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CHILIZ

Manual/Service

JET FLAP high-end freerider – LTF 1-2

Serialno:



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# 1 INTRODUCTION

We thank you for your confidence in the skywalk product line and congratulate you on your purchase of the CHILI2. We are confident that you will experience many hours of flying pleasure with the CHILI2.

In this handbook you will find important information on the characteristics, safety, maintenance and care of your new partner in the air. We recommend that you read the handbook completely before your first flight. It contains many helpful tips for flying safety as well as special information pertaining to the CHILI2.

We are gladly available for your questions, comments or suggestions.

### Your skywalk Team

Pure Passion For Flying





## 2 DESCRIPTION

The high-end market for 1-2 gliders has developed considerably in the last few years. The specifications have been determined from the following requirements: High performance in the LTF 1-2 class, sporty handling without being overwhelming and all of this with a fully developed comfort factor. Thus, the pilot can fully access the performance without sacrificing comfort or safety. We constantly strive to implement technical advances into our products and this is reflected in our innovative, technically mature products.

The CHILI2 therefore becomes the little brother of the CAYENNE3, the most successful LTF2/EN:C glider of the 2009 season.

The performance and safety potential that we were able to achieve in the 3-Line concept of the C3 motivated us to implement the same system into the CHIL12. The construction, as well as the inner life of this high-end freerider is very complex. A purebred 3 –liner, thin top lines with loop sleeves, continuous strain-relief bands, reinforced V-Parts, risers with integrated magnets, optimised Jet Flap System, all are parts of the impressive power of the CHIL12.

Only through continuous development and design can we continue to push the edge of the technically possible, without losing sight of pilot safety.

The target group of the CHIL12 is therefore the sporty pleasure pilot, who also enjoys pushing the limits of cross country flying, but won't compromise when it comes to handling or safety. Naturally, the CHIL12 is also the perfect companion for expanded thermic tours! Here its obvious, the CHIL12 suits not for students, its handling exeeds the students abilities for sure.



# 2 TECHNICAL DATA

Size	XS	S	M	L	XL
Cells	52	52	52	52	52
Area	23,19	26,08	28	29,44	31,11
Wingspan	11,47	12,16	12,6	12,92	13,28
Aspect Ratio	5,67	5,67	5,67	5,67	5,67
Area Projected	19,3	21,7	23,3	24,5	25,9
Wingspan .proj.	8,78	9,31	9,65	9,91	10,17
Aspect Ratio proj.	4,00	4,00	4,00	4,00	4,00
Canopy Weight kg	5,1	5,7	6,2	6,5	6,8
Take off Weight in kg	60-80	75-95	85-110	100-120	105-130
min. Speed in km/h	21	21	21	21	21
Trim Speed in km/h	38	38	38	38	38
max. Speed in km/h	52	52	52	52	52
Winch Towing	yes	yes	yes	yes	yes
Jet Flap Technology	yes	yes	yes	yes	yes
Motor certification with special risers	no	no	no	no	no

#### 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 line system of the CHILI2 is based upon that of the CAYENNE3. The implemented hybrid-material mix of covered main lines, mid-lines (Dyneema and Aramid) as well as uncovered Technora top lines guarantees the best strength values with minimal drag. A cover is sewn onto the loops of the top lines at the connection points in order to guarantee the best possible transfer of power. Material selection made it possible to reduce line drag by 25% in comparison with the predecessor. The CHILI2 is equipped with a genuine 3-Line System, like the CAYENNE 3 and the POISON 2, which means it has only 3 line levels. Thus, the glider is equipped solely with A, B and C connection points, as well as 3 A, 3 B, 3 C and 1 stabilo line per wing half.

#### The skywalk CHILI2 has 4 risers.

- > The inner 2 A-lines lead to the A1-risers.
- > The outer A-lines lead to the A2-risers(for big ears)
- > The B-lines as well as the stabilo lines lead to the B-risers.
- > The inner and outer C-lines lead to the C1- risers.
- > The mid C-lines lead to the C2-risers.

Schematic drawings of the risers are found at the back of the manual.

#### **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 CHILI2:

- > 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 CHILI2 with a valid flying license and in accordance with local rules and regulations.

During production, your skywalk CHIL12 has passed several thorough quality control checks. More spot checks were performed before shipping



## SPEED SYSTEM

The skywalk CHIL12 can be equipped with a foot-operated Speed System.

The Speed System affects the A-,B- and C1-riser.

Before activation of the Speed System, all the risers have the same length. The CHILI2 has a very efficient speed system thanks to the 3-Line System.

