ACCELERATED METHOD OF FREEFALL (MACL)

AFF COURSE

STUDENT MANUAL

INDEX

INTRODUCTION

This course is known as “accelerated method of freefall” (MACL) “the accelerated free fall course” (AFF).

As the name indicates this course accelerates the learning process and is in fact three to five times shorter than learning by the traditional “static line” method (RAPS in the UK)

The AFF course uses a method of individual and personal teaching designed to give students all the necessary instruction and information while maintaining high standards of safety within our sport.

The course is carefully designed to allow you to learn to control your body in free fall as well as learning to fly your parachute and land in the desired area and all this at your own pace and with the emphasis on safety.

The course consists of seven levels. For the first three levels you will be accompanied by two instructors one on your right (principal) and one on your left (secondary). For the remaining four levels you will jump with a single instructor.

Remember that your instructors are there to help you gain all the knowledge you need to skydive effectively and safely so don't hesitate to ask them to clarify anything you are unsure about.

All your jumps will be recorded on video in order to assist you in your learning and to allow you to see your progression.

Finally, in this introduction, there are four skills that you need to acquire and apply on every jump you make as a skydiver. They are:

- **OPEN YOUR PARACHUTE**
- **OPEN AT THE CORRECT ALTITUDE**
- **OPEN WITH YOUR BODY IN A STABLE POSITION**
- **LAND S A F E L Y**

These four basic skills must be allied in this order on every jump.

DOCUMENTATION

FEDERATION LICENCE

This is a sports license issued by the Air Federation covering your area.

You can extend this license to a national sports license which allows you to participate in events organized by the Spanish Air Federation (FAE) or to an international license allowing you to enter events organized by the International Air Federation (FAI).

In any case a Federation License is required if you wish to skydive in Spain and these licenses can be valid for three months or for one year.

SKYDIVE LOG BOOK

This is a personal record of each jump you make during your skydiving career
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In order to be valid each entry must have the stamp of the club or parachute
center where the jump was made.

SKYDIVE LICENCES

The Spanish Air Federation separates skydive licenses into four categories A, B, C, and D.

After you finish your AFF course you become a student skydiver. To qualify for your A license, you need to demonstrate certain skills that you will acquire over the first few solo jumps you make. Achieving B, C, and D licenses requires minimum jump numbers in each case and also requires you to demonstrate that you have completed various courses and acquired various skills. After the D license there are several instructor grades.

EQUIPMENT

GOGGLES

Skydive goggles are of a very simple design. Their purpose is to prevent the air causing us to close our eyes during free fall.
Goggles are put on three or four minutes before jump and it is important that they are fitted tightly enough to prevent them from moving during the skydive.

HELMET

A helmet is worn to protect the head and the ears. It must be put on before boarding the aircraft and must be worn until the plane reaches 1000 feet when it may be removed. The helmet and goggles should be put on again three or four minutes before exit.

GLOVES

Gloves should only be used to prevent you from losing sensitivity in your hands due to the cold.
This is likely to happen if the temperature at exit height (12,500 feet) is below -5 degrees centigrade.

RADIO

The radio is worn inside the helmet and is used to allow your instructor to assist you during your canopy flight and landing.
The correct functioning of the radio will be checked before boarding the aircraft and it will then be switched off in order to prevent draining the battery. The radio will be switched on again during the final equipment check about three or four minutes prior to exit. Remember to switch the radio off after landing.

The radio is for your assistance only and it should not be relied on.

JUMPSUIT

There are several styles and colors of jumpsuit available but to complete the AFF course it is necessary to wear a suit with grips on the arms and legs to allow the instructor(s) to assist you in free fall.

ALTIMETER

Basically there are two types of altimeter, one type indicates altitude in feet and the other indicates altitude in meters. Both function in exactly the same way.
When equipment is put on the altimeter should be checked to ensure the needle is indicating zero. During the ascent the needle will move in a clockwise direction and during the descent (free fall) it will move anticlockwise.

The altimeter is always worn on the left wrist and it is very important to check that it is reading zero before boarding the aircraft. Failing to do this will mean all information from the altimeter during both the ascent and the free fall will be false and unreliable.

THE PARACHUTE RIG

The parachute rig is the collective name for the set of elements we wear on our back. The base of the rig is the harness which attaches to our body using two shoulder straps, two leg straps and a chest strap. Attached to the harness is the parachute container which contains the reserve parachute in the top part of the container and the main canopy, packed into a deployment bag, in the bottom.

