

USER'S MANUAL



PEAK

WELCOME

We wish to welcome you to our team and thank you for the confidence, which you have placed in a NIVIUK Glider.

The PEAK is a completely innovative glider, carefully designed by the NIVIUK team to achieve new standards in the Serial Class.

The very latest technological innovations which have been used in the design of the NIVIUK competition wing, the ICEPEAK XP have been also been used in design of the PEAK. Add to this the passion of our design team and we can now offer you the ultimate serial glider.

Our aims were to create a serial glider with features as close as possible to its bigger brother and this has been achieved beyond our wildest dreams. In the development of the PEAK the NIVIUK team, directed by Olivier Nef, have achieved performance and stability not yet seen in this category. With an aspect ratio of 6.6 we feel that the overall qualities of our competition glider have successfully been transferred to the Serial class.

We are sure that you will enjoy flying this wing and that you will soon find out the meaning of our slogan:

“Give importance to the small details to make big thing happen”

This is the user manual, which we recommend you take time to read in detail.

The NIVIUK Gliders Team.

USER'S MANUAL

NIVIUK Gliders PEAK

This manual offers all the necessary information that will familiarize you with the main characteristics of your new paraglider. Although this manual informs you about your glider, it does not offer the instruction requirements necessary for you to be able to pilot this type of wing. Flying instruction can only be taught at a paragliding school recognised by the Flying Federation of your country.

Nevertheless we remind you that it is important that you carefully read all the contents of the manual for your new PEAK glider.

Severe injuries to the pilot can be the consequence of the misuse of this equipment.

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1. CHARACTERISTICS

1.1 WHO IS IT DESIGNED FOR?

The PEAK has been designed for experienced pilots that have good flying knowledge. Designed to take an important place in this category of gliders, it can be used for pilots that want to do high performances competition but without renouncing the security of a certified glider. The PEAK has been particularly designed for the Cross Country fan that wants performance, confidence and comfort, to be able to enjoy fully his flights.

1.2 CERTIFICATION

The PEAK has been presented at the new European certification EN. All the commercialized sizes passed all the required tests with excellent results. The certification results gave the letter D for all the sizes.

The PEAK passed the essential load test of 8g without any problems at all. This test was carried out in the Swiss Air-Turquoise laboratories in Switzerland.

Check the homologation results and figures on the last pages of this manual.

1.3 IN-FLIGHT BEHAVIOUR

To create a glider for all, while preserving the flying characteristics of the ICEPEAK XP (the bigger brother), adapting to the demands of the certification while respecting the specifications has been possible thanks to the complete NIVIUK team and the perseverance to get to our goals. Our idea was to give the pilot a glider that not only gives pure sensation but, above all, the pilot has to be in complete harmony with the machine by passing clear precise information and by doing so, offering a perfect analysis of the air mass. Piloting the PEAK has to be the continuing of our philosophy, accessible gliders with an intuitive behaviour, but with outstanding performances in its category.

In thermals, the PEAK shows its undisputable efficiency, way above most actual gliders. Turning needs a little adaptation time for those that are not

used to fly with an aspect ratio of 6.6 and three rows of lines, but once you know how, you will enjoy precise piloting, responding actively to your demands. It will make the PEAK your best ally to be on top of the thermal and to enjoy the performance and speed.

Glide ratio and speed, in these domains the PEAK is outstanding. The PEAK allows the pilot to feel the information given by the glider and to anticipate the movements even at high speed where the glider remains solid and communicative. The accelerator is progressive. In its first half you will feel a real acceleration without having the impressing of falling out of the sky, the glider is homogenous, flying fast and far. The second half is pure continuing speed pleasure up to 100%, if the air mass allows to.

1.4 ASSEMBLY, MATERIALS

The PEAK has all the technological innovations of the other NIVIUK gliders. Furthermore it disposes of small elements to improve the pilot's comfort (Harken pulleys) and to improve the output of the glider (Rigifoil). Very small pulleys have been fitted on the risers to improve the use of the accelerator, you will be less tired and have a better feeling of the glider in your feet. The use of the rigifoil allows reinforcing the leading edge while preventing its deformation. The airflow is improved on the complete front side of the glider. The new generation profile is conceived to spread the total load on the three rows of lines. The chosen materials and line dimensions have minimum air resistance while respecting the security for the load repartition.

From 170 lines of the PEAK, only 8 are protected and the 162 others are continuously subjected to the abrasion of our sport. That's why we advise to check the lines every 100 hours or every 6 months.

The used fabric, as for the rest of our gamma, has been chosen among the best fabrics on the market, offering lightness, live span, and resistance while remaining colour fast.

Not a single millimetre of error is possible in the manufacturing process from Olivier's computer to the cutting of the fabric. The cutting is done section by section in an extremely meticulous manner. The numbering and marking of the guideline marks is also done in the same meticulous way so avoiding errors in this critical process.

