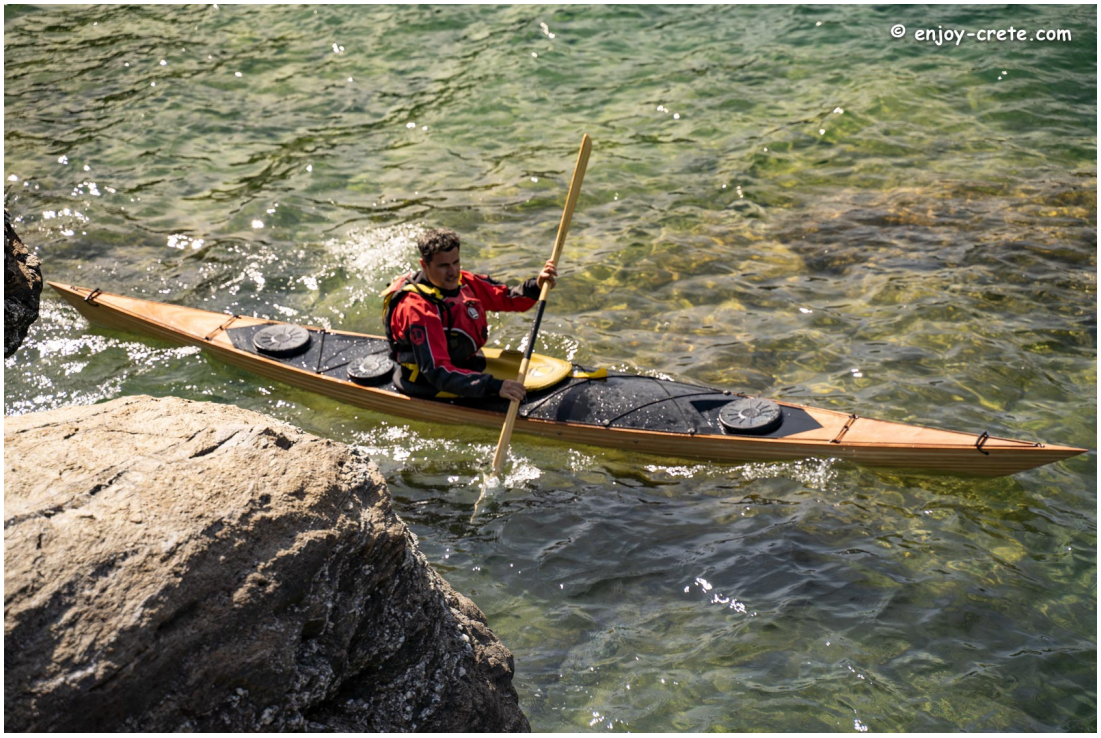


22/03/2020

BUILDING A WOODEN SEA KAYAK

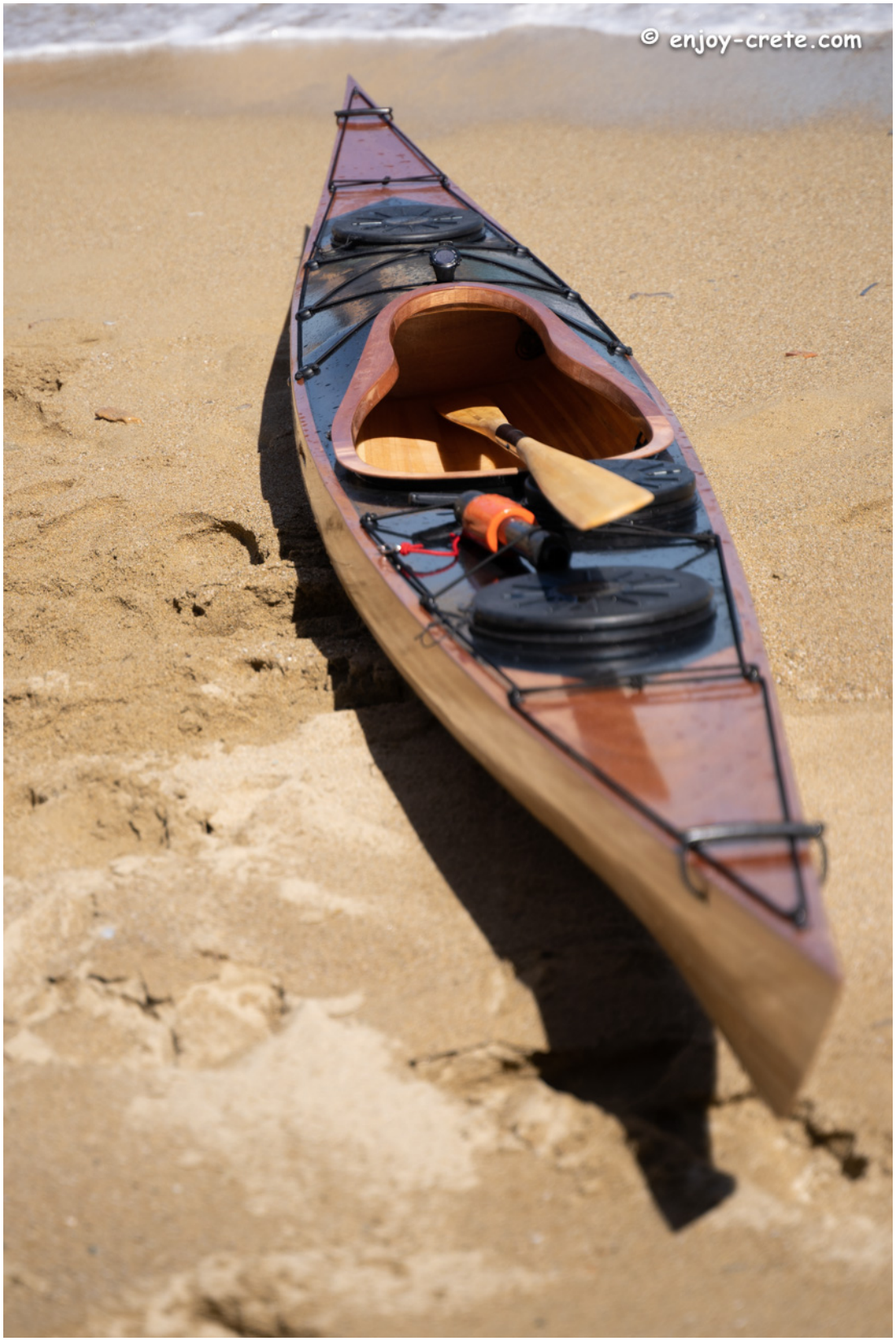
Building a wooden sea kayak nowadays is a quite complex procedure.
To simplify the procedure a few companies/people offering free or paid building plans. That gives you at least a good starting point instead of designing everything from scratch.

To make the long story short I & my colleague Vasilis choose to build the CNC Vember Expedition sea kayak. It is a British style kayak.
The boat comes into two versions; the normal and the expedition. We did the second one which extends the length by 10% to 5.35m (17.53 feet) while maintaining the same beam and stability characteristics. The construction follows the Vember Build Manual, but with the transverse temporary forms spaced at 330mm rather than 300mm.

As stated above the length of the kayak is 5.35 meters, the beam roughly 54 cm and the weight an impressive 20.1kg with the 3 hatches and a foam bulkhead/footpeg! We've changed pretty much everything apart from the hull.

