn 43 with a waterline of 38.4 feet has a DL of 303.

Some serious oceangoing passagemakers are designed with only one engine for fuel economy. Such boats generally have an independent wing engine as a "limp home" standby should the main engine fail. Some of the early designs carried sails, both for stability and getting home after an engine failure. This is a trend that is emerging again with some modern designs, although today's diesel engines are more reliable.

Stability is a big consideration in designing a passagemaker, which is going to be at sea for perhaps weeks. The motion of a vessel in a seaway, after a time, can be quite debilitating and leads to fatigue, especially for those folk who are prone to seasickness. There is much debate about how to counter the rolling motion of a vessel at sea. There is nothing new about methods for suppressing the rolling motion of a vessel, and that modern technology has made some of them more efficient.

Although it has been around since the 1920s, another method gaining popularity because of technological advances are gyroscopic internal stabilizers. The gyro stabilizer consists of a spinning flywheel that spins rapidly on gimbals set in a housing, which is bolted internally, generally in the engine room. The flywheel and cage is free to rock forward and aft and this motion imposes torque on the hull to counter the motion of the boat. Another consideration when selecting a genuine passagemaker is the so-called "trawler truth ratio". This is the estimate of how closely the vessel resembles a true trawler. Most long distance yachts bear a resemblance to a trawler hull, with an internal volume big enough to carry fuel,

# PASSAGEMAKERS

WHY ARE MORE YACHTIES THAN EVER CHOOSING THE PASSAGEMAKER LIFESTYLE? KEVAN WOLFE ASKS FIVE OWNERS WHAT THEY LOVE ABOUT TAKING THE SLOW ROAD.

Another bit of naval architect speak that is an important factor in passagemaker design is Prismatic Coefficient, a figure describing the fullness of the ends of the underwater hull in relation to the maximum beam. Basically, it's a mathematical calculation of how pointed the bow and stern are and how efficient the hull is through the water.

Some designers recommend paravanes, while others won't even hear of them. Paravanes are large steel plates set on outrigger poles and hung below the water either side of the beam to dampen the sideways motion. Side trawlers often use their poles in this manner, particularly when anchored up.

Active fin stabilizers are also used to prevent roll while the vessel is underway and are probably the most accepted; they also work well at anchor. They consist of retractable fins that extend beyond the hull below the waterline and alter their angle of attack, depending on the heel angle and rate of roll of the vessel. They operate in a similar manner to the ailerons of an airplane.

food, supplies and of course crew for a self-sufficient long distance voyage. Check out some of the superyacht hulls in the Med and around the world. As you can see, there is a vast difference between a stock cruiser and a true long distance passagemaker, so if you are contemplating setting out on a long distance adventure it will pay to do your homework first. It's also important to remember that all motor yachts compromise in some department - the perfect boat is yet to be designed. Over the next few pages we speak with a few passagemaker owners on their boat, love for the water and where to next.



**ALLAN & KAREN DAVIDSON**  
**HOME PORT:** Brisbane, Queensland  
**BOAT:** Nordhavn 43, *Opal Lady*

Why did you choose to buy a passagemaker yacht?  
 We had previously owned sailing yachts, a catamaran and monohulls. In our quest for a suitable boat with which to circumnavigate Australia, we decided to go power as many times in the past we'd had to motor due to the lack of wind or the wrong wind direction, or to change the electrical systems. We wanted a boat that didn't require a marina every week and would keep us safe, comfortable and protected from the elements. In the past we had to visit marinas weekly for fuel, water, washing and food. Now we have a 3,500nm fuel range (we average 7.7 litres per hour), a large refrigerator and freezer, plenty of storage and a washer/dryer. We can remain at sea for several months at a time in five-star comfort and safety.

What features about your boat do you like the most?  
 The pilothouse with excellent views and comfort for both captain and crew; the seaworthiness and kindness; the Portuguese Bridge; the saloon with its large windows and great galley views; the walk around engine room; the quality of

the build; the superb finish of the timber work and the large load capacity.

Any other upgrades or options?  
 Our main focus when planning *Opal Lady* was to have a backup system for all electronics and other systems on board, as neither of us are mechanically minded. We have paravanes as well as Trac digital stabilisers, and double electronics all independently installed including Navnet, Navpilots, GPS, VHF and HF radios. We also have AIS, Satellite Phone and wireless broadband internet. We even have a manual seawater WC as well as the freshwater electric one, so in the event of a power, pump or water failure we still have a usable toilet! Our watermaker supplies 2300 litres per day, so we are never short, and all deck faucets are fresh water to help prevent salt degradation on the exterior. A Viking Professional stove / oven makes home cooking and baking a pleasure. We have a front loading washing machine / dryer, satellite TV with Austar and VAST. On the tenders side we have a 3.5-metre trimy and a Zodiac.

Where have you cruised with this boat so far?  
 In 2009 we headed straight to Tasmania to join the six-week VDL Circumnavigation Cruise (run by RYCT every two years), then we cruised for a further 12 months around Tassie, revisiting some of our favourite locations such as Port

Davey in winter with the snow capped mountains, and Bruny Island. Tassie has safe anchorages and magnificent fresh produce, you can eat your way around! From there we cruised back up the east coast of Australia to Yorkeys Knob. Cairns to join the Louisiades Rally 2010. Following our six weeks in PNG we cruised back to Mackay, where we spent Christmas and saw out cyclones Anthony and Yasi. Then at the end of March we made our passage north over the top to Darwin, following the western coastline of the Wessel Islands. For four and a half amazing months we explored through the Kimberley and down the West Coast of WA, visiting the Montebellos, and the Abrohus Islands.

Where are you planning to cruise next?  
 Early in 2012 we will conclude our circumnavigation in Hobart, so a big party coming up! Then we will be back cruising the pristine Tasmanian waters trying to catch a record southern bluefin tuna, and up the Huon to catch some salmon and trout. From here we will cruise the rivers, lakes and inlets up the East Coast of the mainland, north to the Whitsundays for the winter.

What attracts you to the passagemaker lifestyle?  
 Being able to see amazing places and live with an ever-changing view in five-star comfort and safety.

What's your most memorable cruising experience or destination?  
 Hard to narrow it down to one! The places, the wildlife and the people we meet! Gordon River and Port Davey, Tasmania for it's pristine beauty, The Kimberley for it's awesome scenery and wildlife, Louisiades PNG for the experience of seeing how island people live so happily on their meager existence.

What, in your view, defines a 'passagemaking yachtie'?  
 Someone who wants to take life at a slower pace, be out there enjoying the cruising yachtie lifestyle, visiting remote locations without being exposed to the elements whilst on passage, and being able to be self sufficient, safe and comfortable.

Place the following features of your yacht in order of importance: looks, performance, build quality, accommodation, range. Range, build quality, performance, accommodation, looks.

You can follow the Davidson's cruising adventures at [www.opallady.com](http://www.opallady.com) [www.nordhavn.com](http://www.nordhavn.com)

"We will be back cruising the pristine Tasmanian waters trying to catch a record Southern Bluefin Tuna and up the Huon to catch some salmon and trout. From here we will cruise the rivers, lakes and inlets up the East Coast of the mainland, north to the Whitsundays for the winter."

LOVELY LADY Allan and Karen aboard their passagemaker *Opal Lady* overlooking a pristine australi.