# **USER MANUAL**

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### **USER MANUAL**

# PASHA II

#### Contents

#### A. General

Introduction	 2
Warnings and precautions	 3
Operating limits	 3
Construction	 3
Trim	 3
Tandem spreader bar	 4
Safety equipment	 4

#### **B.** Flying operations

D.

Checklist	 5
Take-off	 6
Flight	 7
Steering	 7
Approach and landing	 7
Towed flight	 8

#### C. Extreme and critical manoeuvres

<ol> <li>Collapse of the canopy         <ul> <li>Asymmetric collapse</li> <li>Symmetric collapse – "Big-Ears"</li> <li>Frontal deflation</li> </ul> </li> </ol>		8 9 10 10
2. Stalls		10
- Parachutal stall with steering line	s	11
- B-line stall		11
- Spin (negative spiral)		12
- Full Stall		12
3. Spiral dive		13
D. Descent rates		13
E. Maintenance and repairs		14
F. Material list		15
G. Line lengths		16
H. Line plan		17
Test flight certificate / Technical data		18

# A. General

#### Introduction

We congratulate you on your purchase of a MAC Pasha II.

Please read this manual carefully before you start, this way you will get the most out of your glider.

Extensive development work and numerous tests make the Pasha II a tandem paraglider with maximum possible safety, excellent achievement and a lot of fun-potential.

The Pasha II is constructed for tandem pilots expecting an easy take-off and landing, light and precise handling in thermals, stability and good performance from the paraglider.

A greater responsibility is put on the pilot by tandem flying, because another person is participating on the flight. Therefore, please, attend to following:

Paragliding is a sport, which demands, besides the optimum equipment, a high degree of attentiveness, good judgement, and theoretical knowledge. Paragliding can be a dangerous sport, which may lead to injury or death. Avoid flying in strong turbulence, strong winds and especially in thunderstorms and Foehn conditions. These could lead to uncontrollable flight conditions and result in a crash. If you have the slightest doubt about weather, wind or terrain, don't take off.

Before delivery, as well as during production, each paraglider goes through a strict visual inspection, and is test-flown by your dealer. Stamps on the placard, together with a completed test-flight certificate, confirm this. Check that the paraglider has been test-flown before your first take-off. If it has not, consult your dealer.

If, after carefully reading through this handbook, you still have questions, telephone your dealer; or us, and we will be glad to help.

## **MAC Para Technology** wish you many pleasant flights with your

PASHA II

#### WARNINGS AND PRECAUTIONS

The purchaser of this product takes responsibility for all risks, associated with the paraglider, including injury and death. Wrong usage will considerably increase these risks. The purchaser is aware that a completed course and a pilot licence for the relevant country is required for paragliding.

Every arbitrary change to the paraglider's construction will evoke termination of the airworthiness.

The Pasha II must not be flown:

If it is out of the weight range In rain, snow-fall and in turbulent weather conditions In strong wind In cloud and fog By pilots with insufficient experience

The Pasha II is a tandem paraglider. Solo flight or flight with more than two persons are forbidden.

#### **Operating limits**

The Pasha II has been developed for foot-launch, and for tandem flights.

The Pasha II has been tested by DHV test pilots to DHV 1-2 GH category.

Flight tests have shown that the glider remains stable and controllable over a wide range of normal and abnormal flight conditions. Nevertheless, turbulence and gusting winds can lead to a partial or complete collapse of the canopy. Therefore never fly in such conditions. It also has been load and shock-tested and passed with a load corresponding to 8G of the maximum weight in flight (1040 kg).

#### Construction

The *PASHA II* construction uses a system where every second cell is attached to the lines and V-Tapes. These V-Tapes doesn't lead to the upper surface, but they are stitched in ca 80% of the airfoil height.

The line construction is clear from the line plan.

## Trim

The glider is delivered with five risers system and tandem spreader bars. Its speed can reach 38 - 41 km/h depending on the weight of the pilots. The brake-lines should always be adjusted so that the first brake-lines just come under tension when the brake handles have been pulled 5 - 10 cm.