The A,B and C1-risers shorten during use.

How strongly they shorten is shown on the detailed riser drawing.

The different risers are size-dependant.

#### **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.

Shematic drawing of risers on page 63 - 65.





## 4 HARNESS

The skywalk CHILI2 is licensed for all EN or LTF 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 CHILI2. The CULT and RANGE Harness series supports the 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 CHILI2.

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 CHILI2 is very easy to launch. Hold both A-risers in and the brake handle in your hands. The A-risers are positioned with a magnet for the launch, in order to facilitate the handling with the 2 A-risers.Both A-risers separate in the air automatically and thus the riser is free for big ears. For better orientation and control, the A-lines as well as the A-riser covers are red, the brake lines are orange and the brake handles are black. Arms are extended to the side and back holding the A-risers. Check the wind direction, laid-out canopy and air space before beginning launch.

The surface of the skywalk CHILI2 is lifted from the consequent speed. The canopy will fill quickly and dependably. As soon as the pull pressure recedes, hold the canopy vertically above you by carefully dosed braking. Collapsed cells can be opened by pumping



the appropriate side. You may now make the necessary changes in direction.

Look and feel that the wing is properly and uniformly inflated.

The final decision to launch and accelerate respectively should only be made when all disturbances are successfully eliminated! Otherwise, stop the launch immediately due to safety grounds!

By reverse- and strong wind-launches, the glider may shoot forward more strongly or earlier than expected. To counteract this, run upslope towards the glider

We recommend first practicing this demanding launch technique on flat ground.

During a reverse launch, we recommend using only the front A-risers, allowing the wing to open somewhat more slowly and the full scope of pressure from strong wind does not come at once. In high wind, the CHIL12 can be held on the ground with the last risers (C2 line). Please practice this technique on the ground.

#### **Turning**

The skywalk CHILI2 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 can steer and land the CHIL12 with the C-risers, but behaviour is restricted.

#### **Active flying**

Active flying means flying in harmony with your paraglider.

Anticipate the behaviour of your skywalk CHILI2 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 CHILI2 will not collapse often. 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 CHILI2 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 CHILI2 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 CHIL12 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.

#### Landing

The skywalk CHIL12 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 and-make 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 increasethe 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 the cloth 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 your-back 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 CHILI2 too tightly and take particular care with the reinforcements on the leading edge. Your glider will reward you with a longer product life. The skywalk SOFT BAG is the perfect partner for your glider.

#### Winch towing

The skywalk CHILI2 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 CHIL12 is not certified for motorized flight. We have developed special gliders for motorized flight. They can be found in our MOTORIZER program.



## **DESCENT TECHNIQUES**

Under no conditions should the CHIL12 handbook 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 CHIL12.



#### 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 CHILI2 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:**

HIGH SINK RATES LEAD TO INTENSE EFFECTS ON THE BODY DUE TO THE CENTRIFUGAL FORCE AND CANNOT BE WITHSTOOD BY INEXPERIENCED PILOTS FOR LONG.

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 CHIL12 has no tendency towards a stable spiral dive, but instead diverts automatically after brake is released. If the inner side of the curve is heavily loaded from weight transfer, the automatic diversion from the spiral could be delayed.

#### **WARNING:**

STEERING PRESSURE IS A SOMEWHAT 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 than with the 4-Line Systems. The glider dives back further and shoots (at the wrong time) clearly more forward strongly. 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**

Both A-risers are fixed with a magnet at the launch, which disconnects in the air. For big ears, pull down the outer A-risers symmetrically.

The wing ends fold down and the sink increases. If you additionally operate the Speed System, the sink speed will again increase. Through weight shift and dosed one-sided braking, the glider remains steerable.

To exit big ears, let go of the A2-riser, normally they will open again by themselves. Occasionally you may have to actively open them by briefly braking on one side and then the other side, which will asymmetrically open the ears. It is always advisable to maintain slight pressure on the foot accelerator.

We strongly advise against attempting a steep spiral or wingover with big ears.

The extreme line load could lead to material damage.

Generally never fly with a wet glider.

#### **Examples:**

- > In strong winds or below a thundercloud at low altitude it is possible that neither B-line 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 CHIL12 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.



## **TEXTREME FLIGHT MANOEUVERS**

#### Asymetric tuck

The CHILI2 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 CHILI2 will re-open automatically even after bigger collapses within a turn of a radius of 90°-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 CHILI2.

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 IMMIDIATELY!



