## Hebridean Servo Pendulum Wind Vane Test 22nd Feb 2014

## By Ian Kirkwood.

Having spent regular periods trawling the net for information on wind vanes and their prices, I was interested to find www.windvaneselfsteering.co.uk in November 2013 promoting John Fleming's DIY servo pendulum vane, the 'Hebridean'. For a year or two I had looked at everything I could find on the market but there was none that suited my immediate limited budget. So I had resigned myself to waiting some years to acquire a vane. Even Ebay items were mostly beyond my reach.

I got in touch with John and it turned out I was customer number one, the site having only recently been launched. Our conversation by telephone ended with a set of plans heading my way. The hand drawn plans and lengthy description of manufacture were meticulous. Soon the pages were well thumbed and I began to assemble my materials. The vane is now supplied as a kit of A4 stainless steel parts and more recent customers will not have to go through the repeated ordering of components such as bolts, washers, tubes, plates and bars that I did. I soon lost track of my total spend but reckon it to be somewhat over the current kit price numerous postage charges having inflated the costs. Yet the outgoings would be well spent, if the hebridean worked.

I have a garage with a pillar drill, a vice and some tools such as an angle grinder. With these revving I was soon the owner of some Hebridean parts and gradually a strange contraption took shape before my eyes. The wood I got free from a retired wood turner friend. Beautiful air dried elm. A joiner chopped it up for me. My initial enthusiasm was only occasionally challenged as I awaited deliveries or had done enough for a while. But I really wanted this vane and that kept me motivated through the cold. In the end it took me about half a winter to complete in my spare time. Quicker than I had anticipated.

'Imagination' is my 1979 Verl 900 built in Hampshire, UK (see verl900.wordpress.com for more information). She is a 9m long boat with fin and skeg, has about 1m of freeboard and weighs 3.5 tonnes unladen. With the high freeboard she needed the longest pendulum allowed for in the plans. 600mm must sit below the surface whilst the boat is at rest. Visually the trailing angle of the pendulum suits the slightly reversed transom very well.

I could write more about my experiences building my vane, how John answered all my queries and how my feedback helped him make refinements to the product and the manual. In December he actually visited me to see the progress and gave me the impetus to complete the project.

We met at Kyleakin on 21 February 2014 during a very stormy weekend. I thought twice before sailing but since it was a bright start on the 22nd I felt keen to go. A force 7 westerly greeted us as we cleared the Skye bridge from Loch Alsh and entered the Inner Sound close hauled heading NW. Once the reefed sails were reasonably balanced I reached over the lifelines on the windward side of the cockpit, unclipped the (permanently tethered) vane, brought it round to the transom and slotted the 20mm stainless round bar pivot into its mounting slot. The two arms popped up into place by bungee power when released from above. The vane I then slotted on and screwed tight at the top. Setting the vane's edge to the wind involves loosening two butterfly nuts and setting the angle before retightening. None of this I found very difficult despite the gale. The two tiller lines were hanging ready to attach to the arm ends. The moment of truth had arrived.

John looked on, holding the tiller, as I clipped on the two lines and tightened them up. There was nothing for it now but to let go.

I had, I suppose, expected the boat to spin around in some trouble. There was bound to be a considerable period of fettling and a sorting out. She moved three or four degrees to windward and I got ready to take control of the tiller. I knew there was really a bit much weather helm still to fix. Instead the vane performed the task and took her straight back on course. I peered through the sheets of rain at that distinctive nodule atop Rassay dead ahead. The nodule moved a little from side to side as we cut through waves about a meter high. For the next hour we sat watching the work being done, I a little green and very glad of my new assistant. A smile came to my face seeing just how well the Hebridean worked without any adjustment or tinkering.

By the Crowlins we turned again for the Skye Bride just visible at times through the angled sheets of rain. Now we were on the corresponding reach and tried on the smaller vane. The only other adjustment needed after a while was to alter the angle a little to cancel our leeway. We dropped sail on approach to the bridge and John took me by surprise with a display of the vane continuing to steer us with the sails down and engine on. We pulled in to Kyleakin with the vane still attached but could easily have stowed it again along the stanchions outside of the lifelines

For about 300GBP I had built my own own wind vane for my 9m yacht. I believe it will work as well as a commercially available model. I can hardly believe my good fortune or the capability of the unit. Neither did it once looked strained. And having built it from scratch, I know if anything goes wrong I have a strong chance of fixing it myself on the boat. It has been a thoroughly absorbing and rewarding winter project which I would recommend to anyone needing such a unit. The radical geometry at the root of the design promises top performance in light airs too, on which I will report at a later date.

Ian Kirkwood Imagination 25 February 2014 www.ik-design.co.uk