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WORLDWIDE PARAGLIDING AND PARAMOTORING MAGAZINE. FOR FREE.

## ##sitting! 2023





A nice symbol for an issue of free.aero containing several harness tests for more run-of-the-mill use: A Supair acro harness above the wing (AirG Emilie) during an Infinity Tumbling. Pilot and photographer Danny Taylor (British instructor, AcroDanny [shropshireparagliding.co.uk](http://shropshireparagliding.co.uk)) used an Insta360 ONE RS 1 inch camera, which gives a bit of a confusing perspective. On the right, another interesting perspective, a big collapse during a failed entry into the Infinity.



# SUMMARY

*Translations by Ruth Jessop*

- 1
- 2
- 4
- 5
- 6
- 9
- 10
- 12
- 13
- 17
- 20
- 26
- 35
- 36
- 41
- 46
- 50
- 59
- 60
- 70
- 70

- COVER
- SUMMARY
- RESERVE TO THE RESCUE...
- VIDEO: RESERVE RELEASE
- WORLD CHAMPIONS
- LOW FLYING SHOT
- SHOT SMILEY
- AN ALL BLUE STODEUS
- #SITTING! HARNESSES
- THE RISE OF THE SUBMARINE
- TEST NEO SHORTY
- AIR DESIGN SOCK VS LITTLE CLOUD GRASSHOPPER MK 2
- DUDEK HIKE & CRUISE AND DUDEK TECHNO 2023
- DUDEK TECHNO 2023
- DUDEK HIKE & CRUISE
- RED BULL X-ALPS 2023: MAURER WINS AGAIN...
- INTERVIEW WITH CELINE LORENZ
- VIDEO: JEAN-BAPTISTE CHANDELIER NO WAY
- THE MAKING OF: JEAN-BAPTISTE CHANDELIER NO WAY
- IMPRESSUM
- INDEX ADS

EN/LTF B

# HOOK 6

## TAKE THE NEXT STEP

The new Hook 6 is the perfect balance to progress in all your flights and encourage you to experience new adventures. The excellent characteristics of the Hook 5 have been optimised in order to offer more stability, control, comfort and performance.

### Sizes

20 / 22 / 24 / 26 / 28 / 31

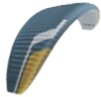
### Colors



Spicy



Matrix



Tekno



Neon



**niviuk**

EN/LTF A+

# HOOK 6 P

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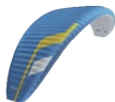
### Sizes

20 / 22 / 24 / 26 / 28

### Colors



Amber



Breeze



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[niviuk.com](http://niviuk.com)





Testing dropping and recuperating humanitarian packages in Kenya. All photos: Association Humanitarian Pilots Initiative

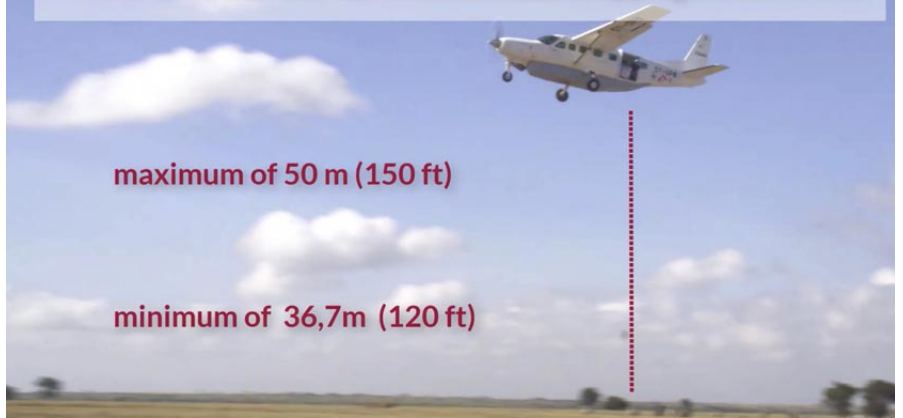
# RESERVE TO THE RESCUE...



After 10 or 15 years, most paragliding reserves are “obsolete” according to the manufacturers. Following the initiative of Swiss airline and paraglider pilot, Fabio Zraggen (left), an association collects used reserves from clubs, amongst others, so that they can be reused to drop humanitarian packages over remote regions of Sudan, for example.

It is much more economical and efficient than deliveries involving a helicopter landing. Above all, lots of basic, light, slow aircraft can do the job and make an accurate drop thanks to flying at low altitude, between 37 and 50 m.

▶ For the best results, recommended dropping altitudes are:



maximum of 50 m (150 ft)

minimum of 36,7m (120 ft)

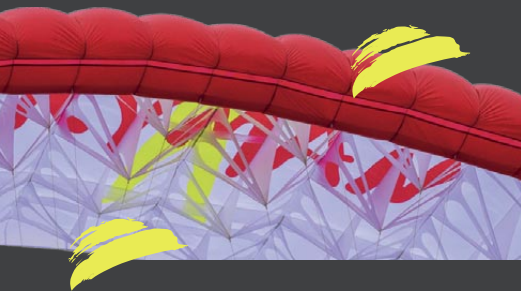


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hybrid single skin with 20% double surface



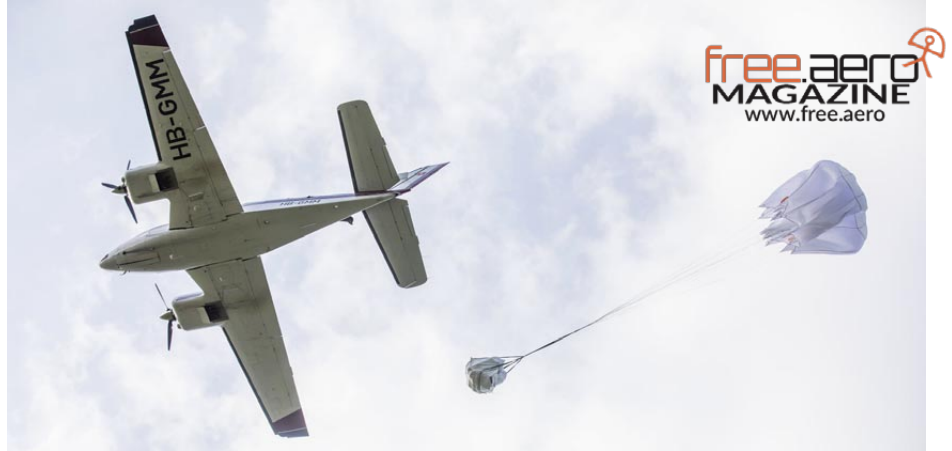
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[www.skyman.aero](http://www.skyman.aero)



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The numerous tests carried out by the team of volunteers have clearly shown the reliability of the concept, the opening speed in less than 50 m, and the robustness of the old reserves. They continue to work over the course of many drops, almost all without any damage, with the exception of one panel that got ripped.

This reliability is reassuring for us paraglider pilots too: even when they are old, at least the first generation of "heavy" reserves remain visibly reliable and functional.

And yet, the speed when they open during a drop is higher than what is normally encountered when paragliding: about 180 km/h.

For these drops, the small Swiss harness manufacturer "Flugsau" ([www.flugsau.ch](http://www.flugsau.ch)) has specially designed D-Bags which slow down the speed that they open at slightly.

If you want to donate an old reserve to this project, you can send it to this address in Belgium:



**Video: Drop tests in Kenya. The association, Médecins sans Frontières, is also involved. Photos: The Association Humanitarian Pilots Initiative**

SVAS HPI Corderie SMITS-HENIN  
Av. de la Couronne 236B  
B-1050 Ixelles, Belgique,

Or (from Switzerland only) at  
SVAS HPI Flugsau GmbH  
Älplerhaus 3  
CH-6388 Grafenort

Right: Lucian Haas, who published the first article about this project on his blog <http://lu-glīdz.blogspot.de/>, collected these reserves, just from his local club. Bulk shipping was cheaper. For more info about the project: <https://www.hpi.swiss/svas-drop-system>



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## WORLD CHAMPIONS

The 18th<sup>e</sup> edition of the 2023 Paragliding World Championships took place from the 20th of May to the 3rd of June 2023, in Chamoux-sur-Gelon. The French pilots flew away with all the podiums!

