TEST

Philippe Lami
Lami.ph@aerogliss.com

Sky Paragliders
Atis

Do you know Sky? Here in the remote regions in the South of France it is almost unknown brand. Nevertheless since 1988 Sky Paragliders has developed and manufactured thousands parachute gliders and rescue parachutes …

Products designed for:

beginners
experienced pilots
beginners in overflights
pilots practising overflights
contest participants

The models are developed by Aéro Concept, a Swiss engineering office and manufactured by a Czech company. The current product range consists of 5 models: **FIDES** for beginners, **ATIS** and **LIFT** for the advanced, **BRONTES** for the experienced and tandem **GOLEM**.

Use for those looking the enjoyment of flight.

ATIS has obtained DHV1-2 certificate. The parachute canopy is made of NVC Skytex 9017 fabric. Flat thickness ratio: 5.1 (but design thickness ratio is 3.9 which suggests the domical geometry). Available in 4 sizes according to the flying weight ranging from 55 to 130 kg. The parachute body has tidy cells without any wrinkles. However, certain details are not brought to perfection, such as the company logo label located in the centre – silk screen printing is more appropriate. Chambers have 3 parts and diagonal segment pass through the whole profile from inside to outside. Risers are 49 cm long, branching into 5. Handles are fixed by magnetic pressure. Riley pulleys and 17 cm accelerator (Edelrid lines secured with plastic components) are provided. We shall take M size for the flight, shall we?

With the handy cord suspensions with two galleries the parachute unfolds very quickly. At calm the wing extends very well and ascends slowly. When the wind blows do not hesitate to pull up the A lines – by this you will achieve a very quick climb. As soon as the glider rises over your head it precisely responds to your commands. If you simply pull the brake a few centimetres up the speed will decrease very quickly.

Adventurous spirit!

With my hands up I am speeding at 36 km/h. Looking at the wing top I can see well straightened elliptic canopy. A few quick swings show me the parachute has an adventurous spirit and extraordinarily sensitive control. It enters the curves immediately and with a small lift. You can select any banking you like but most importantly, **ATIS** allows you to drive it with absolute sharpness and precession. Be careful when adjusting the chest strap; if you tighten it too much the manoeuvrability may be too sensitive!

Well, now I am making just the kind of turn I like: precise and ideal. But don't lean to much otherwise you will quickly increase the sink rate, otherwise you compensate by the other side brake. With such precision **Atis** is a bird of prey in thermics. The more so because it accelerates immediately after you raise your hands which is a very pleasant or even transporting feeling. The accelerator shoots Atis up to 48 km/h without any vibrations.

The few hours of flying in varied weather conditions made me an admirer of **Atis** glider. It has no disturbing moves and it is quite easy to manage. The wing ends are of rigid construction and the canopy reacts to all moves as a compact whole. Rarely the wing closes but even then it performs remarkably well – it has only a slight deviation and its original shape is quickly restored. The lift at command is high (75 cm) and the force rapidly increases up to the point of minimum speed, i.e. 22 km/h. The canopy phase which precedes the sink (stall) moment can be used to achieve precise landing.

If a quick descent – in the 360 style – is used a considerable sink rate is achieved very swiftly. There is also a danger of spiral neutrality in case of too loose chest strap . Take into account your physiological limits! With the special riser the big ears can be practised easily and remain under the wing at all times (which strongly applies to my load on the parachute). Even if you control the glider with the seat weight shift, the manoeuvrability is excellent. And if you apply the brakes a little bit, the 100 % lift all is swiftly achieved.

The "B" stall is also practicable – with a slight sink at the end. As concerns the performance and features, Atis is within the standard for the gliders of this type – its gliding range is about 8. Summed up it offers a wide scope of possibilities. Finally, when the return to the ground is prepared Atis lands excellently thanks to good speed compensation.

We like turns

The answers from several pilots asked by me to evaluate this glider showed the opinions were very similar. While its design and shape are criticized all appreciate its turning capability. Its high manoeuvrability makes it indeed a specific, singular parachute. Consequently, it is ideal for the pilots looking for just these properties. Atis (the Greek for Fortune's favourite) thus need not worry nevertheless Sky Paragliders would gain on improving certain details. This would provide it an important position in the market.

