

The newsletter of Bruntons Propellers

## Autoprop across the Atlantic



Another story from the last edition requiring completion is that of the French Naval Architect,

**Yves Kinard, who had chosen an Autoprop to propel his 21 foot, (6.5 metre), motor yacht across the Atlantic. We've been asked by many people, "Did he make it"? The short answer is yes!**

Yves found the Autoprop allowed him to cruise at 6 knots at 1250 rpm while the fixed propeller needed 1500 rpm. Over the 3977 nautical miles covered, with just one refuelling stop in the Azores, the Autoprop provided between 15 and 20% greater range than would have been the case with a fixed bladed propeller. The Autoprop message is all about efficiency. Autoprops ability to provide the correct pitch at all times, whatever the engines rpm and the sea state, means less fuel consumption, less emissions, less noise, and less wear and tear.

## Hybrid power research project

We are delighted to have been asked to join an elite group of companies who have been granted EC funds to research and develop a hybrid power system for yachts. In general it is recognition of the amount of knowledge we have amassed over the years and our design skills but in particular it recognises the unique abilities of one of our major products – the Autoprop. More details over the page.



## Yet more growth for Varifold

**Last years Proptalk headline, "More growth for Varifold", really was the precursor of things to come! The main subject of the story; the new, Philip Briand designed, 38 metre sloop being built by Perini Navi. This superb yacht, named 'P2', is now sailing, and both her skipper and the yard are full of praise for the performance of the 40" diameter Varifold fitted; at the time the largest we had supplied.**

This however is far from the end of the story; in the next year Varifold will grow some more and our naval architects and engineers are now working on a 45" version of the propeller to be fitted to a 48 metre yacht.



*This is what happens when you fit a 2 blade Varifold!*

Varifold is not just for large yachts; the same advanced design technology is found in each of the 2, 3 or 4 blade propellers that make up the range: a range that can power yachts with engines from 10hp to 1000hp. It does not have to be a new boat either.



We have many customers who have re-propped their yachts, replacing either a fixed bladed propeller, or a less than successful folder from another company. For those replacing a fixed propeller the Varifold is nothing short of a revelation when sailing, relieving their yacht of the considerable drag that their old fixed blade produced. Those replacing an existing folder report increased speed, using the same or less engine revolutions, significantly reduced noise and vibration, and an almost complete lack of cavitation.



## Also inside

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# Autoprops Satisfied Customers

Every year many of our satisfied Autoprop customers get in touch to tell us of the success they have had with their propeller. Here are just two examples, of a pretty extreme nature, which demonstrate the strength and abilities of a unique propeller – the Autoprop!

## Antarctic Ice

It's hard to imagine a more extreme test than this! Steven Wilkins is Skipper and expedition leader with Xplore Expeditions. Below are some of his comments regarding the Autoprop fitted to his Challenge Class, 67 foot yacht, which has a 130hp Perkins diesel.

*"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 the Bruntons Autoprop propulsion system has not missed a beat.*

*In the 13,500nm we covered last year, we averaged 6.7 litres per hour (inclusive of gen-set and diesel heaters) in motor sailing or straight motoring.*

*The design allows for continued auto adjustment of the blade angle as the RPM's increase to ensure maximum thrust, 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: 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.*