The test results relate to this brake-line adjustment. In extreme situations other settings may lead to the glider reacting differently. To be able at all times to react quickly enough to possible problems; you should not let go of the brake handles during the flight (it may be possible to hold both handles in one hand). Alter the line length to bring the handles to a suitable height when using your harness.

*NOTE!!* If in doubt about the brake-line adjustment, it is preferable to leave them too long, as any necessary shortening can easily be achieved by wrapping them round your hand.

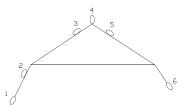
#### Tandem spreader bar

The PASHA II tandem spreader-bar allows varied attachment possibilities, allowing for the difference in heights and weights of pilot and passenger. Changing the main attachment (karabiner - min. strength 24 kN) position can allow for weight difference: the front position (3) for heavier passengers, the middle position (4) if their weights are the same and the back position (5) for lighter passengers. The passenger weight is always compared to the weight of the pilot!

Adjustment of the passenger's karabiner hang point can allow for height differences. The pilot's attachment is on hanging point (6) (see the picture below).

The rescue system bridle must be connected to main suspension point on the spreader-bar (3, 4 or 5). It is possible to use a separator karabiner (min. strength 24 kN) for the rescue system, clipped in to the same loop as the main karabiner. The rescue system bridle must not be connected only to the pilot's or passenger's harness or to the spreader-bar's hang points.

WARNING: The karabiners used in position 3, 4 or 5 must be karabiners designed for tandem flight, which means the minimum strength must be 24 kN. (Recommendation Austrialpin Powerfly, Austrialpin Delta). This holds also for the karabiner used for the attachment of the rescue system in Position 3, 4 or 5. (Recommendation: Maillon Rapide 6/7 mm)



# **B.** Flying operations

### New glider check and before every flight checks.

A tandem glider is often used by more than one pilot, ensure that all of them know the operating limits well and will observe these rules.

In addition to all the usual pre-flight checks, please pay particular attention to the items in the following checklist:

## Checklist

1. Inspection of canopy for tears or damage, especially the seams which join the ribs to the upper and lower surfaces, also the area of the attachment tapes and brake-line connections.

2. Inspection of the lines for damage, including to the stitches on the connecting loops. It is also important to check the suspension lines and brake-lines for tangles. The line lengths mus be checked after 50 hours flying time and whenever the flight behaviour of the glider changes.

3. Inspection of the risers and maillons for faultless condition. Pay special attention to maillons for traces of corrosion under the lines.

4. Inspection of the knotting of the steering handle to the brake-lines. The brake-lines must run freely.

5. Inspection of the tandem spreader bar for damage.

6. Inspection of both harnesses. The harness must show no signs of wear or other damage. You must also check the harness after a hard landing.

7. Check that the rescue-system is correctly installed and secured.

8. Inspection of the main karabiners. Inspection of attachment and security of the karabiners.

WARNING! Remember; don't take off with a wet glider. In such conditions it will be more difficult to launch and the glider's behaviour in extreme situations can be different from that of a dry glider.

#### Pre launch check

- 1. Are openings open and the leading edge in form of a horseshoe?
- 2. Are lines and brake lines free?
- 3. Are the pilot's and passenger's karabiners correctly fastened?
- 4. Is the rescue system correctly fastened?
- 5. Is your helmet on and fastened?
- 6. Is the start direction set?
- 7. Are the start commands concerted?
- 8. Are the weather conditions, the wind strength and direction, safe for take off?

9. Is the air space in all directions clear?

Finally will be the start check done to the hanged passenger once more.

### Take-off

Find a suitable take-off spot, from which you can abort the take-off at any point. After checking the glider, following the checklist, lay it out with the cell-openings upwards so that the canopy forms the shape of a horseshoe. In a strong wind don't spread the canopy too far, so that there is less resistance when pulling up.