Maxime Pinot became World Champion, Meryl Delferriere ladies' World Champion, and the French team also claimed the top spot on the podium (Photos: Michael Georges)

- 1) Maxime Pinot, FRA, Ozone Enzo 3, Ozone Submarine
- 2) Honorin Hamard, FRA, Ozone Enzo 3, Ozone Submarine
- 3) Pierre Remy, FRA, Niviuk Icepeak X-One, Ozone Submarine



- 1) Meryl Delferriere, FRA, Niviuk Icepeak X-One, Ozone Submarine
- 2) Constance Mettetal, FRA, Niviuk Icepeak X-One, Niviuk Drifter 2
- 3) Nanda Walliser, SUI, Ozone Enzo 3, Ozone Submarine



- Nations (all the results: <https://civcomps.org/event/pgworlds-2023/results>)
- 1) France
  - 2) United Kingdom
  - 3) North Macedonia

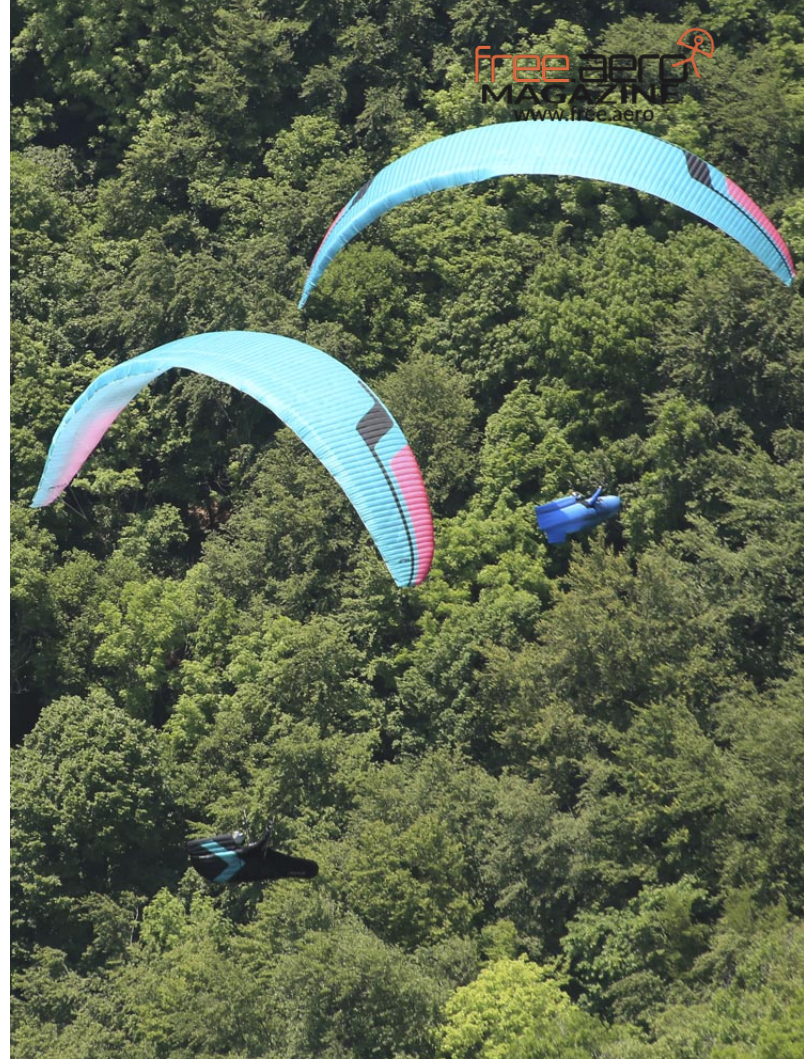






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Maxime Pinot flying his Ozone Enzo 3 with an Ozone Submarine.  
Photo: Pascal Bougakoff

Meryl Delferriere, flying a Niviuk Icepeak X-One with an Ozone Submarine, followed by  
Constance Mettetal, Niviuk Icepeak X-One, Niviuk Drifter 2. Photo: Pascal Bougakoff

Girl Power: With Constance and Meryl, French paragliding is represented by very effective  
female ambassadors... Photo: Pascal Bougakoff



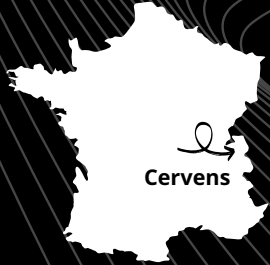


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- PLIAGE SECOURS



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World of XC paragliding



# #SHOT



Karen Skinner films herself flying past some flowers marking the start of summer...

Paramotoring offers this immense privilege of being able to skim just above the ground, kilometre after kilometre, with your feet a few centimetres above the vegetation, the perfume filling the pilot's nostrils... unlimited "proximity". But there is a small problem: in France, paramotors must remain 150 m above the ground. In other countries such as Spain, where this photo was taken, this is not the case.

On the other hand, in France, for paragliding without a motor, there has been no limit above the ground since 2007, "as long as you don't cause any risk to people and property on the ground". During exhibition flights, you must stay 10 meters away from people. And of course, local regulations might be applicable.



Photo: Philippe Goutagny [www.ecole-de-parapente-des-arcs.com](http://www.ecole-de-parapente-des-arcs.com)



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A landing with a smile... After marking the correct landing field with a lawn mower at Gerlizten, Xandi Meschuh checks the result from the air...

The wing is an Icaro Pandion 2 (low EN-B). 

#SHOT  
#SMILE





# BuzzZ7

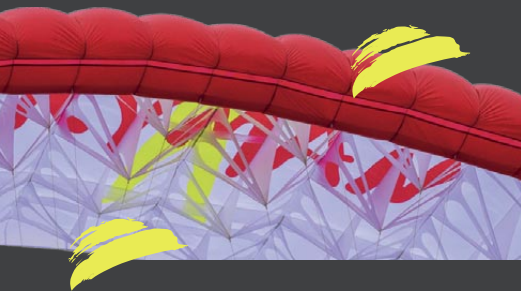
The new Z7 delivers all of the legendary ease of use the Buzz series is known for with the highest level of efficiency, speed, and glide yet. It is designed for pilots who want a fun and capable XC wing with the most passive safety available from this class.

- New planform with increased wing sweep for improved roll stability throughout the range.
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## AN ALL BLUE STODEUS

Stodeus' new BlueBip should perhaps be called the "UltraBip" (our review in the last issue) without a GPS or voice output". It works as an autonomous solar sound vario, but above all it connects via Bluetooth Low Energy (BLE) to iOS and Android smartphones and tablets with most flight applications (XCTrack, FlySkyHy, SeeYou Navigator, etc.), to transmit to them the very precise value of the vario, measured using an algorithm integrating the barometer, gyroscope and accelerometer. For the pilot's track and his speed, the BlueBip lets the phone's internal GPS do the work, which generally works very well, unlike the calculation from the vario, which is a complex specialty that is best left to dedicated varios such as the Stodeus.

The device can be configured via USB-C, amongst other things to set the sound profile of the vario. As always with Stodeus, it is compact (5.8 x 3.6 x 1.4 cm), and very light: only 26 g...

[www.stodeus.com/shop/en/home/62-bluebip-bluetooth-solar-audio-variometer.html](http://www.stodeus.com/shop/en/home/62-bluebip-bluetooth-solar-audio-variometer.html)



As a reminder,  
our UltraBip test  
in the last issue  
with an  
introduction to  
the entire  
Stodeus range.



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#SITTING!2023



# #SITTING!

The harness, which plays a role in both comfort and safety (especially if it's imagined by AI, shown above), but also, via weight shift, it has an additional and essential role when it comes to steering...

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... whether during a classic contemplative flight as above, or outside the flight envelope as below... Photos by Catherine Rios, <https://www.facebook.com/Catherine.lee.Rios>







A recurring comparison: a classic harness, such as this Niviuk Konvers 2, on the right, vs. a cocoon harness, such as this Kannibal Race 2 above (photo Justin Puthod). Despite the list of “minuses” seeming long, sales of cocoon harnesses with or without fairings, are on the rise. It is worth noting that the bulk and the weight have decreased dramatically.

### COCOON HARNESS

#### THE ADVANTAGES

- Comfort
- Heat
- Aerodynamics, performance
- Piloting using a small amount of weight shift may seem more precise
- Efficient piloting by tensioning and twisting the body, permanent contact with the whole harness
- Flying using the accelerator is more ergonomic
- Piloting by playing with the wind resistance
- The instruments are clearly visible
- A more elegant look

#### THE DISADVANTAGES

- More cumbersome (sometimes)
- Heavier (sometimes)
- Undesirable behaviour in the event of an incident (twist)
- Piloting is sometimes less efficient for large amounts of weight shift.
- Feeling of instability in turbulence
- Real instability with some hammock harnesses
- Possible difficulty during take-off/landing
- Higher risk of forgetting to clip in properly (sometimes)
- Less forward and rearward vision (fairing)
- Higher price







More and more pilots are using a cocoon harness such as this Gin Genie X-Lite with an easy intermediate wing like this EN B Gin Evora. (Photo: Jérôme Maupoint/GIN).



SOME LIGHT OR SEMI-LIGHT COCOON HARNESSES WHICH ARE AVAILABLE (NON-EXHAUSTIVE LIST)



Genie X-Lite, 2.99kg - 3.48 kg, test in the next issue



Ozone F\*Race , 1.4 kg -1.7 kg



Ozone BV1, 1.8 kg |- 2.1 kg



Advance Weightless, from 1.9kg



NEO Stay Up 2, 1.95 kg, test in the next issue



Neo Suspenders 3.85 kg in M



Supair Delight 4 Sport, 3.62kg to 4.17 kg, test in a future issue (Classic and Sport)



Kortel Kolibri Evo, 1.44 kg |- 1.64 kg



Niviuk Hawk and Arrow 3.7kg - 4.65 kg, test expected later in the summer



Skywalk Range X-Alps, 1.95kg-2.10kg



Air design Sock, 2.6 kg - 2.9 kg, and Little Cloud Grasshopper MK2, 2.4 kg and 2.9 kg, test in this issue



Dudek Techno 2023, 1.92 kg |- 2.14 kg test in this issue



Apco Kitto, 1.9 kg |- 2.3 kg

Skyman's U96, precise details to follow







## THE RISE OF THE SUBMARINE

The Submarine is gaining momentum. Already clearly visible during rounds of the World Cup last Winter, it has become a 'must have' amongst the competitors, even with pilots who do not fly an Ozone wing. There were 14 Ozone Submarines in the top 15 places at the 2023 Worlds.

