

Manual/Service

Serialno:

MNLK

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## $\mathbbm{1}$ introduction

Congratulations and thank you for purchasing a skywalk glider! We can assure you that this decision will reward you with plenty of pure passion for flying. To ensure that you feel at home on your new glider, we recommend you thoroughly read the Owners Manual/Operating Instructions. This way you will get to know your skywalk CAYENNE3 in a quick and simple manner.

The following instructions will help to keep your skywalk CAYENNE3 in excellent condition, to use it safely and enjoy it for a very long time. If you have any questions, remarks or suggestions for improvement, please do not hesitate to contact us by fax, e-mail or phone. The skywalk-team is always happy to be of service.

#### Your skywalk-team



## 2 DESCRIPTION

It was a difficult task to develop a worthy successor to the CAYENNE2 . A class 2 glider has to include just about everything.

Maximal performance stands side by side with high feel-good factor as a top criteria. This determines if the pilot can get the maximum performance from his glider. Handling has to be excellent, if not developed exactly for Acro-flying, because only when the pilot has the glider under control in any weather condition can he fully utilise

the performance potential.

Whether novice cross country pilot or OLC kilometer-chaser, as cross country pilot one frequently encounters demanding conditions. Here, the wheat is quickly separated from the chaff and the pilot will find out how the glider handles, and whether he can control it.

In the CAYENNE3, we have implemented everything which is currently technically feasible, setting new standards on the way. Optimal performance was the goal from the very first day.

A purebred 3-liner, thinner mid- and top-lines with loop sleeve, drag-optimised risers, 5 continuous strain relief bands, JET FLAPS...these are a few of the technically innovative features accompanying the CAYENNE3 to the launch.

We have saved 40% in line drag alone in comparison with the CAYENNE3's predecessor through the implementation of high-tech lines in the line system.

Owing to the continual optimisation of our CAD Software, we can be even more exact in our development parameters. Only through constant advancement is it possible to stand again and again at the peak of the technological standards.

Naturally, we couldn't leave out the JET FLAPS, implemented in all of our gliders. JET FLAPS are becoming ever more important in order to guarantee pilot safety at such long distances. Brake travel is becoming shorter due to the low cord length. The JET FLAPS compensate this loss perfectly and allow enough steering way.

The CAYENNE3 speaks to mileage-hounds as well as those looking to trade up from the upper LTF 1-3 range (e.g: CHILI pilots).

Your skywalk Team

## ${\mathbb Z}$ technical data

Size	XS	S	Μ	L	XL
Cells	61	61	61	61	61
Area	22.24	25.34	26.41	27.83	29.50
Wingspan	11.55	12.33	12.59	12.93	13.30
Aspect Ratio	6.00	6.00	6.00	6.00	6.00
Area Projected	18.70	21.30	22.20	23.40	24.80
Wingspan .proj.	8.97	9.57	9.77	10.03	10.33
Aspect Ratio proj.	4.30	4.30	4.30	4.30	4.30
Canopy Weight kg	4.9	5.6	5.9	6.2	6.6
Take off Weight in kg	60-80	75-100	85-110	95-120	105-130
min. Speed in km/h	22	22	22	22	22
Trim Speed in km/h	39	39	39	39	39
max. Speed in km/h	56	56	56	56	56
Winch Towing	yes	yes	yes	yes	yes
Jet Flap Technology	yes	yes	yes	yes	yes
Motor certification	no	no	no	no	no
with special risers					

#### ATTENTION:

THE HOMOLAGATION TAG CAN BE FOUND IN A POCKET ON THE MIDDLE PROFILE RIB. IN GERMANY, THE HOMOLOGATION BADGE MUST BE ATTACHED TO THE GLIDER. IF THERE IS NO BADGE ATTACHED, THE SKYWALK SEAL MUST BE VISIBLE. THIS SEAL CERTIFIES THAT THE GLIDER IS IDENTICAL IN CONSTRUCTION TO THE MODEL INSPECTED AT THE HOMOLOGATION LOCATION. IF THE SEAL IS MISSING, IT CAN BE ASSUMED THAT THE GLIDER IS A PROTOTYPE WHICH HAS NOT BEEN INSPECTED.

#### CAUTION:

THE TYPE SHEET IS PRINTED ONTO THE INSIDE OF THE STABILO. DATE AND NAME OF THE PILOT OF THE FIRST FLIGHT HAVE TO BE ENTERED!

### 2 line system

The lines of the Cayenne 3 represent an ideal compromise in durability and low drag. The material mix of covered main lines (Dyneema and Aramid) as well as uncovered Technora lines guarantees the best mechanical strength properties with minimal drag. A cover is sewn on the loops at the connection on the mid lines as well as the top lines in order to guarantee the best possible transmission of energy. It was possible with this combination of materials as well as the laborious loop sleeves to reduce drag by 40% in comparison to its predecessor.