The lines are semi-automatically manufactured and all the sewing is finished under the supervision of our specialists.

The jigsaw puzzle of the assembly process is made easier using this method. We economize on resources while making the quality control more efficient.

All the different parts of the canopy are cut and assembled under the strict conditions induced by the automation of the whole process.

All NIVIUK Gliders go through an extremely thorough and efficient final inspection. Every single line of each glider is measured individually once the final assembly has concluded.

Each wing is thoroughly inspected at the end of its assembly.

Each glider is packaged following the maintenance and conservation instructions recommended for the advanced materials. NIVIUK Gliders are made of first class materials as demanded by the performance, durability, and homologation requirements of the present-day market.

Information about construction materials is given on the last pages of this manual.

1.5 ELEMENTS, COMPONENTS

The PEAK is delivered to its owner together with a series of components that, although not fundamental, do take an important part in the use, transport and storage of the paraglider. The glider is delivered together with a rucksack, large enough for all of the equipment to fit inside (195 liters), once appropriately packed. The rucksack is designed to make transport on foot as pleasant as possible. The internal bag, intended to protect the PEAK from possible damage, during storage is also supplied.

The compression strap allows you to keep the glider as good as possible in the rucksack. Furthermore you will find the accelerator bar that completes the acceleration gear of the wing, a small fabric repair kit made of auto-adhesive ripstop, a pair of special handles for more precise piloting and a user's manual with the answers to all our questions about our new PEAK.

2. UNPACKING AND ASSEMBLY

2.1 CHOOSE THE RIGHT PLACE

We recommend that you unpack and assemble your wing on a schooling slope or a flat clear area without too much wind and free of obstacles. These conditions will allow you to carry out all the steps required for you to check and inflate the NIVIUK PEAK.

We recommend that an instructor or a retailer supervise the entire procedure, as only they are competent to resolve any doubt in a safe and professional way.

2.2 PROCEDURE

Take the paraglider out of the rucksack, open it and spread it open with the lines on top of the underside, position the wing as if you were to inflate it. Check the condition of the fabric and the lines, making sure there are no abnormalities. Check the maillons, which attach the lines to the risers, are properly closed. Identify and if necessary disentangle the lines from A, B, and C risers, the brake lines and the corresponding risers. Make sure that there are no ties or knots.

2.3 ASSEMBLY OF THE HARNESS

Correctly place the risers on the harness karabiners. The risers and lines should not have any twists and they should be in the right order. Check that the harness buckles are correctly locked.

2.4 TYPE OF HARNESS

The PEAK has passed the EN D certification using an ABS type harness. This certification allows it to be flown with most of the harnesses on the market.

We recommend that you adjust the distance of the chest strap according to the certification. This varies according to the size of the wing.

44 cm for size 23 - 45 cm for size 25 - 46 cm for size 27 and 29.

Any changes made to these specifications may affect the wing's performance

and reactions. This would therefore effect the glider's configuration and would not conform to the certification.

2.5 ASSEMBLY OF THE ACCELERATOR

The acceleration mechanism of the PEAK works when you push with your feet on the accelerator bar, this is supplied with the equipment. On delivery the accelerator bar has not yet been installed and it is recommended that it is fit by your self before flight. Most harnesses are equipped with a pre-installed acceleration system. When fitting any accelerator system ensure that all preinstalled items within the harness, such as roller pulleys are used correctly. After fitting, take into account that you will have to adjust the length of the accelerator lines for correct use. This will vary according to the length of the pilot's legs!

We recommend that you try the correct fitting of the acceleration system on equipment designed to do this, most paragliding schools have this sort of equipment.

2.6 INSPECTION AND WING INFLATION ON THE GROUND

Once you have checked all the equipment and made sure that the wind conditions are favourable, inflate your PEAK as many times as necessary in order to become acquainted with the wing's behaviour. The PEAK inflates easily and smoothly. An excess of energy is not necessary and the wing will inflate with minimum pressure on the harness when you move forward. This may be assisted by using the A lines. Do not pull on them, just accompany the natural rising movement of the wing. Once the wing is in the 12 o'clock position, simply apply correct pressure on the brake lines and the PEAK will sit over your head.

2.7 ADJUSTING THE BRAKES

The length of the main brake lines is adjusted at the factory to the length established during certification. However, the length can be changed to adapt to the pilot's flying style. Nevertheless, we recommend that you fly for

a while with these, set at the original length. This will allow you to become accustomed to the PEAK and it's unique flying behaviour. If you then decide to change the length of the brake lines, untie the knot, slide the line through the brake link to the desired length, and strongly re-tie the knot. Qualified personnel should carry out this adjustment. You must ensure that this adjustment does not slow down the glider without any pilot input. Both brake lines should be symmetrical and measure the same length. The most recommended knots are the clove hitch knot or bowline knot.

