

#trends 2026





A major trend for 2025/2026: parakites. Niviuk has also joined in and presented its Jester at Coupe Icare 2025...

> We examined it in the last issue: submarine-type harnesses are gaining popularity, even among leisure pilots. Read again below. By the way, yellow has been especially fashionable since 2025!





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SKYMAN PASSION
TWENTY YEARS NIVIUK

The new Nova Aonic 2 is representative of a persistent trend: splitting the classes in two, here with a "high-end EN A."
The many internal details show the manufacturers' efforts to make even EN A wings perfectly suitable for cross-country flying...

In addition, the EN standard is set to evolve and will probably split the EN B class into at least two categories.



#2025 world championships

The Paragliding World Championship 2025 took place in Castelo, Brazil, from August 31 to September 13, 2025. More than 130 pilots from over 50 countries competed.

France clearly dominated:

- 1) Baptiste Lambert, FRA, Ozone Enzo 3, World Champion,
- 1) Constance Mettetal, FRA, Niviuk X-One, World Champion (Women)

Overall 2+3:

- 2) Honorin Hamard, FRA
- 3) Marcelo Sanchez Vilchez, ESP

Women 2+3:

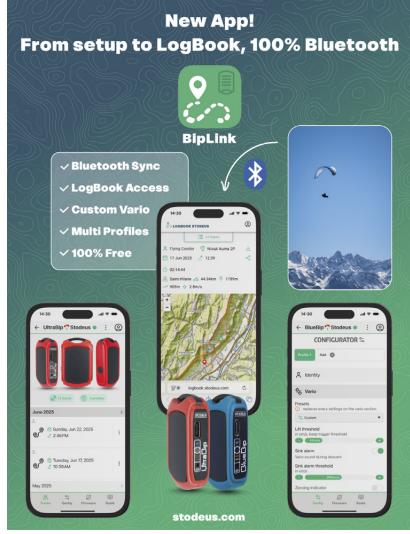
- 2) Alexia Fischer, USA
- 3) Keiko Hiraki, JPN

Nations:

- 1) France
- 2) Spain
- 3) USA

The accidental death of Belgian pilot Bram Declercq during the championship has sparked controversies that may prove beneficial.

Pal Takats proposes a limitation for wings to the EN C class, and the FFVL asks for the resignation of the CIVL board, notably due to the decision to move the competition to Castelo.





Strong presence of Submarine harnesses from all brands... Photos: Tim Rochas



JESTER GLIDER



Pure parakite. Maximum fun.

The Jester is our first parakite. Designed utilising on our experience with paragliders and developing kite wings for third parties, it offers a radically fun flying experience. It combines speed, agility and control for dynamic descents and proximity flying.

Sizes 14 / 16 / 18 / 21 / 2

Fast, precise and playful. Piloting through the risers allows you to automatically adjust the wing's angle of attack, keeping it stable even at top speed. The Jester invites you to discover a new way to play with the wind.







#technique





#hands up!

The words are in French and very poorly translated by YouTube's captioning service, but the video is understandable without them as well.

In this video, Cédric from Certika very clearly shows that when a modern wing is at the stall limit, it is crucial to release the brakes quickly and fully, then prepare for the usually pitch correction that follows. If the pilot, however, maintains some brake input, the wing exits the initial parachutal stall much less smoothly, with uncoordinated movements.

Especially for more experienced pilots, this is not necessarily intuitive. One might expect a violent dive, as if releasing brakes during a true stall while swinging forward. Here, Cédric proves the opposite: as long as the wing has not clearly passed behind the pilot, fully releasing the brakes is beneficial.

One possible reason: a braking-induced concave profile tends to pitch down more than the same profile without braking. This is also one reason why, after the flare in exiting a 360° turn, it is better not to brake too early, but wait until the wing has passed back above the pilot or is even slightly ahead. Only at that moment is it appropriate to brake decisively.

