



Robby Swift



Klaas Voget



Robby Swift & Gonzalo Costa Hoevel





Robby Swift



## FLATWATER

*"Any windsurfer will remember that first sensation of planing that got them hooked on our sport. Flatwater sailing is the extension of this addiction – it reflects windsurfing in its purest form. You go really fast, drag race with your friends and try to be the fastest guy on the water."*

**Jonathan Squires**

**NeilPryde Windsurfing Division Manager**



HELLCAT





# HELLCAT

*"The HellCat's great. I always like speed even if I sail for fun. I know that if I need to accelerate to overtake a friend, the HellCat can do it. It's got heaps of speed and having turns so well without the need for cambers – the perfect blasting weapon."*

Antoine Albeau / FRA192

Antoine Albeau





## IT'S ONE HOT RIDE.

Inspired by NeilPryde's world beating RS:Racing sail, the HELLCAT was introduced last year and has proven to be quite addictive. The HELLCAT's no-cam freerace design delivers a seductive combination of speed and acceleration combined in a lightweight, easy to rig package that planes

effortlessly, handles smoothly and is the most manoeuvrable sail in the 2009 NeilPryde flatwater collection. So, whether you're blasting with your friends or fine tuning your slalom gybes, the HELLCAT is *one hot ride*.



C2



C3

### DESIGN OBJECTIVES:

- To design a fast, powerful flatwater sail without cambers.
- The sail must be responsive, have good acceleration and a light sailing weight.
- The HELLCAT needs to be powerful. However, the extra power must not come at the expense of stability or control in the top end – especially in overpowered conditions.
- The HELLCAT needs to be easy to rig, and attain near 'peak-performance' when using X3 and X6 masts.

#### For 2009:

- The HELLCAT needs to be easier and need less physical effort to get to, and maintain, top speed.
- Reduce sailing weight – the sail needs to feel 'lighter' in the hands.
- Increase the HELLCAT's wind range.

### ACHIEVED BY:

- The HELLCAT incorporates a classic flatwater outline with a longer boom and increased foot area relative to a wave or crossover sail. This promotes speed and a 'locked in' sailing stance.
- The HELLCAT features a compact clew. This brings the surface area close to the rider while keeping relatively short boom and compact outline, which results in improved stability and low-end power.
- A relatively straight luff curve promotes responsiveness in light wind and low-end acceleration. This is because the sail is able to 'inflate' rapidly when exiting gybes, sailing into a gust or getting on to the plane.
- To assist in achieving power with control, the surface area in the head of the sail has been reduced. This redistribution of surface area 'down' the sail results in a compact aspect ratio sail.
- The HELLCAT features a 'hollow' leech, which helps promote mid-leech stability.
- The HELLCAT's luff pocket has been designed to easily accommodate wider diameter masts (X3 & X6).

#### For 2009:

- A further reduction in mid-upper luff curve results in lower downhaul. This reduces sail body tension, which together with a smaller head area, makes for a lighter sailing weight. This gives the sail a 'light' feel.
- Increased luff-curve in the lower section of the sail helps hold the draft stable, and prevents it from moving aft as the wind increases.

SIZE	LUFF +/- 1cm	BOOM +/- 1cm	BASE	BATTENS	CAMS	IDEAL MAST	CODE
5.2	406	179	6	6	none	NeilPryde Matrix 400	BNP9HC52
5.7	423	187	24	6	none	NeilPryde Matrix 400	BNP9HC57
6.2	441	193	12	6	none	NeilPryde Matrix 430	BNP9HC62
6.7	459	199	30	6	none	NeilPryde Matrix 430	BNP9HC67
7.2	476	205	16	6	none	NeilPryde Matrix 460	BNP9HC72
7.7	494	211	34/4	6	none	NeilPryde Matrix 460/490	BNP9HC77
8.2	511	217	22	6	none	NeilPryde Matrix 490	BNP9HC82







Gonzalo Costa Hoevel & Pieter Bijl



Micah Buzianis







Pieter Bijl & Micah Buzianis



Micah Buzianis

## V6

*"The light 5 batten layout makes the V6 a fun & easy free-ride sail. It's got great early planing, and this helps you to get up to top speed easily. But in the end it's all about being easy and forgiving. The narrow luff pocket makes water starting easy, and the inter-cams have perfect rotation while giving the performance edge in early planing and top end control. The V6 sails like a non cam sail – but with the advantages of having cambers."*

Pieter Bijl / NED0



## 100% PURE FREERIDE.

One of NeilPryde's longest continually produced sails, the V6 gives you the advantages of a cambered sail in a simple, user-friendly package. Incorporating design features that include two InterCams, a classic flatwater outline and powerful shaping result in a sail whose design emphasises

smooth rotation, early planing and ease of use. The result of this combination of features, the V6, is a sail that has come to represent the essence of flatwater windsurfing; simple to rig, quick onto the plane, easy to handle and fun to use. *It's 100% pure freeride.*



C2



C3

### DESIGN OBJECTIVES:

- The V6 sail is for use on flatwater. It must plane early, and have respectable top end speed and up-wind ability.
- The V6 must have a wide wind range; good stability and a wide range of "tunability" to suit different wind & water conditions.
- The V6 should have excellent "passive" planing characteristics. This is the sails' ability to 'pull' the board onto the plane without the need for the rider to actively pump.
- The V6 should be more manoeuvrable and lighter than the V8, and plane more readily than the HellCat. It is a sail that allows the rider to focus on blasting – and having fun.
- The sail must be quick and efficient to rig, easy to gybe and simple to waterstart.