The CAYENNE3 is a purebred 3-liner system – which means it operates solely over 3 line levels. 3 A, 3 B, 3 C, as well as 1 stabilo line. This means also that it has only A, B und C connection points.

The skywalk CAYENNE3 has 4 risers on each side.

- > The A-lines lead to the A-riser.
- >The B-lines as well as the stabilo lines lead to the B-riser.
- >The inner and outer C-lines lead to the C1-riser.
- >The middle C-lines lead to the C3-riser.
- A schematic illustration of the risers can be found on page 63 and next.

#### **IMPORTANT SAFETY WARNING:**

FLYING A PARAGLIDER REQUIRES MAXIMUM CAUTION AT ALL TIMES. BE AWARE THAT FLYING YOUR PARAGLIDER IS DONE AT YOUR OWN RISK. AS A PILOT YOU MUST GUARANTEE THE AIRWORTHINESS OF YOUR PARAGLIDER BEFORE EVERY SINGLE FLIGHT.

#### Don't use your skywalk CAYENNE3:

- > Outside the certified take-off weight
- >With any engine
- >In rainy, snowy and extremely turbulent weather conditions or high winds
- >In fog or clouds
- >With insufficient experience or training

Every pilot is responsible for his own safety and will have to ensure that his aircraft (paraglider) has been checked and serviced for airworthiness before flying.

You can only fly your skywalk CAYENNE3 with a valid flying license and in accordance with local rules and regulations.

During production, your skywalk CAYENNE3 has passed several thorough quality control checks. More spot checks were performed before shipping

### 3 speed system

The skywalk CAYENNE3 can be equipped with a foot-operated speed system. The speed system works on the A-,B- and C1-risers.

All risers are equal in length before activation of speed system. The CAYENNE3 has a very efficient speed system travel thanks to the 3-line system.

When operated, the A, B and C1 risers are shortened.

To what degree the risers are shortened can be seen on page 63 nd next. Each size glider has its own risers as well as speed system length.

#### CAUTION:

#### THE DHV RATING OF SOME GLIDER SIZES CAN CHANGE DURING THE USE OF THE SPEED SYSTEM WHILE FLYING. TO DETERMINE WHICH SIZES ARE AFFECTED PLEASE CHECK THE TYPE SHEET.

#### Installing the Speed System equipment:

Most commonly used harnesses have pulleys for the speed system already attached. The speed-system line runs from the front through the pulleys at the harness to the top. They are tied to the "Brummel-hooks" at the appropriate length. With the correct adjustment of the speed system lines, the foot-bar can be reached easily angled during flight. By straightening the legs, the entire speed range can be used. Prior to flying, the connection hooks of the foot-operated accelerator and the acceleration system have to be connected to each other (Brummel-hooks). Check that the speed system line runs freely.

#### Function:

By using the foot-operated accelerator, the pilot reduces the force by half via a pulley system and shortens the A-, B- and C-risers.



### **4** HARNESS

The skywalk CAYENNE3 is licensed for all certified harnesses of the GH type (harnesses without solid cross-bracing).

Be aware that the level of suspension changes the relative braking distance.

Recommendation: Our RANGE competition harness is perfect for combining with the cross country glider CAYENNE3. The CULT XC with Leg Faring supports direct handling and flying fun.

#### CAUTION:

#### FULLY CROSS-BRACED HARNESSES EFFECT THE HANDLING DRASTICALLY AND DO NOT LEAD TO INCREASED SAFETY!

### 5 FLYING PRAXIS AND MAINTENANCE

It is important to inspect all paragliding equipment thoroughly before every flight to check for possible defects. Also check the glider after long flights and after long periods of storage.

#### **Check thoroughly:**

- >All seams of the harness, of the risers and of the reserve bridle
- >That all connecting parts, maillons and carabiners are closed
- >The brake-line knots on both sides and follow the brake-line to the top
- >All the other lines from riser to canopy
- >All the line attachment points at the canopy
- > If the top or bottom of the wing has partial damage or is highly damaged
- >The ribs and crossports from inside

#### ATTENTION

## DO NOT LAUNCH IF YOU DETECT ANY DEFECTS, EVEN IF THEY ARE MINOR!

If you find any damage or excessive wear and tear please get in touch with your flying school.

#### Laying out the glider

If you are using your paraglider for the first time we recommend that you practise some inflations and try some simple flights at a training site. This way you are able to get accustomed to your skywalk CAYENNE3.

Lay out the canopy so that the leading edge is slightly arched. The middle of the canopy should form the deepest point of the paraglider. This way the A-lines are tensioned first in the middle whilst inflating. The paraglider inflates evenly which ensures a stable and straight take off.