Admittedly, it is one of the harnesses with the most complex fairing. The aerodynamic performance of the airtight cocoon is undoubtedly very good. Moreover, we really believe what Fred Pieri, developer at Ozone, who has his own wind tunnel for testing, says: "We have found that a Rush with a Submarine performs better than a Delta with a classic harness."

The price to pay for the undeniable optimization of the Submarine: a confusing complexity at take-off, landing and in flight. Its 3-metre length can oblige the pilot to correct (with the help of weightshift) movements on all the axes: otherwise, the pilot will find himself with a large surface at an angle to the air flow, which eats away at the potentially hard-earned performance. Being perfectly adjusted is also essential.

In general, with the tricky to close fastening of the airtight cocoon, use of the Submarine seems more suited to very high-level competition pilots. Some "Sunday" cross country pilots have put their Submarines back on sale after a few flights.

More info on this interesting technology:

<https://flyozone.com/paragliders/products/harnesses/submarine/>

\*Editor's note: It would be interesting to make the same comparison with another cocoon harness equipped with a fairing, but less radical. A well-thought-out fairing at the rear can already save almost one point of glide ratio, also on a less extreme harness. The result will be less good, but by how much?

Calculations based on tests in the Ozone wind tunnel. "Cocon compet" is a prototype of the Submarine.

For a Zeno, you gain 1.1 points compared to a "sit-up-and-beg" harness. When flying an EN A Mojo, the gain is of course less.

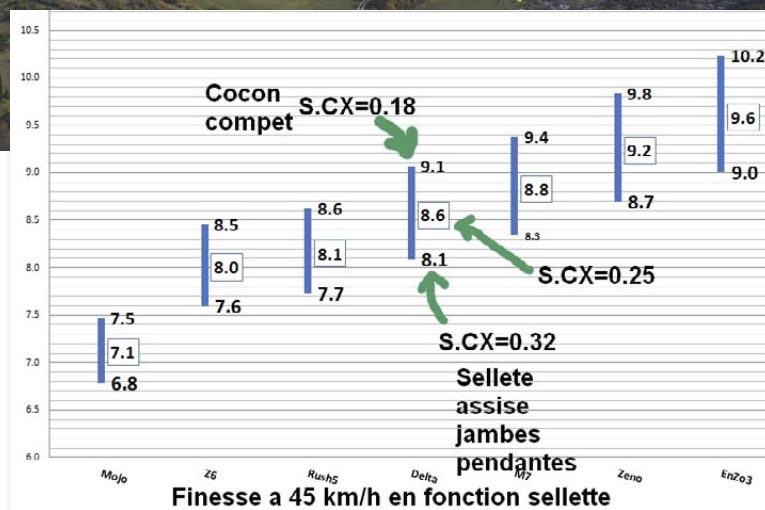


Photo: PWCA.org



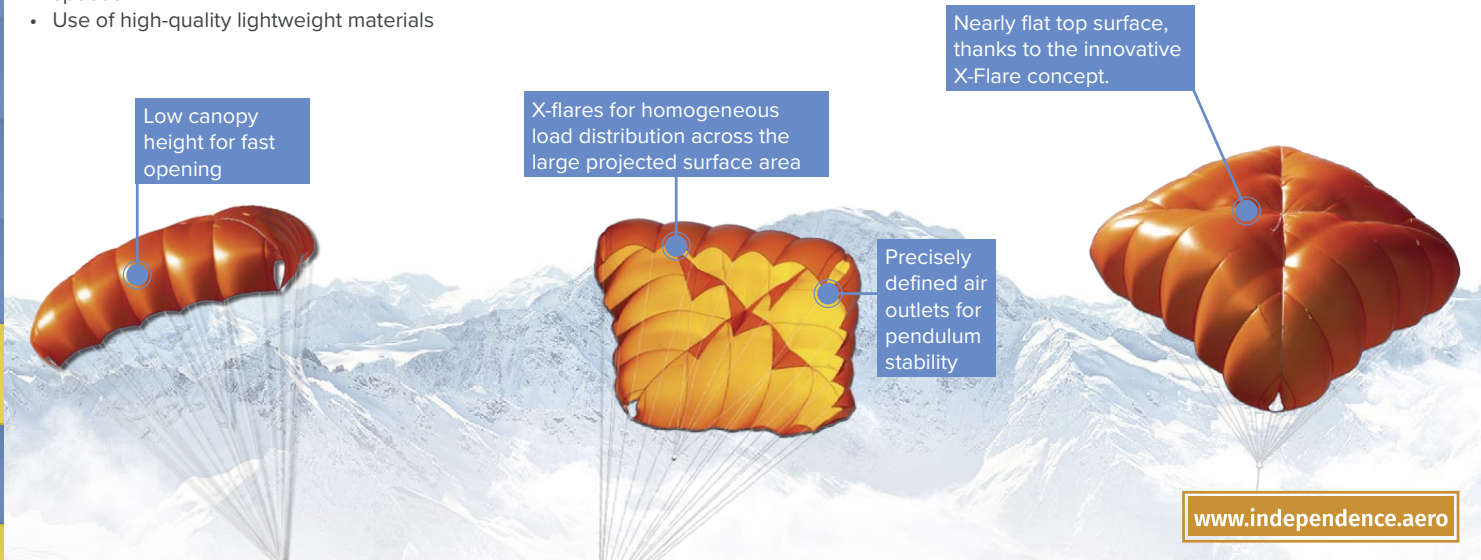




Quick facts about the NG series:

- Available in 3 sizes, in both the NG and the NG Light version. Certified according to EN12491
- New, innovative X-Flare concept for high efficiency
- Excellent sink rates, each just over 5 m/s, equivalent to a jump from a height of about 1.3 m
- Very reliable opening and extremely good pendulum stability
- Intelligent, lightweight construction for fast openings, even at low speeds
- Use of high-quality lightweight materials

	Max load (kg)	Surface (m <sup>2</sup> )	NG weight (kg)	NG light weight (kg)
NG 100 Series	100	25	1.45	1.18
NG 120 Seriea	120	29	1.6	1.3
NG 140 Seriea	140	33	1.85	1.49





ROCK THE OUTDOOR increases your safety, refines you handling or improves your comfort in flight



rolls of PLA yarn (biodegradable plastic)



thanks to designers skilled in 3D printing

### SPECIAL HARNESSES/ACCESSORIES

Harnesses which are particularly suitable for pilots and tandem passengers are becoming more and more sophisticated and practical, especially for lightweight flying. We tested two very interesting products: Neo's Rescue Pack and Apco's 2light harness. Both will be tested in the next issue. The test for another special harness, the Shorty, a paragliding/speedriding hybrid, is in the current issue.

Here are some of the conclusions that we have come to about the Apco 2light: a lightweight harness (less than 2kg with its moussebag) that is nevertheless sophisticated for tandem pilots. Once you understand the reserve storage system in the back, it turns out to be quite practical, since the compartment has a very large opening, making it easy to pack the reserve and probably also very effective when deploying. The comfort is comparable to that of a classic tandem harness, whilst being lighter.



Photos: Apco



Photos: Burkhardt







# TEST NEO SHORTY

*A “niche” product, which is already three years old but is still competitive: the Shorty, Neo’s reversible harness... which is not reversible in the classic sense, but universal for paragliding & speedriding...*

*by Valentin Burkhardt*



Photo : Jérôme Maupoint



The brand promises a “light, compact, comfortable and robust non-reversible bag/harness for paragliding & speedriding”. For this, the idea is to use the same shoulder straps for the backpack to carry the glider in, as for the harness.

This principle already exists. One of the first manufacturers was Sky Paragliders with its Crux (tested in “Light 2017” by Free Aero Magazine)

But the latter seems less sturdy, therefore less universal for additional use such as speedriding, for example.

The Alpage by Scorpio, tested in the same issue, arrived a little later and followed the same principle.



The Shorty is very universal: precise and comfortable when paragliding (thermaling). We can confirm that it also favours the transition from sitting to standing, when speedriding.

And unlike the Crux, it allows adjustments, such as the inclination of your upper body.



The Shorty in "backpack" mode and in "harness" mode: using the same straps.

The Shorty can be delivered (as an option) with Austrialpin Rocket carabiners: Neo initiated their development with the Austrian manufacturer. Considering the price of the harness, including them as standard would seem appropriate to us.



Photos: Valentin Burkhardt

The Shorty airbag can be added as an option, an EN/LTF and CE (Personal Protective Equipment PPE) certified piece of equipment. 420 g more, but it is a very important safety item. It can even remain attached to the harness as a backpack when it is being folded up. This airbag fills itself up thanks to the air flow via two side scoops. Obviously, like all airbags without a pre-inflation spring, it is not operational during takeoff.



