

Nova Pheron

REPORT BY STEVE UZOUCHUKU



Nova needs almost no introduction. Appearing on the scene in the very late 1980s with the CXC, they went on to produce gliders like the Phantom, Xenon and Xyon - all favourites amongst pilots in their time. Nova's current range also includes the Carbon (DHV1-2) and the Argon (DHV2-3 Serial Class racer). From a base in Innsbruck close to the Austrian Alps, gliders are designed and tested.

The top-end DHV1 Nova Pheron was released earlier this year. The DHV1 category has not had much attention in the UK but this is changing. Traditionally, pilots leaving schools have gone on to DHV1-2 gliders, but as the top end 1-2s are no longer suitable for first-timers, the breadth of pilot experience covered by low end 1-2s and 1s has expanded. The DHV1 category now covers two levels: gliders for use within the school, which need to be extremely simple and robust to withstand the handling of complete nonks, and top-end machines which need to satisfy the performance demands of the debutante pilot without having any vices which will lead to problems during the first critical hours of flying outside the school.

The Nova Pheron fits into the second category. Designer Hannes Papesh and the Nova test team have set themselves the goal of producing a glider at the highest level of safety but with the potential to keep the owner satisfied at least for their first two seasons and maybe much longer.

The Pheron is made from a number of different fabrics carefully chosen for the requirements of different areas of the glider. The top surface is Gelvenor, famous for its durability and resistance to porosity. The ribs and undersurface are made of different grades of Porcher/NCV Skytex. Lines are Liros: Technora at the bottom (maillon ends) and Dyneema at the top. The glider supplied was made in one colour top and bottom with just a flash near one tip as seen on other gliders in the Nova range. The risers are black webbing, woven by Güth and Wolf in Germany, marking a departure from the familiar yellow and also now a four-riser system.

The glider has a very uncomplicated one-line-per-cell layout but the lines soon merge to leave only 3 A-lines which go to split A-risers for easier big ears. A continuous compression strap helps the wing retain its shape across the D-line attachment points, similar to that first seen on the Vertex in 1997, but has no diagonal or V-ribs. When laid out for launch the high aspect ratio of the wing catches the eye - a DHV1 with an AR of over 5:1!

The glider supplied was the large size, certified by the DHV at 95 - 125kg all-up. Test flying was done at 107kg, just below the middle of the range. The manual is comprehensive and is in three languages. Accessories supplied include a two-stage speed bar with cord and brummel hooks, a windsock and a small belt pouch. The glider bag is noteworthy in the way the glider and harness are stored. Opening the bag reveals a diagram of how the bag accommodates the harness and glider itself. Packing according to this layout results in no problem zipping up the bag, with space to spare which can then be taken up by the compression straps. Something for the new pilot to appreciate whilst the more experienced struggle to stuff gliders into bags and strain at zips! There is a separate compartment for other equipment and a further large pocket atop the bag for a helmet. The bag has a much higher centre of gravity than other bags which means putting it on is different, but once it's on and the straps correctly adjusted the whole package makes for very easy carrying - particularly appreciated on long walk-ups.

Alpine launching in flat calm gives a good idea of what this wing is about. Even with no wind the glider comes straight up and sits overhead. Reverse launching is the same: pull it up and it sits overhead with little or no pilot intervention needed. This is what you would expect from a DHV1, though. Ground handling the glider is too easy - new pilots will get spoilt! When inflating in strong winds the Pheron needs to be kept on the ground

specification

Model	XS	S	M	L
No of cells	33+6	33+6	33+6	33+6
Span (projected, m)	8.81	9.22	9.62	9.96
Area (flat, m ²)	23.89	26.12	28.44	31.47
Aspect ratio (flat)	5.04:1	5.04:1	5.04:1	5.04:1
Max. chord (m)	2.73	2.85	2.98	3.13
Line diameter (mm)	1.1/1.3/2	1.1/1.3/2	1.1/1.3/2	1.1/1.3/2
All-up weight range (kg)	60 - 85	75 - 95	85 - 105	95 - 125
DHV certification	1	1	1	1
AFNOR certification		Standard	Standard	Standard
Guarantee	3 years/300 hours materials & workmanship + Nova Protect*			
Price	£1,649	£1,649	£1,649	£1,649

*Nova Protect is free and covers any accidental damage sustained in the first year of ownership.