#### For 2009:

- Reduce weight and improve softness, especially in smaller and medium sizes.
- Focus the design of the 2009 V6 on improved early planing and a lightweight feel.
- Where possible, simplify the V6 to make it more user-friendly for less skilled riders.

### ACHIEVED BY:

- The V6 has a purely flatwater outline including a medium/low foot curve and compact boom length. This balances manoeuvrability and performance.
- A combination of 5 or 6 battens, and 2 InterCams, gives the V6 a relatively soft, cambered profile. During transitions, the two InterCams give the sail a RAF 'feel', while also creating profile, support and stability for early planing.
- With a luff sleeve width that is virtually identical to HellCat (*only 5mm wider*), the V6 is stable and easy to rig.
- By reducing surface area in the head, it is possible to use a slightly tighter leech. This improves low-end power and upwind performance.
- A pronounced compact clew, smaller head and 'hollow' leech improve stability, low-end power and prevent the mid-leech from loading up and "blowing out".

#### For 2009:

- A progressive batten configuration, whereby smaller and medium sizes of V6 (*from 7.0 and down*) feature 5 battens, while larger sizes feature 6 battens, results in a light weight, soft feeling in the small sizes while the larger sizes benefit from the additional batten support needed to maximize performance across a wide wind range.
- A further reduction in overall mid-upper luff curve and results in lower downhaul that reduces sail body tension, which together with reduced head area, makes for the lighter sailing weight. This gives the sail a 'light' feel.

SIZE	LUFF +/- 1cm	BOOM +/- 1cm	BASE	BATTENS	CAMS	IDEAL MAST	CODE
5.5	424	173	24	5	2 InterCams	NeilPryde Matrix 400	BNP9V655
6.0	438	182	8	5	2 InterCams	NeilPryde Matrix 430	BNP9V660
6.5	453	192	24	5	2 InterCams	NeilPryde Matrix 430	BNP9V665
7.0	466	201	6	5	2 InterCams	NeilPryde Matrix 460	BNP9V670
7.5	479	209	20	6	2 InterCams	NeilPryde Matrix 460	BNP9V675
8.0	495	218	6	6	2 InterCams	NeilPryde Matrix 490	BNP9V680
8.5	507	226	18	6	2 InterCams	NeilPryde Matrix 490	BNP9V685









Antoine Albeau







**V8**

*"The new V8 for me is the perfect combination between a race sail and an easy cruising sail. I can rig this sail in a heartbeat and be on the water racing with my buddies or doing a coast run with minimal effort. The low end is truly amazing on the new V8, I can rig a smaller sail than normal and still go out and plane early and be at top speed in an instant."*

**Micah Buzianis / USA34**





## 100% PURE FREERACE.

Since its introduction to the NeilPryde Collection in 1991, the V8 has set the benchmark for freerace sails. It's fast, powerful and, with a research and development programme directly linked to that of the NeilPryde RS:Racing, the V8 features all of the most recent innovations in flatwater windsurfing.

With 2 UltraCams, a midsize luff pocket, and softer rotation than a race sail, the V8 represents the perfect balance between high end performance, solid low end power and easy handling. *It's 100% pure freerace.*



C2



C3

### DESIGN OBJECTIVES:

- To take the technology and experience gained in developing the NeilPryde Racing program and package it into a freerace sail that is fast, powerful and easy to use.
- The V8 must have outstanding low end performance and exceptional rotation - without compromising top end speed and control.
- Make the V8 user friendly and easy to rig - without compromising performance.
- The V8 must have a wide wind range - while maintaining stability and the "tunability" of the sail to suit different wind & water conditions.

#### For 2009:

- Improve the top end performance of the V8 while maintaining excellent bottom end characteristics.
- Reduce sailing weight - the sail needs to feel 'lighter' in the hands.
- Increase the V8's wind range, especially in the larger, more light-air oriented sizes.

### ACHIEVED BY:

- The outline and shaping are closely related to the RS:Racing sail. This makes the V8 the fastest freeride sail in the collection.
- After the V8 Helium, the V8 has the deepest profile of all the flatwater sails, and an aspect ratio close to that of the V6. However, a larger foot area than the V6 ensures that the V8 planes effortlessly, while UltraCam Technology confirms excellent rotation and profile stability.
- A Profile Relative Luff Sleeve Width, which involves using a wider sleeve section in the lower part of the sail (*where the profile is deepest*), gives good power, improved stability and easy rigging. In the upper section of the luff pocket, a narrow section is used giving light weight, easy water starting and good twist.