Photo: Neo



Photos: Valentin Burkhardt



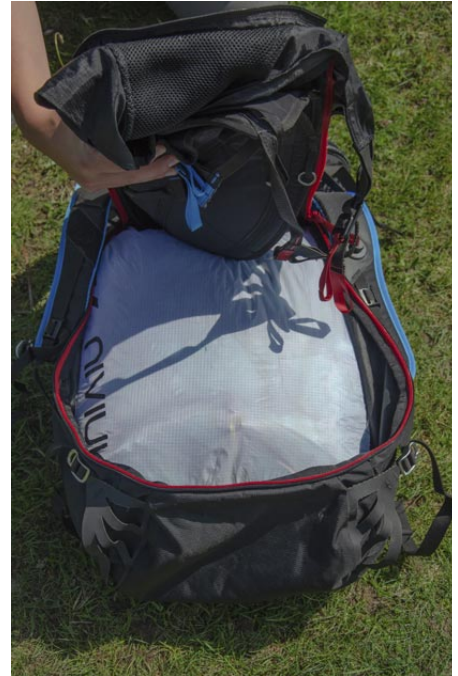
Photos: Valentin Burkhardt



Although the harness shares the same shoulder straps, you still have to remove the backpack to switch to flight mode.



First step: undo the blue zip. So, you can't just open the pocket containing the thigh straps, whilst keeping the bag on your back.



Once the blue zip has been undone, lift the upper part to access the wing.



It is worth noting that the bag does not have a large volume, a compact 22 m<sup>2</sup> wing fits in, but for a helmet, and an additional jacket, it is necessary to compress everything down well.



To finish off, close the red zip (a different colour to make it clearer).



Switching to harness mode only takes a few minutes but it can be quite counter-intuitive at first. Once used to it, it becomes perfectly clear.



It is therefore worth practicing a few times to grasp the principle of the two different zips. After that, the pilot benefits from a very robust and universal harness for speedriding and paragliding (therefore a little atypical), with oversized zips and other fasteners, but nevertheless, relatively light. 1.95 kg with airbag and back protector in size M (plus your choice of carabiners), compared to 1.51 kg for the Crux with an airbag for example, which is less versatile.

The Shorty comes in three sizes: 1.48kg (S) - 1.50kg (M) - 1.54kg (L). The airbag is optional and comes in one size. It can be purchased for around €790, the airbag €190, the carabiners €28.

<https://fly.neoatelier.fr/shop/shorty-1726>



The Koroyd back protector is standard. Photos below: As always with Neo, the high price is at least partially justified by the fine detail of the work and the brand's own accessories like these oversized accelerator pulleys...





# PERFECT HIKE&FLY SET



Hike&Cruise (from 2.37 kg - 19, 22, 25 m<sup>2</sup>)

Techno 2023 (from 1.95 kg - S, M, L, XL)

DuraLight 2023 (from 0.45 kg - litres: 65, 75, 85)



[www.dudek.eu](http://www.dudek.eu)





Photo : Air Design

# AIR DESIGN SOCK VS LITTLE CLOUD GRASSHOPPER MK 2

Photo : Little Cloud







Photos: Sascha Burkhardt

## Two harnesses along the same lines, the Little Cloud Grasshopper, which we have already briefly presented this year. Here are the differences... *By Arthur and Sascha Burkhardt*

The geometry is the same, but the reserve system is different. That of the Sock (right) is also optimized for right-handed pilots.

The side plate, reinforced by a bar, allows more effective support

At the end of 2022, the “small” French manufacturer, Little Cloud, released a new version of the Grasshopper, a very light and practical harness. Nicolas Cochet from the manufacturer, Air Design, understood the product’s potential, already visible in version 1 of the Grasshopper, and developed his “Sock” in close collaboration with Tom Bourdeau, boss and designer at Little Cloud. Air Design supported the production of the Grasshopper 2 in exchange for Tom Bourdeau’s know-how and by contributing some details to the development.

The Sock therefore comes with the same pilot seat system, thigh straps above a plate, both comfortable and efficient in terms of piloting.

The Grasshopper 2, as far as an original harness is concerned, is distinguishable, above all, by a different rescue system and a different attachment.





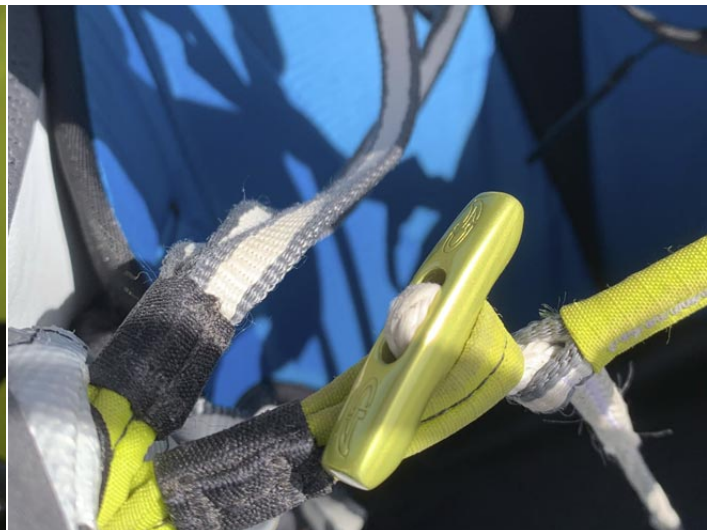
On the Grasshopper (on the left in the photo), the reserve is attached only to the chest strap, and its attachment points are fixed in the main carabiner and thus close the harness in a practical manner. On the Sock, the reserve is attached to the cocoon and connected to the shoulders. The harness is closed using hooks which are inserted into the loops. It's not as convenient. On the other hand, the Grasshopper's reserve can drag on the ground whilst getting ready for takeoff. For both harnesses, getting into the cocoon is very easy, and the harnesses are piloted in an identical manner, with effective control via the pilot's thighs which push against the leg straps and the side of the seat. The responsiveness is very slightly behind that of a pure hammock harness, like a Skywalk Range X-Alps, but it is undoubtedly a question of geometry, and the compromise between comfort/stability/manoeuvrability is really very successful for both the Grasshopper and the Sock. The leg straps also provide a lot of comfort, in addition to possible support when flying. They are very universal, lightweight, comfortable harnesses.

The other difference is in the detail: the Air Design Sock has more closable pockets, including in the nose of the cocoon. The weight of the Sock is therefore 100g to 200g more than that of the Grasshopper, but also remains below 3 kg (2.9 in size L).

Photos: Sascha Burkhardt



Much more practical and faster, the fastening system on the Grasshopper (on the left), vs that on the Sock (on the right), which was particularly tedious on the specimen we tested, where the buckles seemed too small.





The Sock has additional storage space in the nose of the cocoon



A very large storage space which closed simply by a magnet on the Grasshopper (left and middle). There were more zips on the Sock (right)



Photos: Sascha Burkhardt





Unusual: the reserve on the Little Cloud Grasshopper is housed in a "Ravioli", but the system has been positively tested according to Tom Bourdeau. On the other hand, it obviously fits less fluidly into the cocoon than that of the Sock.

Photos: Arthur Burkhardt

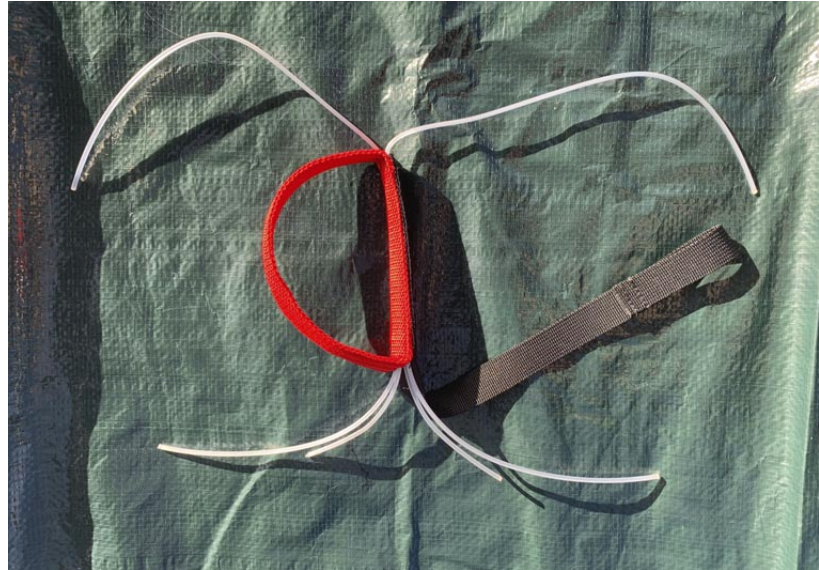


The Grasshopper is available in 3 different colours.

Photos: Little Cloud



For the Sock, the customer is free to choose different colour combinations, on the order form, but the cocoon is always black.



