Photo: Will Calver

Antoine, Finian, Gonzalo, Micah and Robby

RACING

"At the end of the day, racing is all about being number one. Whether it's GPS speed sailing, national or international slalom or Formula, to have a chance at winning you need to be fast. And to be fast, you need the best equipment, and that's what NeilPryde does better than anyone else in the world. Our stuff is fast."

Jonathan Squires
NeilPryde Windsurfing Division Manager

NeilPryde Racing is a relentless programme of research, development and innovation by the NeilPryde Design Center under the direction of Robert Stroj. It is a programme with a 'no compromise' approach to developing sails that offer the best possible performance, because, ultimately the difference is winning.

NeilPryde's race sails have remained the dominant force in windsurf racing for the past 17 years. With numerous World, Speed, PWA, Euro Cup and Continental Championship wins to their credit, and now also the outright World Speed Sailing Record of 49.09 knots, the RS: Racing sails have been the difference on the racecourse since their introduction in 2001.

The NeilPryde development programme has been further extended and made more accessible with the introduction of the RS:X Olympic Programme in 2005 and the RS:Slalom "Real World Slalom Sail" in 2007 as well as the ongoing refinement of the ultimate speed machine – the "Speedseeker".

However, the benefits of the racing programme are not limited to those on the racecourse.

The technology, ideas and concepts that are created and refined during the development process for race sails are ultimately applied to all of the sails in the NeilPryde range. Recent examples of this include the introduction of the compact boom length in 2006, the concept of which has now been included in the design of all 2009 wave, crossover and flatwater sails.
The UltraCam, too, is technology designed specifically for the RS:Racing programme, and is now included as standard in the V8, V8 Helium and RS:Slalom sails.

RS:RACING PROGRAMME

When the RS:Racing Programme was launched in early 2007, it bought with it a new approach to the design, development and introduction of racing sails to the windsurfing market. Most notably, it saw the end of an annual launch of an entire quiver of race sails. Instead, new Race Sails would only be introduced when it was clear that the design team had made a significant breakthrough that resulted in a better performing sail.

As a result of the programme, 2008 saw the introduction of only two new sails in the RS:Racing collection, namely the 6.2m & 6.7m Evolution 1. All of the other sizes in the RS:Racing programme remain as per the original, 2007 design, and will be used in competition throughout 2008 where they continue to assert their dominance.

1. LIMITED PRODUCTION

- RS:Racing sails are built in their own production area within the NeilPryde factory by a dedicated crew of skilled workers who specialise in race sail production.
- Production is limited to 250 RS:Racing sails per month. This is due to the complexity, and high degree of precision that is required to build RS:Racing sails.
- RS:Racing sails are made to order throughout the year.

2. CONTINUOUS DEVELOPMENT PROGRAMME

- Future RS:Racing sails will be released size-by-size, and will be identified by an 'evolution-number' as and when a significant performance breakthrough is made in a particular size. Complete Racing sail quivers will not be released on an annual basis unless the breakthrough benefits all sizes of sail.

3. STANDARDISED PRICING – WORLDWIDE

- Pricing for the RS:Racing has been standardised, and a suggested retail price set for Europe, to reflect the global nature of windsurf racing.

SPEEDSEEKER

The NeilPryde Speedseeker is a highly specialised 'research project' - a custom designed and built rig based on the RS:Racing Sail plan-form. It has been developed with one purpose in mind - to set a new world speed-sailing record, and provide the technological edge needed to help Antoine Albeau and Finian Maynard break the elusive 50 knot speed record.

Breaking World Speed Sailing Records involves months of meticulous preparation and then usually no more than a 30-minute window in which wind and water conditions become ideal for sailing at up to 90 km/h. Optimal conditions for setting a new World Record are 45 knots of wind at an angle of 120-125 degrees. That is a challenge in itself, as these types of conditions are rare during the allotted time periods for record attempts.

The entire length of the purpose-built speed canal in Saintes Maries de la Mer, France, is 1,100 meters by a width of 25 meters. There are five different 500M courses accommodating the four wind directions of N, WNW, SE and SW with the most common being N (Mistral) and SE (Le Marin).

