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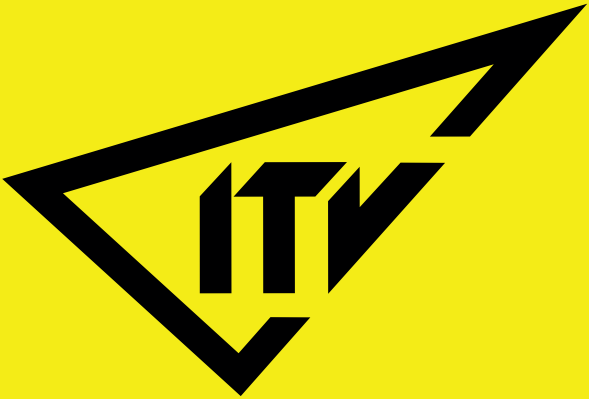


Bulldog 2

USER'S MANUAL

EDITION 10/04/2026

THANK YOU FOR YOUR TRUST

The ITV team thanks you for the trust. We hope this tandem will give you a lot of fun for many years of flying. We recommend that you study this manual which is both the identification and inspection document as well as the logbook of your paraglider.

It is your responsibility to ensure that this equipment has been tested by your dealer and that the test results are recorded on the test sheet. We invite you to send us the test results and register your paraglider online at www.itv-wings.com. We will then be able to contact you without delay to answer any questions relating to your wing or its components.

We strongly encourage you to keep this manual up to date and to give it to your buyer in the event of resale.

Enjoy your flights
ITV team

INDEX / EN

WARNING

ITV wings are designed and manufactured with a constant focus on safety, offering access to a wide flight domain. Like any aircraft, this equipment requires maturity, the ability to analyze flight conditions, skills, and constant care for equipment maintenance from the pilot.

This manual does not replace training at a specialized center or adequate practice for tandem paramotor flying. Before delivery, every ITV wing must be checked and flown by an ITV dealer. We recommend to carry a rescue parachute. Having a reserve parachute is essential for safe practice.

Check the riser configuration upon receiving your wing (see illustrated diagram p17). The manufacturer cannot be held responsible for incorrect assembly or configuration of the risers according to the intended use.

PILOT REQUIREMENTS

For paramotor flying, appropriate training, insurance, and licenses are required. You must be able to correctly assess weather conditions before flight. Use a wing suited to your skill level. Before each flight, perform a thorough pre-flight check. You fly under your own responsibility, aware of the risks involved. The manufacturer or seller cannot be held responsible in case of an accident.

Carrying a reserve parachute is strongly recommended, especially for tandem flights. ITV recommends a semi-automatic parachute, such as a pyrotechnic or pneumatic system. Parachutes for heavy loads cannot be manually deployed.

BASIC SETTINGS

ITV wings are delivered in compliance with certification. Any modification, such as changing line lengths or attaching different risers or links, voids the certification.

WEIGHT RANGE

Your wing is certified for a specified weight range. Flying outside this range means you are outside the certified flight characteristics. The choice of where you fall within the range is personal. You can fly at the maximum, minimum, or middle of the range. We recommend the middle.

Being at the low end of the scale has advantages such as high damping, less dynamic feel and a better climb rate. The disadvantages are a lower speed, less agile and reduced internal wing pressurization. On the other end, a heavily loaded wing will fly faster, have a more tauter canopy, which will increase the dynamic character of the wing.

Bulldog 2 TANDEM | PROGRAM

The Bulldog 2 Tandem is developed for foot-launch and trike tandem paramotor flying: easy inflation and takeoff, optimal stability, docility and good landing.

These features are combined with moderate control effort. The design aims to maximize the lifespan of the wing, both in flight behavior and structural resistance (EN-926-1 certification).

FOLDING

To extend your wing's life, take these precautions:

- Ensure the wing is dry before packing.

- Always store the wing in a suitable bag (Quick-pack, Innerbag, etc.).

- Store in a dry place, away from moisture and heat sources.

- Do not expose to excessive heat (e.g., car trunk).

ITV strongly recommends accordion folding, so all ribs are side by side without folding plastic reinforcements, or a not-too-tight quick-pack.