#### Front tuck:

The paraglider can be front tucked by a strong pull on the A-risers or when encountering strong sink. The leading edge will fold forward along the whole length of the wing. Light braking will reduce the forward surge and will help to speed up the opening of the canopy. The skywalk CHIL12 opens regularly by himself. If the glider does not open so quickly cause of turbulences, the pilot can help with slightly braking both sides.

#### **WARNING:**

IF THE PILOT GRABS THE BRAKES TOO ROUGHLY, A DANGEROUS STALL COULD RESULT.

#### Parachutal stall

The CHIL12 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 CHILI2 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 CHILI2 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 CHILI2 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 CHILI2 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!



#### **MATERIALS**

The skywalk CHILI2 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: Dokdo 30DFM



#### Lines

Top lines: Liros LTC 80 / LTC 65

with loop sleeves

Middle lines: Liros NTSL 160 / NTSL 120

partially with loop sleeves

Main lines A,B: Liros PPSL 200 / PPSL120 Main lines C, Stabilo: Liros TSL 220 / NTSL 160

Brake lines top: DSL 70

Brake lines middle and main: Liros DSL 70

Main brake line: Liros DFLP 200/32 Leading edge reinforcement: Dacron Connection point reinforcement: Dacron

#### **Risers**

The risers are manufactured from 22 mm Polyester webbing by Cousin Frères. Stretch values, strength and stability stand at the peak of webbing production.

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#### **MAINTENANCE AND DISPOSAL**

With proper maintenance, your skywalk CHILI2 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!

#### 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 CHILI2 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

#### **Line-Repairs**

manner.

The CHIL12 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!



#### 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.
- 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 200 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 CHILI 2 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 CHILI2 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 EXPIRATION OF THE OPERATING LICENSE! ANY LIABILITY CLAIM TOWARDS THE MANUFACTURER AND ITS DEALERS IS EXCLUDED!

# 11 HOMOLOGATION

The CHIL12 has following homologations: LTF03:class 1-2GH, LTF09:class B, EN926-2:class B

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.



# 12 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 CHILI2 stands at the absolute peak of paraglider development. It shows exactly what is currently possible regarding performance, safety and innovation. A long time was required in developing the CHILI2, but it was also a lot of fun for us. We are always focused on constructing the best possible glider for you. Our satisfaction is complete when you notice this during your very first flight with the CHILI2.

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

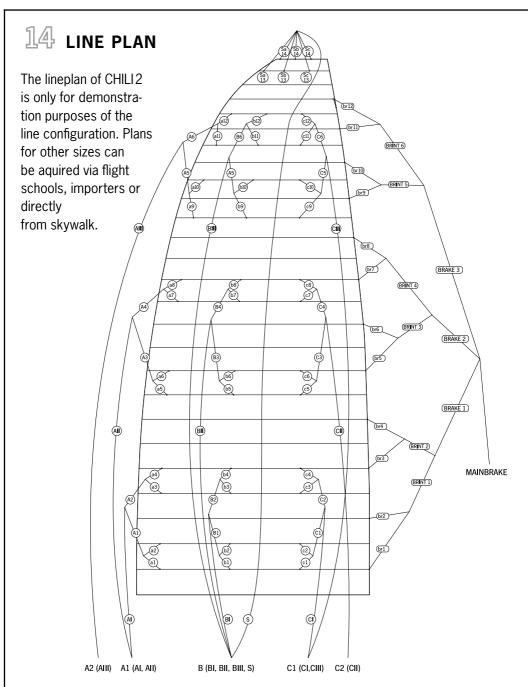


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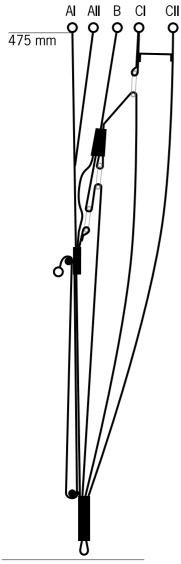