Until 2008, the typical speed sailing rigs used by Antoine and Finian measured between 5.0 and 5.3. But after experiencing gut-wrenching winds of 60-65 knots, it was clear that smaller sails were needed in order to capitalise on the moment. As a result, the riders now have available two additional sizes of Speedseeker, 4.6 and 4.8.

During a record attempt, riders accelerate from 0-44 knots in about 6 seconds (that's almost the same acceleration as a Porsche 911 RS) and the boomerang sensation once the bow of the board is forced downwind onto the run is similar to being shot out of a cannon. At these speeds, experience is essential, as is total confidence in the equipment. At peak speed, it's all the rider can do just to see where he's going!

Breaking the World Record would be no easy task.

However, on 5 March 2008, at Saintes Maries De La Mer in France, the days, weeks and months of preparation paid off. When the record setting "window of opportunity" opened, and conditions were perfect, the team, and the sail, was ready and, using a 4.8m, Antoine Albeau set a new world speed sailing record of 49.09 knots.

Despite being an outstanding achievement in its own right, the new World Record is also a stepping stone towards the ultimate goal of the Speedseeker program: to be first to 50knots.

As this is written in July 2008, work continues at pace on the development of new sails that incorporate technology, and ideas, that will be used in the 2008/2009 season – and the challenge to beat 50 knots.

While we have no plans to sell Speedseeker sails to the general public, the research and development work that has gone into the Speedseeker Programme has yielded performance data that's enabled the Design Team in Maui to greatly improve the performance and handling of the RS:Racing, RS:Slalom and other NeilPryde high performance flatwater sails.

Photo: Gilles Martin-Raget

THE DIFFERENCE.

The RS:Racing program is dedicated to designing and manufacturing the best windsurfing race sails in the world. Building on an unquestioned race pedigree, 2007 sees the introduction of UltraCam Performance Technology which has completely redefined the concept and function of the camber inducer. In doing so the rotation, acceleration and straight line performance have been dramatically enhanced, thus ensuring that this tradition of excellence continues.

C1

SLALOM 4.6 | 5.0 | 5.4 | 5.8 | 6.2 | 6.7 | 7.2 | 7.8 | 8.4 | 9.0

- 7 Battens / 4 Cambers
- Smaller high-wind sizes for Speed and Slalom Racing.
- Forward orientated shaping for control off the wind and in chop.
- More pronounced leech twist for high speed, rough water and control.

FORMULA 9.8 | 10.7 | 11.8

- 8 Battens / 5 Cambers
- Larger light-wind sizes for Formula & light air windsurfing.
- Fine entry and tighter leech for extreme upwind angles.
- Two carbon battens for optimal stability.

DESIGN OBJECTIVE:

- To improve sail rotation and speed around the marks.
- To enhance control and acceleration in the upper end while giving the sail a lighter feel.
- To improve drive in light winds and upwind courses.
- To introduce a specific light wind slalom sail in response to the increased popularity of light wind slalom 42.

EVO I

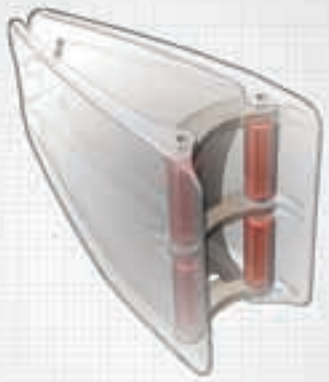
- Improve handling and control in “top end” (very windy) conditions.

ACHIEVED BY:

- Development and introduction of fully suspended, self-adjusting UltraCam Performance Technology (patent pending).
- Incorporating a more open mid-leech in combination with a fuller profile around the lowest four battens, especially in larger slalom sizes (6.7 to 9.0). This gives the sail a lighter feeling without losing power and acceleration.
- A slightly tighter, more supported head design including a revised Flexhead Configuration.
- The 9.0m is now a dedicated light wind slalom, rather than Formula, sail. It features one less batten which, in combination with a shorter boom, improves its early planing and gybing characteristics making it an outstanding light wind performer.

