

List of improvements on ONAK 2.0

Suitcase

- 1. Crossing straps on the side for more stability
- 2. Handle is easier to use
- 3. A stiffer tube as axle, impossible to slide, and lighter because of tube
- 4. Rust-free bearingless wheels
- 5. Pneumatic wheels for better cushioning on stairs
- 6. Separate holes for wheels and straps, more orderly look
- 7. Lid-folding lines end with a slightly thicker area so shearing is impossible (even though this happened only in one occasion before)
- 8. Wheels are now manufactured in Europe, not in Taiwan

optional stretch goal:

Wider tubes both as a handle and begin axle and even easier pinless Quick-release for the wheels.

Straps

- 1. All straps always stay together: no searching which buckle fits where anymore
- 2. All straps are always **bolted to the hull:** cleaner look, easier replacement
- 3. All straps come with a **pulley-system**, halving the strength needed to assemble the ONAK canoe
- 4. Straps should never slide through holes in the hull anymore; so **less communicating vessels** when tying down the boat.
- 5. Straps that might have been overtightened before now have a dead-stop
- 6. All straps are taken double; double the strength
- 7. No buckle is sewed-in; easier replaceable (and easier supply-chain)
- 8. We now use standard off-the-shelf buckles from renowned climbing-harness brand Austrialpin
- 9. Pulley-system means double the length of excess straps when assembled, but this is easy to roll and leave neatly between the 2 parallel straps
- 10. Loop at end of the strap to easily tighten with more tension if somehow needed
- 11. (Handy people can replace any strap with on of the straps used in the trolly, with just fire and a knife, but without knots)
- 12. Straps at back-seat form the perfect start for a back-rest support

Borders

- 1. +- 1kg lighter design which is stronger (though only 2 profiles at connection pieces)
- 2. Total symmetry making assembly less confusing
- 3. Click on the hull, don't come loose anymore

Hull

- 1. Less chance of false-folds
- 2. Cut-out at wings make it easier to understand how to fold
- 3. Wings stay open, like an angel flying away
- 4. Folding to box goes loosely; plenty of space for straps in between
- 5. When the boat is folded, the inner compartment gets smaller; items fit more snug, so they swing/damage less
- 6. Much easier folding-lines through many in-mold tricks
- 7. Fish-kit ready (made compatible with existing products)

Seats

- 1. Wood, recognizable from classic canoes
- 2. A click-in system with bolts, straight to the hull
- 3. Mesh for the seat; allows wet swimming pants to dry
- 4. Seats become more customizable by the owner (replacement of mesh by straps, backrest,...)
- 5. More locally produced out of renewable & recyclable sources

Packaging

1. Focus on using less plastic & tape

HOW STRONG IS THE ONAK MATERIAL? (also applicable to ONAK 1.0,) :

ONAK is made out of a Polypropylene composite. In a process very similar to the process of making HMPE (also known as Dyneema or spectra, but then from a PolyEthylene source), the srPP or self reinforced Polypropylene we use makes our canoes much stronger than standard or chalk reinforced Polypropylene used in corrugated sign boards or your classic white-plastic milk bottles. Actually, strength-to-weight, the ONAK material is stronger as the 6082 T6 Aluminium used in other canoes with a factor of 119%*. On each side of the Polypropylene honeycomb core material that we use we have 3 woven layers of this srPP Curv material.