#### Forward launch

This is possible in almost all wind conditions except strong headwinds. It is essential to stanc in line with the canopy, especially when the glider has longer lines. Before take-off, place yourself centrally at the gliders axis. Let the B - C and D-risers fall into the crook of your arm and pull the canopy dynamically up by the A-risers. The stronger the headwind the less run-up you need to pull the canopy up. As soon as the glider is above you, stop pulling on the Arisers. Now do a visual check upwards, to see if the canopy is completely open. Otherwise, abort the take-off. Now accelerate continuously until you lift off. In a weak headwind it is easier to take-off if after reaching minimum flying speed you pull the brakes slightly. After the take-off, gently release the brakes again.

WARNING!! Do not use the forward launch in very strong winds. Make sure you don't pull the risers too much towards yourself or downwards as this can result in a frontal collapse, or in an asymmetric take-off.

#### **Rear launch**

To be used in moderate to strong headwinds. Please note that in a strong headwind you may need a helper, as you could easily lose control of the canopy. If the headwind is too strong, take some of the pressure out of the canopy by taking in one or both of the brake-lines (or the D-risers).

### Flight

Always fly with sufficient clearance from the terrain. The *PASHA II* glides best with open brakes, descends best with lightly applied brakes. In turbulence fly with brakes lightly applied to avoid canopy collapse. If the canopy pendulums forward, this should be corrected by prompt braking. A pendulum movement of the canopy backwards is corrected by loosening the brakes in good time.

#### Steering

Turns can be initiated using the brakes in two different ways.

#### Turns with brakes

The pilot applies the brake on the side to which he wishes to turn. To minimise height loss, the brake on the outside of the turn is lightly applied.

#### Turns with brakes and weight shifting

The pilot applies the brake on the side to which he wishes to turn and shifts his weight to the same side. Turns can also be made with the harness alone, by shifting the weight to the inside of the turn. This weight shift has a greater effect, the more loosely the chest-strap is fastened. An optimal steering technique is achieved by a combination of braking and weight shift. The combination of brakes and weight shift is the best technique to turn *PASHA II*.

A further possibility for steering is best limited to emergencies (if the brake-lines break, for example). This entails either gently pulling the front riser (watch out for collapse of the canopy) or rear riser (beware asymmetrical stall). We recommend that you do not use this form of steering in normal flight.

Warning! We do not recommend this method of turning while in standard flight, because the danger of a stall is high.

## Approach and landing

To avoid stressful situations in the approach to landing, it is important to initiate the process at an adequate altitude. This leaves you enough time to observe and appropriately deal with wind direction and any other aircraft in your vicinity.

The final approach should generally be made into the wind and with fully released brakes, in order to maintain maximum energy in the glider. If the air is turbulent, it is better to land lightly braked to minimise the possibility of the canopy collapsing. In order to land on your feet, rather than lying on your back, you will need to lean forward in the harness not lower than 5 m above the ground. At an adequate height (about 1 m above the ground), pull both brakes fully down until the glider is sufficiently slowed.

In a light headwind pulling the brakes only lightly is enough to give a soft landing. In calm conditions, or even tailwind, you must pull the brakes as abruptly as possible. This dynamically increases the angle of attack and gives you the maximum braking effect.

# **Towed flight**

The PASHA II is suitable for towed flight.

Make sure you use proper equipment, experienced personnel and all relevant safety precautions for towing.

*WARNING!!* Please always ensure that the brake lines are adjusted to the lengths recommended here. Setting them shorter could lead to a tendency to stall during towed flight. Apart from this, there are no special procedures.

WARNING!! The PASHA II is not suitable for jumps from aircraft.

# C. Extreme and critical flight manoeuvres

This section describes flying conditions which can be deliberately induced, or which can develop unintentionally due to turbulence or pilot error. Any pilot who flies through turbulence is sure to be faced with these special flight conditions at some point. So take a good look at these flight manoeuvres or prepare for them by SIV (safety training over water). Mastering these flying conditions significantly improves your active flight safety. Sufficient height, as well as the carrying of a reserve parachute, is imperative.

WARNING!! All the critical flight conditions described here require thorough knowledge; otherwise carrying them out may be very dangerous. Sufficient height above the ground is imperative. Bear in mind that all disturbances of the canopy can increase the sink rate by 2 - 10 m/sec, depending on the degree of disturbance. Carrying out these manoeuvres wrongly may lead to a crash.