EVO I

- Reduced shaping in the bottom 3 battens. This results in a finer entry which helps reduce drag and increase top-end speed potential.
- Reduced luff curve helps make the sail feel softer, and “smoothes out” the transition between “power on” and “power off”.



ULTRACAM
PERFORMANCE TECHNOLOGY

Please refer to page 82 for more details.

SIZE	LUFF +/-	BOOM +/- 1cm	BASE	BATTENS	CAMS	IDEAL MAST*	CODE
4.6	391	166	22	7	4 UltraCams	NeilPryde X9UW 370	BNPRS46
5.0	408	171	8	7	4 UltraCams	NeilPryde X9UW 400	BNPRS50
5.4	424	179	24	7	4 UltraCams	NeilPryde X9UW 400	BNPRS54
5.8	438	186	8	7	4 UltraCams	NeilPryde X9U 430	BNPRS58
6.2 EVO I	452	194	22	7	4 UltraCams	NeilPryde X9U 430	BNPRS62E1
6.7 EVO I	468	201	8	7	4 UltraCams	NeilPryde X9U 460	BNPRS67E1
7.2	487	209	28	7	4 UltraCams	NeilPryde X9U 460	BNPRS72
7.8	503	216	14	7	4 UltraCams	NeilPryde X9U 490	BNPRS78
8.4	521	225	32	7	4 UltraCams	NeilPryde X9U 490	BNPRS84
9.0	534	235	44	7	4 UltraCams	NeilPryde X9U 490	BNPRS90
9.8	553	256	24	8	5 UltraCams	NeilPryde X9U 530	BNPRS98
10.7	574	268	44	8	5 UltraCams	NeilPryde X9U 530	BNPRS10
11.8	594	288	30+**	8	5 UltraCams	NeilPryde X9U 530	BNPRS11

** Compatible with NeilPryde Matrix.*
*** Must be used with a mast extender or alternatively use X9U580, base 14.*

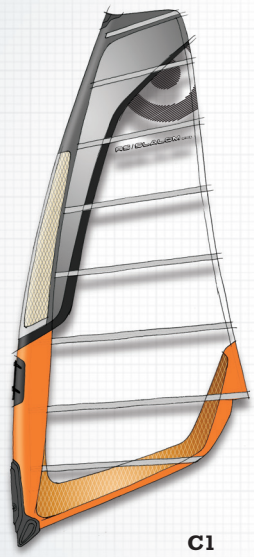
Antoine Albeau, Finian Maynard and Micah Buzianis

RS/SLALOM MK II

REAL WORLD RACING.

The RS:SLALOM$_{MKII}$ takes the design pedigree of NeilPryde's RS:Racing sail and builds it into a high performance yet easy to rig, sail and gybe slalom sail.

With three UltraCams and a design based around the X6 Mast, the RS:SLALOM$_{MKII}$ features a combination of enhanced bottom end power, excellent top end speed, stability and exceptional rotation at every gybe.



C1

X6 Performance Optimised

The RS:SLALOM has been designed and developed around the X6 mast to deliver optimal performance to a wide range of sailors.
The luff The luff curve is specifically developed to be less sensitive to the slightly slower reflex found in the X6 mast relative to the X9.
The X9 mast is compatible as a performance upgrade.

GPS

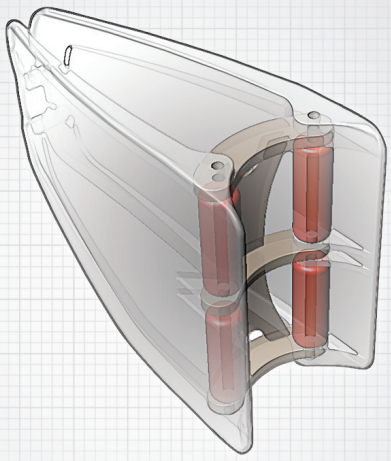
With a combination of good top-end speed, plenty of low-end power and easy rigging, the RS:SLALOM is ideally suited to the rapidly growing group of riders with an interest in GPS Speed-Sailing.