MAINTENANCE

If necessary, wash your wing with cold water and neutral soap. Do not store the wing wet or dirty. For long-term storage, avoid tight packing. To preserve inflation qualities, avoid folding the nylon rods reinforcements at the ribs nose.

Every paraglider is prone to aging and must therefore be inspected regularly (every 100 flight hours or annually, whichever comes first). Before resale, a check releases your responsibility. We recommend having checks done at our workshops.

Be vigilant for any defect, damage, or breakage in the lines or canopy and address it quickly. Pay special attention during pre-flight to the tightness of quick links connecting lines to risers and risers to spreaders or frame.

If returning to the workshop, send the complete wing (risers and original bag, without harness) with this manual for recording interventions. Also include the intervention sheet (available at itv-wings.com, SAV section) and mark any repair locations with colored tape. Please return your wing folded.

PRE-FLIGHT

The pilot is fully responsible for ensuring all equipment is flight-ready. Before each takeoff, follow this pre-flight procedure:

1. Check reserve parachute: container pocket closed, handle in place. For automatic systems, safety pin removed.

2. Helmet adjusted and chin strap closed for you and your passenger. All harness straps closed.

3. Check leg straps for both.

4. Wing properly connected to spreaders or frame, carabiners and links closed.

5. Good grip on brake handles.

6. Leading edge open, lines clear. Position yourself correctly relative to the wind and stay centered for progressive inflation.

7. Clear space and good visibility.

Ensure enough clear space ahead for a safe climb, avoiding trees, power lines, or other obstacles in case of engine failure. Always fly with a good safety margin and be able to land without engine in a suitable area.

INFLATION AND TAKEOFF

We recommend your first flight with the new wing in calm conditions to learn about your wing. The fan layout is best, allowing even filling from the center. Ensure no risk of line tangling or tip line wrapping (cover line). Any alteration during takeoff can unpredictably affect trajectory.

Inflation should be well-aligned (wind direction-center of wing), with lines taut, no running start, and a progressive, steady effort. Hands on the front risers should guide the rise with slight tension. Too much pull can partially close the leading edge.

For takeoff, trims should be closed. In moderate wind (from 15 km/h), use a reverse inflation technique and move toward the wing during the rise.

For pilots not skilled in reverse inflation, do not attempt takeoff in winds above 15 km/h.

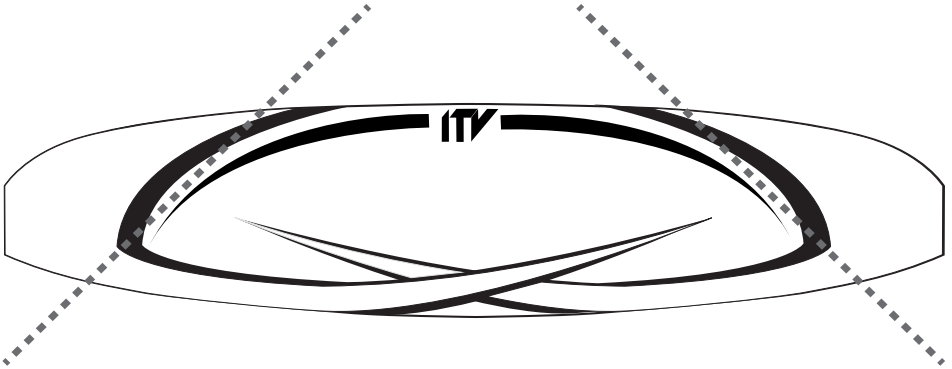
MAXIMUM SINK RATE AND RAPID DESCENT TECHNIQUES

For these 3 maneuvers, we strongly advise—as with all other phases of flight—to keep the brake handles in your hands, passed through the loops (wrist strap). This allows for an instantaneous return to conventional control. These emergency maneuvers should only be used in case of necessity. Over time, they weaken the lines, the ribs, and the canopy-to-line attachment points.

WARNING: Be aware of the risks of performing deep spirals with "big ears". This maneuver significantly increases the load on the central A-lines and can prematurely weaken them. **Only use this technique in cases of extreme emergency, and have the line strength tested in our workshop afterwards.**

360° / Spiral Dives: During continuous spiral dives, sink rates exceeding 10 m/s can be reached. This maneuver can be disorienting for both pilot and passenger (loss of reference points and very strong acceleration/G-forces). Care must be taken to approach the practice of 360's progressively. The exit is achieved 'hands high', while counter-steering on the outside of the turn if necessary. The Bulldog 2 TANDEM does not exhibit spiral instability, meaning it recovers from a deep spiral dive autonomously. Nevertheless, to completely eliminate any risk of spiral neutrality, the pilot can choose to initiate the exit by applying symmetric braking and then leading into a dissipation turn to dampen the exit surge.