This is a shortlist of the things we've changed/added:

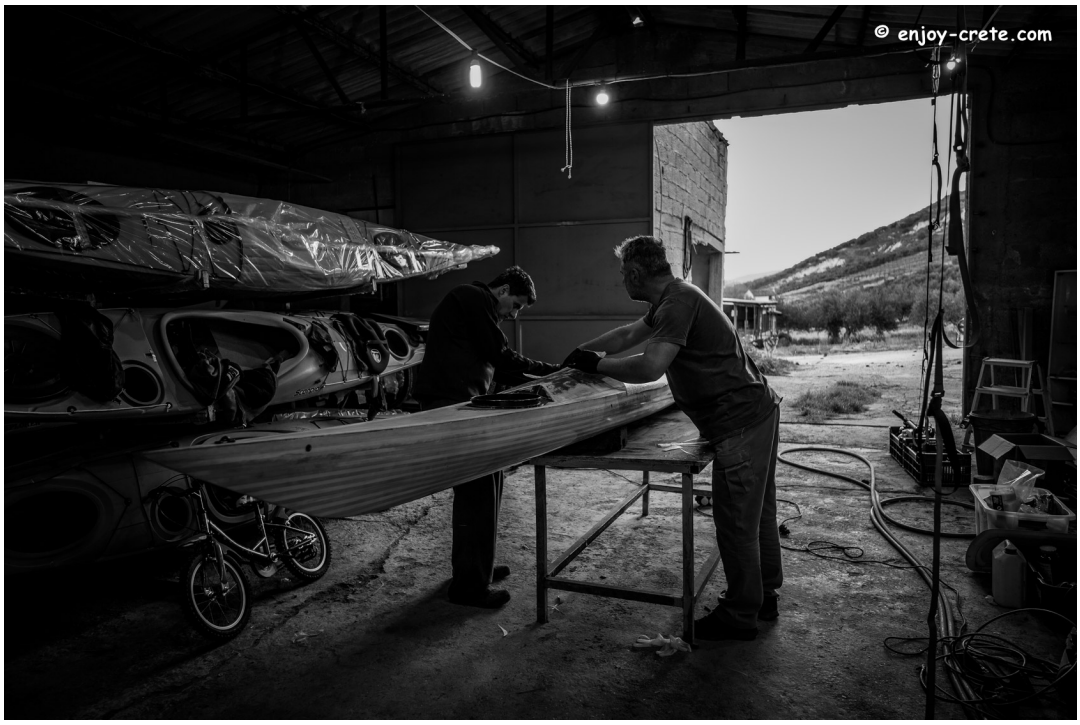
1. Completely new rim/cockpit design with braces that give you superb fit (like those from NDK kayaks)
2. We build completely from scratch the skeg, everything that goes with it apart from the wire of course
3. The bulkhead behind the seat has a small angle in order to perform self rescues easily without the need to lift the whole boat in order to empty the water
4. We've added 3 hatches from Kajaksport (including the rims) to match those from modern sea kayaks. Superb quality from Kajaksport and excellent fit on the wooden kayak. The deck has to be altered a lot to accommodate this as initial plans are without any form of hatches.
5. Deck fittings from Sealect
6. Front and rear kayak holds are custom made, with a tube-like system to flow easily the rope while stays on the deck without moving up and down



Who fits on the boat?

I'm 1.85cm tall and 84-88kg (depending the season!) and I am at the very maximum body type for the kayak. Ideally, the boat is made for paddlers from 1.60 to 1.78m and no more than 80kg. The main problem of the boat for tall paddlers is that it doesn't fit shoe size bigger than 43. I've got a 44-45 and I had to paddle it without a shoe in the

first instance. Soon I replaced the footpegs with a foam-based bulkhead and then I was able to fit even with my 44 shoe size (low profile shoe).
We will start building a new version of the boat for larger paddlers; check out my Facebook page and also my Instagram for an up to date information on the building process. Same hull but much higher deck to accommodate paddlers from 1.80m to 1.90 and up to 100+ kg. Hopefully, that will be ready in the next 2 months. It is a pain to make the adjustments on the deck but we already spend hours brainstorming and we have decided what we'll do!