DESIGN OBJECTIVE:

- To design and build a sail that will fit between the RS:Racing and V8.
- Deliver performance as close as possible to purebred race sails but with easier on the water handling, rigging and de-rigging.
- The sail must rotate smoothly, accelerate well, have a soft, forgiving feel and a light 'sailing weight'.
- The sail must combine good windward ability with control and speed on a broad reach.
- The sail must be suited to Slalom 42.

ACHIEVED BY:

- Introduction of UltraCam Performance Technology dramatically improves rotation, stability and tuning range.
- Fewer cambers (compared to the RS:Racing) produces a softer feeling rig with smooth rotation, excellent handling during gybes and good acceleration.
- Dynamic Luff Sleeve Shaping. The width of the luff sleeve is widest where the profile is the deepest (below the boom). This enhances aerodynamic efficiency and helps maintain draft stability.
- By slightly increasing the width of the lower luff sleeve and lengthening the access zipper, attachment of the lower camber when rigging is simplified.



ULTRACAM PERFORMANCE TECHNOLOGY

Please refer to page 82 for more details.

SIZE	LUFF +/- 1cm	BOOM +/- 1cm	BASE	BATTENS	CAMS	IDEAL MAST*	CODE
5.0	406	172	6	7	3 UltraCams	NeilPryde X6 400	BNP8RSS50
5.4	420	177	20	7	3 UltraCams	NeilPryde X6 400	BNP8RSS54
5.8	435	185	6	7	3 UltraCams	NeilPryde X6 430	BNP8RSS58
6.2	450	192	20	7	3 UltraCams	NeilPryde X6 430	BNP8RSS62
6.7	467	201	8	7	3 UltraCams	NeilPryde X6 460	BNP8RSS67
7.2	484	208	24	7	3 UltraCams	NeilPryde X6 460	BNP8RSS72
7.8	500	214	10	7	3 UltraCams	NeilPryde X6 490	BNP8RSS78
8.4	518	222	28	7	3 UltraCams	NeilPryde X6 490	BNP8RSS84
9.2	530	235	40	7	3 UltraCams	NeilPryde X6 490	BNP8RSS92
10.0	537	252	48/18	7	3 UltraCams	NeilPryde X6 490/520	BNP8RSS10

** Compatible with NeilPryde Matrix.*

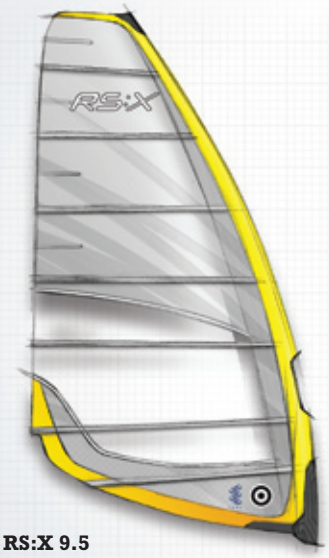
Micah Buzianis

ONE DESIGN RACING.

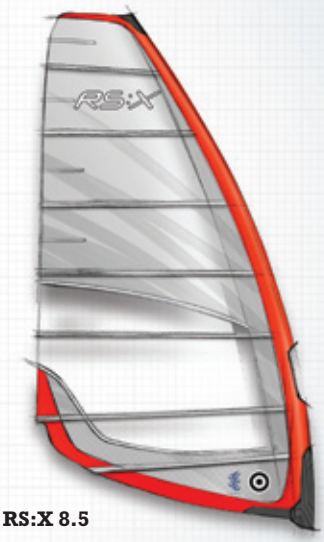
Leveraging the knowledge and experience gained through the development of the RS sails NeilPryde launched a successful bid to design, and supply, the One Design equipment for the 2008 Olympic games in Beijing.

Closely based on the proven RS Formula sails, the RS:X is a light weight sail that been modified to suit the demands of Olympic Windsurfing. Specifically designed for use with a longer boom and large board, the RS:X is able to deliver a high level of performance across a wind range from 3-30knots.