UK importer: Active Edge, Albert Terrace, 50 King Edwards Drive, Harrogate, North Yorkshire, tel: 01423 545000, e-mail: dean@activeedge.co.uk, website: www.activeedge.co.uk.

positively until the chosen time for pull-up as it wants to inflate all the time. The C or D risers can be used to achieve this. Asymmetric inflations are easy, requiring a very basic level of skill.

In moderate winds just leaning back firmly in the harness inflates the glider, and it immediately rises overhead in an almost pre-programmed manner. It is difficult to get the inflation process wrong. The glider can be kept overhead even through self-induced tucks of up to 40%.

In the air the usual questions arise. How will it turn? What's the glide and sink rate like? Well the bus-like DHV1 of yore is dead. Both glide and sink rate are at the top end of this class, and climbing ability and turn behaviour are exemplary. The performance figures for the Pheron are more or less the same as those of the X-Ray, Nova's DHV2 wing from four years ago.

The turning ability of the Pheron will allow the new pilot to learn to thermal with ease, and will still entertain and provide enjoyment for the more experienced pilot. The turn behaviour is very good without any sort of weight-shift input, and the glider banks up nicely into the turn. Quite a lot of brake travel needs to be used to get the glider turning, like all DHV1s, but it responds smoothly and smartly without showing any sign of nervousness or over-responsiveness to the controls. Control pressure is firm with good



ALL PHOTOS: NOVA

feedback without being heavy. The main difference between this glider and one certified to a higher category is simply the lower position of both hands in flight and the larger separation between the levels at which the hands sit when thermalling. Feedback comes through to the harness telling you which side to turn to, but it never 'bumps you about' and is damped enough to prevent nerves. Pitch behaviour is impeccable, again as you'd expect from a DHV1; even when entering or exiting thermals pitch input is not necessary to keep the glider where it should be.

Having enjoyed the first thermals of the day, a return to the ridge from some way behind it is then on the agenda. Another Achilles heel for the older DHV1 or 1-2, and another dragon slain by the Pheron. Hands-off glide is very good, as is trim speed, and there is a whopping 13cm. of speed bar travel. Using this full travel allowed the glider to return to the ridge at a rate and height very close to that expected from the hot 1-2s about. The new pilot won't tuck everything in like more experienced pilots, but when he or she learns this trick the Pheron will benefit from it. The feedback on the speed bar was very reassuring even at full tilt. Big ears are easily pulled in using the split A-risers, and pop out smartly as soon as they are released. Deliberately pulled asymmetrics are also out fast and the only one that happened by itself was very short and affected only the tip.

Landing the Pheron is simplicity itself. A good flare needs to be made because of the long brake travel, again a feature of all DHV1 gliders. Top landing in strong winds will require some technique as, for the same reason, the glider is difficult to kill using only the brakes. The manual suggests that D-risers be used to deflate the glider in this situation.

It is good news for new pilots that gliders like the Pheron can be built with the highest level of passive safety, yet with excellent performance and handling - to the point where thermalling it would give pleasure to the more experienced pilot. The ability to climb and the potential for cruising around once you've got used to the speed bar means this is a great wing for most pilots. The fact it does all this within DHV 1 certification is nothing short of amazing!

importer's comment

Available from all good dealers with Nova's unique one-year accidental damage, three-year/ 300 hours material and manufacture guarantee. Special thanks to Steve for what we believe is an accurate and honest review!

DEAN CROSBY, ACTIVE EDGE