Another article will be published on this topic in a future issue of the magazine! So: as long as the wing hasn't passed behind (which might not always be easy to see), it is better to exit the beginning of the parachutal stall with a clear release of the brakes.

Thanks, Cédric

https://certika.org/certika/frontend/web

#design

#design details

More and more wings are integrating unusual shapes and appendices: the most visible are the winglets (see also further on in this issue).

•At BGD, the winglets are primarily used to allow the wing to exit from a deep spiral. This way, the manufacturer can use other parameters to improve the handling of the wing while giving it this safety feature... Wings that remain too easily in a spiral can no longer pass EN B certification.

On this Base 3, three other details stand out, supposed to improve performance at least a little:

- •A strong tapering of the wing, with the chord decreasing significantly towards the tip, and then...
- •... while the wing has a rather pronounced arc, the tip extends more towards the horizontal (increasing projected aspect ratio), and
- •is curved backwards (increased sweep)

These last three points mainly serve to increase performance, among other things by reducing drag.

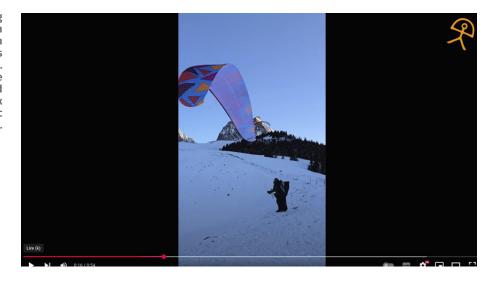
On the website, however, BGD mentions: "The tapering of the wing provides very good low-speed flight characteristics, a low stall speed and a large margin against over-piloting," but in the end Bruce Goldsmith did not want to clearly confirm this aspect when we asked him for details. Because, as always, the design of a wing is a whole, with many interacting parameters.



#trends



BGD claims that this remarkable self-stablising behaviour (here on a Diva 2, but also present on the Base 3) is achieved by a rather light reflex in the profile, which can fully "express itself" thanks to other construction parameters. Among other things, the sailmaking work must be precise to avoid breaking the reflex effect. And also to maintain good performance: a reflex profile is generally less performant than a classic









It is not entirely new to raise the wingtips as on the BGD from the previous page: twenty years ago we tested the Bionic, which exaggerated this technique to the point that it had to be compensated elsewhere.



For the past two years, winglets have been sprouting like mushrooms on the upper surfaces of wings. Often, it is not only to make it easier to exit a spiral, but also to reduce roll in general. This allows the wing to have more curvature, without turning it into a "swing" on the roll axis.



It is also possible to place just a single winglet on top of the wing, as Apco has done since the F5.











#single surface

For a while, it was thought that the singleskin trend would settle down: classic mountain wings became significantly lighter while offering higher speeds, thus better wind penetration.

But single-surface wings still have several advantages:

- •generally still at least a bit lighter in weight
- •even smaller packing volume
- •even easier handling at launch
- extremely easy inflation
- •often very safe in flight: after a (rare) collapse, reopening is immediate since no cells need refilling.

Niviuk has just released, for the 2025 Coupe Icare, the 4th version of its "Skin P". Given the performance and the "like a real paraglider" behavior of the earlier versions, we are very eager to test it!

The new Skin 4P, presented at the 2025 Coupe Icare: from 950 g to 1.2 kg $\,$ depending on the size, it is really (!) light...

The landing flare would be even better than on previous versions. The Skin 4P is $\bar{\text{derived}}$ from the wing used in tandem flight from the summit of K2...

#single-surface



At the top: reread our extensive feature on the origins of single surface wings!

On the right: the Grasshopper from Independence is a single-surface wing expressly designed for training. We have observed, just like some schools in Germany, the surprising ease and safety for students who experienced no frustration from day one. The only drawback: reduced glide ratio, and students must later train for one or two hours to move on to more "complicated" wings.