In the process of building the deck

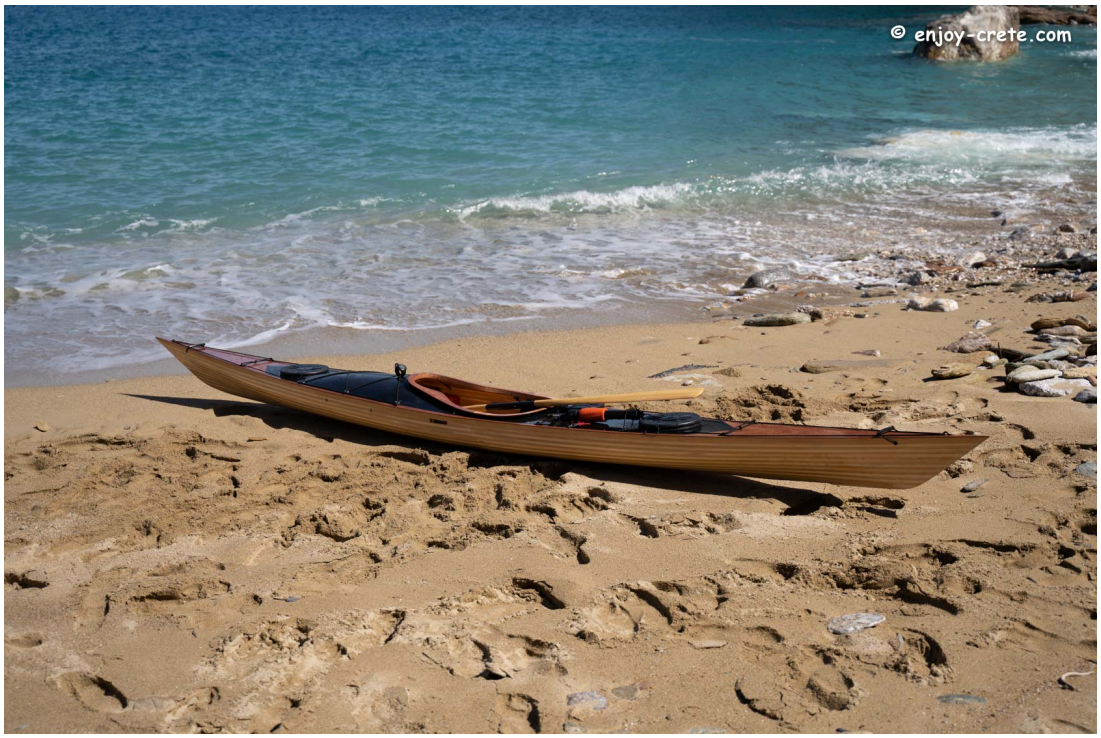
First Test

I'm not a person who praises a kayak because I've built it or just bought it…..instead I have to paddle it to see how it performs in all conditions; from dead flat to 2+ meter waves.
I'm glad to report that on Crete you can find rough conditions most of the days thus testing the boat is not required to travel for a long time.

Conditions: relatively flat with occasionally winds up to 10 knots.

The kayak is super stable (primary stability). To give you a reference is more stable than the NDK Romany Surf, Explorer, P&H Cetus, Venrure JURA, North Shore Atlantic, Valley Etain, etc. It is actually the most stable kayak I've ever paddled with a beam of 54 cm, quiet impressive. I've paddled over the years more than 60 different sea kayak designs.

Novice paddles will be able to paddle in conditions that they weren't comfortable before due to increased stability. The boat turns very good as well; its maneuverability is outstanding and I can only compare it with the Nigel Dennis Romany. I found it, however, less responsive than the Romany but much faster (as the NDK Explorer more or less).



I kept a speed of 5 knots in flat water during a roughly 90% of my strength sprint to give you an idea.

With its long waterline, a strong paddler will be able to keep an average speed of 3.8-4 knots. Due to the bloody COVID-19 virus, I didn't have the time to do a long trip yet to check the average speed but once I'll do, I will publish a new blog post.

On side winds, the boats weathercock a little bit, not too much but it is noticeable. It was empty, however. The skeg is very effective and needs a tiny bit to keep the boat going straight.

Happy building!

PS: Mid May the new version (High Volume) will be ready and already planning an expedition to test it extensively. Stay tuned for another blog post soon.