In turbulent air, it is recommended to return to a fully trimmed position.



Big Ears: It is not recommended to exceed 30% of the wingspan on each side. Beyond this limit, the wing may become unstable.

Recommended Procedure

1- Initiate big ears simultaneously
Pull the big ears simultaneously on both sides by pulling the Big Ears Kit riser. Ensure you are holding the webbing strap and not the line itself.

2- Adjust trims if necessary
Trim if needed to adapt to the conditions or manage your flight path.

3- Recovery / Reopening
Release the big ears simultaneously to allow the wing to reopen.

B-Line Stall: Do not pull more than 25 cm (risk of a full stall).

Given the wing's high aspect ratio, an incorrect or uneven pulling force on the B-risers can cause the canopy to degenerate forward into a horseshoe shape. Avoid releasing the risers abruptly. During a B-line stall, the wing can become unstable and the airspeed is reduced to nearly zero.

TURNS AND OBSTACLE AVOIDANCE

The most effective turn entry is achieved by weight-shifting on the harnesses or seats towards the inside of the turn, combined with input on the inside brake. Once the turn is established, the turn rate is easily modulated using the outside brake.

Evasive action is achieved by a sharp and assertive input on the inside brake.

LANDING AND WING DEFLATION IN STRONG WINDS

The approach and flare should be carried out with the trims fully closed or released by a maximum of 1/4. The increasing glide performance and stability of our wings make them increasingly susceptible to the effects of the wind gradient. It is highly advisable to maintain a high airspeed on final approach with hands high.

In a moderate breeze upon touchdown, after ensuring static control of the canopy and turning around to face the wing (foot launch), the pilot should release the brakes and pull symmetrically on the rear risers.

ALTERNATIVE STEERING METHODS

In the event of an issue with a main brake control, the Bulldog 2 TANDEM can be steered using the TST control for directional management, as well as by applying moderate pull on the rear riser.

The TST control allows for precise flight path adjustments. However, it does not alter the wing's angle of attack; therefore, landing using the TST controls is not recommended. For landing in the event of a primary brake failure, using the rear riser is the preferred method.

FLIGHT IN TURBULENCE AND FLIGHT INCIDENTS

Flight in turbulent conditions must be avoided at all costs. Refer to aerology and meteorology manuals to help predict these conditions (strong winds, mechanical or wake turbulence, rotors, lee-side thermals, Foehn effect, cloud overdevelopment, etc.). Nevertheless, if you are inadvertently caught in turbulence: reduce your airspeed by pulling in the trims so they are released by a maximum of 2 cm.
This configuration provides the following safety benefits:
Increased angle of attack: This significantly reduces the risk of a collapse caused by the leading edge entering a negative angle of attack.
Dampened pendulum effects: Pitch and roll oscillations during flight transitions will be minimized.
Immediate recovery: In the event of a deflation, the wing will be optimally configured for immediate reinflation."

PARACHUTAL STALL

Although not detected during testing, if this phenomenon occurs without any brake input, you should initiate a moderate turn to return the wing to forward flight, and control the ensuing surge by maintaining adequate tension on the brakes. The occurrence of this phenomenon could be a sign of aging and would warrant an immediate workshop inspection. In the event of a deep stall close to the ground, prefer a hands-high landing in this configuration over any recovery maneuver.

WING COLLAPSES

Recovery is generally spontaneous and immediate. Although this possibility was not encountered during testing, a massive collapse leading to a sudden turn cannot be ruled out. If left uncorrected, this situation could degenerate into an auto-rotation.
To correct such an incident, weight-shift toward the inflated side, then apply gentle input on the outside brake. Once the rotation is arrested, if the wing has not yet reopened, briefly pump the brake on the collapsed side to encourage reopening. Avoid aggressive inputs to prevent over-controlling the wing and risking a stall.