Separate A, B, C-lines and risers and put in order. Make sure that the brake lines run freely through the pulleys to the trailing edge of the paraglider.

All lines have to run freely without any knots and twists from the risers to the canopy. Because the lines are very thin, please sort them carefully.

During flight, tied or crossed over lines can often not be released or untangled! The brake-lines are lying directly on the ground are thus prone to being caught during launch. There shouldn't be any lines beneath the canopy during take-off. Lineovers can have fatal consequences.

#### The Launch

The skywalk CAYENNE3 is very easy to launch. Hold the two A-risers and the brake handles in your hands. For a better identification, the A-lines and covers at the A-risers are coloured red. The brake lines are coloured yellow and the brake handles are black. Hold your arms slightly sideways and backwards like an extension of the A-risers. Before run-up check the laid out glider. Further check the wind direction and the airspace! Pull rapidly and the canopy of the skywalk CAYENNE3 will launch and rise above your head. The canopy will inflate fast and reliably. Keep the glider straight above your head and run forward. Slow down a little as soon as the upward pull decreases.

You can open any collapsed cells by pumping the affected side.

Changes of directions that are necessary can be carried out now.

Look and feel that the wing is properly inflated.

Don't make your final decision to accelerate or to take-off until you are absolutely sure that the wing is properly and evenly inflated. Otherwise, stop the take-off produce immediately! During reverse launches and in strong winds, it is possible that the glider surges forward and inflates faster than intended. You can counteract this by running towards the glider. We recommend that you practice this demanding launch technique on a flat slope! If you reverse launch it is advisable to only use the inside A-risers. This way the paraglider inflates a little slower and in strong winds you don't have to deal with the full pressure at once.

In very windy conditions, the CAYENNE3 can be easily held on the ground with the last riser (c-riser).

#### Turning

The skywalk CAYENNE3 is very manoeuvrable and reacts to steering input directly and without delay.

Simple weight shift enables you to fly very wide turns with minimal altitude loss. Combined steering technique: Weight shifting and pressure on the inside brake line allow extra tight turns.

During the turn you can control the speed, the curve radius and banking by additional use of the outer brake. Counter braking or releasing the brake lines can change these parameters most effectively.

In order to get the best climbing performance, you should allow the glider to fly and do not activate the brakes too strongly. The glider senses the circle exactly and converts the slightest climb into altitude, as well as helping to find the optimal center of the thermal and gravitating towards the maximal altitude.

In narrower thermals, you can circle the glider very narrowly because it climbs cleanly higher also when considerably banked.

#### CAUTION:

## PULLING THE BRAKE LINES TOO FAR AND TOO FAST CAN CAUSE A FULL STALL!

You will recognise a flat spin through high steering pressure and a slight backwards folding of the outer wing section. If this happens you have to release the inside brake immediately.

#### **Emergency Steering**

In case one or both brake lines break you are able to steer and land the skywalk CAYENNE3 with the aid of the C-risers.

#### Active flying

Active flying means flying in harmony with your paraglider.

Anticipate the behaviour of your skywalk CAYENNE3 in flight, especially in turbulent and thermal conditions and react accordingly. In calm air, the necessary corrections will be minimal, but turbulence demands permanent attention and the use of brakes and weight shift in the harness.

Good pilots have instinctive reactions.

It is important that you always have direct contact to the canopy by slight pressure on the brakes in order to feel the stored energy of the glider. This way you will promptly detect a loss of pressure in your canopy and subsequent collapse and will be able to react in time.

Even if the pilot does not promptly react, the skywalk CAYENNE3 will not stall immediately. However, with active flying you can measurably increase safety.

#### Examples:

- >When flying into strong thermals, release brakes.
- >When flying into falling airstream, pull brakes.
- >This way you can avoid extensive changes in the angle of attack.
- >In turbulent air, you feel the release in pressure from certain parts of the glider through the feedback from your brakes. You can balance this by quickly pulling the brake a little more until the pressure returns. Always apply brakes softly and progressively.
- >Don't slow down your glider too fast and too much danger of stall!

## As you know: By active flying you can avoid almost all deformations of the glider in advance.

#### Accelerated flying

You will notice the high performance of the CAYENNE3 not only during trim flight, but also in accelerated glide. When you activate the Speed System, avoid applying too much pressure, the system operates very effectively and directly. To reach the maximum speed, push the speed system firmly until both pulleys on the A-risers touch each other.

If you apply pressure too quickly, the CAYENNE3 will dive down forward due to the extreme change in position. Brake with feel and the glider will quickly accelerate and the rate of sink from start to highest speed will remain very moderate.

