



### **Bruntons Autoprop**

There are propellers and there are propellers. We all know what they are meant to do, but performance needs are dictated by a wide variety of conditions, sea states, the boat and engine that is coupled to it.

As owner and skipper of *Xplore* -- a Challenge Business class 67-foot yacht, equipped with a 130hp Perkins, and overall weight of 41 tons -- I had to make a decision as to the reliability and suitability of the propulsion system being that we were now taking *Xplore* to the ends of the earth, in the toughest weather and heavy ice conditions.

What I needed was power, reliability, simplicity, economy, and low drag when under sail.

Based on over 300,000nm of sailing experience I know that this was a tough ask of any piece of equipment. But I am pleased to say that for the demands we have put this yacht throughout the last 12 months (and a very successful first season here in Antarctica) the Bruntons Autoprop propulsion system has not missed a beat.

In the 13,500nm we have covered, we have averaged 6.7 litres per hour (inclusive of gen-set and diesel heaters) in motor sailing or straight motoring. For motor sailing we run our engine between 900 to 1200 RPM and for straight motoring our engine RPM never exceeds 1600.

In forward or reverse the Bruntons Autoprop delivers equal thrust. The design allows for continued auto adjustment of the blade angle as the RPM's increase to ensure maximum thrust for longer motoring times, giving less fuel consumption; and when we need the "grunt" in pack ice or hellishly windy conditions, it holds the power where you need it.

Under sail: lock the shaft and our boat speed increases between .75 to .9 of a knot without a single squeak or sound of movement -- even when the yacht is in surfing conditions over 14 knots.

As we have deadlines and clients with schedules to maintain I am always aiming to achieve 180nm per day, and this we have been able to do reliably. The Bruntons Autoprop has obviously played a major part in our superior performance this season, and has certainly lived up to my expectations.

Can I say I am happy? Yes: Bruntons has delivered a great propulsion system for the toughness of the Southern Ocean and Antarctica.

**Stephen Wilkins**  
**Skipper, Expedition Leader, Xplore Expeditions**  
[www.xplore-expeditions.com](http://www.xplore-expeditions.com)

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