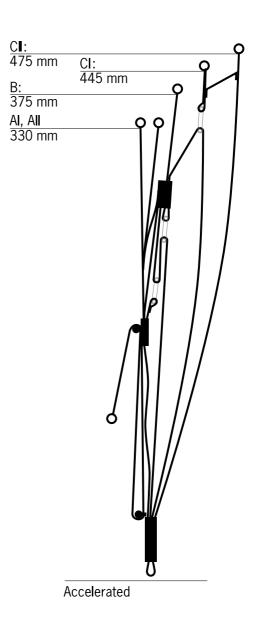




# 15 RISERS

CHIL12, Size XS and S





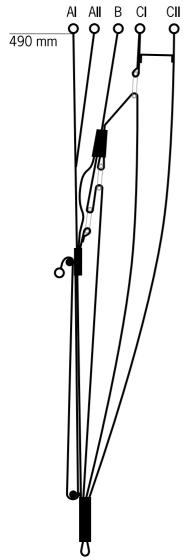
Trimspeed

63

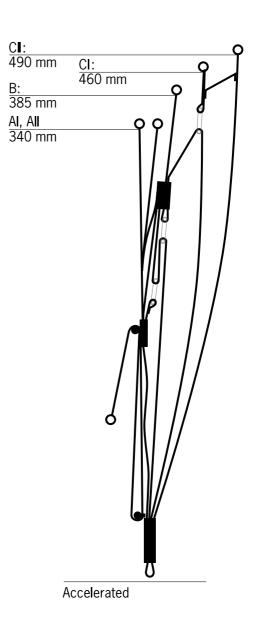


# 15 RISERS

CHIL12, Size M



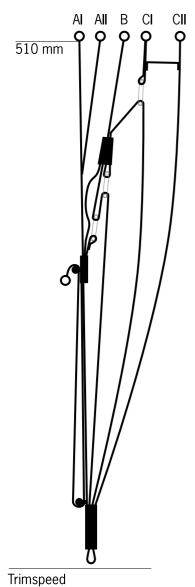


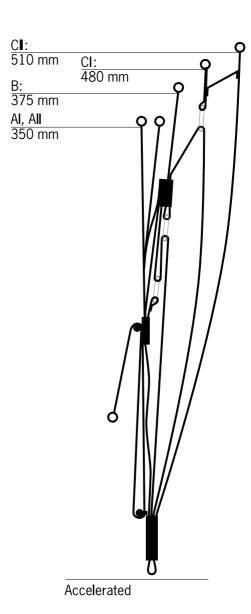




# 15 RISERS

CHIL12, Size L and XL







# 16 test protocol

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



Examinations of the lines:											
Firmness of r	nain I	ines:		] [					]		daN
Visual checl	k of t	rimming:	+		4				_		
Checkflight necessary? + -											
Citoriogal		?		$\Box$	+				$\dashv$		
Gütesiegel p	Diaqu	le:			+				$\dashv$		
Identificatio	n pla	te?	+		$\top$				1		
Condition:		New Very good co	ndition		•				•		
		Good condition									
		Well used									
	Heavily used, but within gütesiegel standards, frequent checks required										
	No longer airworthy, outside of the limit values.										
Repairs made?											
Signature of	teste	r:			1	Date:					



# 16 test protocol

Test Protocol			Date:
Customer, Name:			
Adress:			Phone:
Glider:	Size:	Serial number:	-
Gütesiegelnr.		Date of last check:	
Date of first flight:	Year of constructi	ion:	
		T	Г
Accomplished checking:	Results: [ +/- ]	Description of failure	Suggested repairs
Identification:	+ -		
Visual check of canopy:	<u> </u>		
Upper surface:	+ -		
Lower surface:	<u> </u>		
Profiles:	<u> </u>		
Line flares:	+ -		
Leading edge:	+ -		
Trailing edge:	+ -		
Crossports:	+ -		
Visual check of lines:	$\vdash$ $\vdash$ $\vdash$		
Seams:			
Abrasion spots:	<u> </u>		
Core withdrawals:	+ -		
Vis. check of connectionparts			
Suspension line screw locks:			
Risers:	+ -		
I amelik was asuwawanki			
Lenght measurement: Risers:	+ -		
Lines:			
LIIICS.			
Examinations of the canopy:			
Firmness of canopy:	+ -		
Porosity:			



Examinations of the lines:									
Firmness of ma	nin lines:						]		daN
Visual check	of trimming:	+	<u></u>				4		
Checkflight necessary? + -									
Ciitasiamal pla	3		$\overline{\Box}$				$\dashv$		
Gütesiegel pla	ique:	<u>+</u>					$\dashv$		
Identification	plate?	+					寸		
Condition:	☐ New☐ Very good co	ndition							
	_	Good condition							
[	Well used								
[	Heavily used, but within gütesiegel standards, frequent checks required								
	No longer airworthy, outside of the limit values.								
Repairs made?									
Signature of te	ster:			Date					



## NOTIZEN/NOTICE



## NOTIZEN/NOTICE



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