We would like to stress that Pilots should fly only in wind conditions that they are accustomed to. Even though the CAYENNE3 is extremely stable in accelerated flight, collapse in turbulence is still possible. In general, the reactions are more impulsive and demand quicker reaction time from the pilot.

Therefore always use the speed system system with adequate altitude from the ground, obstacles and other aircraft.

We strongly advise against shortening the brake line length. The total length of the brake line is necessary particularly in accelerated flight, so that the glider is not braked, therefore losing massive glide performance.

#### NEVER ACCELERATE IN TURBULENT AIR! NEVER ACCELERATE NEAR THE GROUND! NEVER LET GO OF THE BRAKE HANDLES!

In case the glider collapses you will have to release the speed system immediately, in order to stabilise and reopen your paraglider.

### 6 LANDING

The skywalk CAYENNE3 can be landed easily.

Make your final approach against the wind and let the glider slow down at its own speed. Reduce the speed further by applying the brakes lightly and evenly. At about 1m above the ground you increase the angle of attack by slowing down

more and eventually completely flare out the glider.

When you have reached the minimal speed apply full brake.

In strong head winds, slow down carefully. When you have reached the ground safely, stall the glider carefully.

Avoid turning sharply before your final approach, danger of oscillation!

#### **CAUTION:**

#### THERE IS A POSSIBILITY THAT YOU MAY MISCALCULATE THE FINAL APPROACH OF YOUR FIRST FEW LANDINGS, DUE TO THE HIGH PERFORMANCE LEVEL. BE AWARE THAT THE GLIDER TAKES A BIT OF ALTITUDE WHEN YOU BRAKE AFTER FLARING ON YOUR LANDING APPROACH.

# Carefully packing your paraglider will increase the longevity of your glider.

- >Empty the glider from all debris such as leaves, twigs, grass, sand etc.
- >Sort out your lines and spread them evenly on the glider.
- >Make sure the glider is dry when storing it for lengthy periods of time.
- >Fold the glider starting in the middle and work your way to the outside always folding 2 cells, so that the leading edge is folded cleanly.
- >Fold the cells, starting from the second cell from the middle, so that the reinforced edges of the cell openings are on top of one another.
- >Do the same at the lower long-edge of the glider.
- >This folding method is best done together with a friend, but you should be able to do the same on your own after some practice.
- > Then press the air out of the folded glider starting at the bottom and working your way to the top.
- >Fold the whole row once toward the middle.
- >Do exactly the same on the other side. Then fold one half onto the other half andmake sure that the leading edge is folded cleanly.
- > Start wrapping up the glider from its lower end. The wraps should be approx. 1ft. wide.
- > The leading edge can be folded inwards once, but is not necessary. The left over air should be pressed out of the glider and not through the material (this can increa-

sethe porosity of your glider).

- >Now attach the compression band around the packed wing, at right angles to thecell openings, then slide the glider into the light nylon bag. This helps to protect thecloth from being damaged by sharp edges or zippers from your harness.
- >Open the packsack and place your glider on the inside edge. The soft wing on yourback will make transportation much more comfortable.
- > Place the harness with the seat board facing up on top of your glider and close the zippers. Put the rest of your equipment (helmet, overall, instruments etc.) under the hood of your packsack.

#### Tip: Make sure that you do not pack your CAYENNE3 too tightly and take particular care with the reinforcements on the leading edge. Your glider will reward you with a longer product life.

#### WINCH TOWING

The skywalk CAYENNE3 is very suitable for winch towing. Make sure you climb from the ground at a flat angle. The pilot must have a valid towing license The tow winch must be authorised The winch operator must have a towing license, which includes paragliding When towing always steer sensitively, do not brake too much because the glider already flies at an increased angle of attack.

#### **MOTORIZED FLIGHT**

The CAYENNE3 is not certified for motorized flight. We have developed special gliders for motorized flight. They can be found in our MOTORIZER program.

#### **Descent Techniques**

The handbook should not be used as a textbook for learning how to paraglide.

According to the local rules and regulations, instruction and training must be carried out in licensed schools. The following information will help you to get the most out of your skywalk CAYENNE3.

#### **Spiral dive**

You can initiate the spiral dive by carefully increasing the pull on one of the brakes and simultaneously shifting your weight to the inside of the turn. If the glider doesn't bank and the sink rate doesn't increase, then try again. Do not simply apply more and more brake without sensitivity.

The skywalk CAYENNE3 enters the spiral dive with a high banking angle and makes a fast steep turn. The banking and sinking can be controlled by a carefully dosed pulling resp. loosening

of the inner brakeline. Smooth braking of the outer wingtip avoids collapsing and also speed can be controlled better in hard spirals. The spiral is the most effective tool in losing height. This is an advantage and a disadvantage at the same time, the pilot needs to be able to handle the resulting high sinkrate.