World of XC paragliding



Skyman Sir Edmund Shark:
we have tested it extensively, it is the single
surface wing with interesting performance and
undeniable safety.
Despite the dedicated system to facilitate the
flare at landing, it is not 100% comparable to a
landing with a standard wing.
And Markus Gründhammer, at the top, doesn't
land like "normal" pilots anyway...
;-)



FIEL BELD MAGAZINE

#single-surface



EN/LTF A

KODE 2 P GLIDER

Hike lightly, fly free and enjoy the ride

The Kode 2 P is an ultralight and accessible mountain wing, designed for hike and fly. It retains the free and playful spirit of its predecessor, with greater pitch and roll stability and improved low-speed behaviour.

Refined in every detail, it is even more intuitive and easy to control. Highly versatile and available in a wide range of sizes to suit every type of pilot and adventure.

Sizes

12 / 14 / 16 / 18 / 20 / 22 / 24 / 26







From 2.09 kg -



The new Kooper P is Niviuk's most versatile reversible harness. Its modular structure allows for various configurations – perfect for different flying disciplines. Ideal for hike & fly, thermalling and soaring, it can also be used for speed flying. Light, ergonomic, compact and safe, it is equipped with an airbag and an integrated emergency parachute compartment.

Sizes S / M / L





#coupe icare 2025

From September 16 to 21, 2025, the Coupe Icare took place for the 52nd time in Saint Hilaire in the French Alps near Grenoble.

The weather was mostly on the side of the organizers, with rain starting only in the afternoon on the last day.

Here are some impressions of this huge free flight festival, attended by about 80,000 people, before diving into the 2026 the Icare Expo to discover new trends...









THE SIR EDMUND SHARK IS SKYMAN'S MOST POWERFUL SINGLE SKIN

hybrid single skin with 20% double surface



SIR EDMUND SHARK

most powerful single skin for Hike & Fly

thermalling

short cross-country flights

www.skyman.aero





There is not only paragliding...







In the first days of the Coupe Icare, during the Icare Test, manufacturers offer all pilots the opportunity to test wings. Pilots pay 25 € for participation, while the stands are free for manufacturers.

The Film Festival is also an essential part of the Coupe.











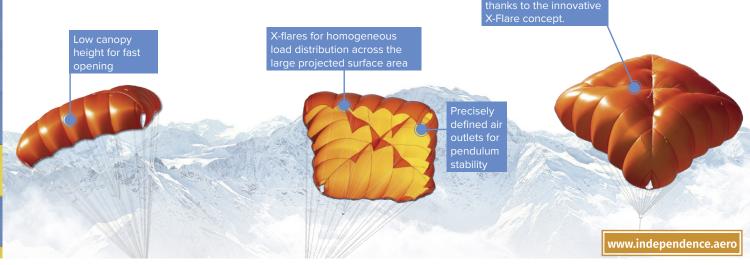


The world's leading rescue systems

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 (m²)	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







#trends 2026 1/2

The Coupe Icare is the world's largest showcase of free flight innovations. As always, clear trends have emerged. First, of course, the submarine harnesses, as we already highlighted in the last issue of Free Aero magazine (see below for a recap).



The other big trend is parakites. In the end, these wings could appeal to a much wider range of pilots than just the niche of speedriders/speedflyers, because parakites are more universal.

In this issue, we are focusing above all on the submarines discovered at Coupe Icare 2025. Parakites and other new developments will be presented in the next issue at the end of October, "Trends 2026 2/2".

As every year for decades, Free Aero Magazine was present with a stand, but as always, it is impossible to be both at our stand and to visit the other 119 stands in search of new products for our readers. So if you came by in vain and want to contact us, email will be the easiest way: contact@free.aero or via WhatsApp



Thank you!





The new Calixe from Ascendant, a derivative of the Zian ST, in a public version, possibly as first pod harness. Two reserve parachutes, shorter fairing, less risk of losing visibility during a stall.