*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."*

## From Arctic to Antarctic



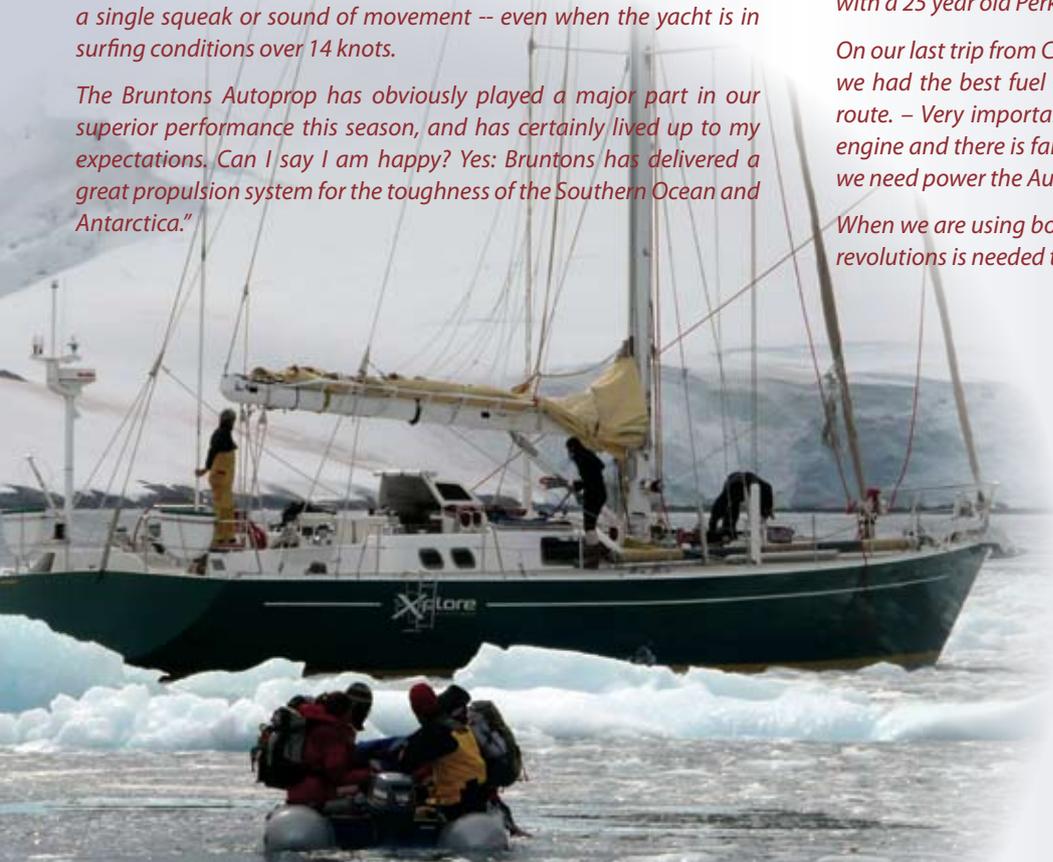
Danish sailors Kirsten and Kim Bork Mathiesen have so far sailed 35,000 nautical miles on their Beneteau First 42, using their Autoprop for 2500 hours. Their feelings for their Autoprop are summarised below.

*"When we bought our First 42 we believed that there was something wrong with its funny looking propeller! The salesman, an experienced boat builder, explained that it was an Autoprop and, by the way, the best propeller existing.*

*So far we have only good things to say about the Autoprop. From Arctic to Antarctic we have benefited from excellent fuel economy as well as fast and safe propulsion. At economic speed (5.5 to 6 knot) we are using about 2 litres per hour. This is well done for an 11 ton boat with a 25 year old Perkins 4-108!*

*On our last trip from Cape Horn and through the Chilean Archipelago we had the best fuel economy of all boats of the same size on this route. – Very important when most of the sailing is taking place on engine and there is far between the refuelling possibilities! Also when we need power the Autoprop has never let us down.*

*When we are using both sail and engine at the same time, only a few revolutions is needed to add another couple of knots."*



# Fixed Bladed Success



For many years it was the success of our Autoprop design, and later the Varifold, which received the most attention from the yachting press. Today, this is changing as we supply an increasing number of fixed bladed propellers to the builders of motor yachts. These yachts, which are often of advanced design, require the custom designed propellers and stern gear which we can provide to maximize the vessels performance and provide the smooth and silent power that the owner will rightly be expecting.

Pictured above is one of our latest launches, MY 'Silver', whose propulsion equipment was designed and manufactured in partnership with fellow Stone Marine company, Stone Marine Singapore.

