

PERFORMANCE

SAILING

DESIGN

Creating
award
winning
products

TEAM ALLEN

2019
Medal
Hunt

TECH TALK

Moving
on up



MADE IN THE UK

 allen



Liz

Liz Adams, Managing Director

This issue of Allen Performance Sailing magazine is our first fully digital version which allows the reader to hyper-link to the featured products on our re-developed website; www.allenbrothers.co.uk ongoing development now means that the full range of Allen products can be purchased direct from Allen, and technical drawings for each product can be downloaded. Giving you easy access to more of our products than ever before. We are also hoping that having our Banks Keyball trapeze harness available from our website will encourage more sailors to adopt the safety conscious system and this year we are pleased to announce our collaboration with Zhik to produce a Keyball version of their T3 harness.

Hope you enjoy this digital issue, wherever you are reading it!

Happy and safe sailing in 2019!



Join the revolution in trapeze sailing



The Allen Keyball Trapeze System is a streamlined design with an aluminium handle to guide the ball into a 3D moulded socket, leading the way to a safer future for trapezing.

Performance Through Innovation

www.allenbrothers.co.uk



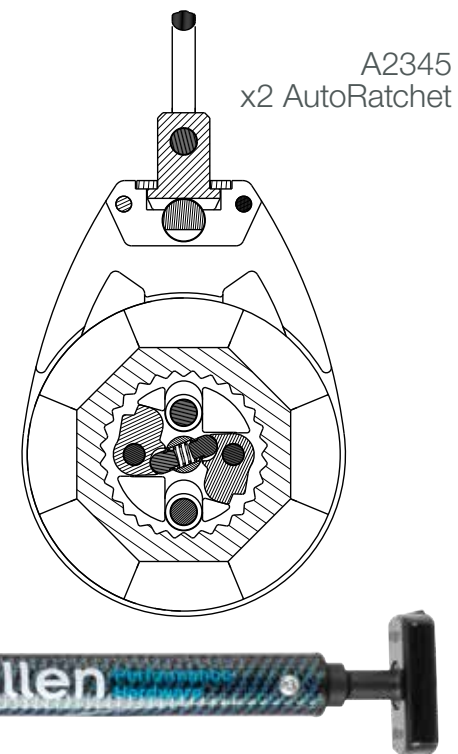
Design Matters

Innovation, Evolution & Performance

with Darren and Tom
Designers

Throughout its 60 plus year history, Allen Brothers has taken pride in innovation, driven by sailors, for sailors. Our Team Allen elite squad is constantly feeding back information to us on how we can develop and improve our products as well as giving us ideas for new ones.

Having decided to look again at the AutoRatchet range, we developed the unique X2 twin pawl AutoRatchet. The first implementation, launched at METS 2017 was the compact 45mm, **A2345**. This year we have complemented it with the 60mm version, for larger ropes. We are very pleased it was nominated in the prestigious DAME awards Deck Equipment, Sails and Rigging category, against a very strong set of competitors.



Pad Tii

Recently we developed aluminium versions of our push in deck bushes, but customer feedback led to us creating a double-sided threaded version. Turned from solid on our CNC sliding head lathes, we thought about the potential and wide possibilities of items that we could create. A recent trend in sailing for rope attachment of deck blocks led us to develop the Pad Tii range. Previous options in the marketplace did not allow for replacement and servicing of the loop attachment, so this was a big factor in the design brief of the Pad Tii, making it serviceable.

We incorporated an ingenious removable attachment pin to allow the user to replace the tii-on rope as it wears. The female part remains watertight and attached to the deck, whilst the male part can be removed and the loop can easily be replaced. Inside is a soft pad that takes up any play and makes the pin secure. See our website www.allenbrothers.co.uk for more product information and technical details.

Customer requests for more purchase on Jib and mainsheet track systems led us to develop the **A2126M** & **A2136M**. These are double stacked cheek blocks that enable the user to double the purchase that they can put through the fitting which makes adjustment and tweaking that bit more accurate and easier.

A2136M



Tii Shackles



Allen/Marlow Tii shackles feature an adjustable loop to make attachment quick and easy. This simple and easy attachment system will save weight and give you more options for attaching blocks. Perfectly designed for use with our Tii-on blocks and Pad-Tii ranges.