A thicker fabric (Skytex 38, Ultragrid), inflatable protector or foam protector... The final weight is not yet known. The shorter fairing is compensated by a certain height. Getting in and out of the harness is very easy.







The Bogdanfly Zeppelin was one of the first more "public" submarines. Around 3 kg. Very easy to put on.

The boss, Bogdan, had to leave Ukraine to manufacture in Portugal.







At Nearbirds, version 2 of the ATACMS (which, after verification, was the first pod harness with magnetic closure!) has a double skin: it stays constantly inflated, even if the pilot opens it. This skin even slightly acts as an inflatable protector (in addition to the protector on the back). Volodimir Perevalov (behind the harness) still manufactures in Kyiv – under Russian bombs.







Two standard reserve parachutes on this harness called "Vyra" (a contraction of the Ukrainian "Vira" = trust and "Vyr" = vortex). That's less warlike than the" ATACMS 2"... The harness stays inflated thanks to two batteries and a fan. In hot countries, pilots appreciate being able to open the pod. Pods are generally warm enough to allow taking off in shorts. Great! But sometimes, it's too hot in these "greenhouses"...



EN/LTF B

SKIN 4 P





Born on the *summit of K2*

From 0.95 kg

The Skin 4 P is much more than an ultralight single-surface wing; it's the ultimate evolution of hike and fly. Its design is completely new, created from scratch with a single goal: to be the lightest and most compact wing possible, without sacrificing safety or the pleasure of flying. The Skin 4 P has been tested under extreme conditions, being the hero of the flight from the summit of K2. After that experience, it's ready for any mountain challenge.

14 / 16 / 18 / 20



ROAMER 2 P Pack small, fly light

From 189 g -



Niviuk harness is aimed at hike & fly lovers as well as para-mountaineers. Its ergonomic 3D-modelled structure adapts perfectly to the body, and its innovative integrated connection system makes pre-flight preparation simple, as well as reducing the overall weight of the equipment. You won't even notice you are wearing it!









Ozone presents the commercially available version of its Sublite. It is very comfortable, relatively easy to set up (for anti-forgetting safety reasons, only one leg still opens. Questionable choice?)

The structure is the same as the F*race2/F*lite2: the Dyneema threads carry the load, not the fabric.





The World Vice-Champion, Honorin Hamard, and the Champion, Baptiste Lambert, at the Ozone stand in front of the Sublite. In competitions, it is rather the classic Submarine that is used.

Below: huge storage compartments on this Sublite. The magnetic closure is sleeker and really looks "classy."



#safetu







#safety note boucles

On the Ozone F*Race 2, a potentially dangerous but classic problem for this kind of closure, and one that is easy to fix: the ABS chest strap closure could open in flight. This simply happened because the loop was too large. A quick adjustment reduces the opening and prevents the metal tab from coming out of its housing.

On other harnesses, an extra elastic loop can also prevent this issue. It is essential to add this on harnesses where the manufacturer intended it!

https://flyozone.com/paragliders/infozone /safety-notices/f-race-2-safety-notice





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At the Supair stand, of course, the Alp, one of the pioneers in submarines. We have been testing it for several months and will deliver our conclusions before winter. To reveal some results already: the performance gain (glide, sink rate, speed, aerodynamic stability in turns) is impressive, regardless of the wing above! Very high comfort for a harness under 2 kg. Setup a bit less comfortable. But: this wedding dress doesn't drag and does not disturb at takeoff, even when groundhandling in strong wind.





More information about other Supair products, such as the new Delight 5, will be in the next issue!







Neo is still not offering its Submarine commercially. However, the manufacturer adds at least, for the first time, a fairing to a production harness: this is the new Race Up.





THE SIR EDMUND SHARK IS SKYMAN'S MOST POWERFUL SINGLE SKIN

hybrid single skin with 20% double surface



SIR EDMUND SHARK

most powerful single skin for Hike & Fly

thermalling

short cross-country flights



Niviuk still does not present final versions of the Rocket or Rocket P harnesses, although these are already widely used in the X-Alps, World Cup and World Championship competitions. The 2025 World Champion, Constance Mettetal, flies with a Rocket like the one in the image above.