3. THE FIRST FLIGHT

3.1 CHOOSE THE RIGHT PLACE

We recommend that the first flight with your PEAK is made on a smooth slope (a school slope) or in your usual flying area.

3.2 PREPARATION

Repeat the procedures detailed in chapter 2 (UNPACKING AND ASSEMBLY) in order to prepare your PEAK.

3.3 FLIGHT PLAN

Draw out a flight plan before take-off in order to avoid possible flight errors.

3.4 PRE-FLIGHT CHECK LIST

Once you are ready, but before you take-off, carry out another equipment inspection. Ensure correct installation of all equipment and that all lines are free of hindrances or knots. Check that the weather conditions are suited for your flying skills.

3.5 WING INFLATION, CONTROL, AND TAKE-OFF

Smoothly and progressively inflate the wing (chapter 2.6 INSPECTION AND WING INFLATION ON THE GROUND). The PEAK inflates easily and does not require excessive energy. It does not tend to over-take you, so the wing inflation phase is carried out without anguish. These take off characteristics provide a perfect control phase and enough time for the pilot to decide whether to accelerate and take off.

Whenever the wind speed allows it, we recommend a reverse launch technique, this type of launch allows you to carry out a better visual check of the wing. The PEAK is especially easy to control in this position in strong winds. However, wind speeds up to 25 to 30 km/h are considered strong and extra consideration should be given to any thought of flight.

Preparation and positioning of the wing on the take off is especially important. Choose a location, which is appropriate for the direction of the wind. Position the paraglider as if it were part of a large circle, taking into account the shape of the canopy in flight. All this will assist in a trouble free take-off.

3.6 LANDING

The PEAK lands excellently, it transforms the wing speed into lift on the pilot's demand, allowing an enormous margin of error. You will not have to wrap the brake lines around your hand to get greater braking efficiency.

4. IN FLIGHT

4.1 FLYING IN TURBULENCE

The PEAK has an excellent profile to withstand the very different aerological conditions so allowing the best possible piloting and stability. It reacts admirably in passive flight, thus offering a high level of safety in turbulent conditions. Nonetheless, the pilot always has to pilot according to the prevailing weather conditions, the pilot is the ultimate safety factor.

We recommend active piloting, making the necessary fine adjustments to keep the wing in control. He/she should stop braking to allow it to fly at

the required wing speed after a correction is made. Do not maintain any correction for longer than necessary (braked) this would cause the wing to enter into critical flying situation. Whenever necessary, control a situation, react to it and then re-establish the required speed.

4.2 POSSIBLE CONFIGURATIONS

We recommend that training to master these manoeuvres be carried out under the supervision of a competent school.

Asymmetric collapse

In spite of the great stability of the profile of the PEAK, heavy turbulent conditions may cause part of the wing to collapse asymmetrically. This usually happens when the pilot has not foreseen this possible reaction of the wing. When the wing is about to experience an asymmetric collapse the brake lines and the harness will transmit a loss of pressure to the pilot. To prevent the collapse from happening, pull the brake line corresponding to the compromised side of the wing, this will increase the angle of incidence. If the collapse does happen the PEAK will not react violently, the turn tendency is very gradual and it is easily controlled. Lean your body towards the side that is still flying in order to counteract the turn and to maintain a straight course, if necessary slightly slow down the same side. The collapse will normally open by itself but if that does not happen, pull completely on the brake line on the side, which has collapsed (100%). Do this with a firm movement. You may have to repeat this operation to provoke the re-opening. Take care not to over-brake on the side that is still flying (turn control) and when the collapse has been solved, remember to let the wing recover its flying speed.

Symmetric collapse

In normal flying conditions the design of the PEAK ensures that a symmetric collapse is quite improbable. The profile of the wing has been designed to widely tolerate extreme changes in the angle of incidence. A symmetric collapse may occur in heavy turbulent conditions, on entry or exit of strong thermals or lack of adapting the use of the accelerator to the prevailing air conditions. Symmetrical collapses usually re-inflate without the glider turning

but you can symmetrically apply the brake lines with a quick deep pump to quicken the re-inflation. Release the brake lines immediately to recover optimum flight speed.

Negative spin

This configuration is out of the normal flight behaviour of the PEAK. Certain circumstances however, may provoke this configuration such as trying to turn when the wing is flying at very low speed (while heavily braking). It is not easy to give any recommendations about this situation since it varies depending on the circumstances. Remember that you should restore the relative air speed over the wing. To achieve this, progressively reduce the pressure on the brake lines and let the wing gain speed. The normal reaction would be a lateral surge with a turn tendency no greater than 360° before restoring to normal flight conditions.