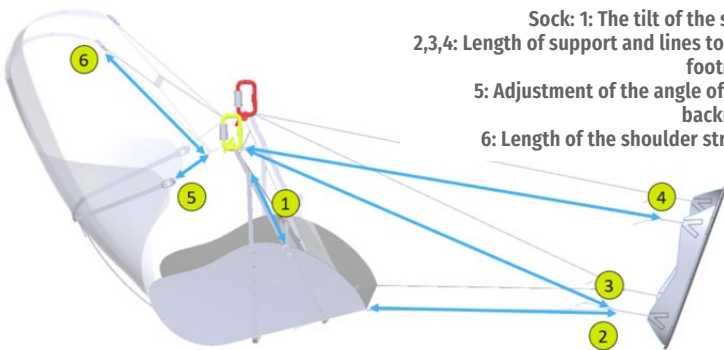




Photos: Sascha Burkhardt

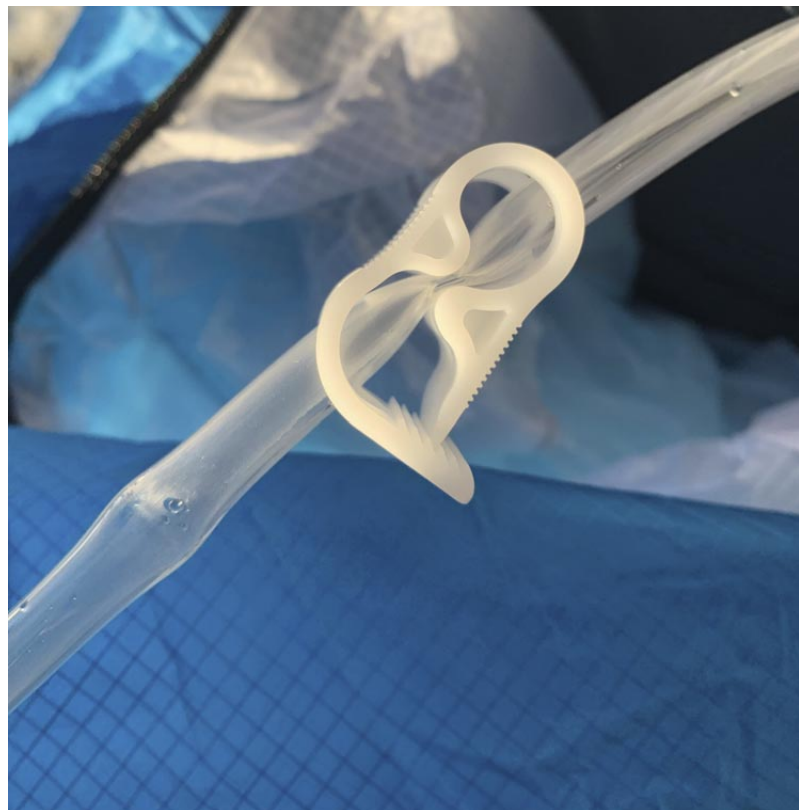
The inflatable protector (here, a pre-series of the Sock with a small defect) is identical for both models. It goes quite high up the back, but less so than a Permair in Skywalk's X-Alps 2 range, for example.

The protector (shown here from the Grasshopper) can be inflated with its storage bag, or otherwise by mouth, and closes with a clip.



Sock: 1: The tilt of the seat  
2,3,4: Length of support and lines to the footrest  
5: Adjustment of the angle of the backrest  
6: Length of the shoulder straps

Typical: adjustment of the length of the cocoon using a lark's head knot





On the Air Design Sock there is additional storage behind the reserve



Photos: Sascha Burkhardt

An elementary mistake noticed on one of the first Air Design Socks: the protection on the pulley was fraying.



The problem is now solved: the neoprene is integrated with the pulley and not sewn onto the plate. A fine example of responsiveness from the manufacturer.



Photos: Nicolas Cochet



Which of the two should you choose? The geometry of the harnesses is identical, they are very comfortable to fly, quite reactive, and both are, nevertheless, stable in turbulence. It is possible to pilot sitting upright in both, if necessary. We found the mode of attachment in the Grasshopper more practical, but there may be pilots who prefer the Sock attachment, which is more in keeping with the design, and integrates the reserve more fluidly into the cocoon. Moreover, the many small details, such as the zips on the pockets, are nice on the Sock.

A big difference, which is also a direct consequence of the reserve attachment: with the Air Design harness, when the reserve is open, the pilot is attached by the shoulders. With the Grasshopper, it's by the main carabiners. The influence on the mirror effect of either of these possibilities has not been unanimously decided and should be low.

Another surprising difference, but without any influence on the actual strength: despite the use of identical materials for the frame, the Sock is certified 120 kg vs. 100 kg for the Grasshopper.

We can't give better advice than "try both", although our preference was for the Little Cloud Grasshopper... 🪂



LITTLE CLOUD GRASSHOPPER MK 2 MANUFACTURER DATA	
<b>MANUFACTURER: LITTLE CLOUD</b>	
Web: <a href="https://www.littlecloud.fr/grasshopper-mk2/">https://www.littlecloud.fr/grasshopper-mk2/</a>	
YEAR RELEASED	2022
SIZES	S, M, L
WEIGHT (KG)	2,4 / 2,6 / 2,8
SIZE OF THE PILOT (CM)	150-195
PROTECTOR	35G
MAXIMUM LOAD (KG)	100
PRICE (€)	1590

AIR DESIGN SOCK MANUFACTURER DATA	
<b>MANUFACTURER: AIR DESIGN</b>	
Web: <a href="https://ad-gliders.com/project/the-sock-keepyoursockon/">https://ad-gliders.com/project/the-sock-keepyoursockon/</a>	
YEAR RELEASED	2022
SIZES	S, M, L
WEIGHT (KG)	2,6 / 2,75 / 2,9
SIZE OF THE PILOT (CM)	150-200
PROTECTOR	35G
MAXIMUM LOAD (KG)	120
PRICE (€)	1680

- Fasteners/means of fastening much more practical
- ... but the reserve can touch the ground whilst setting up
- Less zippered storage
- No storage in the nose of the cocoon
- The main storage space is larger

- The main closure is much less practical
- The reserve fits better into the cocoon
- More zippered storage, including...
- ...a pocket in the nose of the cocoon





# MOXIE

## NEW PILOTS & STUDENTS

The Moxie is ideal for **progressing your flying with maximum ease** and safety. The wing has been designed with the **easiest launch** we have ever experienced, highly **intuitive handling**, a generous yet **precise brake range** for fun and effective thermalling performance, and a deep and forgiving flare. It's our **most confidence-inspiring wing yet**, and is full of technological features such as winglets, engineered cell openings, double transversal leading edge shaping, and a very low drag line plan.

PLAY, LEARN, GLIDE

[FLYOZONE.COM](http://FLYOZONE.COM)





# DUDEK HIKE & CRUISE AND TECHNO 2023

Photo: Valentin Burkhardt, Pilot: Sascha Burkhardt



# The Techno 2023 from Dudek is a 2 kg hammock harness with a foam protector and a rear fairing. Giving serious competition to the best in the class!

By Stefan Ungemach

As with its predecessor, the Techno 2018, the reserve is in a separate front container and is attached to the main carabiners. This also makes it easy to remove and use on other string style harnesses. Currently, only the Neo StayUp 2.0 offers the same concept. The harness is sturdy and well-made despite the very lightweight materials. Under the accelerator there is a strip of protective fabric that can be replaced.

The ultralight Edelrid Ease carabiners weigh only 22g each. The ventral closes with a GetUp system with a width of 45cm. You can order a version with automatic buckles, with this addition, the harness weighs about 50g more. This is the version that we tested.

The leg straps are also adjustable, giving ABS cross-bracing and providing greater roll stability when properly adjusted.

The cocoon can be adjusted by depth and inclination. The adjustment of the shoulder straps is done by easy-to-manoeuvre spllices.

The reserve is removable. This is rare for a cocoon harness...



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volarinfo

free.aero  
MAGAZINE  
www.free.aero



It is not always easy to get into the cocoon due to the elasticity of the material and the narrow fit, especially when the front container is mounted.

In flight: The two-stage accelerator with stable textile rods on two pulleys on each side is a success. By pushing it, the pilot is not lifted up and there is no unpleasant pressure on the pilot's back. It falls short of the comfort of an Air Design Sock, but otherwise it's one of the most comfortable contenders in its category. The back support is better than it looks at first glance. There is plenty of room under the arms, which allows significant weight shift.

It is pleasant to fly; the harness transmits feedback well in both directions, without being too "wobbly".

The Techno is equipped with a 15 cm foam protection under the buttocks with high deceleration values (46G for a maximum 50G allowed). There is no back protector.



A suspension and classic adjustments for the cocoon (orange tapes).



The shoulder straps are adjusted by easy to manipulate splices.

Photos: Sascha Burkhardt



A clean, easily adjustable, taut cocoon



The Edelrid Ease carabiners are light and practical



The practical buckles on the version with the same name, the Technora 2023, add an extra weight of just 50g.



The foam protection bag (top).

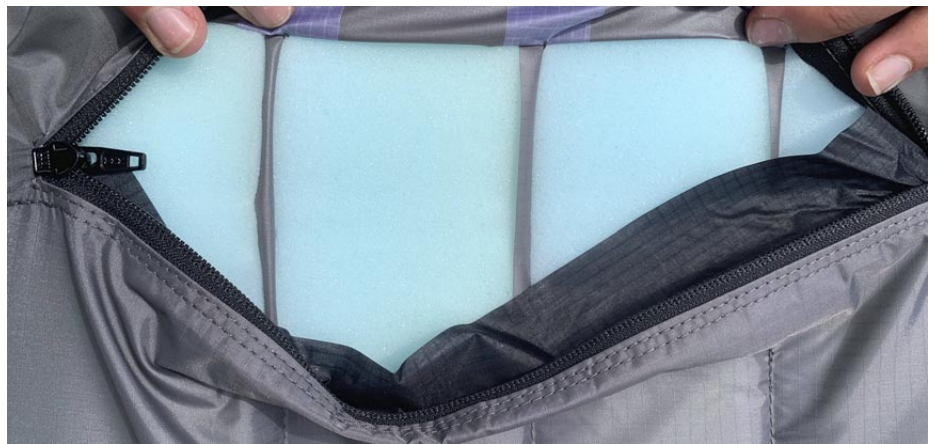


Cockpit: The dashboard is sufficiently large and well reinforced. Underneath there is a large strap cutter for emergencies. Although it might not be obvious at first glance, all the important "little things" are included in this harness. A compartment with a capacity of approximately 5 litres under the seat (and in front of the protector) can contain personal belongings or water ballast. There is an opening to empty it. There is also an opening for a Penilex tube on one side.