The Jester is the new parakite wing from Niviuk. The Jester is described as "ultra-fast, with direct and lively handling". At low speeds, it would distinguish itself by "forgiving and predictable behavior, with progressive and intuitive brake pressure, offering an extra margin of safety".

Aspect ratio 5.5, sizes 14, 16, 18, 21, 24.

We are eager to test it and will cover it in more detail in the next issue, dedicated to Parakite innovations.



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A photo of the Ozone Vapor 20: according to our information, Ozone is preparing a complete range of parakites, with beginner, intermediate, and expert models. Contrary to what Ozone initially planned, the range was not ready for autumn 2025. So, for now, it is just "vaporware," but knowing Ozone, we are confident the range will be released quickly and will be fully fledged.





news instruments

At Coupe Icare 2025, there were many innovations in instruments... Too many for this issue, we will cover these new features in the next edition. Among them, we will present:

The Vectorvario The first compact vario, to be attached to the riser, with inertial sensor AND airspeed measurement, integrated in measurement of wind and wings movements. We are already testing it...

Biplink and Tracerlink Stodeus's Ultrabip and Bluebip can now display all important information on an Apple Watch. It consumes little power but is super efficient. With the BipLink app, you can now configure your Stodeus vario directly from the app, without connecting it to a computer. In addition, flights can be uploaded to a server and viewed online. The operation is very smooth.







3. XC Tracer Max III Bigger, more powerful, with very fast map display rotation. It shows the topography stunningly clear on a black and white scre, en perfectly visible in full sunlight. We are testing it...

SØ from Skybean Indestructible screen, FLARM, FANET, very good readability, new functions... We aretesting it since the Coupe Icare!

5. The new Flymaster and Syride...

All this upcoming in the next issues!









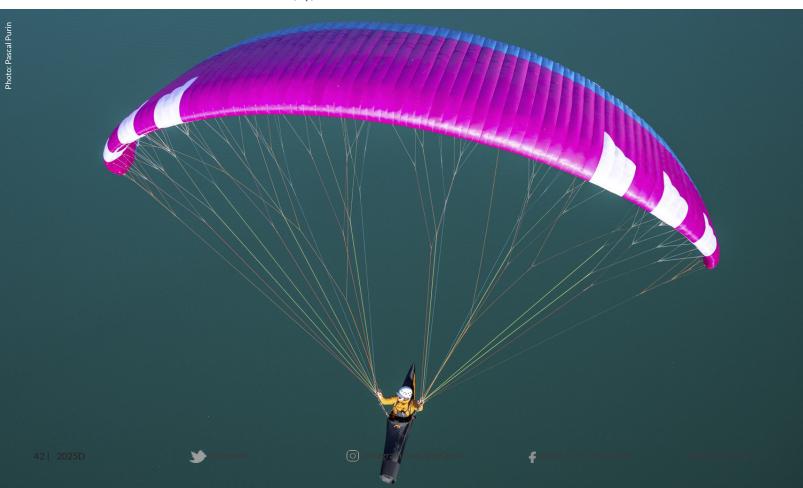


Trend in winglets: also at Zoom. More details in the next issue!



#phi

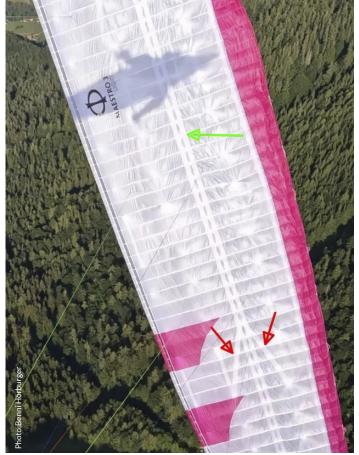
At the end of September, the Maestro 3 light (bottom) was certified by the DHV. The size 19 of the classic Maestro 3 (top) was also certified.