Parachutal stall

If it does happen, the feeling would be that the wing would not be advancing, you would feel a kind of instability and a lack of pressure on the brake lines, although the canopy would appear to be correctly inflated. The correct reaction would be to release the pressure on the brake lines and push the A lines forward or rather lean your body to any side **WITHOUT PULLING ON THE BRAKE LINES**.

Deep stall

The possibility of the PEAK falling into this configuration during normal flight is very unlikely. This could happen if you are flying at a very low speed, whilst over steering in a number of manoeuvres and in turbulent conditions. To provoke a deep stall you have to take the wing to minimum flight speed by symmetrically pulling the brake lines, when you reach this point, continue pulling until you reach 100% and then hold. The glider will first fall behind you and then situate itself above you, rocking slightly, depending on how the manoeuvre was carried out. When you start to provoke a stall, be positive and do not doubt an instant. Do not release the brake lines when half way through the manoeuvre. This would cause the glider to surge violently forward with great energy and may result in the wing below the pilot. It is very important

that the pressure on the brake lines is maintained until the wing is well established vertical above.

To regain normal flight conditions, progressively and symmetrically release the brake lines, letting the speed be re-established. When the wing reaches the maximum advanced position ensure that the brakes are fully released. The wing will now surge forward, this is necessary so that air speed is completely restored over the wing. Do not over brake at this point because the wing needs to recover speed to quit the stall configuration. If you have to control a possible symmetrical front stall, briefly and symmetrically pull on the brake lines and let go even when the wing is still ahead of you.

Wing tangle

A wing tangle may happen after an asymmetric collapse, the end of the wing is trapped between the lines (Cravat). This situation could rapidly cause the wing to turn, although it depends on the nature of the tangle. The correction manoeuvres are the same as those applied in the case of an asymmetrical collapse, control the turn tendency by applying the opposite brake and lean your body against the turn. Then locate the line that reaches the stabiliser that is trapped between the other lines. This line has a different colour and belongs to the external lines of the C riser.

Pull on this line until it is tense, this should help to undo the wing tangle. If you cannot undo the tangle, fly to the nearest possible landing spot, control the flying course with your body movements and a little pressure on the opposite brake. Be careful when attempting to undo a tangle if you are flying near a mountainside or near to other paragliders, you may lose control of the flying course and a collision may occur.

Over handling

Most flying incidents are caused by incorrect actions of the pilot, which chained one after another creates abnormal flying configurations (a cascade of incidents). You must remember that over handling the wing will lead to critical levels of functioning. The PEAK is designed always to try to recover normal flight by itself, do not try to over handle it. Generally speaking, the reactions of the wing, which follow over handling, are neither due to the input made or the intensity, but the length of time the pilot

continues to over handle. You have to allow the profile to re-establish normal flight speed after any type of handling.

4.3 USING THE ACCELERATOR

The profile of the PEAK has been designed to fly stable through its entire speed range. It is useful to accelerate when flying in strong winds or in extreme descending air. When you accelerate the wing, the profile becomes more sensitive to possible turbulence and closer to a possible frontal collapse. If you feel a pressure loss, you should release the pressure on the accelerator and pull slightly on the brake lines to increase the angle of incidence. Remember that you have to re-establish the flight speed after correcting the incidence.

It is NOT recommended to accelerate near to the mountainside or in very turbulent conditions. If necessary you will have to constantly adjust the movements and pressure on the accelerator whilst constantly adjusting the pressure applied to the brake lines. This balance is considered to be “active piloting.”

4.4 FLYING WITHOUT BRAKE LINES

If, for any reason at all, you cannot use the brake lines of your PEAK you will have to pilot the wing using the C-risers and your body weight to fly towards the nearest landing. The C-lines steer easily because they are not under pressure, you have to be careful not to over handle them causing a stall or negative turn. To land you have to let the wing fly at full speed and before reaching the ground you will have to pull symmetrically on both the C-risers. This braking method is not as effective as using the brake lines so you will land at a higher speed.

4.5 KNOTS IN FLIGHT

The best way to avoid these knots and tangles is to inspect the lines before you inflate the wing for take-off. If you notice a knot before take off, immediately stop running and do not take-off.

If you have taken-off with a knot you will have to correct the drift by leaning on the opposite side of the knot and apply the brake line on that side too. You can gently try to pull on the brake line to see if the knot becomes unfastened or try to identify the line with the knot in it. Try to pull the identified line to see if the knot undoes. Be very careful when trying to remove a knot. When there are knots in the lines or when they are tangled, do not pull too hard on the brake lines because there is an increased risk of the wing to stalling or negative turn being initiated

Before trying to remove a knot, make sure there are no pilots flying nearby and never try these manoeuvres near the mountainside. If the knot is too tight and you cannot remove it, carefully and safely fly to the nearest landing place.