The two zipped pockets seem small, but they are easy to access and in fact very deep. Everywhere there are small loops to attach a mobile phone, instruments, or a radio.

All in all, the Techno 2023 is first and foremost a veritable declaration of war against the only other competitor in this particular segment of the market: the Neo StayUp 2.0.

Foam (46G).



The fairing's scoop.





The weight is comparable, but with a fairing in addition, the buckles are more comfortable and they can open quickly in the event of a water landing, and there is really nothing missing as far as comfort features are concerned. The discreet black and grey is possibly more practical in terms of getting dirty than Neo's white.

In addition, the price of the Techno 2023 is much lower. Compared to current lightweight harnesses with an integrated reserve (e.g. the Supair Strike 2, AD The Sock, Skywalk Range X-Alps 3, Skyman U96, Nova Artus...) Dudek are also very well placed, especially as far as quality/price is concerned. 🪂

A nice combination: The  
Dudek Hike & Cruise and  
the  
Techno 2023



Photo: Valentin Burkhardt, Pilot Sascha Burkhardt

DUDEK TECHNO 2023 MANUFACTURER DATA	
<b>MANUFACTURER DUDEK</b>	
Web: <a href="https://www.dudek.fr/accueil/99-970-techno-2023-cocon-ultralight.html#/95-taille_de_la_sellette-m">https://www.dudek.fr/accueil/99-970-techno-2023-cocon-ultralight.html#/95-taille_de_la_sellette-m</a>	
YEAR RELEASED	2023
SIZES	S,M,L,XL
WEIGHT(KG)	1.92/1.98/2.06/2.14 (+50g V.B)
SIZE OF THE PILOT	165-195
PROTECTOR	Foam 46G
MAXIMUM LOAD (KG)	100
PRICE (€)	1380 €



The side plate transmits forces well, but at first it may feel cramped





# FORZA 2 HIGH PERFORMANCE GREAT COMFORT

The **Forza 2** is a complex and feature rich harness that is **comfortable and easy to fly** in real XC conditions. We spent over **three years of development** on this project and the many prototypes have undergone **hundreds of hours of test flying** by some of the world's best XC pilots.

Our mission for the **Forza 2** was to create an aerodynamic, durable, and **highly comfortable tool for serious XC missions**. This new design is the **highest performance** traditional-fairing harness we have flown.

- Designed for long and demanding XC missions
- Anatomically sculpted seat and backrest
- Wind-tunnel tested aerodynamic fairing
- Two reserve compartments
- High comfort, stability, and passive safety for demanding XC conditions



FLYOZONE.COM 

Top Photo: Matias Nombarasco Pilot: Ricardo Gomez

Lower Photo: Ozone HQ



65 cells on the upper surface, 21 cells underneath, a nice sharknose, a significant aspect ratio of 5.6, combined with a weight of only 2.62 kg on this fairly high-performance hybrid mountain/classic wing.

# DUDEK HIKE & CRUISE

Photo: Valentin Burkhardt, Pilot: Sascha Burkhardt





Photo: Valentin Burkhardt, Pilot Sascha Burkhardt

## An original idea: the Hike & Cruise is a hybrid between a very light weight mountain wing and an EN B with higher performance... By Sascha Burkhardt

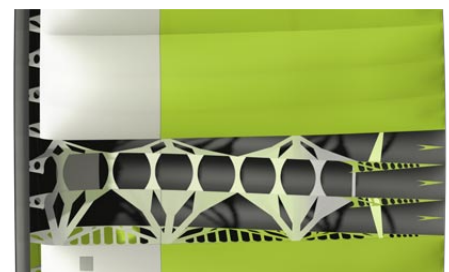
We have already tested other wings from Dudek, from heavy paramotors to single skins, such as the Run & Fly. With the Hike & Cruise, Dudek wanted to find a good compromise between an EN B wing capable of cross-country, and a double skin mountain wing, but with weight and take-off behaviour close to that of a single skin.

The project was initiated by Jean Baptiste Chandelier, when he was still at Dudek, and was completed by the Polish manufacturer's current team.

The construction is very original: with 21 panels on the lower surface and 65 on the upper surface, connected by a complex but light internal structure. Dudek concentrated on perfecting the most important surface on the profile, namely on top.

The interior is therefore very "airy" too, with very good communication between the compartments. This obviously helps with reopening after a collapse, for example. But also, inflation therefore happens faster than on other wings.

Clearly visible: the large difference between the number of panels on the lower surface compared to the upper surface....





**It comes up as easily as a single skin.  
Pleasant to play with in a very light breeze.  
Bonus: in strong winds, it is easy to control with the rear risers as well, allowing lots of fun and endless games...**

Indeed, the 22 we tested comes up with the same disconcerting ease as a single skin. With an off-putting little problem: once overhead, it keeps its position well, but not as convincingly as a single skin. Misled by the ease with which it comes up, some pilots thought they were flying a single-skin and criticized the Hike & Cruise's solidity whilst overhead, as it stays there and is at least as well behaved as any other mountain wing!

It is also great fun to play with in the wind, even in very light winds, as well as in strong winds, in this case using the rear risers by alternating actions on the As and Cs, which are easy to grab hold of given the very airy construction of the risers.

The load take up when launching is very good, much better than a single skin, which seems logical.

In flight, it is a lively wing, which flies very well and even manages to penetrate front on gusts. Of course, the penetration is not the same as that of a wing that has 65 cells on the lower and upper surfaces, but it is much better than on other pure "mountain" wings.

In thermals, it can be slightly off-putting at first: perhaps due to its relatively large aspect ratio of 5.6, coupled with a fairly large arc (or lobe, curvature seen from the front). It can sometimes be thrown out of a thermal when only one side of the wing goes into it. But once you understand how it rolls, it becomes very effective in thermals.

Photo: Valentin Burkhardt, Pilot Sascha Burkhardt





The very “open” and airy design of the internal structure favours the circulation of air inside the wing which is an important safety element. The reassuring side of this wing, which is an EN B in sizes 19 and 22 (but very close to an EN A) and EN A for size 25, could be a direct consequence of its lightweight manufacture, so there is little inertia during a dive, for example, and its uniform distribution of internal pressure. However, this last point is just a very probable hypothesis.

On the other hand, this uniform internal pressure is also felt when doing big ears: the ears remain fairly well inflated, try to reopen, and if in addition the pilot accelerates, the whole thing loses integrity and vibrates in an astonishing way, but it's just a comfort issue, not a safety issue.

The pilot is really flying a wing that is an interesting compromise between mountain and soaring, being very accessible, reassuring and pleasant (except for in accelerated flight with big ears).

The price of the Hike & Cruise is quite high, between 4500 € and 5000 €. It's a lot but has to reflect the design and manufacture of this “made in Europe” paraglider (the quality is indeed impeccable, and Dudek even thought of details such as small hooks on the leading edge, to prevent it from slipping on a very steep mountain take-off).

It should also be noted that with 65 cells (above), it is comparable to an Advance Iota DLS, and its aspect ratio of 5.6 is close to an Ozone Swift 6.

All this in a 2.62 kg wing, in the size M we tested. A very interesting universal wing; all that remains is to hope that the price will drop a little, once the newness effect has passed... 🙏

Photo: Dudek





# DUDEK HIKE&CRUISE: THE OPINION OF A PRO



**Jérôme Canaud**

Instructor,  
Teacher and co-initiator of the program  
WINGMASTER.TOP

Facebook Jérôme Canaud

Jérôme sent us his very interesting, and as always, very competent, opinion of the Hike & Cruise. He confirmed our impressions. The only small difference concerned the amount of roll in thermals (probably due to the different all up weight), and certain aspects concerning the spiral.

Jérôme is very well known for his Wingmaster activity, whether on YouTube or on his own website.

He describes the Wingmaster Masterclass as follows:

“This is the first and only masterclass in paragliding. It’s 11 hours of video in 21 chapters, 100% visual.”

This masterclass is aimed at beginners who are training up to BPC (Brevet de Pilote Confirmé) level, and also at recreational pilots who have been flying for a long time and who want to learn about recent flying techniques.

The chapters cover all the technical subjects involved in paragliding (inflation, ground handling, rapid descent, reserves, management of flight incidents, piloting exercises, lining up approaches, etc.).

I have brought together in a video all the techniques that I use when paragliding and that I have been teaching during the last thirty years of supervising courses at all levels.

The MasterClass costs 145 euros, the price of a one-day training course! And it’s for life.

We also offer weekly live streams on our YouTube channel.

Wingmaster also exists in an English version.”

[www.wingmaster.academy](http://www.wingmaster.academy)



Very fast to inflate, it is reminiscent of the behaviour of single skins. The wing arrives quickly above one’s head, but does not overfly.