On the Maestro 3 at the top, you can clearly see the result of a very meticulous design and workmanship job: it looks as if the leading edge was made from a solid material, cut straight with a knife. No visible irregularities!

To achieve the necessary tensions in the canopy, Hannes Papesh works, among other things, with perforated straps that branch out at the wingtips – as on the Maestro 3 light on the right, photographed by Benni Hörburger during a wing-over..



instagram.com/free.aero

The Cabrio harnesses from Phi are available. The system is modular; one can add or remove the back protection, rescue compartments (left, right, or both sides), and the protectors... The main protector is pre-inflated by a Nitinol spring. The additional back protector is optional (photo bottom right).

Meeting at the Phi booth: between Hannes Papesh and Benjamin Hörburger, Frank Ulmer from Sri Lanka. He is the founder of Aqua Dynamics, the manufacturer of canopies among others for Phi, BGD...

In thirty years, Frank has developed his company remarkably: in 1988, he started in a very small corrugated sheet hut. Nowadays, Aqua Dynamics (which also produces kites and marine sails) employs 2000 people on 30,000 m²...











#kortel kooka

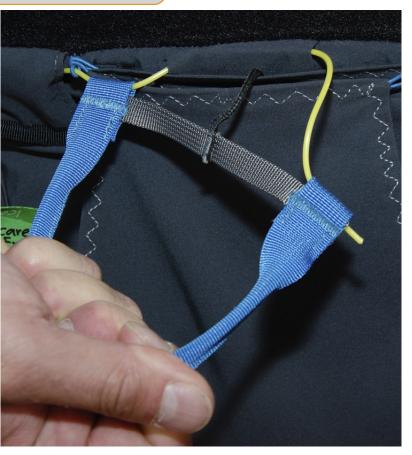
At Kortel, too, they believe in the future of submarine harnesses and are working on them. Meanwhile, the manufacturer released a comfortable pod harness full of interesting details, yet not heavy: between 2.5 kg and 3 kg depending on the size, which is light given the features and fabric quality.

Kortel has put a good dose of their accumulated know-how into it. The adjustments are, of course, made with splices (Kortel was a pioneer here). On the Kooka, you can adjust the height of the the leg loops.

By the way, the Kooka already includes the new very robust anti-forget system that the new standard will require (in red).

We will present the Kooka in more detail in a future issue.







A good idea: the rods of the rescue parachute closure remain on the harness and not on the handle, reducing the risk of entanglement after deployment!

At the bottom, the inflatable protector under the seat is complemented by an airbag protector on the back.



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#TRENDS 2026 1/2

#trends 2026

Back to the roots: buckle closures, but very easy to operate!A





Stiffeners in the back for better support.





#mac para eden 8

The new Eden 8 from Mac Para also comes with winglets yet proves to be much more agile than the previous version. A promising EN B+ that we will test in detail!





#niviuk kode 2P

Surprise: the Kode 1, still a great success, is being replaced by a version 2.

According to Niviuk, this ultralight and accessible mountain wing, designed for hike and fly, will retain the free and playful spirit of the previous version, with improved pitch and roll stability, as well as better behaviour at low speeds.





The new Kode 2P: clearly still very playful, despite improved roll stability.





#u-turn vision 2

The second generation of the highperformance EN B wing is expected to
deliver an even better performance
profile with "maximum fun". This
well-established cross-country wing
shall retain its "well-known
tolerance", which would provide an
absolute sense of safety even in
demanding conditions, while still
offering very good handling.
Significant improvements have also
been achieved in fully accelerated
performance.

More news about U-Turn in the next issue.





#independence air taxi 3

The Air Taxi 3 tandem is a completely new version. In addition to very easy take off and landing behaviour, it is designed to offer a very wide speed range thanks to long-travel trimmers.

We will test this tandem in detail.





