

# Advanced Elements AirFusion Kayak

With a change of vehicle I found myself unable to carry kayaks on a roof rack when I went away on holiday so I decided to have a look at what alternatives are available to overcome this. I looked at a number of kayaks of the folding variety available in the UK as well as from overseas. Generally I was concerned that they were too complicated/time consuming to assemble and too expensive for occasional use. A weeks' holiday with an indifferent weather forecast allowed me to have a close look at the options and I travelled around the country looking at what I could buy in the UK. Confirming my initial view on the folding kayaks I decided to have a closer look at the Advanced Elements range of inflatable kayaks – I was first made aware of them on The Gadget Show!

The AirFusion is somewhat different to the rest of the range as it uses a combination of aluminium poles and air chambers as a frame for the heavy duty reinforced PVC "skin". The AirFusion closely resembles a general purpose "hard shell" kayak and this is the one that I bought.

## Kayak in a bag



Figure 1 Out of the bag ready for assembly

Very briefly – the first step is to unfold the kayak and fit the rubber mat that covers the seating and feet area. Next you insert the aluminium tubes. Two poles slide through a sleeve on the bottom of the front and rear thwarts and then are inserted along the keel line and joined with a locking tube that forms the v shape of the hull. A further pair of joined poles for the sides are slid into position – one each side in the



middle of a pair of air tubes that line the sides of the kayak and run from the bow to the stern. The next step is to inflate as per the instructions. After you have done this assembly once or twice this kayak is really quite straight-forward to put together. I find that to get a really excellent shape to the outer skin you need to ensure that the front and rear thwarts are situated exactly alongside the longitudinal air tubes with the thwarts firmly on the bottom when pumping them up. Little adjustments to the longitudinal air tubes where they are velcro'd to the skin soon smoothes out any anomalies.



Figure 2 Showing keel tubes, front thwart, side poles between the side air tubes and front deck tube.



## Happy Paddler



Figure 3 This will do nicely

A bit of time getting the thwarts in the correct position with the side tubes is well worth the effort and makes the kayak look like a hard shell. I improve each time I put it together. This was my first attempt – not bad.

I have paddled this kayak now a couple of times for about 3 hours in total. The first session was spent in getting the seat position just right so as to encourage you to lean forward slightly and then adjusting the front thwart, which also acts as the footrest, to suit. Getting the seat and front thwart position like this makes a big difference to the feel of the kayak and is well worth spending the time to get these positioned just right. The seat has adjustable straps to allow you to adjust the seat forwards or backwards and just clips into place – by using clips means that it will always return to the desired position when setting things up the next time. Once you get the front thwart in the best position it is recommended that you mark the hull with a marker to help find the correct position easily thereafter.



Figure 4 Low brace turn - no problem



## Some Observations

The biggest difference to a hard shell kayak is that this kayak is not ideally suited to rolling. This is due, in part, to not being able to fasten a spray deck tightly to the cockpit coaming as it is formed by inflating a tube inside a sleeve around the cockpit edge and so does not provide a rigid fixing to stretch a spray deck



across. That said it is possible to fit a nylon spray deck effectively and I make sure I roll it under the coaming all the way around the cockpit to make a good splash proof seal. The other difference is not being able to effectively engage the thighs and knees for the hip flick/knee lift required for rolling. There is nothing solid to brace the knees against (conventional skin on frame type kayaks use a knee brace called a masak to facilitate rolling). I do find that this kayak will edge without any problem. In use the kayak has a good turn of speed – actually it is surprisingly quick, probably due to the V shaped hull, it tracks well (has a narrow short keel like strip on the keel line at the bow and stern) and is easy to turn – in fact a nice, fast, lively kayak with good initial and secondary stability. I find this to be a stable kayak but not excessively so, which bodes well for using it in rougher water – so far I have only used it in calm

waters with only a F3, but I did not detect any wind related problems.



## **Conclusion**

I have deliberately tried not to compare this kayak with a hard shell and accept it in its own right, but it performs very much like a hard shell kayak and I must say I am very pleased with what I ended up with. OK I cannot see me rolling it because of the lack of knee/thigh engagement, but that is probably the only real difference in use to a hard shell kayak. It fits my requirements very well indeed.

*Disclaimer: I have no commercial connections with Advanced Elements.*

**Mike Holgate**  
**BCU Level 2 Coach/4 Star Sea leader**  
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Mike is based in Bournemouth and started seriously paddling in 1989 becoming a coach in 1993. His main interest is sea kayaking with Greenland paddles. Mike started Poole Bay Canoes ([www.poolebaycanoes.co.uk](http://www.poolebaycanoes.co.uk)) about 3 years ago to increase the choice of Greenland paddles in the UK.