#### For 2009:

- A finer leading-edge entry encourages less resistance and better top end speed.
- A further reduction in mid-upper luff curve results in less downhaul tension. This reduces sail body tension, which together with reduced head area makes for a lighter sailing weight. This gives the sail a 'light' feel.
- By using a progressive batten configuration, whereby smaller sizes of the V8 (*from 8.0 and down*) feature 6 battens, while larger sizes feature 7 battens, makes for a light weight, soft feeling in the small sizes while the larger sizes benefit from the additional batten support needed to maximize performance across a wide wind range.
- With the luff curve and shaping strongly influenced by the RS:Slalom, the V8 has the perfect balance between low end acceleration and high end speed and control.

SIZE	LUFF +/- 1cm	BOOM +/- 1cm	BASE	BATTENS	CAMS	IDEAL MAST	CODE
6.5	454	192	24	6	2 UltraCams	NeilPryde Matrix 430/460	BNP9V865
7.0	468	201	8	6	2 UltraCams	NeilPryde Matrix 460	BNP9V870
7.5	483	210	24	6	2 UltraCams	NeilPryde Matrix 460	BNP9V875
8.0	498	218	8	6	2 UltraCams	NeilPryde Matrix 490	BNP9V880
8.5	509	227	18	7	2 UltraCams	NeilPryde Matrix 490	BNP9V885
9.0	521	235	32	7	2 UltraCams	NeilPryde Matrix 490	BNP9V890
10.0	546	249	28/18	7	2 UltraCams	NeilPryde Matrix 520/530	BNP9V810









Pieter Bijl & Robby Swift

V8 HELIUM



Robby Swift & Pieter Bijl





Gonzalo Costa Hoevel

## V8 HELIUM

*"I was really surprised with how quickly I could get going on the V8 Helium. I was only on an 8.0m sail and I don't think that we had more than about 8 or 9 knots out there off the Lahaina waterfront. Pieter and I were pretty reluctant even go out and try to take photos that day because the wind was so light and we ended up having a great blast around together in next to no wind!"*

**Robby Swift / K89**



Robby Swift



# V8 HELIUM



## 100% PURE PLANING.

Not everyone lives within easy access of ideal windsurfing conditions. And nor do all windsurfers want to use the current generation of sails that have been designed for use in light to medium airs. Recognising the need for a smaller, significantly more powerful sail, the NeilPryde Design Centre has created the V8 HELIUM.

The V8 HELIUM combines an efficient sail profile and full body shape into a lightweight, easy to rig, tune and use set-up that uses proportionately less surface area to generate considerable low end power. The result is a sail that delivers all the power you need to maximise your enjoyment – and experience the thrill of planing in even the lightest winds.



## DESIGN OBJECTIVES:

- Create a light weight, powerful sail. The sail must plane as early as possible.
- The design of the new sail should be based on the logic that the sailor will only need one V8 HELIUM, and that the size of sail they will require will depend on the riders weight.
- As such, each sail size should be designed to suit a certain user weight range.
- Each size of sail must have the best possible early planing characteristics for any sail of comparable size that is currently available.
- The sail must be simple to use. It needs to be easy to rig and trim, and be as insensitive as possible to “less than ideal” trim settings.



## CHOOSING YOUR SAIL

*“The V8 Helium comes in three sizes, but contrary to regular sails these are not designed to cover different wind conditions but are in fact all designed to be early planing, extreme light-wind specialised sails and the design of each size is optimised to deliver this performance to a specific body weight. For this reason a light weight person should choose the 6.5, a medium weight is suited to the 7.5 and heavier riders should choose the 8.5 for uncompromised light wind performance.”*

**Robert Stroj**  
NeilPryde Sail Designer

Under 65kg	Over 85kg
6.5m	7.5m
	8.5m

*This is a suggestion only and there may be some variation between individuals.*

## ACHIEVED BY:

- By using a minimal amount of reinforcement, and a relatively high proportion of monofilm compared to other 2009 NeilPryde flatwater sails, the V8 HELIUM's static weight is kept as low as possible.
- The profile of the V8 HELIUM is quite full; it has been optimised to generate as much power as possible.
- Minimal use of twist in the head gives the V8 HELIUM a soft, “pumpable” feel while a slightly tighter leech helps improve absolute bottom end performance.
- The V8 HELIUM has fewer battens than any other sail in the flatwater range and utilises tube rod battens to maintain stability in breezier conditions.
- The V8 HELIUM uses UltraCam Performance Technology for easy rotation and a high level of stability. *(Please refer to page 82 for more details.)*

SIZE	LUFF +/-	BOOM +/- 1cm	BASE	BATTENS	CAMS	IDEAL MAST*	CODE
6.5	459	195	0/30	5	2 UltraCams	NeilPryde Matrix 460/430	BNP9V8H65
7.5	481	219	22	5	2 UltraCams	NeilPryde Matrix 460	BNP9V8H75
8.5	504	238	44/14	5	2 UltraCams	NeilPryde Matrix 460/490	BNP9V8H85

*\* As this is a light wind sail it will perform best with light rig parts. The ideal mast for all sizes of V8 Helium is a NeilPryde Matrix 460. However, the 6.5m is compatible with a 430cm and the 8.5m is compatible with a 490cm mast if required.*