#### CAUTION:

## THE HIGH SINK RATE CAUSES HIGH PHYSICAL STRAIN DUE TO THE INCREASING CENTR IFUGAL FORCES AND MAY CAUSE BLACKOUTS!

Tensioning the stomach muscles during the spiral dive can help. At the first signs of dizziness or feeling faint exit the spiral dive immediately. Because of the extreme loss of altitude experienced during a spiral dive always ensure you have enough height above ground. To avoid a strong surge when exiting the spiral dive you have to release the inside brake whilst applying the outer brake slightly.

The CAYENNE3 has no tendency towards a stable spiral dive. The pilot must not sit neutrally in the harness, but must actively shift the weight to the inside of the turn. Should the glider reset under adverse conditions (e.g. unintentional asymmetric back tension), the pilot must actively exit the spiral by shifting weight to the outside of the curve and applying more brake to the outer side of the curve.

#### WARNING:

STEERING PRESSURE IS A LITTLE HIGHER THAN DURING NORMAL FLIGHT!

#### **B-line stall**

B-Line Stall: Due to the 3 Line System, the B-Stall demands a higher energy expenditure as with the 4 Line Systems. The glider dives back further and shoots (at the wrong time) clearly more forward. Because the B-Stall has a much higher wear and tear effect on the cloth, we recommend using it only as an aid in descending.

#### **Big ears**

Big Ears: Pull the outer A-Lines symetrically downward for Big Ears. Both wing tips will fold inwards and the rate of sink increases.

If you then activate the Speed System, the rate of sink will increase again. The glider remains controllable through weight shift and braking on one side. To exit Big Ears, gently use the steering lines.

A steep spiral or wingover with Big Ears is strongly discouraged. It can lead to damage of material due to the high stress on the remaining lines.

#### **Examples:**

- >In strong winds or below a thundercloud at low altitude it is possible that neither Bline stall or spiral dive will help. Big Ears are the easy way out.
- > If the pilot is stuck in strong lift and needs to look for sink it is advisable to exit the lift band with the use of Big Ears.
- >In order to fold the wing tips you have to pull both outer A-lines simultaneously.
- > This will cause both wing tips to fold inwards and the skywalk CAYENNE3 will enter a stable forward flight. The brake handles remain in your hands together with the outer A-line. Braking and weight shift enables you to steer your paraglider.
- > In order to increase the sink and forward speed you can optimise this manoeuvre by using the acceleration system. The risk of canopy destabilisation in turbulent air is clearly reduced when using Big Ears.
- >To exit Big Ears release the A-lines. The canopy will unfold automatically.
- > You may brake a little to support the unfolding.

It is advisable to pump out one side at a time to reduce the risk of detaching airflow.

## $\mathbb 7$ extreme flight manoeuvers

#### Asymetric tuck

The CAYENNE3 is extremely good natured regarding collapses for a glider of this class. However, you cannot completely rule out a collapse in strong turbulence. The skywalk CAYENNE3 will re-open automatically even after bigger collapses within a turn of 180°. The turn towards the collapsed wing section can be minimised by braking on the remaining open side of the canopy.

In case of a big collapse you will have to use small brake movements in order to avoid a stall. In case the canopy still doesn't recover you can accelerate the opening process by pumping the brake on the tucked side.

#### Cravat / Line Over:

This type of instability never occurred during any of our test flights with the skywalk CAYENNE3.

Still, in extremely turbulent air or during exceptional piloting errors it is possible that the folded wing section might get tangled in the lines.

The pilot may then stabilise the paraglider by careful counter-braking.

Without immediate intervention of the pilot a cravated paraglider will turn into a strong spiral dive.

#### There are several possibilities to untangle the paraglider:

- >Pumping on the folded side
- >Pulling the stabilo-lines (tip-lines)
- >In case none of these manoeuvres have any success you can try to unfold the paraglider by performing a full stall. Only experienced pilots, with a lot of flight experience should attempt this manoeuvre. Make sure you have enough altitude to recover the full stall in time.

#### CAUTION:

#### IF NONE OF THESE MANOEUVRES ARE SUCCESSFUL OR THE PILOT FEELS OVERWHELMED BY THE SITUATION, THE RESERVE PARACHUTE SHOULD BE DEPLOYED IMMEDIATLY!

#### Parachutal stall

The Cayenne3 never showed a tendency to stall during the entire development phase. Despite this, it is possible to intentionally fly a parachutal stall.

Gliders with porous cloth are especially susceptible to stall (UV-radiation) or which have been-towed frequently and subjected to high loads (stretched A-lines).