5. LOSING HEIGHT

The knowledge of the different descent techniques is an important resource to use in certain situations. The most adequate descent method will depend on the particular situation.

We recommend that you learn to use these manoeuvres under the tuition of a competent school.

5.1 EARS

Big ears are a moderate descent method, reaching -3 or -4 m/s, ground speed reduces slightly between 3 and 5 km/h and piloting becomes limited. The angle of incidence and the surface wing load also increases. Push on the accelerator to restore the wing's horizontal speed and the angle of incidence.

To pull big ears take the outermost A-lines of both stabilizers as high up as possible and pull on them outward and downward. The wingtips will fold in. Let go of the lines and the big ears will re-inflate automatically. If they do not re-inflate, gently pull on one of the brake lines and then on the opposite one. We recommend that you re-inflate asymmetrically, not to alter the angle of incidence, more so if you are flying near the ground or flying in turbulence.

PLEASE, READ THIS CAREFULLY: RISK OF FULL STALL

1. As can be seen on the EN Certification, the PEAK has a relatively short brake travel and it should be noted that by reaching for the A3 line to make big ears it is possible to apply brake pressure without realising it. The same happens whilst pulling down the A3 line to make the ears. This can obviously lead to a significant speed decrease.
2. The PEAK has a new high arch concept and applying ears induces more resistance. With this new arch, the ears don't stick to the intrados but they do tend to "hang". Because of this, there will be more resistance, compared to ears on a standard glider.
3. Because of the design concept, the PEAK has a low transverse tension, which results in less pitch. This is good in normal conditions however on the other hand the glider could get into trouble if it is allowed pitch and achieve an extreme angle of incidence.

These are 3 particularities, which together with turbulent conditions could cause an unintentional stall.

The Solution:

Big ears may still be applied but the pilot must be fully aware of the above-mentioned points and act accordingly. To avoid the stall simply use the accelerator halfway (this is sufficient) to increase the speed, which naturally decreases the angle of incidence. In this way you will maintain a safe margin and avoid this phenomenon.
Take care not to pull the brakes while making the ears !!

Some pilots would say:

"Nothing is better than a good descending air mass to descend safely!"

5.2 B-LINE STALL

When you carry out this manoeuvre, the wing stops flying, it loses all horizontal speed and you are not in control of the paraglider. The air

circulation over the profile is interrupted and the wing enters into a situation similar to parachuting.

To carry out this manoeuvre you have to take the B-risers below the maillons and symmetrically pull both of them down (approx. 20-30cms) and then hold this position. The initial phase is quite physical (hard resistance) which means that you will have to pull strongly until the profile of the wing is deformed, when this happens the required force will then significantly reduce. To maintain this manoeuvre you must continue to hold the B Lines in the pulled down position. The wing will then become deformed, horizontal speed drops to 0 km/h and vertical speed increases to -6 to -8 m/s depending on the conditions and how the manoeuvre has been performed.

To exit the manoeuvre, simultaneously release both risers, the wing will then slightly surge forward and then automatically return to normal flight. It is better to let go of the lines quickly rather than slowly. This is an easy manoeuvre but you must remember that the wing stops flying, it loses all horizontal movement and its reactions are very different compared to normal flight.

5.3 SPIRAL DIVE

This is a more effective way for rapidly losing height. You have to know that, the wing can gain a lot of speed and the increase in G's will be substantial. This can cause a loss of orientation and consciousness (blackouts). These are the reasons why it is best to carry out this manoeuvre gradually so your capacity to resist the G forces increases and you will learn to fully appreciate and understand the manoeuvre. Always practice this manoeuvre when flying at high altitude.

To start the manoeuvre, first lean your bodyweight and pull the brake line to the side to which you are leaning. You can regulate the intensity of the turn by applying a little outside brake.

A paraglider flying at its maximum turn speed can reach -20 m/s, equivalent 70 km/h vertical speed and stabilize in a spiral dive from 15 m/s onwards. These are the reasons why you should be familiar with the manoeuvre and

know how to carry out the exit methods.

To exit this manoeuvre you must progressively release the inside brake and also momentarily apply outside brake. Whilst doing this you must also lean your bodyweight towards the outside. This exit manoeuvre has to be carried out gradually and with smooth movements so you can feel the pressure and speed changes at the same time.

The after effect of the exit manoeuvre is that the glider will rock briefly with lateral surge, depending on how the manoeuvre has been carried out.

Practice these movements at sufficient altitude and with moderation.

6. SPECIAL METHODS

6.1 TOWING

The PEAK does not experience any problem whilst being towed. Only qualified personnel should handle the qualified equipment to carry out this operation. The wing has to be inflated in the same way as in normal flight.