Blue Carbon Tiller extension

After extensive research and development with a leading custom composites company, we developed a unique and exciting new product. Adding both form and function to any boat that requires a tiller extension, the electric blue cross weave adds a touch of identity and the peel ply finish along the length of the tube giving maximum grip without the weight. To finish each end of the tube is a lightweight rubber stopper knob and a flexible universal joint. The final result is a stylish, lightweight and extremely strong tiller extension.

Cheek Block Range

Another area we have been looking at is the cheek block range, we have expanded this to include a conversion kit to enable users to cheek mount their 60mm dynamic blocks and Pro-Ratchets onto the side of the boat, this compliments the previously available 60mm version. See **A2060** – 60mm Dynamic cheek block and **A2160C** – 60mm Pro-Ratchet Block for more info.



A2060
A2160C



Left

Miami Gold for 49erFX
Martine Graef and crew
Kathene Kunze



Team Allen Successes:

Team Allen's 2019 Medal Hunt

With a 60-year heritage of successful competition in the British racing scene, from grass roots to the Olympics, many top sailors rely on Allen and 2019 looks like it will be a classic year as the medal hunt has already started in fine form.

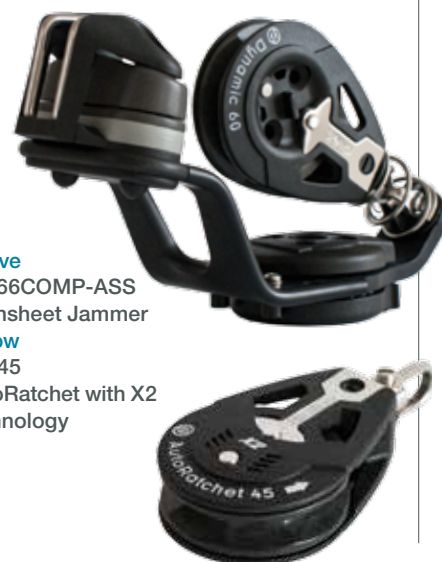
Team Allen crews dominated the 49er and 49erFX podiums at the season opening World Cup Regattas of 2019 at Enoshima, Japan and Hempel, Miami, USA. British crew James Peters / Fynn Sterritt won the 49er event whilst Brazilians, Martine Graef / Kahena Kunze also took gold in the 49erFX at Enoshima. At the second round of the World Cup Series in Miami the Allen equipped 49erFXs of Martine Graef / Kahena Kunze took Gold and Charlotte Dobson / Saskia Tidey took Bronze. In the 49er event in Miami, Dylan Fletcher / Stu Bithell took Silver, making them the first of three Team Allen boats in the top 10. As the 2020 Tokyo Olympics approaches, the competition can only get hotter.

The growing number of international crews taking on roles in Team Allen reflects increased awareness of the outstanding performance of our hardware. All our products are tested by our elite sailors and their feedback is an important part of our research and development. When you buy Allen, you are using the same equipment as they use.

This medal haul continues the Team's winning streak from 2018, when Team Allen sailors, Christian Birrell / Sam Brearey walked away with the UK, Merlin Rocket and 470 National Championships. Team mates Rhys Lewis / Drew Wright and Gianluigi Ugolini / Maria Giubilei won the 420 Nationals and Nacra 17 Under 25 World Championships respectively, while new signing Ben Hutton-Penman won the RS Aero 5 World Championship.

Tom Gillard also added to his tally of National Championship wins in the

Streaker class. Tom's Streaker features the new Slingshot mainsheet jammer - **A5266COMP-ASS** - The Slingshot jammer is self-aligning and prevents the mainsheet from wrapping round the block which gives extra control for fast, smooth tacks and gybes. Tom's New Streaker will be on display at the Dinghy Show at the Allen stand, **C82**



Above
A5266COMP-ASS
Mainsheet Jammer
Below
A2345
AutoRatchet with X2
technology



Top
Iago & Diego

Above
Ben Hutton-Penman
Winner
RS AERO 5
WORLD
CHAMPIONSHIP

Above Right
Tom Gillard's new
Streaker for 2019



Allen Championships

Following a successful inaugural season, the Allen Endurance Series will continue in 2019 and last year's winner, Grant Piggott will be back in the hunt. This year there will be four events in the Series; The Solent Forts Race, East Coast Piers Race, Round Sheppey and Whitstable. For more information go to www.allenenduranceseries.com

It is not all about international glory though. The Allen Performance Challenge means you get rewarded for being the best you can and taking your personal achievements up a level. At qualifying events, carry an Allen sticker and you will be eligible for a free Allen voucher worth £25 if you put in a special performance. Go to www.allenperformancechallenge.com for more information.