A parachutal stall can also occur if a paraglider is flown in the rain (soaked condition), or if the pilot exits B-stall too slowly. The paraglider has no forward travel and increased sink rate at the same time. The pilot can end the stable parachutal stall through use of the speed system or gentle pushing of the A-riser to the level of the line locks. The skywalk CAYENNE3 normally exits the parachutal stall on its own.

#### WARNING:

IF THE PILOT SHORTENS THE FACTORY SETTING OF THE MAIN BRAKE LINES, THERE IS AN INCREASED DANGER OF PARACHUTAL STALL AFTER B-STALL. THEREFORE, NEVER SHORTEN THE BRAKE LINE LENGTH.

#### CAUTION:

AS SOON AS YOU APPLY THE BRAKES DURING A PARACHUTAL STALL THE PARAGLIDER WILL IMMEDIATELY ENTER A FULL STALL. IF STILL IN A PARACHUTAL STALL CLOSE TO THE GROUND DO NOT ATTEMPT TO RECOVER BUT STRAIGHTEN UP YOUR POSITION IN THE HARNESS AND PREPARE FOR A PARACHUTE LANDING ROLL.

#### Full stall

In order to Full Stall your paraglider grasp both brake handles

and pull strongly and symmetrically until the airflow breaks away from the canopy. The canopy will drop back.

Despite this violent reaction keep the brakes fully depressed until the canopy stabilises above your head.

In a Full Stall the skywalk CAYENNE3 flies backwards and always forms a forward facing semi-circle.

In order to exit a Full Stall the pilot will have to release the brakes slowly and

symmetrically. (Recovery time >= 1 sec). The glider opens and surges forward to pick up speed. Brake gently to dampen the forward surge of the skywalk CAYENNE3 and to counteract a possible front tuck.

#### CAUTION:

#### IN CASE THE FULL STALL IS RELEASED TOO EARLY, TOO FAST OR WITH THE WRONG TECHNIQUE THE CANOPY MAY SHOOT STRONGLY FORWARD!

#### **Negative spins**

A paraglider spins backwards if the airflow disconnects over one half of the wing caused by the inside wing turning in the opposite direction of flight.

#### There are two reasons for the Negative Spin:

>One brake is pulled to far and too hard (e.g. when entering a spiral dive)

>One brake is pulled too strongly when flying slow (e.g. in thermal flying).

The skywalk CAYENNE3 usually re-enters normal flight immediately after the brake is released without any great loss of altitude. Simply release the excessively induced brake until the airflow re-connects to the inside wing. After a long lasting spin it is possible that when releasing the brake the canopy might shoot forward and collapse. Cross-braced harnesses that are too narrow increase the tendency to spin on most paragliders.

#### Wingover

Alternating left/right turns lead to an increased banking of the canopy. The load on the outside wing tip to a minimum (the tip starts to feel light). Further turns and higher banking is not recommended at this stage as the canopy might collapse on the inside wing section.

#### CAUTION:

FULL STALL, NEGATIVE SPIN AND WINGOVERS (ABOVE 90°) ARE ILLEGAL ACROBATIC FLIGHT MANOEUVRES AND ARE NOT PERMITTED IN REGULAR AIR TRAFFIC. INCORRECT OR EXCESSIVE STEERING IN THESE SITUATIONS MAY HAVE FATAL CONSEQUENCES INDEPENDENT OF THE TYPE OF PARAGLIDER USED!

### 8 MATERIALS

The skywalk CAYENNE3 is manufactured from the highest-grade materials. skywalk has chosen the best possible combination of materials taking in to account durability, performance and longevity. We know that durability is a deciding factor in customer satisfaction.

#### Sail and Profile

Top Sail: Leading edge Porcher Marine 9092E85A Top Sail: Middle and rear Porcher Marine 9017E68A Bottom Sail: skywalk TSF SC 39 Nylon Ribs and Bands: Porcher Marine Nylon / skywalk TSF SC 39

#### Lines

Top Lines: Edelrid 8000-80/ 8000-65 partially with loop sleeves Middle Lines: Edelrid 8000-120/ 8000-80 partially with loop sleeves Main Lines A,B: Liros PPSL 200/PPSL120 Main Line C,Stabilo: Liros TSL 220/NTSL 120 Brake Lines Top: Edelrid 8000-45 Brake Lines Middle and Main: Liros DSL 70 Main Brake Line Liros PPSL 200 Leading Edge Reinforcements- Dacron Suspension points- reinforcement Dacron

#### Risers

Risers are manufactured by Cousin Freres, from 12,5 mm Polyester webbing with Kevlar inserts. Stretch values, strength and stability of this material are amongst the best of all webbing products currently on the market.