6.2 ACROBATIC FLIGHT

Although the PEAK has been tested by expert acrobatic pilots in extreme situations, it HAS NOT been designed for acrobatic flight and we DO NOT RECOMMEND THE USE OF THIS GLIDER for that use. We consider acrobatic flight to be any form of piloting that is different to normal flight. To learn safely how to master acrobatic manoeuvres you should attend lessons, which are carried out and supervised by a qualified instructor over water. Extreme manoeuvres take you and your wing to centrifugal forces that can reach 4 to 5g. Materials will wear more quickly than in normal flight.

7. FOLDING INSTRUCTIONS

The PEAK has a complex leading edge, manufactured using a variety of different materials. For that reason, the use of a correct folding method is very important for extending the useful life of your paraglider. It should be folded like an accordion, with the leading edge reinforcements flat and the

rigifoils positioned one upon the other. This method will ensure that the profile remains in good shape without altering its form or its performance. During folding take care not to bend or twist the leading edge rigifoils. The wing does not have to be tightly folded, if you do so it may damage the material and or the lines.

8. CARE AND MAINTENANCE

8.1 MAINTENANCE

Careful maintenance of your equipment will ensure continued performance. The fabric and the lines do not need to be washed, if they become dirty, clean them gently with a soft damp cloth.

If your wing becomes wet with salty water, immerse it in fresh water and dry it away from direct sunlight.

The sunlight may damage the materials of your wing and cause premature aging. Once you have landed, do not leave the wing in the sun, store it properly.

If you use your wing in a sandy area, try to avoid the sand from entering the cell openings of the leading edge. If sand is inside the wing, remove it before folding.

Competition lines, which were used in the past, were more vulnerable to premature wear and ageing but the new line materials used on the PEAK now ensure a much longer working life. However they still demand regular checks with careful attention to wear and tear. We advise a full inspection of the lines every 100 hours at a specialised paragliding repair centre. Rocks and hard ground are obviously far more abrasive than grassed areas, that's why we do not advise the PEAK for ground handling practice

8.2 STORAGE

It is important that the wing is correctly folded when stored. Store your flying equipment in a cool, dry place away from solvents, fuels or oils. It is not advisable to store your flying equipment in the trunk of your car. Temperatures inside a car parked in the sunlight, can be very high. Inside a

rucksack and in the sunlight temperatures can reach 60°C. Weight should not be laid on top of the equipment.

8.3 CHECKS AND CONTROLS

You should ensure that your PEAK is periodically serviced and checked at your local repair centre every 100 hours of use or every 6 months (whichever happens first). This will guarantee that your PEAK will continue to function properly and therefore continue fulfilling the homologation certificate results. As previously mentioned, you should systematically check your lines visually before each take-off. We strongly advise a complete line check every 6 months.

8.4 REPAIRS

If the wing is damaged, you can temporarily repair it by using the rip stop found in the repair kit, so long as no stitches are involved in the tear. Any other type of tear must be repaired in a specialized repair shop or by qualified personnel. Do not accept a home repair.

9. SAFETY AND RESPONSIBILITY

It is well known that paragliding is considered a high-risk sport, where safety depends on the person who is practising it.

Wrong use of this equipment may cause severe injuries to the pilot, even death. Manufacturers and dealers are not responsible for any act or accident that may be the result of practicing this sport.

You must not use this equipment if you are not trained. Do not take advice or accept any informal training from anyone who is not properly qualified as a flight instructor.

10. GUARANTEE

The entire equipment and components are covered by a 2-year guarantee against any manufacture fault.

The guarantee does not cover misuse or abnormal use of the materials.