TECH TALK

Moving on up



“When it comes to performance sailing, these are the new Good Old Days”

We all know you can't hold back progress, whether you like it or not it's inevitable and comes from the constant requirement to improve on performance. Some may resist and harp back to the 'good old days' but the cutting edge of technology is where we are heading. Modern materials used in the manufacture of clothing, hardware and rope are taking the sport of high performance sailing to ever more technical levels.

The marine industry has embraced the use of advanced polymers in the development of lighter, stronger equipment with a major improvement being the widespread adoption of Dyneema in rope systems. As this has very little stretch, it is like removing the shock absorber from a system, so blocks and fittings must be engineered to take the extra shock loadings whilst they must also be made lighter and, in many cases, smaller, as line diameters decrease.

This means many of the high-performance innovations originally intended for dinghy sailing are now relevant to individual systems on much larger boats. Allen's core business over the years has been hardware for dinghies and small keelboats, but we are now getting enquiries for systems on much larger racing yachts. The most extreme examples include the TP52 class and the Class 40 which finished 4th in the most competitive fleet of the 2018 Route Du



A..77-497 - Dragon control line cleats

Rhum, which used Allen hardware for all hand powered rope systems.

As ever, our innovation is led by the real-world experiences of sailors. In Keelboats and Sportsboats we are having success with classes as diverse as the International Dragon and Mini Transat. The World Championship winning Petticrow Dragon V6 features both standard and custom Allen fittings and we are currently helping to fit out systems on Mini Transat contenders. The VX One, from Ovington Boats, has a full Allen fitout with the growing fleet contesting their Gold Cup events this year.

Back in our traditional markets, this year's RYA Dinghy Show stand will feature a Streaker, Optimist and International 14 which incorporates state of the art racing sailboat systems. Why not stop by stand C82 and take a look? When it comes to performance sailing, these are the new 'Good Old Days'.



Dragon vang strut



A2050Tii - Dragon spinnaker block



HIGH SPEED ESSENTIALS

CHRIS FEIBUSCH has this high performance hit-list with expert advice to fast-track you to top of your game

Handling a high performance dinghy takes confidence and slick manoeuvres – something that takes plenty of practice. It doesn't harm therefore to spend some time improving the essentials first.

BEFORE GOING AFLOAT

For smooth, fast and safe manoeuvres good boat preparation is key. This is true of any class, but in a high performance boat it's even more critical as everything happens a little more quickly and the most innocuous of problems can have major consequences; a simple twist in the spinnaker halyard, for example, can lead to a knot forming during the hoist or drop, resulting in a kite trawl and most likely a capsize. Game over for that race.

This scenario can be all but eliminated by simply taking care of the halyard (rather than coiling the halyard when you drop the mast for towing, instead run it up and down the length of the mast). Ensure there are no kinks when rigging, and that the elastic in the halyard tensioning system is replaced often and tensioned correctly. Replacing elastics regularly can save a lot of heartache: saggy trapeze elastics can lead to fumbles when hooking on, or loose control line take-ups can lead to kinks in critical controls, or even create a trip hazard. Correctly trimmed line and sheet lengths can make a big difference in ensuring the system works correctly.

Ensure your deck hardware fittings are optimised for purpose. Larger diameter blocks relative to the rope diameter will significantly increase efficiency for a negligible weight penalty.

CRACKING THE START

Many high performance boats have a self-tacking jib, which means it can be hard to recover from a stall. Learning to hold the boat stationary on the startline allows you to line-up early and position yourself where you want to be. This can require a lot of skulling on the rudder and pushing the boom out, as well as a lot of interaction between helm and crew. It's difficult to master and a stall is never far away, but this is an area that the top teams spend many hours practising.

