

Questions and answers.

Q1. Will it fit my boat?

Answer.

The Hebridean is a wind vane that you can store in a locker until you have use for it. Then it can be fitted in its socket on the transom and connected to the tiller. Boats with high free-boards need longer pendulums and this is cumbersome to fit if they are too long. The socket is sandwiched between 2 blocks of hardwood (rectangular, "L" shaped or whatever shape so long as enough wood is in contact with the socket) that can be bolted horizontally, vertically or at an angle depending on your transom. The socket has to be held at deck level or just below and about 150mm off. The wind vane is designed for boats up to 1 metre free-board at the stern. The "gallery" on the website has a diagram of a simple wood construction you can use to see if the wind vane will fit and operate without hinderance at the stern of your boat.

Q2. Is it difficult to make?

Answer.

By reputation servo pendulums work well but are not easy to build yourself. The simplicity of this design means that by comparison it is much easier. Structurally it has been designed entirely with DIY construction in mind. The metal components are prefabricated so all you need to make is the wooden frame on to which they bolt. Nothing more than basic wood-work skill and tools are required. It is best however to have the strips of wood initially cut from the 4 metre plank (of standard dimensions) by circular saw according to the plans to maintain accuracy. All moving parts are metal to metal which are trouble free, and because of the simplicity of the design there is only one lever between vane and pendulum.

Q3. Is it strong enough?

Answer.

My one is made of American Oak. I have tested it as if the boat broaches with it in control resulting in a force of 350kg on the lines to the tiller. The pendulum flexed considerably but the frame was unaffected (except for a slight twist well within its limits). Much more force and I think the pendulum would have cracked. However who pulls the tiller with a force of 350 kg? I advise the owner to have a fail-safe connection to the tiller which breaks at around 150kg to safeguard the wind vane in the event of a broach. In normal use, if the sails are balanced the forces on the tiller are not great. If this connection does fail, the pendulum swings to the side up to around 90 degrees clear (depending on the shape of your transom) free of danger. If the pendulum strikes something floating past in the water it is forced out of the water. (Friction is enough to hold it in the water in use). All you have to do then is push the wind vane back down. If you find that friction is not enough then a shear pin can be added. So the wind vane is safe-guarded from an excessive side-ways and upwards force on the pendulum. Within these limits it is amply strong enough.

Q4. What is it like on a run?

Answer.

It is often said that wind vanes struggle to hold course running with the wind especially in light winds which then appear less. However I find it works well, because it is damped by feed-back from the swing of the pendulum. The vane axis being horizontal with the horizon means that it is very sensitive to apparent wind changes. See some of my you tube videos running with the wind.

Q5. Will the metal to metal moving parts wear out?

Answer.

In 5 years of use (and I enjoy using it whenever I can) I have not had to renew anything, and have noticed no change probably because movement of parts in a wind vane are small. If however a looseness does develop in the linkage, there is no loss of efficiency in its operation (providing it is not excessive) because of its design which delays damping of the vane until the tiller moves. Nonetheless all moving parts are easily unscrewed and replaced if necessary.

Q6. Does it work reliably?

Answer.

Even sailing solo depending on conditions, I have no hesitation to go forward to change sails (mine are hanked on). If it is too rough I heave-to and then do what I have to.

Q7. Can it cope with weather helm?

Answer.

Yes, but it is always better to have the sails balanced. And it is always best not to have too much sail in strong wind conditions.