11. TECHNICAL DATA

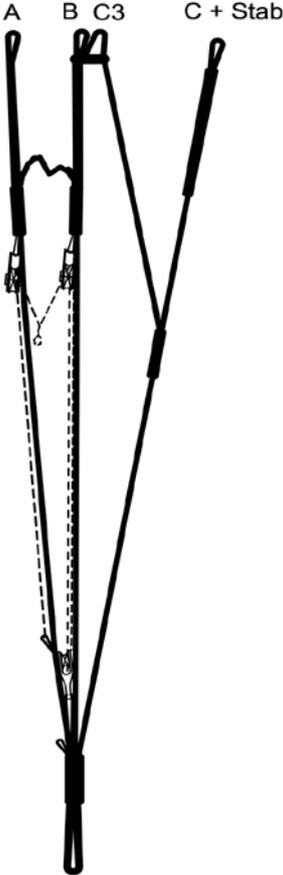
11.1 TECHNICAL DATA

PEAK			23	25	27	29
CELLS	NUMBER		73	73	73	73
	CLOSED		17	17	17	17
	BOX		25	25	25	25
FLAT	AREA	M2	23,5	25	27	29,4
	SPAN	M	12,45	12,84	13,35	13,92
	ASPECT RATIO		6,6	6,6	6,6	6,6
PROJECTED	AREA	M2	19,22	21,27	22,85	24,85
	SPAN	M	9,87	10,17	10,56	11
	ASPECT RATIO		4,9	4,9	4,9	4,9
FLATTENING	%		15%	15%	15%	15%
CORD	MAXIMUM	M	2,32	2,39	2,48	2,59
	MINIMUM	M	0,49	0,51	0,53	0,55
	AVERAGE	M	1,88	1,94	2,02	2,11
LINES	TOTAL METERS	M	278	286	298	310
	HEIGHT	M	6,79	7,07	7,38	7,66
	NUMBER		170	170	170	170
	MAIN		3/3/4	3/3/4	3/3/4	3/3/4
RISERS	NUMBER	3	A/B/C	A/B/C	A/B/C	A/B/C
	TRIMS		-	-	-	-
TOTAL WEIGHT IN FLIGHT	MAXIMUM	KG	85	95	110	125
	MINIMUM	KG	70	80	90	105
GLIDER WEIGHT	KG		5,9	6,3	6,8	7,4
CERTIFICATION			EN-D/ LTF 2-3	EN-D/ LTF 2-3	EN-D/ LTF 2-3	EN-D/ LTF 2-3