# Collapse of the canopy

Remember this is a glider with unspectacular reactions to disturbances in the air. Whenever in doubt, let up the brakes and let the glider fly. The glider has a high internal pressure, resistance to tucking and very high degree of passive safety. It is recommended that at this stage you already start to practising an active flying style. The key to active piloting is keeping the glider above your head at all times. We recommend in principle that you hold the brake handle in your hand whenever possible, or fly with your hands through the brake handles, to allow you to react immediately to any possible disturbances.

*WARNING!!* If you fly with your hands through the brake handles, you may lose valuable time for activating the rescue system.

#### Asymmetric collapse

This form of collapse is usually caused by turbulence.

#### Initiation

On one side of the glider, pull the outermost A-riser slowly down, until the edge of the canopy folds in. The canopy collapses furthest if you pull both A-risers violently down. This causes up to 50 % of the leading edge to close up, and results in the canopy going into a spiral towards the collapsed side. If the harness is too loosely adjusted, in a more extreme collapse you will fall in the direction of the folded-in side, thus unintentionally magnifying the canopy's tendency to turn.

#### Recovery

The *PASHA II* will re-open by itself after a turn of about  $40^{\circ}$  (depending on the weight in flight) with a loss of height of about 5-7 m. This depends on the adjustment of your harness. The time this takes, and the associated loss of height, can however be noticeably reduced by appropriate action by the pilot (especially in turbulence). By applying opposite brakes on the still inflated side, the outside of the turn, it is possible to stop any turning movement of the canopy. If you react immediately, 30% brake on the open side should suffice to hold the canopy on a straight course.

If the canopy remains in a turn after a collapse it can begin to stabilize in a spiral dive. It is necessary to react to prevent this. Try to stop the spiral dive by using prompt opposite braking and weight shifting to the outside of the turn.

WARNING!! Especially in turbulence, you <u>must</u> first stop the canopy from turning, before you pump out the collapsed side. When the canopy is stable again, open it by pulling the brake lines on the closed side. If it is tangled, pumping the brake line should help.

WARNING!! Take care to avoid applying too much brake when pumping out the deflation, as this may disrupt the airflow over the canopy and lead to a stall.

WARNING!! In the case of a cravat which pumping of the brakes fails to release - apply 50% -70% brake on the open side of the canopy to stop rotation. Then pull the caught line carefully to release it then pump out the affected side. Take care to avoid applying too much brake when pumping out the deflation, as this may disrupt the airflow over the canopy and lead to a stall.

### Symmetric collapse – "Big-Ears"

#### **Initiation**

Whilst maintaining contact with the brakes, grip the outermost A-risers. Pull both A-risers down simultaneously. The further you pull the A-risers, the greater the area of canopy that will collapse (and the greater will be the sink rate).

#### Recovery

As soon as you release the outer A-risers, the *PASHA II* opens independently. You can speed up its opening by light braking. If in extreme cases the lines get tangled, pumping (pulling repeatedly) the brake lines should help.

#### **Frontal deflation**

If you anticipate strong turbulence, sometimes you may have to apply both brakes to avoid a deflation.

#### <u>Initiation</u>

Hold the brake handles in your hands and grip all A-risers at the level of the maillons. Now pull down far enough to make the whole leading edge roll in (the further you pull the more area folds in).

#### Recovery

As soon as you release the A-risers, the *PASHA II* opens by itself and the glider will recover with a small surge. You can speed up this process by light braking.

#### Stalls

Turbulence or rapid braking can lead to a pendulum effect, and thus to changes in the angle of attack. In extreme cases this can make the airflow break away from the upper surface of the canopy even without the brakes being activated.

WARNING!! All canopies need some time after a stall (in extreme cases a couple of seconds) before the airflow builds up again. You should therefore carry out all manoeuvres involving stalls at an adequate height, as it will take a certain amount of time before the glider flies with its normal sink rate.

## Parachutal stall with steering lines

#### **Initiation**

Pull the brakes slowly down until you have no more forward speed. The canopy now loses internal pressure and the lower surface pushes further and further up between the suspension points. The loss of internal pressure is greater the longer the glider is held in this situation. During the parachutal stall the canopy always remains open.