### MAINTENANCE AND DISPOSAL

With proper maintenance, your skywalk CAYENNE3 will remain in airworthy condition for several years. A well cared for paraglider lasts a lot longer than one which is packed in a bag without care after flying.

Always remember: Your life depends upon the condition of your paraglider!

Please read the Tips and Tricks for Cloth Handling.

#### Storage:

Store your paraglider in a dry location, protected from light and away from chemicals! Damp is a natural enemy for any paraglider. Therefore always make sure your paragliding equipment is dry before packing it away. Dry if necessary in a heated room.

#### **Cleaning:**

Rubbing and cleaning leads to faster deterioration of your paraglider. If you still think that your paraglider needs to be cleaned, then use a soft and wet towel or sponge. Don't use any soap or detergents. Never use flammable products.

#### **Repair:**

All repairs must be carried out by the manufacturer or by an authorised skywalk-Service-Centre. Amateur repairs can cause more harm than good.

#### Wear:

The skywalk CAYENNE3 mainly consists of Nylon fabric that loses strength and shows an increase in porosity under the influence of UV-radiation. Unpack the paraglider shortly before launch and pack away immediately after landing to avoid any unnecessary sun exposure.

#### DISPOSAL

skywalk places high value on the environmental compatibility and quality control of our materials. If your glider should reach the point where it is no longer airworthy, please remove the metal parts. All other parts such as lines, cloth and risers can be brought to a waste disposal center. The metal parts can be brought to metal recycling.

If you wish, you can send your glider on to us, and we will dispose of it in a responsible manner.

#### **Line-Repairs**

The CAYENNE3 suspension lines are composed of a Dyneema-core with a Polyester sheathing as well as unsheathed Technora Lines.

Repeated folding or kinking of lines (even the slightest amount) at the same spot reduces their strength.

Any visual damage of a line, even if it is only the line coating, requires a replacement line. Only acquire new lines from the manufacturer or from an authorised skywalk-Service-Centre. Your flying school or your dealer will assist you to change a defect line. Check the correct length of the line before replacing it. Compare with its counterpart on the opposite side of your glider. After the exchange a line-check will be necessary. The best way to this is by unfolding the glider on the ground!

#### **Tips and Tricks for Cloth Handling:**

In order to care for and ensure the continued performance of your glider and this special high-performance cloth, it is imperative that you adhere to the following guide-lines

#### Therefore, the following Instructions for Handling and Care:

1. Avoid any unnecessary exposure to sun or weathering. During launch, do not lay the glider on the ground for long periods of time, and always pack it up right after landing. 2. Any rubbing or abrasion will lead to cloth damage, so be sure not to drag the cloth on the ground.

3. Lay the glider cell upon cell, but please avoid tightly squeezing or tightly folding the glider together.

4. Always use the special inner packsack together with the padded pack band, both made of very soft cloth.

5. Always store the risers in the protective casing provided for this use.

# CVAENNE

6. Never bring the cloth into contact with saltwater, the metallic content may react with the saltwater and lead to corrosion. If the glider does happen to come into contact with saltwater, please rinse it with ample amounts of fresh water and then carefully and thoroughly dry it.

#### **General information:**

- >When unfolding the paraglider insure that neither the canopy nor the lines become too dirty as dirt particles in the fibres can damage the material and lines.
- >If the lines get tangled on the ground they may be over-stretched or break during take-off.
- >Do not step on the lines and/or canopy.
- >Make sure that no sand, stones or snow get inside the canopy as the extra weight collected in the trailing edge may slow down or even stall the glider.
- >Sharp edges damage the canopy.
- >Uncontrolled inflation attempts in strong winds may result in the glider impacting into the ground at high speed. This can cause rips, damage on lines and/or fabric.
- >Make sure not to land your canopy leading edge first as this may cause permanent damage to this area of your paraglider.
- >After landings in trees or on water you should check the length of the lines.
- >After contact with salt water thoroughly rinse the equipment with fresh water!

## 10 2-YEAR CHECK

## skywalk specifies a maintenance interval after 24 months or 150 flying hours.

According to regulations, the 2-Year Check must be carried out

by the manufacturer, or an authorised check center. The check must be confirmed with a stamp from skywalk or the skywalk authorised check center. Missing this deadline, or if the check is carried out by an unauthorised center will lead to immediate loss of your skywalk CAYENNE3 homologation and all warranty and liability claims.

We fully recommend that you do not carry out the check yourself. Without proper instruments and specific knowledge, the check will be insufficient. The airworthiness of your glider can therefore not be guaranteed.

#### Changes to the paraglider:

Your skywalk CAYENNE3 is manufactured within the regulated parameters of tolerance. These parameters are very narrow and must not be altered under any circumstances. This applies as well to the brake line length. Only this way can the optimum balance between performance, handling and safety be assured!