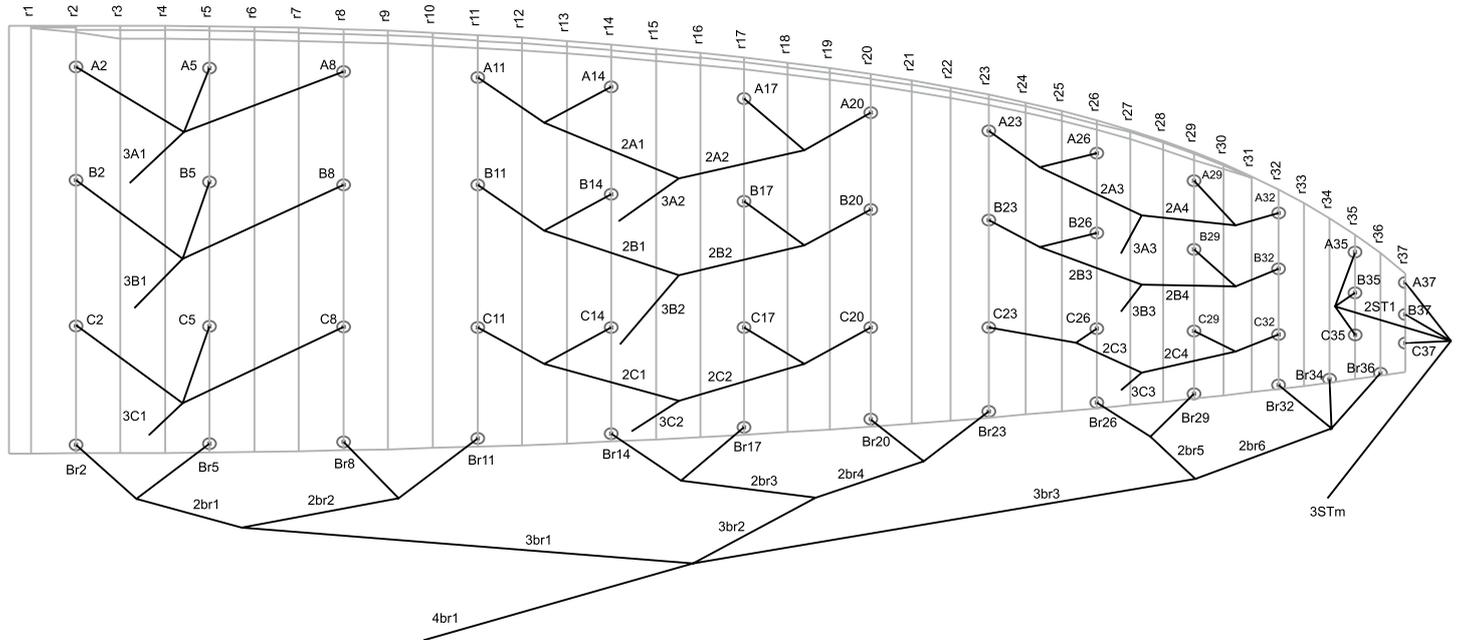
11.2 MATERIALS DESCRIPTION

CANOPY	FABRIC CODE	SUPPLIER
UPPER SURFACE	SKYTEX 40 9017 E77A	NCV (FRANCE)
BOTTOM SURFACE	SKYTEX 40 9017 E77A	NCV (FRANCE)
PROFILES	SKYTEX 40 9017 E29A	NCV (FRANCE)
DIAGONALS	SKYTEX 40 9017 E29A	NCV (FRANCE)
LOOPS	LKI - 13 / LKI - 10	KOLON INDUSTRIAL (KOREA)
REINFORCEMENT LOOPS	W-420	D-P (GERMANY)
TRAILING EDGE REINFORCEMENT	MYLAR 25 M/M	D-P (GERMANY)
RIBS REINFORCEMENTS	W-420	D-P (GERMANY)
THREAD	SERAFIL 40	AMAN (GERMANY)
SUSPENSION LINES	FABRIC CODE	SUPPLIER
UPPER CASCADES	DC - 060	LIROS (GERMANY)
MIDDLE CASCADES	DC - 060	LIROS (GERMANY)
MIDDLE CASCADES	PPSL - 120	LIROS (GERMANY)
MIDDLE CASCADES	8000/U - 090	EDELRID (GERMANY)
MAIN	GKT - 175	TEIJIN LIMITED (JAPAN)
MAIN	8000/U - 130	EDELRID (GERMANY)
MAIN	8000/U - 090	EDELRID (GERMANY)
MAIN BREAK	PPSL - 200	LIROS (GERMANY)
THREAD	SERAFIL 60	AMAN (GERMANY)
RISERS	FABRIC CODE	SUPPLIER
MATERIAL	G-R 22	TECHNI SANGLES (FRANCE)
COLOR INDICATOR	PAD	TECHNI SANGLES (FRANCE)
THREAD	N/F-66	YOUNG CHANG T&C LTD
MAILLONS	MRI4	ANSUNG PRECISION (KOREA)
PULLEYS	PY-1304 - 2	ANSUNG PRECISION (KOREA)

11.3 RISER ARRANGEMENT - PEAK



11.4 LINE PLAN - PEAK



11.5 DIMENSIONS - PEAK 23

NIVIUK PEAK 23

LINES HEIGHT CM.

	A	B	C	BR
1	679,5	672,5	680,5	764,5
2	671,5	665	672	743
3	673,5	667,5	675	725,5
4	672,5	666,5	676,5	720
5	663	658	665	704
6	660	655	662,5	691
7	663	659	669	687,5
8	649,5	646,5	655,5	692
9	638,5	636,5	643	680,5
10	628,5	628	634,5	673
11	623,5	622,5	635	668
12	599,5	598	603,5	667
13	591,5	593	598	671

RISERS LENGTHS CM.

	A	B	C	
	47	47	47	STANDARD
	27	31		ACCELERATED

11.6 DIMENSIONS - PEAK 25

NIVIUK PEAK 25

LINES HEIGHT CM.

	A	B	C	BR
1	703,5	697	706	791
2	695,5	689	696,5	769,5
3	697,5	691,5	700	751
4	697	691	700,5	745,5
5	687,5	681,5	689	728,5
6	683	677,5	686	714,5
7	686,5	681,5	692,5	710,5
8	673	669	676,5	716
9	661	658	665	705
10	651,5	649,5	656,5	697,5
11	649	646,5	656	691,5
12	620	618	623,5	690,5
13	611	613	618	695

RISERS LENGTHS CM.

	A	B	C	
	47	47	47	STANDARD
	27	31		ACCELERATED

11.7 DIMENSIONS - PEAK 27

NIVIUK PEAK 27

LINES HEIGHT CM.

	A	B	C	BR
1	729,5	721	730,5	825,5
2	720,5	713	721	802,5
3	723	716	725,5	783,5
4	721,5	715,5	727	778
5	712	706,5	714,5	760,5
6	707,5	703,5	711	746
7	711,5	707	717,5	741,5
8	697,5	694	703,5	747
9	686	683,5	690,5	735,5
10	675,5	674	682	727,5
11	670	669	682,5	722
12	643,5	641,5	647,5	721
13	634,5	636,5	641,5	725,5

RISERS LENGTHS CM.

	A	B	C	
	47	47	47	STANDARD
	27	31		ACCELERATED

11.8 DIMENSIONS - PEAK 29

NIVIUK PEAK 29

LINES HEIGHT CM.

	A	B	C	BR
1	761	753	763	856,5
2	752,5	744,5	753,5	833
3	754,5	747	757,5	812,5
4	753,5	747,5	758,5	807
5	743,5	738	746,5	789
6	740	734,5	743	774
7	743	738,5	750	769
8	728	724,5	735	775,5
9	716	713,5	722,5	762,5
10	705,5	704	713	754
11	699,5	699	713	749
12	672,5	670,5	676,5	748
13	663,5	665,5	671	752,5

RISERS LENGTHS CM.

	A	B	C	
	47	47	47	STANDARD
	27	31		ACCELERATED

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The importance of small details