In the air, the wing gives good feedback through the controls (top of the weight range). The controls are effective, and the wing is easy to handle. It is necessary to keep working the controls for maximum optimization. The wing positions itself well in thermals. The Hike & Cruise is also damped in the roll: no parasitic roll when flying in a straight line in a turbulent air mass. We discovered this damping in an engaged spiral. The wing descends well and comes out of the spiral as soon as the control is released; there is no spiral neutrality. The Hike & Cruise is also well damped in the pitch and is reassuring in the air.

In fast descents, I mostly did spirals and wingovers; it’s effective and accessible. The ears are not well placed on the lower surface, instead the wing remains partially inflated, to have more effective big ears, you have to pull the line much higher up.

I found the wing to be fast with hands up and the accelerator travel fairly short.

The travel of the controls of the size 22 at the top of the range is average, hence the suitability for confirmed pilots.

## Conclusion:

When flown at the top of the weight range the Hike & Cruise is playful, efficient and reassuring. At the bottom of the range, I think it will lack a little manoeuvrability, the damping will be more present, however, this behaviour could also work well.

A light and compact wing, with good performance, a 5.6 aspect ratio, certified EN B for the 22 and EN A for the 25. Very good for recreational pilots wishing to combine lightweight and cross country flying.

And the lightweight cocoon, the Techno 2023, is a success, less than 2kg for the medium, which is comfortable and stable, and equipped with a foam bag...



## HIKE & CRUISE

MANUFACTURER DATA

### MANUFACTURER DUDEK

Web: <https://dudek.eu/en/produkt/hikecruise/>

	2023	2023	2023
YEAR RELEASED	2023	2023	2023
SIZE	S 19	M 22	L 25
CELLS	65   21	65   21	65   21
FLAT SURFACE (M <sup>2</sup> )	19,00	22,00	25,00
FLAT WINGSPAN (M <sup>2</sup> )	10,23	11,01	11,73
FLAT ASPECT RATIO/PROJECTED	5.60 / 4.06	5.60 / 4.06	5.60 / 4.06
ALL UP WEIGHT (KG)	50 - 75	65 - 90	85 - 105
CERTIFICATION	B	B	A
WEIGHT OF THE WING (KG)	2,37	2,62	2,86
PRICE (€)	4649	4749	4799

Material: Porcher: 27 & 29 g/m<sup>2</sup> Porcher: Hard 26 & 40 g/m<sup>2</sup>. Technora: 050/070/090/130/190/230/280

( ) Planned





Chrigel Maurer  
in goal,  
17.06.2023.  
Photo: Christian  
Lorenz/Red Bull

## X-ALPS 2023: THE EXTRATERRESTRIAL WINS AGAIN...

Chrigel Maurer, him again...

After 6 days, 6 hours, 1 min and 51s, he had already completed the 1031 km route of this year's race. Chrigel travelled 2556 km to complete the race, 2288 km in the air and 268 km on the ground. His feat exceeds his 2013 record, which was six days, 23 hours and 40 minutes.

This year's race also shone thanks to the exploits of one of the female competitors: for the first time, thanks to Eli Egger, a woman reached the end of the race.

Also rising to fame in this race, Celine Lorenz, one of the youngest rookies in the competition, even if she could not finish due to injury...

There is more about Celine in this issue and there will be more interesting information from the race in the next issue...



DASHBOARD	
OVERVIEW	LEADERBOARD
1	C. Maurer SUI1 7d 6h
2	D. Lacaze FRA2 6d 18h
3	M. Pinot FRA1 6d 18h
4	P. Takats HUN 6d 20h
5	P. von Känel SUI2 6d 21h
6	S. Oberrauner AUT1 6d 21h
7	T. Alongi FRA4 6d 21h
8	A. Durogati ITA2 7d 0h
9	M. Anders GER1 7d 0h
10	T. Renaud-Goud FRA5 7d 0h
11	T. Friedrich AUT3 7d 0h
12	S. Inniger SUI4 7d 1h

13	P. Guschlbauer AUT2 7d 1h
14	T. de Dorlodot BEL 7d 1h
15	T. Grossrubatscher ITA1 7d 1h
16	N. Donini ITA3 7d 2h
17	R. Reiser SUI5 7d 3h
18	M. Loidl GER2 7d 15h
19	M. Gierlach POL 8d 1h
20	L. Walters USA1 10d 3h
21	E. Egger AUT4 10d 5h
22	J. Elliott CAN 11d 7h
23	E. Yuji JPN 11d 20h
24	J. Vilalta ESP 68.3 km



PHI-AIR.COM



**MAESTRO 2 light**  
High B



Chrigel in front of the Mont Blanc massif, on the 14th of June 2023. Photo: Sebastian Marko/Red Bull



Chrigel in Italy, on the 17th of June 2023. Photo: Adi Geisegger/Red Bull



A first in the X-Alps 2023: Eli Egger (AUT4), a 28-year-old Austrian from the Dachstein region, became the first woman in the 20-year history of the X-Alps to complete the gruelling course and cross the finish line (10d 5h 18m 38s, place 21). We'll talk more about her in the next issue...  
Photo: Christian Lorenz / Zoom





EN/LTF D

**NIVIUK**

# KLIMBER 3 P

**BORN TO COMPETE**

From **2.85 kg**

We present the third generation of the Klimber. We keep improving our P series two-liner: super compact, ultra-light and high performance. We put all our knowledge, technologies and experience at the service of pilots who want to achieve the best results in hike & fly and cross-country paragliding. With a competitive character, it has been designed for the X-Alps.

## Sizes

20 / 21 / 23

## Colors



X-Alps

Astral

# ARROW P RACE

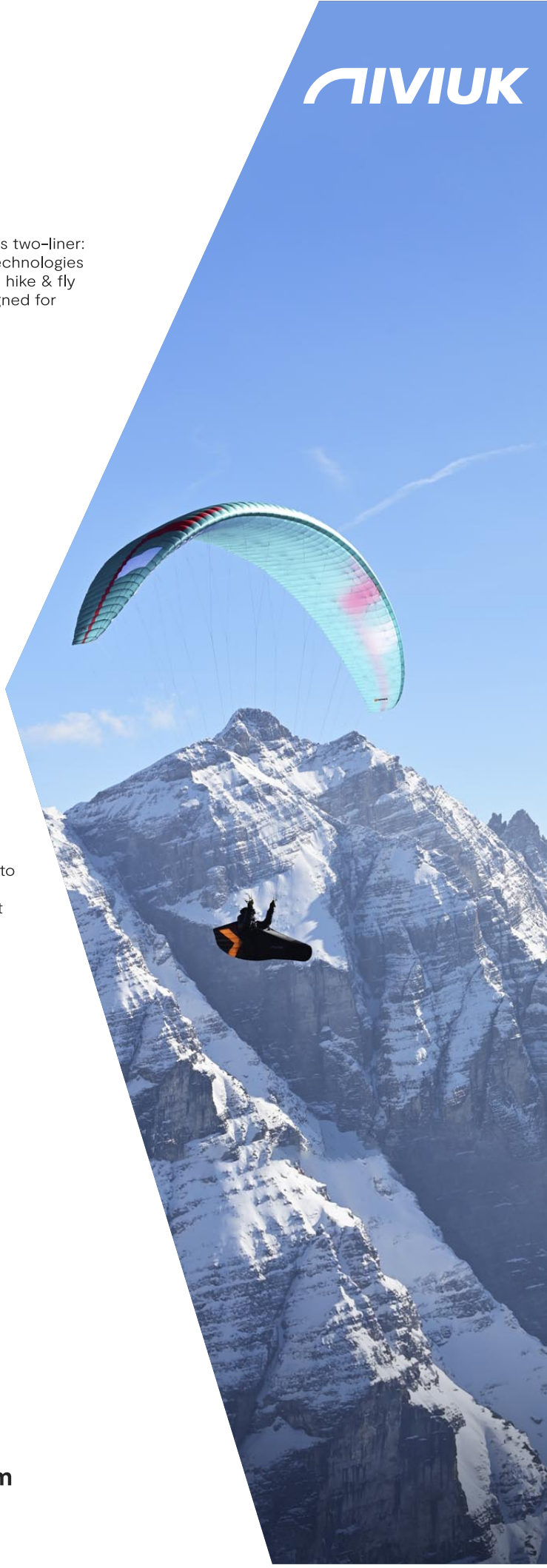
**RAISE THE LEVEL**

From **1.35 kg**

Introducing the Arrow P Race: the most extreme version of our Arrow P harness. Our R&D team designed it exclusively for the X-Alps competition, and now it will also be available to the most adventurous pilots. It is the lightest pod harness with a fairing in our range. It has been developed to meet the requirements of the most demanding pilots: lightness, maximum performance, comfort, ergonomics and stability. Aerodynamically optimised, it offers exceptional performance for its low weight.

## Sizes

S / M / L



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[niviuk.com](http://niviuk.com)



# INTERVIEW: CELINE LORENZ

*At 24 years old, Celine Lorenz (GER3) is the second youngest athlete to participate in the Red Bull X-Alps. She impressed the race committee with her victories in the 2022 Dolomiti Super Fly and the 2021 Bordairrace. Yvonne Dathe, a specialist paragliding coach, interviewed this newcomer shortly before the start.*

Photo: Zoom Productions/Red Bull X-Alps







Photo: Tim Rochas

Celine is in team Niviuk; she flies the brand-new Arrow P (size S, 1.3 kg). She was the first woman to complete the Dolomiti Super Fly in 2022: 433 km in the air, 84 km on foot, 8100 m of elevation.

