



RIDE THE WILD, WILD

Cross-over is a serious mode of development for adventure sports, and speed paragliding (more of titles later) comes from various backgrounds. In snowsports, snowkiting has followed the traction kite revolution. Buggies, landboards, skis and snowboards have all been pulled along by kites and are now doing the same big airs that can be seen off beaches with kitesurfing. And these sports borrow tricks from skateboarding with ramps and rails. No doubt someone somewhere has dropped into a half-pipe under kite traction!

The next stage is really a return to one of the first developments in paragliding, when much of the first flying was done from ski launching. Because the wings were, by modern standards, of fairly low performance (some being ram-air jump wings), there often was a degree of skiing with the wing above you.

Now this has returned as ski-flying or speed paragliding with firms like Gin offering the 12 and 14m Nano. Nova has a 12m proto and Nervures the 12,14 and 16m Swoop. Ozone, never one to miss a trend, has entered with the 10, 12 and 14m Bullet range. The glide angle on these is reported at 3.5:1.

This gives a pilot choice for speed and wind strength, as in traction kiting where you do not stop operating because the wind is too strong, you just change your size of kite. So a typical buggier like myself may well have a quiver of kites from 1.4 to 10m². The other influence on this is from skydiving, where for years wings have been getting smaller to ensure a smaller pack volume that aids movement in freefall. These 160s, 190s and even 110s (square feet!) equate to paragliding areas of 15, 17 and an impressive 10m²! And just in case anyone unsure what sizes paragliders come in, a typical DHV1-2 like the five-size Ozone Rush will have projected areas of 27.6 (XL), 25.1 (L), 23 (M), 21.2 (S) and 19.3m² (XS). So the sizes of these new small wings are beyond and below XS!

The ski-flying branch of this revolution has already achieved some eye catching exploits with descents. This means a pilot with a small wing above touching the snow of the Eiger and the north face of the Aiguille du Midi. As with all new disciplines there is a struggle to come up with a catchy title: ski flying, speed paragliding, mini-vol, les petites and so on. Which one will stick is anyone's guess. But what started as a means of some assisted skiing with a few hops has led to thinking about reducing the size

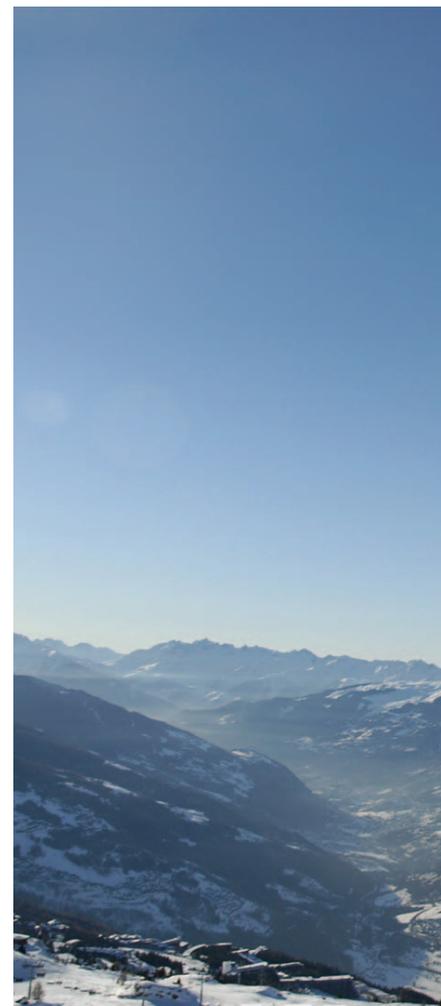
of wings to fly in different conditions, usually higher winds. Spin offs, again reflecting past times, include "descent" wings with minimal volume and weight for mountain exploration, like the new Ozone Ultra Lite at 21m². Sometimes a wing is for flying... and sometimes it can return to the original primitive purpose of coming down safely.