ANY DEFLATION, EVEN PARTIAL, CAN UNDER NO CIRCUMSTANCES BE CONSIDERED ACCEPTABLE AND MUST PROMPT THE PILOT TO SAFELY SHORTEN THE FLIGHT.

AEROBATIC MANEUVERS

Extreme maneuvers should be avoided. Although they were thoroughly performed during numerous test flights, they fall outside the normal flight envelope of a paramotor :

- Turn reversals (wingovers) with roll oscillations exceeding 45° on either side of the vertical;
- Slowing the wing and releasing the brakes, inducing pitch oscillations exceeding 30° on either side of the vertical;
- Stall maneuvers;
- Sharp turns at excessively low airspeeds likely to degenerate into a flat spin or an asymmetric stall, as well as induced collapse maneuvers using the risers.

WARNING: AEROBATIC FLIGHT IS STRICTLY PROHIBITED

Performing maneuvers outside the flight envelope defined above is the sole responsibility of the pilot. The manufacturer disclaims all liability in the event of an accident or structural failure resulting from aerobatic use of the aircraft.

TECHNOLOGIES

3D SHAPPING
Optimized cutting and assembly of the leading edge panels.

ITV RENFORT SYSTEM
Structural reinforcement of the leading edge using nylon rods.

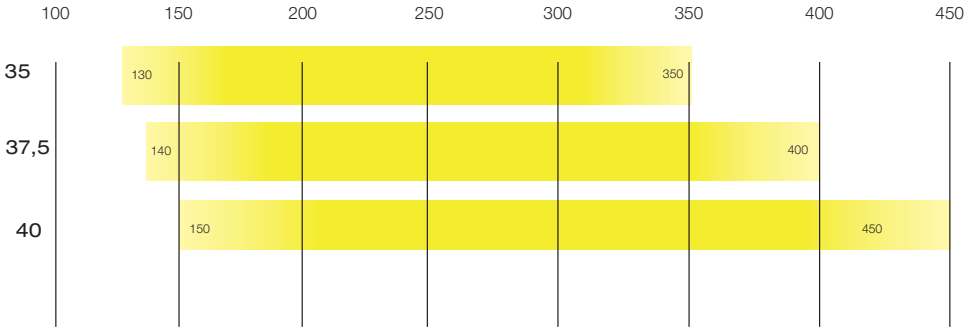
ITV Fins
Automatic wing stabilization.

TIP STEARING TOGGLES (TST)
Wingtip brake system acting exclusively on the wingtip: maximum efficiency for minimum effort!

TECHNICAL DATA

Bulldog 2 Tandem	***35***	***37,5***	***40***
Flat area (m^2)	35	37,5	40
Wing's weight(kg)	8,4	8,7	9
Flat aspect ratio	5,5	5,5	5,5
Span	14,1	14,5	14,9
Cells	56	56	56
Cord	3,12	3,22	3,33
Max speed (km/h)	70	70	70
Max Power in KW	<59KW	<59kw	<59kw
Certification / Identification	DGAC	DGAC	DGAC

PARAMOTOR FLIGHT WEIGHT RANGE

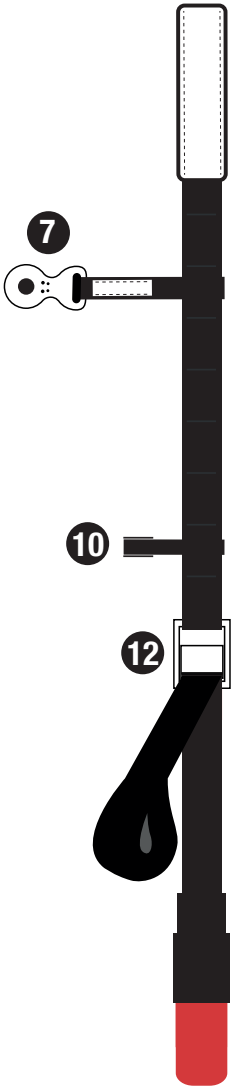


CONSTRUCTION MATERIALS

Fabrics : MJ tex, NCV, Dokdo **Lines :** Edelrid & Liros All covered lines

Risers

The Bulldog 2 comes standard with 5-branch risers (A, A', B, C, and D). They are equipped with a trimmer system that must be used with caution.



