FLIGHT TEST

Apco Presta

BILL MORRIS REPORTS

Apco's DHV1-2 Presta is designed to fall between the Tetra and the Keara. Apco have been building paragliders since 1982 - almost from the very beginning of the sport. They have built up a reputation for serious design, a very broad range, good value and reliable materials. In fact at times their range of gliders is so extensive you need quite a good memory to keep up - even though it is impressive how many names they can find that end in 'a'!



construction

The Presta looks fairly standard in design, but I noticed two particularly interesting features. The first is the line thicknesses, with some beefy 2.2mm on the central low lines and the top A and B lines in unsheathed 0.8mm Dyneema. With more than 360 metres of line any saving in parasitic drag is desirable, and with load distribution widest close to the canopy, and some theories about how the lines disturb the air flow on the bottom surface, this feature looks as if it is worthwhile. The second feature is another manifestation of this year's selling point: leading edge design. The Presta uses Apco's Active Double Valve System (ADVS). Behind the opening of some of the cells there is fabric valve that seals against the leading edge but will open under internal air pressure on launch.

This is an intelligent attempt to give the advantages of an open cell without the drawbacks in flight. This feature is quite simple but it does work, and when flying it is possible to see how the leading edge valves remain closed (presumably in a collapse they open up again). The only care that has to be taken is when folding the glider up: it is worthwhile laying the valved cells down on their sides to avoid bunching up the valve material. It is hard to quantify the effect of this feature except to confirm that it certainly is not detrimental.

Other Presta characteristics are pretty much the familiar, tried-and-tested aspects of Apco design. There is the Gelvenor silicon-treated fabric which is the backbone of their 250 hours/ three year guarantee, which Apco have been using since 1992. The riser sets are unmistakably Apco, with identifier markings and broad risers. The A-line ears system is, unusually, on a floating set-up that allows a fuller pull. Many pilots regards the Apco riser set as both idiot-proof and coded for dummies. I find it simple in design, very handy at those tangled times and perfectly acceptable.

flying

The ADVS design does not inhibit launch in any way. On a reverse launch the pull-up is direct without the ears chasing in, and when overhead any skewing can be walked off. The forward launch is beefy and direct with lots of feedback: no empty feeling in the hands, just full-on pressure to push all the way through. Brake pressure at the lighter end of the weight range was progressive; at the high end it was far more physical (but what large glider isn't?). Weight shift with a normal chest-strap setting helps the turn rate, although brake-only flying is efficient enough. As you'd expect with this class of glider, there is little nodding or pitching. Asymmetric tucks are almost a non-event: you can show off and counter-rotate with some of the opposite wing in.

The A-line riser, now returning to favour now after various string and ring devices, pulls the ears in efficiently, though they will start to wander out if you relax your grip. It is worth noting that there is no adverse reaction whether you let the ears flop out, let one out at a time or both together. At heavier loadings the ears will definitely float out on their own. B-lining requires a very hard pull; the Presta slumps into the compressed shape but wants out as soon as you get anywhere near to releasing. The speed system is a fairly normal set-up that gives initial resistance and then starts to move with the risers tightening. Speed increase on the bar is good and the Presta feels nice and tight.

A particular feature I liked about the Presta was the ability to carry a high load. I flew the Large model close to the top end of its 105 - 130kg range and found it to fly well without a radical loss of sink rate. There are some gliders that have a wide range on their large models which just do not do this; though they are probably fine in the middle of the weight range they start to really make the vario sink-tone call out when you load up. Weight is a good factor to get right on your glider, but it's very helpful to feel confident that the glider will fly right when heavily loaded. If your sink rate increases you are tempted to put more brake on, and it really starts to feel as though that you are making the glider stay up on brake alone. This can seriously effect a pilot's confidence in scratchy conditions. The Presta bombs along merrily at the top end of the weight range so that you can fly fast, convert easily and roll into turns without worrying about losing your momentum. In thermic conditions the Presta can be flown aggressively, only needing positive anticipation of lift, and once locked in to the turn it centres well.

Presta pilots are very loyal and speak well of the glider in terms of stability and trustworthiness. It certainly is a solid and very well-behaved machine, and at this large size, nicely physical. A robust and impressive glider that continues to bolster Apco's long-held reputation.

importer's comment

We are glad that Bill liked the Presta, but not surprised as we think it is a superb wing. For the pilot who wants to progress, the Presta has no equal for the incredible feeling of security it gives - the ADVS leading edge really does make it less prone to collapse, enabling the pilot to concentrate on the flying and let APCO's innovative design take care of the rest! I've flown mine for the last two seasons and still havent found anything I'd rather fly instead despite trying many different wings.

NEIL CRUICKSHANK, NORTHERN PARAGLIDING





specification

Model	X-Small	Small	Medium	Large
No of cells	(32 x 3) + 4	(32 x 3) + 4	(32 x 3) + 4	$(32 \times 3) + 4$
Span (m)	9.65	10.30	10.60	11.10
Area (m2)	26.10	27.10	29.00	31.00
Aspect ratio	5.3:1	5.4:1	5.6:1	5.8:1
Max. chord (m)	2.9	- 2.9	2.9	2.9
Line diameters		0.8/1.1/1.7/2.2mm		
All-up weight range (kg)	64 - 80	79 - 99	95 - 115	105 - 130
DHV certification		DHVI-2	DHVI-2	DHVI-2
AFNOR/CEN certification	Standard	Standard	Standard	Standard
Guarantee		3 Years/250 hours		
Price	£1,900	£1,900	£1,950	£1,950

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