

September - October 2013

International Free Flying Magazine

Cross Country

149



HAT-TRICK. CHRIGEL AND THOMAS DO IT AGAIN

Fly like Maurer: Exclusive in-depth interview with the X-Alps champion

By Hugh Miller



THAT SWING THING

The Swing Mistral 7 is a top-end EN B for ambitious pilots who want to learn more. Pat Dower took it on

Swing's latest in the Mistral series came to me in time for the best XC season the UK has seen for many years. I can't boast quite the accumulation of XC kilometres that Hugh Miller managed whilst reviewing the Delta 2 a couple of issues ago, but the timing of my flying coincided with a great run of conditions for getting out to play. However, when I unwrapped the Mistral 7 in late April a big flight had so far evaded me. I was certainly hoping to put that right.

Who is the glider for?

In Swing's words: "The wing is aimed at the ambitious XC pilot of the standard class, but also talented pilots from the low-end EN B range." As is often the case, the certification report does reflect the true level of demand, but it has to be said that the Mistral 7 performs very well in the standard flight tests. After flying the glider, I agree with Swing's description. It is a sporty glider, which involves the pilot and provides great performance. However, I think there are many other wings that are more suited to talented newcomers or conservative EN B pilots such as Swing's own Arcus series.

▲ ABOVE
The Mistral 7 at the Stubai Cup earlier this year.
Photo: David Seren.

Design and construction

The first thing that struck me was the luxury feel to the whole package. It starts with the bag, which I found to be as good as any I have ever tried. Similar in shape to the Advance Comfort Pack 2 and Easypack it is really comfortable to carry, folds up fairly small, has lots of extra pockets and is beautifully made. It is certainly not one of those flimsy offerings which some manufacturers choose to supply! I was provided with the large size, which was perfect for all my gear. If, however you have bulky gear you might be better off specifying the XL bag when you order.

The brake handles are thickly padded and really comfortable, if you like holding them directly, as opposed to putting your hand through and holding the line. With winter gloves the large size supplied with the glider were only just big enough, so again as with the bag, many pilots would be better off specifying the XL handles when they order. The risers are the skinny variety, which aren't quite as easy to manage as chunky ones. During my time with the glider I had an hour groundhandling one of the latest mid EN B gliders. It had the more traditional chunky risers and they were certainly

a lot easier. There is definitely a fashion on the high-end EN B to go for performance-enhancing features such as lots of unsheathed lines and this is the approach taken by Swing. Personally, all my recent gliders have been like this and I am quite happy to take the extra care needed. I am not sure about the typical EN B pilot though. You pays your money and takes your choice!

Aspect ratio

Aspect ratio is where the surprise came. For a while, Swing have been at the cutting edge in terms of using high AR on many of their models and indeed the Mistral 6 had a not inconsiderable 5.9, which is more on a par with EN Cs. The Mistral 7 reverses the trend in ever-increasing aspect ratio and is back down to a more class-typical 5.5.

It is no exact science, but if you can get the glide ratio and sink rate you want with a lower AR then you probably have a wing with more compact handling, one that performs well at speed and has fewer issues in extreme situations. Other manufacturers such as Nova have been very successful with lowish AR wings, so all in all it is easy to see why Swing have gone down this route.

In all the other areas the Mistral 7 is easy to live with. Plastic reinforcement is restricted to short thick rods only in the leading edge, and using the concertina bag supplied with the glider it is easy to pack. The robust materials (as opposed to lightweight) should stand up to normal wear and tear very well.

Launching

Some gliders take a little acclimatisation and the Mistral 7 was like that for me. Starting with the inflation I didn't find it quite as easy as I expected, but this was using both the A-risers. Changing to using just the centre A-risers, the difference was immediate and the glider was really steady, predictable and easy to control, regardless of the wind. In the strongest winds it needed a jab of brake to stop it overhead. It just shows the importance of experimenting to find the best solution. Cobra launches were fun and reliable. In the big scheme it is not as super forgiving as some low-end Bs, but it is fine for the target market.

In flight

Another part of adjusting to the Mistral 7 related to its turn characteristics. At first I found that the glider was not especially agile. Compared to a few others in the class, it didn't have the same fun feeling. But often agility can come at a price. In the rough stuff the extra responsiveness can translate to over-controlling, a higher workload and a more nervous pilot.

On the Mistral 7, the brakes are definitely on the firm side and in roll it does not bank up especially willingly, so this contributes to the feeling of it not being a naturally agile wing. In still air it feels agile but this isn't transferred to moving air with strong cores.

Once I had thermalled the Mistral 7 for a while, it became clear that the turn radius is impressively small. In fact I was completing 360-degree turns in

▼ CLOSE-UP

Plastic reinforcement is restricted to short thick rods in the leading edge, making for easy packing

Pulley-to-pulley on the speed system



MANUFACTURER'S SPECIFICATION

Swing say: "After very intensive development and numerous comparison flights, Swing is proud to launch one of the best performing and most balanced wings of this class to the market"

Sizes: XS (21.4m²), S (23.2), M (25), L (27), XL (29)

Weight range: 65-85, 75-95, 85-105, 95-116, 105-125kg

Cells: 52

Weight (M): 5.6kg

Flat aspect ratio: 5.5

Certification: EN & LTF B

www.swing.de

several seconds less than I would do on many other gliders, yet without excessive banking. How Swing have managed this I am not really sure, but the modest aspect ratio will be part of the picture.