SAIL



RS:X 9.5



RS:X 8.5

SIZE	LUFF	BOOM	BASE	BATTENS	CAMS	IDEAL MAST*	CODE
8.5	519	233cm	30	7	2	RS:X 490	BNPRSX085
9.5	552	262cm	32	7	2	RS:X 520	BNPRSX095

BOARD

The **RS:X** is a true cross-over board in that it makes the best compromise between traditional raceboard sailing in sub-planing conditions, and exciting "Formula" racing in planing conditions starting from 8-10 knots.

PERFORMANCE CHARACTERISTICS:

Sub-Planing Conditions, Dagger-Board down (up to 8-10 knots)

- **In light-wind** sailing the **RS:X** board behaves in a similar fashion to a traditional raceboard. However, due to the shorter length in comparison to a traditional raceboard, the ease of manoeuvrability in tacking and gybing is significantly improved.
- **Startline tactics:** Many Olympic racers often sail the board backwards in order to keep a good position on the start line. The rounded tail on the back of the board, in addition to improving the flow of water, makes it easier to sail the board backwards!
- **Upwind:** In a little breeze with the Dagger-Board down, the rider can pump the board onto the rail for good tracking upwind. On the rail, the "Convex Tail" allows the board to be rolled with the gusts and swells. Side footstraps help to give the rider more stability and control.
- **Downwind:** With the Dagger-Board up for going downwind, the board provides good stability for pumping (if necessary).

Planing Conditions, Dagger-Board up (8-10 knots and above)

- **In planing conditions,** the board behaves largely like a Formula Windsurfing board, thus giving much faster performance and a more exciting ride.
- **In downwind conditions,** with the adjustable mast track set to the back, the board sails both with good speed and a very steep angle.

* Fin, Dagger-Board and Footstraps are included.

PRODUCT	LENGTH	MAX.WIDTH	WEIGHT/KG	VOLUME	CONSTRUCTION	FIN ATTACHMENT	CODE
BOARD	286cm	93cm	15.5	220 litres	Carbon Sandwich	Deep Tuttle	DNPRSXB
DAGGER-BOARD	77cm	-	-	-	Pre-preg Glass Sandwich	-	DRSPDB
FIN-LADIES	60cm	-	-	-	Pre-preg Carbon	-	DNPRSXF60
FIN-MEN	66cm	-	-	-	Pre-preg Carbon	-	DNPRSXF66

MAST

The RS:X mast is based closely on the masts used in NeilPryde's matrix mast range. The RS:X is a 90-100% carbon mast that has the same bend curves and tapers as the NeilPryde Progressive Flex bend curve. The RS:X is a high performance mast designed to work in all wind conditions, both planing and non-planing.

SIZE	LENGTH/CM	IMCS	WEIGHT/KG	CARBON CONTENT	FINISH	BAG	CODE
490	490	29	2.20	90%	Semi Gloss	Silver	RMRSX490
520	520	32	2.40	100%	Semi Gloss	Silver	RMRSX520

BOOM

The RS:X Carbon Boom has been developed to achieve the best light weight to stiffness ratio avaliable on the market today.

SIZE	ADJUST/CM	WEIGHT/KG	DIAMETER	MATERIAL	FRONT	FRONT ATTACH	BACK END	CODE
225-265	40	3.05	OverS & 30	Uni-Directional Pre-preg Carbon / Glass	Monocoque	Carbon Head	Monocoque Carbon	RBRSX225

RS:X ACCESSORIES

PRODUCT	CODE	PRODUCT	CODE
RS:X EXTENSION	RERSX48	**POWER U-BASE**	RPBRSX
MXT EXTENSION (for adjustable downhauls)	REMRSX34	**MXT POWER BASE**	RPMRSX
ADJUSTABLE DOWNHAUL KIT	RADRSX	**BALL BEARING ROLLER (2)**	REMRSXBB
BOARD BAG	GNPRSXBB	**9.5 RIG BAG**	GNPRSXRB9

FOR FULL PRODUCT DETAILS AND INFORMATION ON WHERE TO BUY AN RS:X VISIT www.neilpryde.com

Photo: Will Calver