Strengths

Manoeuvrability
Precision

Weaknesses

Design of certain details

ABOUT SKY PARAGLIDERS

CZECH REPUBLIC

MANAGERS: Milan Michna, Tomáš Lednik, Jana Ledniková, Alexandre Paux

PRODUCT RANGE: Fides, Atis, Lift, Brontes, tandem Golem
SET-UP: Czech Republic
MARKET ENTRANCE: beginning of 2003

TECHNICAL DATA

Size	XS	S	M	L
Design area (m^2)	20.23	22.16	24.09	26.01
Flat area (m^2)	**23**	**25.,2**	**27.4**	**29.6**
Flat span (m)	10.88	11.34	11.82	12.29
Maximum profile depth (m)	2.68	2.79	2.90	3.01
Flat thickness ratio	**5.1**	**5.1**	**5.1**	**5.1**
Number of cells	53	53	53	53
Parachute weight (kg) without package	5.3	5.5	5.7	5.7
Flying weight (kg)	55–75	65–90	80–105	100–130
DHV certificate	**DHV 1–2**			
Afnor homologation	–	–	–	–
Price including VAT (euro)	**2860**	**2860**	**2925**	**2990**
Fabrics: NCV Skytex 9017 E77A or E38A				
Colour: blue, red, yellow, orange, white				
Lines: Edelrid: 1.8 – 1.5 and 1 mm				
Risers: 5 (A2, A1, B4, C3, D3)				
Accelerator: yes, 17 cm				
Recommended harness: no				

CERTIFICATION DATA – M size
DHV 1–2

- **Speed: with hands up:** 36 km/h
  with accelerator: 50 km/h (at 105 kg)
- **Start: DHV 1** – The glider immediately rises over the head. Average starting speed
- **Turning capability: DHV 1 –** Slight tendency to negative, high lift, high manoeuvrability
- **Lift at command: DHV 1–2 –** Length before stall: 60 – 75 cm at average, before start: 65 – 80 cm. Increase of pressure on brakes: substantial
- **Front collapse: DHV 1 –** Opens automatically very quickly.
- **Side collapse: DHV 1–2 (at 105 kg) –** 90 – 180° rotation, low turning speed. Low height loss. The parachute reopens automatically very quickly. (DHV 1 at 80 kg)
- **Quick side collapse: DHV 1 –** Rotation below 90°, low height loss. The parachute stabilizes automatically very quickly and reopens.
- **Braked side collapse: DHV 1 –** Stabilization is achieved easily using the brake, with average lift. No tendency to drop. Automatic and quick reopening
- **Achievement of minimum speed: DHV 1**
- **Spiral – initiated with hands overhead: DHV 1–2**
- **Spiral – initiated at turn: DHV 1–2**
- **360° practicability: DHV 1 –** 360° is easy, with small tendency to negativity. Spontaneous exit
- **B–Stall: DHV 1 –** Easy initiation, spontaneous return to the flight
- **Landing: DHV 1 –** easy

VALUES

- **Parachute load during the test:** 3.39 kg/m^2
- **Max. speed with hands overhead:** 36 km/h
- **Max. accelerated speed:** 48 km/h stabilized
- **Max. gliding range:** 8
- **Minimum sink rate:** – 1,13 m/s
- **Min. speed:** 22 km/h

(Values measured at 1500 m height using Brauniger Galileo and GPSwar (ernstlehmaha@yahoo.com) computer program

EVALUATION

• Execution	****	• Stability to cross sway	****
• Flight manual	****	• Resistance to turbulence	*****
• Unfolding	*****	• Reopening capability	*****
• Extension	*****	• Strength at max. speed	*****
• Inflating at calm	****	• Slow flight capability	****
• Inflating at wind	****	• Performance	****
• Brake input precision	*****	• Ears	*****
• Brake input smoothness	****	• Sharp 360°	****
• Manoeuvrability	*****	• Landing	*****
• Stability to longitudinal sway	****	• Quality / price level	*****

* bad ** average *** good **** excellent ***** perfect

OUR OPINION

Brand which one should know and glider which wins through.