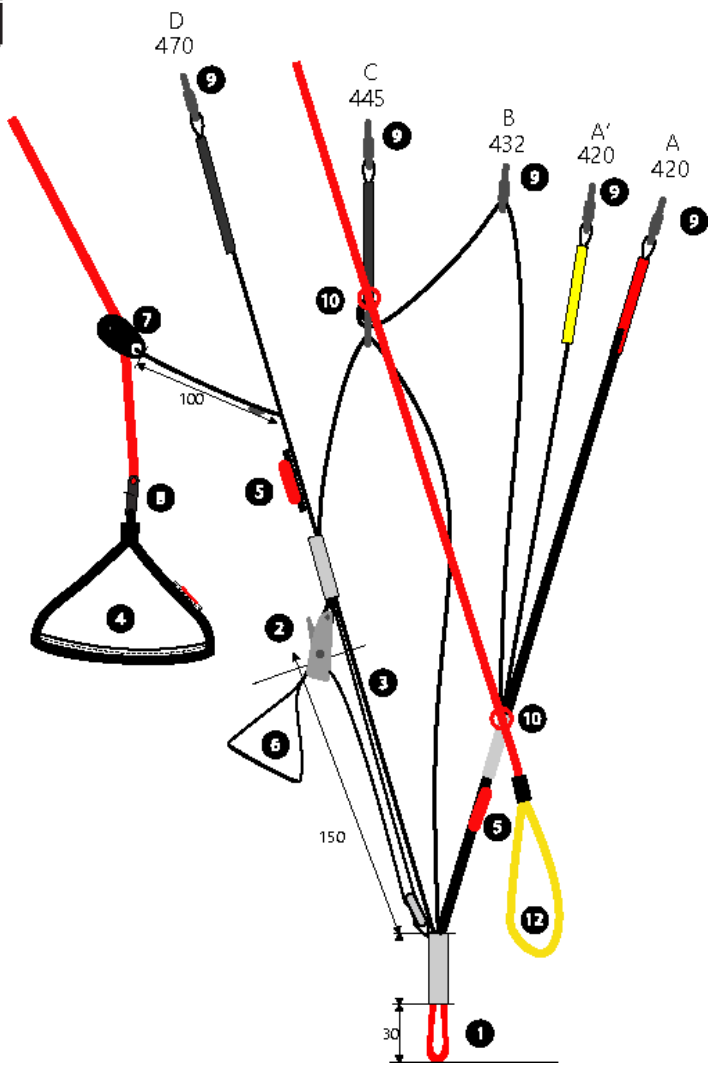
For take-off and landing phases, we recommend setting the trimmers to the closed or slightly open position (3 cm maximum) to optimize lift.

Since the Bulldog 2 features a classic airfoil profile, opening the trimmers in flight increases airspeed but requires more engine power.
CAUTION: This configuration makes the wing more sensitive to turbulence.

Conversely, in the closed position, the wing provides its best sink rate and maximum collapse resistance.

RISER DIAGRAM

	Neutral Position	Accelerated Position
A	420	420
A'	420	420
B	395	432
C	370	445
D	320	470



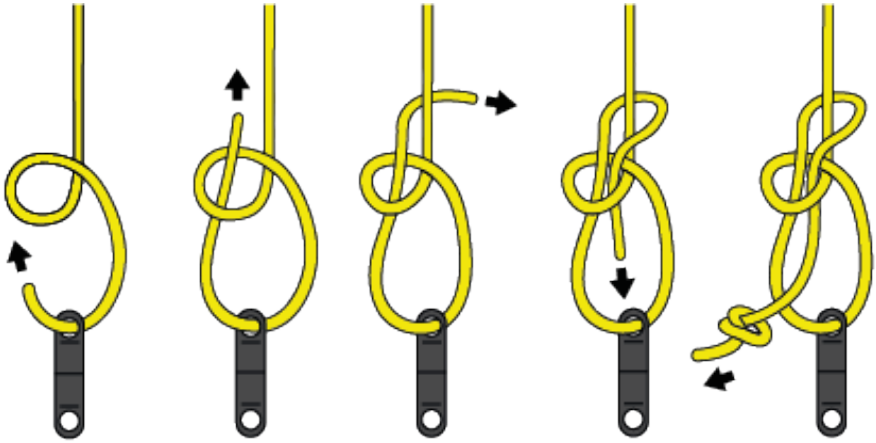
1. Main anchor
2. Trim Buckle
3. Safety strap
4. Brake handle
5. Magnet
6. Trim loop
7. Brake pulley
8. Swivel
9. Quick link
10. TST ring
11. TST handle

BRAKE LINE ADJUSTMENT

The brakes are factory-adjusted to ensure optimal handling. However, if this setting does not suit your preferences, the brake line length can be adjusted.