There will be an expansion of ski flying during the winter season with all the usual competitions, stunts and disasters. 2007 should see a flurry of new small wings from manufacturers keen to widen participation. For the UK, with its blessing of laminar flow and well-known ridge sites, this would seem a real opportunity.

I have been trying the easiest and most accessible way of doing this by flying small paragliders rated for all-up weights between 60 and 80kg at an all-up weight of between 95 and 110kg. This changes the wing loading from the recommended 2 - 3 kg/m² to 4 - 5kg/m², giving a sink rate well over 2m/s and glide angle of just over 4:1. The obvious result of this is that you go faster but you also go down faster (just go through your basic lift-weight-drag picture).

What you do have to be certain of is that you can

ALL GIN NANO PHOTOS: JEROME MAUPOINT ::: GIN GLIDERS
OZONE BULLET PHOTOS: OZONE





D WIND

land these highly-loaded wings in near to nil wind, as in a bottom landing. This has been a literal leap of faith, as you need a pretty steep hill to get off. I have often found myself remembering the early days of slope sliding on foot launched parachutes from hills in the 1970s. However with a fast hands-up approach and a higher flare the landings are fine. Again, remember the sky divers swooping in on hook turns on extremely small wings and converting their speeds of 80km/h to soft landings - when done right!

For flying in dynamic ridge conditions the lift band also appears to change and you do not have the ability to play with the sink rate on large brake travel. You also have to keep well ahead of the glider and plan your turns well in advance. It's more motorway driving compared to country land stuff. Again the basic physics will tell you what you do not want to find out: stalls start earlier and, though brake pressures are higher, it is easier to induce spinning. But, judged properly, you can get in some extra flying days, particularly on those marginal days.

Of course, what you get from the higher speed is the ability to launch in higher wind speeds, a

Bill Morris witnesses the start of speed paragliding

requirement if you want to soar. You can ground handle because the wing area is smaller. Big ears and speed bar all reflect the high loading: very hard to put on and keep on. It is probable that the typical small or extra-small paraglider is still too big at 19m², and something between 12 and 17m² will be the range for the 90 - 100kg pilot.

What are the concerns about this new branch of sport as it develops? The first, as ever with any innovation, is that the first participants seem to have no other references as they try new ideas. High ground speeds, especially downwind, can lead to hard landings. Higher wing loadings mean less collapses if any, but also mean the material is loaded more. Control pressures are higher and brake travel is significantly different. This is a very different way of flying.

The main factor has to be flying conditions. It might seem a really good thing to be able to fly in higher wind speeds - no more blown-out days. This is not often the case; as the basic CP exam question shows, wind range is just as much a factor. So you can take off at 20mph, but often I have found that at an average 20mph the wind can also gust to beyond 30mph. Put this wind speed behind any hill and the

rotor is very significant. Leaving your flying mind behind is not a good way to learn!

And finally, paragliders that fly when the wind is stronger! Every hang glider pilot must be groaning at the thought - not even the strong days to themselves! There is a future to this new development, but it should raise concerns about the challenges to conventional wisdoms. And are there any more crossover possibilities for the future? Perhaps someone on a paraglider pulling a skier? Jumping a traction kite off hills with long hang times. In fact it has been done - you'll have to get madder!

The BHPA FSC are keeping a keen eye on this development and will be using the Registered Development protocol in the Operations Manual to develop Operating Procedures. So that is speed riding - fast descents on skis with spectacular hops, flights combined with tricks, descent flying. Plus the challenge of wing area reduction or higher loadings to get more speed to fly in higher winds in stable conditions. It is a new challenge and another example of how crossover development never ends - or sometimes just goes round again.



BHPA Shop for pilots

- Information for beginner and advanced pilots
- Flying magazines, books and literature
- Hang gliding and paragliding videos and DVDs
- BHPA sweatshirts, T-shirts and branded clothing

Tel: **0116 261 1322**

Web: **www.bhpa.co.uk/shop**

Email: **carolyn-childs@bhpa.co.uk**

BHPA Pilot Handbook

£14.99 from BHPA schools, dealerships and the BHPA shop



Essential reading
whatever the season!