## EUROPEAN COMMISSION SUPPORT HYBRID POWER PROJECT

**Imagine letting go your moorings without starting your engine, (or hoisting your sails), and travelling, virtually silently, out of your marina, or down your river, to the open sea. Sails hoisted, you enjoy your days sail while the regenerative power provided by your Autoprop propeller restores your batteries sufficiently for you to return, as silently up the river to your mooring, as you left: no noise, no fuel consumed, no pollution created.**

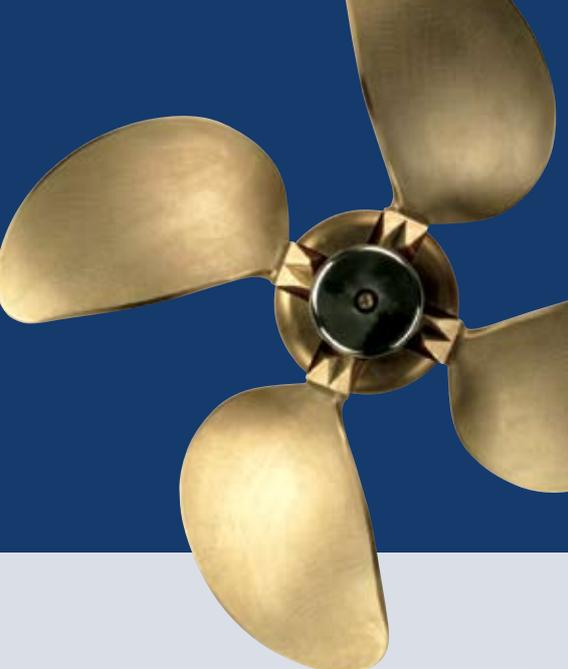
Wishful thinking? It used to be, but soon it may become reality. Bruntons, together with some leading names in other sectors of the industry, have been given a substantial grant by the EC to develop a diesel electric propulsion system.

There is nothing new in the concept of a hybrid power system, and others have already tried to produce one without success. Why should it be different this time? Quite simply, previous attempts have all been by individual companies with expertise in only one of the several highly complex elements of the hybrid power equation. This time every facet of the project is represented by a leading name in their field, a specialist in electric motors, in batteries, control systems and of course propulsion. These individual companies will be working very closely together to produce a solution, and the work is being properly managed, researched and financed. It will probably come as no surprise that it is our Autoprop with its unique 'auto-pitching' design, which will be providing the propulsion. This is an exciting project for all concerned, and the benefits for the end user and the environment are many. You can read more about it at [www.bruntons-propellers.com/hybrid](http://www.bruntons-propellers.com/hybrid)

## Stone Marine Group

**Bruntons are one of a group of companies, owned by Langham Industries, who design, manufacture, repair and service propellers of virtually every type and size and for virtually every kind of screw driven vessel. The five other companies within the group, all of whom carry the name 'Stone' at the beginning of the full company name, together with Bruntons, have recently formed a marketing group which will promote the companys worldwide.**

A considerable amount of co-operation takes place within the group and, with the tremendous range of abilities and skills available, it is hardly surprising that Bruntons and its sister companies are regularly called on by ship and yacht builders and naval architects around the world to assist with propulsion problems. The Stone Marine Group has a complete team of naval architects, designers, metallurgists and engineers available to design and develop, service and repair, propellers and ancillary equipment. The new marketing group will be ensuring that even more of the world knows about us!



# Experiences with Varifold

There is no doubt that the Varifold has been a huge success for our company, and our associates in the project, SPW. Starting its 'career' as a relatively small yacht folding propeller, the Varifold has rapidly grown in blades and in size. During the next 12 months it will be further developed to provide smooth, cavitation free propulsion, for yachts with engines up to 1000hp.

Here are just a couple of the many comments that we have received in the last 12 months.