To adjust the brake line length, we recommend using a bowline knot and limiting your adjustments to small increments (no more than 5 cm). Do not shorten the lines. Lengthening is permitted up to a maximum of 20 cm.

BOWLINE KNOT



If you modify the original setup, have it verified by a professional.

WARRANTY

IITV is confident in the quality of its products and offers you an extended warranty. However, should a product prove defective due to a manufacturing fault (excluding normal wear and tear), we commit to remedying the issue. This warranty is valid for 2 years from the date of purchase, which must be recorded on the test sheet.

Please return this test sheet to the following address:

ITV-WINGS
195 Z.A Bout du Lac
74210 LATHUILE - FRANCE

You also have the option to obtain an additional 1-year warranty extension by registering your wing on our website: www.itv-wings.com

Negligent or improper use of your wing voids all warranties, such as improper storage, exposure to extreme temperatures, overloading, etc.

ITV recommends having your wing inspected every year or every 100 flight hours at its inspection center.

AFTER SALES SERVICE

ITV has a dedicated maintenance and repair service that performs comprehensive inspections and all types of repairs. Based in France, our workshop boasts long-standing experience and solid expertise.

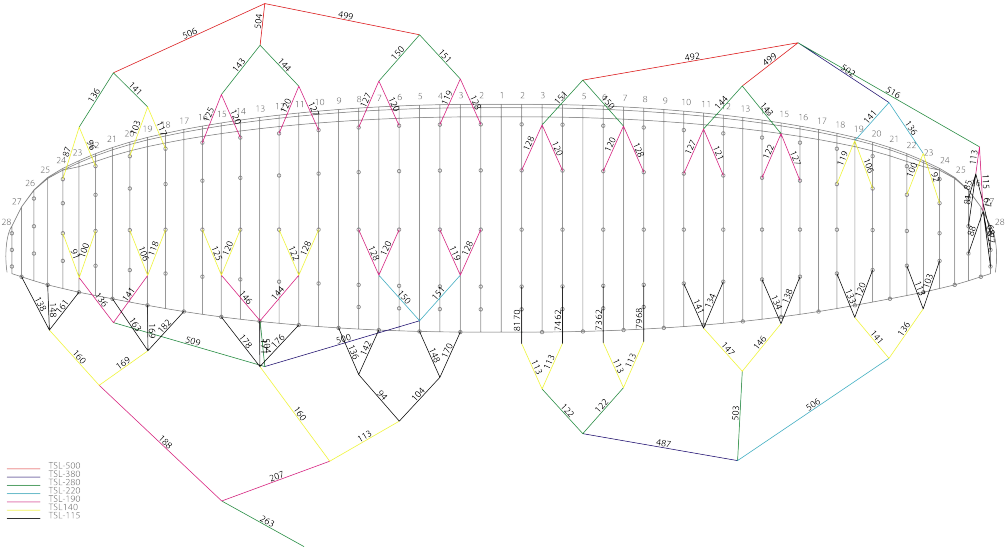
For more information regarding annual inspections and repairs, please do not hesitate to contact us:

e-mail : sav@itv-wings.com

phone : + 33 6 08 83 76 30

PLANS DE SUSPENTAGE
LINES SCHEME

ITV-Bulldog 2 35



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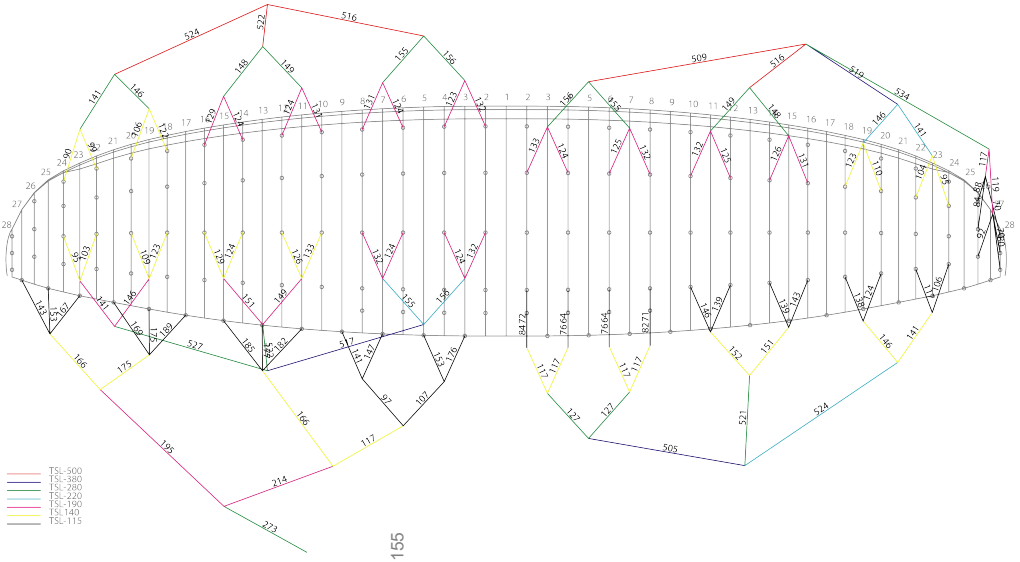

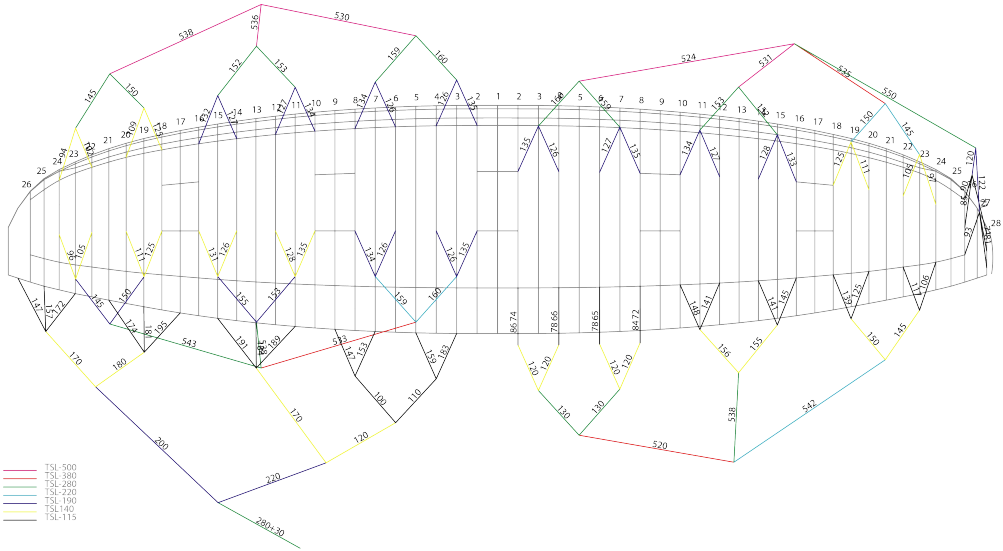
TSL-500
TSL-380
TSL-280
TSL-220
TSL-190
TSL-140
TSL-115

Propriétaires successifs
Successive owners

Nom / Name	Adresse - Tel	Date transaction

Fiche essai vol
Flight test

MODELE : **Bulldog 2 Tandem**
N° de série / Serial n° : .....
Date de fab. / Date of manufacture : .....

Nom et adresse propriétaire / Owner's name and adress :
.....
.....
Nom et adresse du testeur / Testeur's name and adress :
.....
.....
E-mail : .....

Exemplaire valant bon de garantie à retourner à :
This copy to be value to validate the guarantee :

ITV Wings
ZA Bout du Lac
74210 Lathuile - France

Carnet d'entretien / After sale service

Date	Nbre de vols - durée estimée Number os flights - estimated flying time	Intervention	Cachet du réparateur / Stamp of repairer

CONCEPTEUR DE PLAISIR DEPUIS 1981

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