You will probably have to feel for the right brake position at first. If you apply too much brake, the canopy falls away backwards and the glider finds itself on the brink of a full stall. To solve such a situation, please look at "Full Stall."

#### **Recovery**

As soon as you release both brakes symmetrically, the glider will independently recover from the parachutal stall. If it will not, you can help; pull the A-risers until the canopy goes forward again. Another possibility is to pull the brake lines until the canopy falls backwards and then immediately release them. Consequently the canopy will move forward and recover.

WARNING!! In a parachutal stall, asymmetrical application of the brakes can lead to a spin. If you must land from a parachutal stall, on no account apply the brakes very close to the ground, as a reduction in area increases the descent rate.

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

WARNING! We do not recommend the use of B-line stalls to increase sink rate. They can apply heavy loads to the canopy and too quick an initiation or recovery, with a maximum suspended weight, can lead to damage.

#### **Initiation**

Put your hands through the brake handles and grip the B-risers at the height of the maillons. Now pull the B-risers slowly down, until the canopy folds (parallel to its long axis). The glider will now stabilise itself and sink rapidly, with virtually no forward speed. Keep hold of the B-risers throughout the manoeuvre.

#### **Recovery**

Release the risers at first rapidly but then gently. After the B-line stall on no account just let go of the B-risers, as this can cause overloading. As soon as the risers have been released, the *PASHA II* will usually fly normally of its own accord. Otherwise you have two possibilities:

- 1. Pull the A-risers, until the canopy regains forward speed. WARNING! Don't pull too far, or a frontal tuck will develop.
- 2. Pull the brake lines until the canopy starts to fall backwards, and then instantly open both brakes symmetrically. As a result the canopy will shoot forwards, thus regaining forward speed.

So begin with option 1, and only rely on option 2 when you have enough experience with the manoeuvre.

WARNING! In parachutal stalls asymmetric use of the brakes can cause a spin! If you have to land during a parachutal stall, when near the ground do not use the brakes, because reducing the surface area increases the sink rate. If the glider shows a propensity for deep stalls it is necessary to send it for a check.

#### Spin (negative spirals)

If you find yourself in an unintentional spin and you are high enough, you should:

- 1) Release the brakes immediately. The glider will stop rotating, if it does not apply sufficient outside brake to stop rotation.
- 2) Gently apply the brakes to avoid a collapse of the canopy and the possibility of a cravat (one of the tips becoming entangled in the lines)

*NOTE!!* In the case of a cravat which pumping of the brakes fails to release - apply 50% - 70% brake on the open side of the canopy to stop rotation. Then pull the caught line carefully to release it then pump out the affected side.

WARNING! If the brakes on the un-collapsed side, the outside of any turn, are too much pulled, it can lead to a stall and then on to a new spin.

WARNING!! If you are LOW and are in an unintentional spin, or if the canopy is caught in a cravat USE YOUR RESERVE.

#### Full stall

This is included only to expand your knowledge of how the canopies performance. Not recommended as a descent technique.

The Full Stall can happen:

- 1) When flying directly into a thermal whilst already flying with deep brake
- 2) When flying with deep brake, (more then 100%)

#### **Initiation**

Take wraps until the glider is lightly braked (when the hands are right up). Now gently pull both brake lines, until the canopy falls away behind - at this point, dynamically pull the brakes fully down. Press your hands against your body. The glider is now over you, with the wing tips flapping. If you release brakes too soon, the glider can jump extremely forward, while you stay still back. As a result you sink rapidly with no forward movement.

#### **Recovery**

Progressively ease off on both brakes. Once 90% of the leading edge has reopened the brakes can be fully released. Ensure that the release is even on both sides. The glider exits the full stall on its own with no tendency to surge forward.

WARNING!! If the brakes are released rapidly and asymmetrically, the glider may turn through almost 90 degrees and suffer an extensive asymmetric collapse.

## Spiral dive

The *PASHA II* has very effective spiral dive. This allows rapid descent without stalling. The *PASHA II* has no tendency to stabilise in a spiral dive.