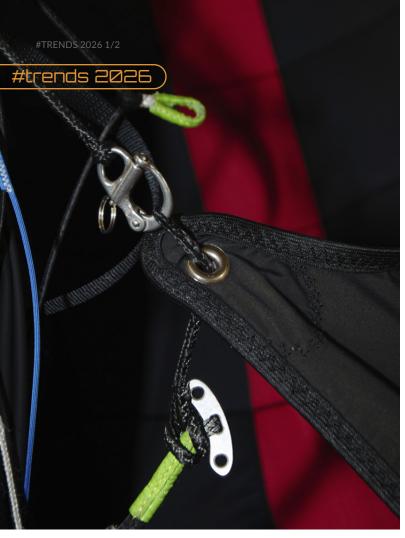
#skyman passion

The U96, which we have already been able to test very thoroughly and positively, is now coming to the market in a completely revised version under the name "Passion". The multi-year development is clearly visible: all reinforcements have been optimised and streamlined. Every detail has been rethought and refined.

instagram.com/free.aero

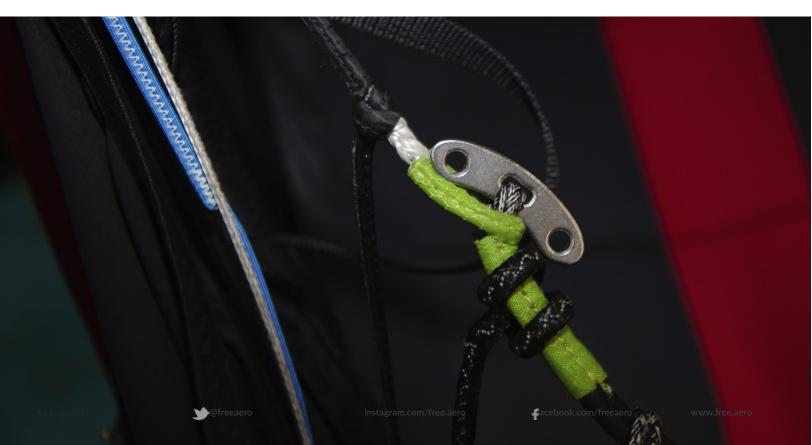








Independence/Skyman boss Stefan Kurrle is also involved in the EN committees: naturally, this harness already integrates the new anti-forget system, which must withstand 400 kg, more than four times the pilot's weight, even with the leg straps open. At the same time, the buckle-to-metal part ratio has been readjusted: even without an elastic loop, an unintended opening seems impossible.





#20 years niviuk ...

At the Coupe Icare, Niviuk celebrated its 20th birthday!

Journalists from Free Aero have followed and covered this success story since the beginning in the Pyrenees...

It was clear that it was not always easy for Dominique Cizeau (right in the photo) and his team.

One of the biggest hardships was probably the unilateral termination of collaboration with another manufacturer, which left Niviuk without production means while the order book was filling every day.

However, "karma" rewarded Dominique for his resilience and perseverance. He opened his own factories in Vietnam, which now are among the largest in the paragliding business...

The R&D team around Olivier Nef (left in the photo) is one of the most efficient we know. During our tests, we regularly observe their impact on the remarkable performance of the range.







NK1: first Niviuk paraglider in 2005...

Icepeak 4 :first 2-liner, here in 2010

Today, Niviuk wings and new harnesses are amoung the most highly rated products by pilots worldwide. This is also seen in the second-hand market.

If you change Niviuk equipment for a newer version, the old model generally finds a buyer immediately.

Some milestones of Niviuk's history here:

https://niviuk.com/en/we-celebrate-20years-flying-higher-than-ever

And on the next page, revisit the entire Niviuk universe from a drone perspective...

Mandatory for a success story: it starts in a garage...





A stunning and well-made video: the viewer flies through all of Niviuk's facilities around the world... The video was released for Niviuk's 20th anniversary this year.

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IMPRINT

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