

Off Center

OFF CENTER INSTALLATIONS

We have been providing off center installations for 40 years! See many more photos here: www.hydrovane.com/galleries/off-center



Sweden Yacht 45 – at ARC Finish – note big offset of his Hydrovane

We talked to the owner of this Sweden Yacht 45 at the London boat show in January 2008. He reported **absolutely no problem with his big offset on his Atlantic loop the prior year.**



Hanse 505 at 2014 ARC finish

From his [email](#): “.... *the hydrovane working tremendously well across a range of conditions.*”

- **SERVO PENDULUM SYSTEMS HAVE A PROBLEM WITH OFFSETS**
– Yes, a big problem for servo pendulum systems but not an issue for auxiliary rudder systems ... and best handled by a Hydrovane.
- **BIG OFFSETS ARE OK** – We used to recommend a 12 inch (30 cm.) maximum – but no longer – having received excellent reports from far greater offsets
- **MIGHT EVEN BE A BETTER LOCATION** – For some boats an offset might be the superior location – putting the Hydrovane rudder in ‘cleaner water’ – away from turbulence caused by the keel and main rudder.
- **NO PERFORMANCE ISSUES** – Even our engineer thought an amidships location must be best – but no so. A few years ago, with an engineer from the University of Southampton, we managed to test performance at various positions on a transom. The tests were conclusive. The Hydrovane is absolutely indifferent as to its location – as long as it has ‘clean water’ to work with it can produce its certain amount of steering power wherever it is located – which makes sense.
- **AESTHETICS & PROTECTION** – The only advantages of an amidships installation are the aesthetics and the protection provided

by the boat's keel.



Outbound 46

Customer's question: *“When the apparatus is offset on the transom then, if the boat is heeling hard over to the opposite side from the system, why doesn't the hydrovane rudder come so far out of the water as to render it ineffective?”*

Our response:

DIRECTIONAL STABILITY – The major compensation for those few seconds that the HV rudder might bounce out of the water is that the boat's main rudder is fixed in that 'on course' position giving the boat 'directional stability'..... and, seconds later the HV rudder is deep in the water attending to any course adjustment, if necessary.

HEELING AND SAIL TRIM – All those pictures in yachting magazines of boats 'over on their ear' are from local 'around the buoy' races where there

is no time to reef and the culture is to harden sheets as much as is humanly possible. The expression is: to be 'sailing on lines that the boat's designer had never intended'.

PROPER SAIL TRIM – Once offshore, where time as well as the boat's course have far less restrictions, sailors can become intimate with the boat's sail trim. A self-steering system is the perfect teacher. Even very experienced sailors have reported to us that their self-steering has taught them that they had always over canvassed and over tightened their sheets. It is such a pleasant discovery to see that the boat's motion is improved and speed is not compromised when sheets are slackened and sail area is reduced. Will and Sarah sailed 7,000 miles across the Pacific averaging 6.5 knots with one reef in their main 2/3 of the time. A maximum heel of 15 degrees should do it for most boats.

UNSOLICITED EMAIL RECEIVED JUNE 2007

WAUQUIEZ 40 PS – BIG OFFSET OF 30in. / 75cm.

“Tell your colleagues.”

From: *available on request* Sent: June-29-07 3:03 PM To: will@hydrovane.com Subject: Qwyver Wauquiez 40 PS Hi Will, Our hydrovane, mounted way off centre, has just completed its first 500 mile passage. Everything from F7 on the nose and rough seas (North Biscay) to a gentle F4 from behind. **The Hydrovane performed brilliantly, and we are delighted with it. Tell your colleagues.** Best regards, John Andrews & Freda Haylett



Wauquiez 40 PS – offset of 30in. / 75cm.

For more testimonials regarding off center installations see the TRUE STORIES tab at:

www.hydrovane.com/emails-testimonials/

POTENTIALLY DISASTROUS FOR SERVO PENDULUM SYSTEMS – BUT NOT AN ISSUE FOR HYDROVANE’S AUXILIARY RUDDER SYSTEM

We often hear such a concern probably because this issue is so critical for

the servo pendulum type systems. If their blade/paddle lifts out of the water the boat could instantaneously ‘spin out’..... imagine that in a storm! Conversely, an auxiliary rudder system, like HYDROVANE, has neither the likelihood of its rudder popping out of the water and even if it did not much would happen because:

- Even if it did lift out of the water, which would last for only a few seconds, the boat should hold course as the main rudder is locked ‘on course’ – preventing any ‘spin out’.
- The rudder does not swing from side to side like the servo systems. Theirs might even lift out of the water when amidships.
- The rudder is longer, reaching much deeper in the water
- Anyway, the only likelihood of the rudder coming out of the water is when heading upwind – but that is the easiest point of sail for steering – most boats almost self steer themselves when ‘on the wind’ – needing little help from their Hydrovane.

Over half of all the Hydrovane installations are off center.



Moody 47 with davits and large ‘drop-down’



Jeanneau 54



Bristol Channel Cutter



Allegro 33



Custom 46



Hallberg Rassy 36



Beneteau 393



Bavaria 40



Bavaria 36



Outbound 46



C&C Landfall 48 – Off center, X+20 Shaft (length 80 in./2 m.), Extended Heading Tube, 2 x ‘A’ Bracket

” We can always find a fit.”