## **Initiation**

Weight-shift and pull the brake on one side gradually. Let the glider accelerate for two turns and enjoy the growing speed and high G-force. You can achieve sink rates up to 17m/s. Once you have entered the spiral you can control your descent rate and bank angle with weight shift and brakes. We recommend lightly applying the outer brake to avoid asymmetrical collapse on outer side of canopy.

## **Recovery**

Weight-shift to a normal flying position and release both brakes. The glider stops spiral diving by itself in 360 degrees.

If you apply inner brake and declerate the glider for two or three turns, big pendulum effects can be avoided.

WARNING! If you stay on the curve side while recovering, it can be prolonged more to one turn. Therefore you must pay attention to your seat position. Practise spiralling with caution and lesser sink rates to get a feel for the gliders behaviour.

Remember: The steeper the turn, the greater the G-force. By tandem flight is the G-force greater than by solo flight.

# D. Descent rates

First fly as far as possible from any areas of lift, to give yourself space to lose height.

<u>Symmetrical collapse - "big ears"</u> Sink rate approximately 3-5 m/sec

#### Spiral dive

This allows rapid descent without stalling. Sink rate, depending on pilot, 5 - 17 m/sec

#### B-line stall

Sink rate approximately 5 - 8 m/sec Important! - End the stall with sufficient time for the airflow to re-establish itself.

In principle, always fly in such a way that you do not need to lose height in a hurry.

## E. Maintenance and repair

The PASHA II is produced from the best materials (see Material Description). The glider must be checked as a minimum, every second year or after 100 flying hours. Do not step on the lines. Although the lines were tested with the "DHV-bend test" they can be damaged if stepped on whilst on a hard surface, or if they come into contact with sharp objects.

If this happens contact your dealer for replacement lines. The lines must be checked after every 50 hours flying time and whenever the flight behaviour changes. Consult your dealer or MAC ltd. Tears in the canopy must be professionally sewn. Adhesive patches are only adequate for very minor damage. The glider must always be kept cool and dry. If possible it should be stored lightly folded in a well-ventilated place. Protect the glider from dampness and sunlight. Exposure to UV degrades the fabric. A damp or wet canopy must be air-dried in a shady place. Do not expose the glider to temperatures of greater than 50 degrees C, as this can cause softening and shrinking of the lines. Clean the canopy only with warm water or a dilute soap solution. Do not use solvents. Never put your glider into the washing machine. Only with correct care can the lifetime of the glider be extended.

Only MAC Para or SKYLINE Flight Gear can make big repairs. Tears have to be professionally sewn. Only minor damage can be repaired with adhesive patches.

If you follow all the steps described in this manual, we are sure that you will enjoy your MAC Paraglider.

Happy landings

Peter Recek - Constructor MAC PARA TECHNOLOGY

#### F. FABRIC OF CANOPY

#### NCV - PORCHER MARINE, France

Extrados - SKYTEX S 09017/E38A - 100% nylon 6.6,33 Dtex,40 g/m2 Intrados - SKYTEX S 09017/E38A - 100% nylon 6.6,33 Dtex,40 g/m2 Main ribs, diagonal ribs - SKYTEX S 09017/E29A - 100% nylon 6.6,33 Dtex,40 g/m2 Reinforcement mean ribs - W 0420 Grille Polyester 200 g/m2 Reinforcement ribs - W 0382 Polyester 180 g/m2

#### LINES

#### E D E L M A N + R I D D E R + C O., G erm a ny

Upper lines - Aram id/P oly ester A -6843-080, A -6843-120 Midd le lines - Aram id/P oly ester A -6843-120 Brake lines - Dynem a/Poly ester A -7850-100 Main lines C1, D1, D2, D3 - Aram id/P oly ester A -6843-160 Main lines C2, C3 - Aram id/P oly ester A -6843-200 Main lines A1, A2, A3, B1, B2, B3, B4 - Aram id/P oly ester A -6843-240 Stabilo line - Aram id/P oly ester A -6843-120 Main brake line - Dynem a/Poly ester A -7850-240