Yvonne Dathe: At 24 years old, you are one of the youngest participants in the X-Alps. How long have you been flying and how did you get into the sport?

Celine Lorenz: I have been flying paragliders since 2015. When I was 11 years old, my mother bought me a tandem flight for my birthday.

It completely captivated me, from that day on, I saved every penny I could get so that I could learn to fly straightaway when I was 16. I lived in the countryside at Winkelmoos, in the mountains.

YD: You skipped school on occasions so that you could pass your exams to fly as quickly as possible.

CL: Yes, for the introductory course, "I was off sick" from school... but in reality, I was on the school training slope. For the training for big flights, it was the same thing.



Photo: D.R.



Photo: Tim Rochas



A mountaineer right from the start, she took up paragliding at an early age. Today, apart from her competition activities, she is a professional tandem pilot. By 2022, she had already spent 300 hours flying.

**YD:**  
So, your parents also supported you because it probably wouldn't have been possible otherwise?

**CL:**  
My mother thought it was great that I was so enthusiastic, and she still supports me today.

**YD:**  
You have done many SIV courses and started doing acro to be able to control your wing in difficult situations. What have been the most difficult flying situations you have experienced so far?

**CL:**  
The only real problem was at Lake Garda, when I was doing an acrobatic flight. I wanted to do some synchro flights with a friend, we collided, and I got caught in the upper lines of his wing. We then went into the water on our two reserves; luckily we were over the lake. In free flight and going cross country, I have been lucky so far.

Photo: Phillip Haag





Photo: Tim Rochtas

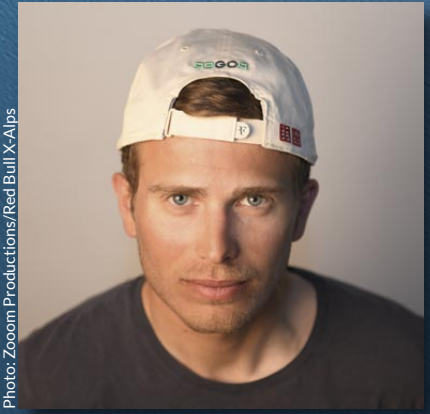


Photo: Zoom Productions/Red Bull X-Alps

The wing that Celine Lorenz used in the X-Alps is a size 21, blue, Niviuk Klimber 3P. Tanguy Renaud-Goud is flying the white Klimber 3P. He came tenth in the race X-Alps 2023 (7d 0h 52m 44s).

**YD:**  
You won the women's classification in the Bordairrace 2021 and the Dolomiti Superfly 2022. Great performance! How did you get into Hike&fly competitions?

**CL:**  
I love the mountains and adventure. You never know what will happen. I find that incredibly exciting because you don't know where you'll be in six hours' time. Will you still be in the same valley? Will you already be two valleys away?

**YD:**  
You are a professional tandem pilot in Garmisch-Patenkirchen. Do you have enough time left to fly solo?

**CL:**  
I manage pretty well because, after doing the tandems, I can go back up with the last cable car and my cross-country equipment.

In Garmisch, you can still go on beautiful little tours late in the day. And when I've had a really crazy day, I take a day off for myself and do some cross-country flying. The fact that my bosses at the tandem company are competition pilots themselves, means that they understand...

Photo: Jakob Schachtel







Dr. Jens Bansi from the Valens clinics in Switzerland, who are very generously supporting the two X-Alps rookies, Celine and Tanguy. The team uses, amongst other things, spiroergometry and neurocognitive tests to measure the physical and mental state of athletes.

YD:  
Do you also skydive?

CL:  
Yes, I started in 2019 in South Africa, I was there with my boyfriend at the time. We went to South Africa specifically to get our licences. It was another way to do things differently. Cool!

YD:  
For you, what are the most beautiful moments flying?

CL:  
For me, the best moments are at sunrise or sunset. It's always very special for me, especially if close friends share the flight, or if I manage to fly further than I had expected. As happened at the Dolomiti Superfly.

During the flight to Sesto, it was totally unexpected, because there was a strong north wind. However, I was able to pass from the south side of the Trois Cimes de Lavaredo (not spectacular on that side), onto the north face. Suddenly, I got this imposing and unexpected view...

YD:  
During the X-Alps, you will have Jacob Schachtel as a supporter, what makes you a good team?

CL:  
We both work together doing tandems in Garmisch. We get along really well, we can tell each other honestly what we think, we go cross country together and we have a lot in common.

He also coached me by phone during the Dolomiti race, for example. I also have Tim Ungewitter as a supporter for videos and photos, amongst other things.

YD:  
What are your goals for taking part in your first X-Alps?

CL:  
Of course, finishing the race is the primary objective, but I also want to have fun during the race, to have a great team vibe and to go home with memories of good times.

Photo: Jules Perrin





Photo: Tim Ujgewitter



Celine has also flown the Peak 5 (above), the Kode P (previous page) and the Icepeak X-One, which she particularly likes. For flying tandem professionally she also uses the Takoo 5.

YD: What do you think will be the biggest challenge in the X-Alps?

CL: The biggest challenge for me will be not putting too much pressure on myself. Yes, of course it's THE Redbull X-Alps, but I shouldn't put too much pressure on myself at the expense of safety.

YD: So you should listen carefully to "your inner voice"?

CL: Yes! In the Dolomiti Superfly, I was in last place on day one. I told myself that it was "over", and that I should, nevertheless, make the most of it.

I kept going, "one small step at a time", without letting myself be pressured by the fact that the others were already much further ahead to the south.

Then I just took advantage of every possible window to fly and it worked fine. I flew really well and was able to catch up.

I finished first lady in the ranking and also the first woman ever to finish this race!

Unlike cross country competitions, where it's easy to be tempted to go for a transition because you are following the others, during Hike&Fly competitions, being alone, I often climb for a long time in a thermal, right to the top, before embarking on a transition...

(Reminder: interview conducted before departure)

Photo: Tim Rochas





Celine during the X-Alps 2023, before her injury.  
Photo: Tim Ungewitter





It was not in the air that she lost, but on foot: on the sixth day, she had to stop due to infected blisters on her feet. At this point, Celine was well placed ahead of Laurie Genovèse and at the same level as veteran Tom Cocone...  
Photos: Tim Ungewitter





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# JEAN-BAPTISTE CHANDELIER: NO WAY!



*Jean-Baptiste Chandelier's most recent video, released in mid-May, once again caused a big buzz and also did the rounds of the television channels.*

*It is, as always, great publicity for our sport! We asked JBC about his technique for doing such manoeuvres, and, as always, learned some very interesting details to pass onto other pilots!*





The trademark of Jean-Baptiste Chandelier's brand is to caress the ground with just the tips of his shoes and then takes off again a few meters further on, with unequalled gentle fluidity.

As is so often the case, many of the scenes were shot at the Col du Lauteret. The angle of this road is well suited to these proximity flights.







A recurring theme: racing with motorbikes, cars, skateboards... JBC uses 3 different wings. For close-up scenes, he uses the little sister to the wing used in the film Lightline. The profile has a slight reflex, it "attacks well going forward", and stays there for a while, according to JBC.

You would think that JBC, working for Skywalker (which is also the parent company of the brand, Moustache) would use mainly Moustache gliders. However, this is not the case, because these are "great at high speed, but not good enough at low speeds" according to JBC. He keeps his "camouflaged Moustache" to use in just a few scenes.







Landing in a car is not the most complicated manoeuvre. It is helped by good communication between the pilot and the driver...

... which ensures the right timing by perfectly adapting its speed to the paraglider. Here, the two get along wonderfully. Perhaps because Laure Metairie, who is at the wheel, is also Jean-Baptiste's companion in real life?







The tunnel scene is spectacular. Apart from the fact that the entrance and exit to this tunnel do not correspond to reality, there is no "cheating", other than the film being slightly speeded up at the point where he lands...

... as well as when entering the tunnel. It is true that given the speed of the film, collapsing the wing could have caused more problems.







The speed of the film as they come out of the tunnel corresponds to the reality of how it was filmed. Nice inflation! In case the wing threw JBC towards the cliff, he was still temporarily secured to the bed of the cliff, he was still temporarily secured to the bed of the trailer.

And, as always, this magnificent moment when JBC leaves the road to return to being the bird that he is...







Oddly enough, JBC considers flying in the peloton of cyclists to be one of the most difficult scenes... Staying in the middle of them, without making a single one fall, whilst aiming for the bottle...

... that he had to recover, then fly away again... It's precision work!







Aiming for the open window from the air also wasn't very easy. The "failures" can be seen in the outtakes at the end of the film.

When it comes to filming with cars, JBC uses his proximity wing. The wing came from the prototype of an acro wing, but it didn't work well doing an Infinity as it stopped under his feet.







For most "normal" pilots, these scenes are probably the most stressful...







JBC therefore works with three wings, one perfect for close proximity flying, another for acro (like Infinity Tumbling), and another, a "Camouflaged Moustache", for scenes like the radar one, for example. The difference is not really visible when you watch the film. One final detail, but which we already suspected: JBC did not really land in the bed in the motorhome, it was a drone that crashed landed there in his place.

As always, this exceptional pilot put sparkles in the eyes of all the spectators, whether they were pilots or pedestrians... If you want to find all of Jean-Baptiste's advice for pilots wishing to do "proximity" flying, read our report in the issue "Playing with wings!"





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