In a competitive fleet you're unlikely to find a decent gap if you approach the line late, and you'll immediately be on the back foot and in dirty air.

On a heavily port biased line or

Facing
Keeping the boat flat and moving fast is key through gybes

Below
Working out the best VMG to the next mark is usually a matter of practise and getting a feel for that class of boat

if the strategy is to go hard right, a port tack start might be an option; either trying to cross the fleet by timing the run in and accelerating at the right time, or by looking out for a gap to appear in the fleet and firing up through it at speed. This has the benefit of leaving you one less tack to do, and you'll also be in clear air.

However, assuming you've started on starboard tack, the focus now will be on holding your lane and trying not to drop down into the dirty air of the boat to leeward. This is where it's important to understand the different modes – the ability to hold a high upwind angle is very important as a tactical option.

At other times, a low and fast →

“ In a high performance class this is critical as everything happens a little more quickly ”





“ The helm can get the bow down and the power on sooner, minimising the distance lost ”

mode might be the order of the day; easing off, putting the bow down and allowing the boat speed to increase.

TACKING AND GYBING

When tacking, keeping the boat flat throughout the manoeuvre is essential. Any heel will load up the rudder – the RS800 is particularly susceptible to this, slowing the boat down and slowing the rate of turn, which may lead to a stall or capsize. Helm and crew moving across the boat together at just the right time, and smooth steering from the helm, are key. The helm can control the rate of the turn to a certain extent to ensure the boat stays level. The ability of the helm and crew to get across the boat and into a trapezing position quickly on the new side will mean the helm can get the bow down and the power on sooner, minimising the distance lost from the manoeuvre.

Gybing needs to be done at speed and requires committed steering from the helm through a smooth arc all the way through until the boat is powered up on the new gybe. Good communication is essential; the helm counting down to the moment he starts to steer can be a big help. Once again, keeping the boat flat is imperative; any heel will lead to rudder stall and slowing of the boat, which will load up the rig and may lead to a capsize.

In very light airs the crew may be sitting or crouching forward of the mast and so must practise the art of squeezing between the small gap between jib and mast during tacks and gybes. Being precise with foot placement is the key here – practice makes perfect.

WINDWARD MARK ROUNDING

On the approach to the windward mark, the kicker needs to be adjusted to its downwind setting before the turn, and the downhaul released, if on. The downhaul should be the principal de-powering control, used from the point at which the helm – or crew – has to start moving a lot of mainsheet to keep the boat flat. Clear calibration markings are a big help here.

If there is any leeward heel it will make it much harder for the helm to steer the boat round as the rudder will be loaded heavily and may stall out altogether. Keeping the boat dead flat will make the turn much smoother and safer through the ‘death zone’, and in heavy airs a bit of windward heel may actually help. In strong winds and waves crew weight needs to be positioned well aft as the boat may have a tendency to nosedive or even pitch-pole as it accelerates.

It’s useful if the helm gives the instruction to the crew when to go in and hoist the spinnaker. This is

Above
As a top RS800 sailor for Team Allen, Chris knows the value of keeping the boat as flat as possible

because the helm is best placed to know whether he’s in control and ready.

Sailing on a deep angle will make the hoist easier for the crew, but the boat speed will be lower. There will be a lot of factors determining how high or how deep the angle needs to be, such as the necessity to hold a lane with other boats around. A deeper angled hoist might be safer and quicker in big breeze or waves as the boat will be more stable and it puts less pressure on the crew, resulting in a quicker hoist. Sailing a higher angle during the hoist means the spinnaker starts to fill as it goes up, making the last few pulls that bit harder.

The helm will generally be hooked on and half trapezing, ready to fully extend or step into the boat as necessary to keep the boat balanced.

DOWNWIND

The optimum angles to sail downwind will vary from boat to boat and in different wind and sea state conditions. Other factors such as tide will also come into play and so for determining the angle for VMG (that will ultimately take you fastest to the next mark) there’s no substitute for experience sailing the boat and a good dose of observation of other boats around.

If you are carrying greater boat speed through the water you will be able to sail a lower angle, so by trapezing or twin trapezing early you will often be able to sail the same angle but faster than a boat with both helm and crew sitting in and trying to soak low.

PAUL WHEELERS ASSOC



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