It certainly climbs very well, and there is something cruelly satisfying in regularly out-climbing pilots on higher-rated gliders on an EN B. The calm response to the brakes is very much part of the character of the glider and will be just what some EN B pilots want.

Feedback and pitch

There is more to the feeling than that though and it took me a while to pin down how to characterise the Mistral 7's feeling in moving air. You get quite a lot of feedback from the glider in thermals and on the glide. The Mistral 7 will roll noticeably and will also pitch back (and then forward again) when you are flying in turbulence. It stays as a block, as you would expect with the modest AR.

I got the sensation of being bounced around more than I would have on many other EN B gliders. The pitch and roll movements were not so fast as to be excessive for a high EN B and I would say that the tuned-in pilot has plenty of time to make the right inputs.

On a big XC, in big air, the Mistral 7 is a little more tiring than some others. Some pilots would prefer a glider to damp out more of what the air is doing, whilst others would use the feedback to their advantage. The buyer must decide what is actually the best for their overall comfort, pleasure and performance. Despite the amount of movement there seemed to be no greater tendency to collapse, which was very reassuring.

So in summary the glider is not the calmest in rough air, but provided you are not disconcerted by the movement you can trust the glider and use the undoubted performance. As a stepping-stone to help you learn about and make the eventual move onto higher-level gliders the Mistral 7 is excellent.

Climbing

No problems here! The nice small turning circle is the glider's biggest strength. Flying with groups of other EN B and EN C gliders there were no circumstances when the glider would not climb with the best. Turn technique is nothing unusual. It is best turned with little or no outside brake and a good dose of weightshift. In strong cores the glider doesn't bite in as fast and effortlessly as some, but once in the core it is very efficient. The key to getting a better turn into thermals is to be flying the glider fast. It is not as planted in thermals as some, so the pilot needs to be

prepared to make adjustments and steady the movements to get the smoothest climb.

On glide

Performing in the leading group at the top of the EN B class, the Mistral 7 has a fast trim speed – I really noticed the speed pick up when I put my hands up to go from thermalling or min-sink mode to gliding.

In all my flying I prefer to glide on some speed bar, or at least with my foot ready on the speed bar, and the Mistral 7 lends itself to this style. I could push the bar whenever the glider pitched back to keep it overhead and maintain efficiency.

Another thing I liked doing on the Mistral 7 when gliding at trim was letting it find its own line. It is sensitive enough to drag onto the lifty line.

Using the speedbar

The speedbar is very much part of the performance package – and it is a beautifully tuned system. Light, smooth and with a bead for setting the point where you go from 3:1 to 2:1 on the pulley system. The glide on bar was great and there is no reason not to use full bar as part of every flight. The speed increase is impressive – I got 14km/h additional speed.

The rear risers are quite lightly loaded and pushing the accelerator made them lighter still. So basically rear-riser control is not effective; the pilot has little authority. On EN B gliders, rear riser control is not especially relevant so it is not a major issue. Rather, active flying on the bar and definitely not the brakes is the way to go on the Mistral 7. It's a technique which takes a while to really master on any glider, but is well worth the practice, both in terms of preventing collapses and in terms of maintaining efficiency in active air.

A pilot who is developing the skills of really using the bar effectively can do it well on this glider. Another reason why it would make an excellent stepping stone.

Manoeuvres

Such were the conditions during my time with the glider it was either not flyable or we were thermalling up and away. The sum total of departures from normal flight that I managed in my 20 hours on the Mistral 7 was big ears!

With only two A-lines per side, one-line big ears are massive. I pushed 50% speedbar, then pulled the ears in one at a time, before pushing the bar all the way. As you would expect the sink rate was high and the forward speed was good. It would probably be the only fast descent method you need. The material flaps around a little, but the glider tracks

Pluses

- Build quality
- Small turning circle and efficient thermalling
- Good glide throughout the speed range

Minuses

- Bouncy ride in rough air

The reviewer

Pat has been flying for 20 years. He clocked up around 20 hours on the Small (75-95kg), flying at about 89kg with an Impress 3 harness.

www.patdower.co.uk



straight and true. Release the outer A-lines and the ears progressively work themselves out again.

Conclusion

Be in no doubt that the modern EN B wing has terrific XC capability and the Mistral 7 is right up there. In fact it carried me to my first 100km of the year; a flight which needed patience, searching upwind and crosswind, some long glides at speed and low saves.

The feeling and level of demand puts the glider at the top-end of its class and the pilot needs to be happy with the thin risers and many unsheathed lines. Plenty of experience on a lower-grade wing is needed. The build quality is high and the overall package is well thought through.

If you want a super calm ride or freestyle agility there are gliders that may suit you better. But as a refined package with top EN B performance it is spot on. **XC**

▲ TOP END

The Mistral 7 is a high-end EN B, with plenty of features of more demanding wings.

Photo: Didi Siglbauer

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