## Meet us at the boat shows!

# 2009

<b>London</b>	Jan 9 - 19
<b>Toronto</b>	Jan 10 - 18
<b>Atlanta</b>	Jan 14 - 18
<b>Düsseldorf</b>	Jan 17 - 25
<b>Seattle</b>	Jan 23 - Feb 1
<b>Chicago</b>	Jan 29 - Feb 1
<b>Goteborg</b>	Jan 30 - Feb 8
<b>Vancouver</b>	Feb 4 - 8
<b>7th Seatec - Carrara Italy</b>	Feb 5 - 7
<b>Helsinki</b>	Feb 6 - 15
<b>Miami</b>	Feb 12 - 16
<b>Fredericia</b>	Feb 27 - Mar 1 & Mar 6 - 8
<b>Stockholm</b>	Feb 28 - Mar 8
<b>Dubai</b>	Mar 3 - 7
<b>Hiswa Amsterdam</b>	Mar 3 - 8
<b>Auckland</b>	Mar 5 - 8
<b>Moscow</b>	Apr 9 - 12
<b>Sailexpo Oakland</b>	Apr 15 - 19
<b>Dublin</b>	Apr 18 - 22
<b>Sanctary Cove</b>	May 21 - 24
<b>Amsterdam Seaport</b>	Sept 1 - 6
<b>Cannes</b>	Sept 9 - 14
<b>Stockholm (In Water Show)</b>	Sept 3 - 6
<b>Atlantic City (In Water Show)</b>	Sept 10 - 13
<b>Southampton</b>	Sept 11 - 20
<b>Toronto (In Water Show)</b>	Sept 11 - 14
<b>Newport R.I</b>	Sept 17 - 20
<b>Friedrichshafen</b>	Sept 19 - 27
<b>Monaco</b>	Sept 23 - 26
<b>Genoa</b>	Oct 3 - 11
<b>Annapolis</b>	Oct 8 - 12
<b>Istanbul (Prov)</b>	Oct 21 - 26
<b>Hamburg</b>	Oct 24 - Nov 1
<b>Barcelona</b>	Nov 7 - 15
<b>Amsterdam - Mets</b>	Nov 17 - 19
<b>Paris</b>	Dec 4 - 13

List correct at the time of going to press



**Jeremy Greenaway owns the Ufo 31 'Ufomist'.** "It, (the Varifold), has proved to be flawless in operation and has enabled us to achieve a remarkable improvement in boat speed under sail, smoother running under power, compared to the fixed two-bladed prop it replaced, better economy and absolutely no loss of manoeuvring capability.

...but it is in sailing performance the transformation has occurred. Where previously Ufomist might struggle to 5 knots in F3, she is now achieving upwards of 6 to 7 knots to windward in 3 to 4.

All in all, we should have made the change years back, saved money on fuel, and shown our heels to the other oldies we sail with!"



**Shipman Yachts** have been experimenting with Varifold in place of another make of folding propeller. The tests carried out by Shipman produced excellent results; in the words of their report, the Varifold propeller, "proved itself to be more than competitive". The company, which is experimenting with larger engines on one of its yachts, has asked us to work with them to provide a Varifold propeller that will give quiet and vibration free performance in the lightweight high tech constructions that are Shipman Yachts.

## Argentinean success

...and finally one of our more unusual successes, and one which helps to demonstrate the skills of our naval architects and engineers across a very wide range of installations. This is the case of the Argentinean fishing boat, whose original 3.4 metre diameter nozzle propeller, refused to deliver much thrust. We will leave you with the 'interesting' English from the fishing boats skipper on the results obtained with the Bruntons designed and built replacement. We have no doubt however that he was very happy with the result.

**' THIS IS AN EXTRAORDINARY SUCCESS, due it will allow to increase our thrust probably in 50 % accordingly BRUNTON. To all of you, my highest thankfull and appreciation of high professionalism. IT IS A REAL PLEASURE TO WORK WITH ALL OF YOU !**

