

Free plans for Vember, the 2017 design from CNCKayaks.



Design and build your ideal “British style” sea kayak

We all have an idea of our perfect sea kayak. We would wish to specify the performance characteristics, the length, the beam, the shape and size of the cockpit, the deck height, the maximum acceptable weight and several other details. If you value the performance characteristics of “British-style” sea kayaks, then our latest offering of free plans from www.cnckayaks.com gives you the opportunity to create your bespoke kayak. Introducing the Vember family of sea kayaks with round bilge hulls to give smooth and progressive stability from upright to edged; kayaks that will be capable and reassuring in rough seas and strong winds. The Vember family has proven to satisfy those requirements. A crucial aspect of the design implementation is that the length and beam of the kayaks can be varied *independently* to suit your style of paddling, your skill level, and your choice of day paddling or expedition use. Details of how to achieve this are contained in the 59 page Build Manual which comes with the free plans download.

The hull is shaped to give smooth, progressive and reassuring stability throughout the heeling range, based on rounding out the chined cross-sections of our West Greenland inspired Shrike design. Vember is not a kayak for speed records or a specialist surfing, and neither is she “all things to all paddlers”. She is a general purpose sea kayak that is now my “go-to” craft for day paddling. For camping, the lengthened Vember Expedition has greater carrying capacity.

An important aspect of this project is the combination of a wood-strip hull with the simple plywood deck used in our Shrike range of sea kayaks. This avoids the complexity of a set of forms to shape the combined hull and deck, and enables builders to vary the length and beam of the hull, the size and shape of the cockpit, the height of the foredeck and gunwales, the positions of the bulkheads, and the layout of hatches, all without altering the structure of the deck. The result is a simplified construction, adaptable to your requirements, which minimises the experience and skill required of the first-time builder. Vember only requires a flat workbench on which to assemble the hull forms:



The spacing of the hull forms can be varied to suit your purpose, but our Build Manual describes the construction of Vember at 300mm spacing and the Vember Expedition, at 330mm spacing, while retaining the standard beam. (The beam can be varied by changing the scale of the printed paper plans of the forms. Details in the Build Manual)

Dimensions of Vember are:

Length..... 4.86 m (15.94 feet) Beam 0.546 m (21.5 inches)

Weight, with hatches, seat, deck lines, and wire operated skag..... 15.9 kg (35 pounds)



And for the Vember Expedition:

Length..... 5.346 m (17.53 feet) Beam 0.546 m (21.5 inches)

Weight, with hatches, seat, deck lines, and wire operated skeg.....17.2 kg (38 pounds)



A local experienced paddler is planning to build a fast Expedition version by maintaining the length of 5.346 m (17.53 feet), but reducing the beam by 10% to 0.491 m (19.3 inches).

Planking the hull is a rewarding and exciting process. I was initially concerned that this stage would be difficult, but I found that it required care and patience rather than skill, and the hull gradually appears like a butterfly emerging from its chrysalis. The Build Manual documents this stage in sufficient detail for the first-time strip-builder.





Once the hull is completed and turned over, one can choose the type and size of cockpit and hatches, and the height of the foredeck. Full details of these options are given in the Build Manual. Vember materials cost £550 (U.K pounds). We used cove-and-bead profile strips for this hull, but for the Vember Expedition hull we just used square edged strips. This proved straightforward, as with such thin strips minimal planing is required to fit the strips closely together.

Here's the Vember Expedition hull:



Here's a performance review of the Expedition version from Damian, who has a shed full of kayaks:

"If I had to pick just one boat, this would be it. Even empty and in a cross-wind, she behaves herself and I've yet to really need the skeg. She's light enough to throw on the roof-rack for an afternoon's playing, but has the capacity to take a fairly hefty load for trips. The shallow rounded keel allows you to layback fully and this means I've been able to hand roll her - a trick I can normally only do in my specialist rolling boat."



She attracts a lot of attention. Every time I've taken her out, without fail, I've been approached by people who have been seduced by the curves and want to know what she is. Having spent a couple of months shuffling round in wood shavings, it's great when people appreciate the boat.

She seems to be very quick. In the absence of any proper trials, my anecdotal evidence is that whenever I put on the power, I'm able to leave buddies' chined Greenland boats behind, far more so than in my other boats."

Everyone who has test paddled Vember has enthused about the looks, the weight, and the handling, so we decided to release the design on-line and free of charge, in the same way that our Shrike range was released in 2014. You are free to modify the plans and to make money by producing and selling kits and completed kayaks.

The free download of full-size plans contains a variety of format options, ranging from paper printing on your home A4/letter size printer, through commercial continuous roll printing, to the CAD files to drive a CNC cutter to produce the temporary forms directly from plywood. Any of these options will produce all the forms to produce your complete kayak. Also included are the files to drive a 3D printer to produce our concealed deck fittings, and our 59

page Build Manual. In the first week after the project was launched over three hundred copies of the plans were downloaded.

You can download the free plans from www.cnckayaks.com and then perhaps you might experience the special joy that comes from paddling a kayak that you have created with your hands – and from your dreams.