#### ATTENTION

#### UNAUTHORISED CHANGES CAUSE AN IMMEDIATE EXPIRAT ION OF THE OPERATING LICENSE! ANY LIABILITY CLAIM TOWARDS THE MANUFACTURER AND ITS DEALERS IS EXCLUDED!

## 11 HOMOLOGATION

The CAYENNE3 has LTF2 and EN Homologation. The many homologation tests are the last hurdle in the development of a skywalk paraglider. The homologation test flights only take place when the test team is completely happy with the glider development. We remark that the certification results will differ during flight in thermals or turbulent air. The homologation informs solely regarding the paraglider performance during extreme-flight-manoeuvres performed in stable air conditions. These extreme-flight-manoeuvres during the homologation process should thus not be over-valued.

## $1\!2\,$ nature and ecological compatibility

We have taken the first step towards ecological awareness with our nature-friendly sport. Especially with our mountain climbers who prefer to climb to the launch site. Nevertheless, we plan on continuing in the same vein. This means specifically: clean up your trash, stay on marked trails and don't cause unnecessary noise. Please help to maintain the balance of nature and to respect animals in their territory.

## 13 closing words

The skywalk CAYENNE3 represents the absolute pinnacle of paragliding development standards. All that is possible with regard to state-of-the-art technology, performance and innovation, have been implemented in the CAYENNE3. This glider will provide you with plenty of fun over many years, providing that you treat and maintain it in a responsible way. Respect for the requirements and potential hazards

of our sport is essential for safe and successful flying.

Even the safest paraglider may experience a crash due to pilot error or meteorological miscalculations. Remember that aviation sports are potentially hazardous and that you are responsible for your own safety. In the interest of our sport we advise you to fly cautiously and in accordance with air law and local rules and regulations.

#### PILOTS FLY AT THEIR OWN RISK!

Your skywalk Team



GmbH & Co. KG

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## 15 risers

CAYENNE3, Size XS and S



15 risers

CAYENNE3, Size M



## 15 risers

CAYENNE3, Size L and XL



Test Protocol			Date
Customer, Name:			
Adress:			Phone:
Glider:	Size:	Serial number:	
Gütesiegelnr.		Date of last check:	
Date of first flight:	Year of construct	ion:	
Accomplished checking:	Results: [ +/- ]	Description of failure	Suggested repairs
Identification:	+ -		
Visual check of canopy:			
Upper surface:	+ -		
Lower surface:	+ -		
Profiles:	+ –		
Line flares:	+ –		
Leading edge:	+ –		
Trailing edge:	+ –		
Crossports:	+ -		
Visual check of lines:			
Seams:	+ –		
Abrasion spots:	+ –		
Core withdrawals:	+ -		
Vis. check of connectionpart	ts		
Suspension line screw locks:	+ -		
Risers:	+ -		
Lenght measurement:			
Risers:	+ -		
Lines:	+ -		
Examinations of the canop	y:		
Firmness of canopy:	+ -		
Porosity:	+ -		

Evaminations of the lines																
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Onceknight																
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		No longer air	worthy	, OL	utsid	e of t	he lir	nit va	lues							
Repairs made?																
Signature of tester:						Da	te:									

Test Protocol				Date
Customer, Name:				
Adress:				Phone:
Glider:	Size:		Serial number:	
Gütesiegelnr.			Date of last check:	
Date of first flight:	Year of	constructi	on:	
Accomplished checking:	Results:	[+/-]	Description of failure	Suggested repairs
Identification:	+	_		
Visual check of canopy:				
Upper surface:	+	_		
Lower surface:	+	_		
Profiles:	+	_		
Line flares:	+	_		
Leading edge:	+	_		
Trailing edge:	+	_		
Crossports:	+	_		
Visual check of lines:				
Seams:	+	_		
Abrasion spots:	+	_		
Core withdrawals:	+	_		
Vis. check of connectionpart	ts			
Suspension line screw locks:	+	_		
Risers:	+	_		
Lenght measurement:				
Risers:	+	_		
Lines:	+	_		
Examinations of the canop	y:			
Firmness of canopy:	+	_		
Porosity:	+	_		

Evaminations of the lines:																
FITTILIESS OF	IIIdiii	illes.			1 1		_		_		_			uan		
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Condition:																
		Very good co	Very good condition													
		Good condition	Good condition													
		Well used														
		Heavily used,	but wi	thin	güte	sieg	el st	andaı	rds,	freque	ent c	hecks	s re	quired		
		No longer air	worthy,	ou	tside	of t	he lir	nit va	lues							
Repairs made?																
Signature of tester:						Da	te:									

### NOTIZEN/NOTICE

#### NOTIZEN/NOTICE



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