#### **BRIDLE (ATTACHMENT LINES)**

STAP a.s., Czech Republic

STAP-POLYESTER 13mm

#### RISER

#### MOUKA TISNOV ltd., Czech Republic

Polyester 367 040 025 912 25 x 1,5 mm

#### THREAD

AMANN SPONIT ltd., Czech Republic

Thread lines - SYNTON 60, Thread -mean lines - SERABOND 60 Thread glider - SYNTON 40, Thread - riser - SYNTON 30

#### MAILLONS

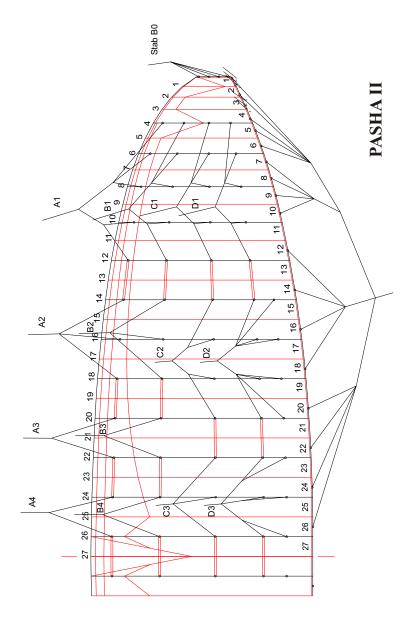
ELAIR SERVIS, Czech Republic

N IR O T R IA N G L E 4/200

# **G. LINE LENGHTS**

	Edelrid A-6843-080		Edelrid -6843-08	0	Edelrid A-6843-080	) /	Edelrid A-6843-080	Edelrid		A	Edelrid -7850-1	
		Edelrid		Edelrid		Edelrid			Edelrid			
	A-	6843-1	60 A	-6843-1	60 A	-6843-1	20	A	-6843-120		A-	7850-120
	Α		в		С		D			BR	BR	BR
stab.	134		132,5		133		136			115 134 138		
4	122,6		120,6		123,6		126,6			136		
6	116,3		114,3		117,8		121,3			144	140	
8	119	180	116,5	180	119,5	180	124	180		146	140	285
10	124	180	120,5	180	124,5	180	132	180		146		
12	134		129,5		133,5		144			151,5		
	A-6843-120		A-6843-12	0						160,5		
14	313		306,5		138,5		149+					
16	312		304,3		131,8	180	144,5+	,	180		231	
18	320,2		312		136,5	180	149,2+		180		232	
					146,6		160,5+	170,8			246	360
20	321,5		312,5								271	
22	324,8		315,1		319,8		155,3+		180			
					322,8		157,1+		180		282	
24	329,6		319,2		332,1		163,8+	177,5	180		296 318	360
26	332,1		321,3								318 347	
Меа	n Lines		5,30	m	A1,4	A2,A3,	A4,B1,B	2,B3,B4	Edelr	id A	-6843-2	40
							C1 C	2,C3,D3	Edelr	id A	-6843-2	10
							01,0					
								D2	Edelr	id A	-6843-2	00
								D1	Edelr	id A	-6843-1	60
Stab	oilo		6,20	m			comes to	"B" Riser	Edelr	id A	-6843-1	20
Brak	celine		2,90	2,90 m + 30 cm Edelrid A-7850-240					40			

# H. LINE PLAN



## **Test Flight Certificate**

# Paraglider type: **PASHA II**

Serial number:

Test flown on:

producent by MAC PARA TECHNOLOGY

Confirmation by dealer:

# **TECHNICAL DATA**

	PASHA II			
Area (flat) [m2]	42,28			
Area (projected) [m2]	36,09			
Span (flat) [m]	15,08			
Aspect ratio	5,38			
Root chord [m]	3,49			
Cells	54			
Weight [kg]	8,9			
Pilot weight [kg]	145 - 225			
Min. speed [km/h]	22 - 24			
Max. speed [km/h]	37 - 40			
Glide ratio	8,3			
Min. sink rate [m/s]	1,15			
Certification	DHV 1 - 2			