The deployment handle for the main parachute is located at the bottom right of the container while the reserve deployment handle is located on the front of the left hand shoulder strap.
On the front of the right hand shoulder strap you will find the cut away pad.

The reserve parachute is attached permanently to the harness. The main canopy is attached using a mechanical advantage arrangement called the three ring system. This system is designed to reduce the force required to release the main canopy in the event of a malfunction and therefore allow the reserve parachute to be deployed without risk of entanglement.

Between the parachute container and the lines attached to the canopy there are four risers, two rear risers (one left and one right) and two front risers (one left and one right). These risers help keep the parachute lines grouped into sets. Attached by Velcro to the rear risers are the steering toggles (usually colored yellow). These toggles are used to steer the parachute, to turn right pull the right hand toggle, to turn left pull the left hand toggle. Pulling both toggles simultaneously and symmetrically acts to brake the parachute.
Between the risers and the fabric of the canopy there is a rectangular piece of parachute cloth called a slider. The slider has four circular grommets (one at each corner) through which the parachute lines are passed.

There are some safety systems which are compulsory on student parachute rigs, one of these is the “Stevens” or “Reserve Static Line” (RSL).
The RSL is a cable which is attached to the main canopy left front riser by means of a carabineer. The other end of the cable is attached to the reserve canopy release. In the event of a main canopy malfunction requiring a cut away the departing canopy operates the reserve parachute release via the RSL.

The final and technically most sophisticated part of the parachute system is the automatic activation device or AAD. This is a barometrically operated emergency system for opening the reserve parachute. There are different models of AAD on the market; Cypress, Vigil, Argus FX1200 etc, all of them operate in the same way. The AAD monitors the rate of descent and if that rate exceeds 35metres per second at a height of 1000 feet it operates and opens the reserve parachute. The automatic activation device is compulsory.

NOTE

THE AUTOMATIC ACTIVATION DEVICE DESCRIBED ABOVE IS AN ADDITIONAL SAFETY MEASURE AND SHOULD NEVER BE USED AS A SUBSTITUTE FOR CORRECTLY APPLYING YOUR EMERGENCY PROCEEDURES IN THE EVENT OF A MALFUNCTION.

SEQUENCE OF A JUMP

GROUND PREPARATION OR "BRIEFING":

The ground learning phase is the most important of this course, do not expect to do in the air what you are not able to do on the ground.
Regardless of the level you are doing the procedure will always be the same, first your instructor will give you a demonstration of the exercise and explain the technique required to carry it out. Then you will begin practicing the exit sequence from the aircraft using a mock up of the airplane door and finally you will practice on the “crawler” to help you get the correct body position for free fall.

GEAR ON:

We put our equipment on (jump suit, parachute rig, altimeter, radio, helmet and goggles (in hand). The instructor will carry out a radio check and check your equipment.
We will check the direction and strength of the wind and your instructor will explain the direction of “traffic” you are to follow under canopy. Remember that wind direction can change between the time you board the aircraft and open your canopy so listen carefully to any instructions you receive by radio.

BOARDING AND IN THE AIRCRAFT:

You must enter the airplane carefully and sit where your instructor tells you. Space is very limited in skydive planes so try to move as little as possible and when you do move take care not to snag your parachute release handles (main and reserve) or your cut away pad.

TAKE OFF AND CLIMB:

During take off and up to 1000 feet we will wear our helmets (at 1000 feet we remove helmets for the remainder of the climb)

During the ascent we will carry out a series of exercises that we will carry out later in free fall. First at 3000 feet (and only in the first jump) we will make a reconnaissance of the area in order to familiarize ourselves with landmarks etc. from the air. At 5000 feet (opening height) we will simulate the opening sequence of the main canopy.
At 6000 feet we will do the exercise signaling “no more work”
At around 9000 feet we will do a review of the entire jump from exiting the aircraft to opening the canopy and the instructor will carry out a final check of your gear.
At 11,000 feet we will put on helmet and goggles.
At 13,000 feet we will exit the aircraft when the pilot tells us to.

EXITING THE AIRCRAFT:

About one minute before we jump the instructor will ask you to get on your knees, when the pilot tells us we are clear to jump we will place ourselves in the door. On jumps 1, 2, and 3 there will be two instructors and on jumps 4, 5, 6, and 7 there will be a single instructor. The position of the instructors in the door will change but the student position remains the same throughout the course.

When instructed the student must move without haste (but without pause into the center of the door, if the door is on the right hand side of the aircraft then he will place his right foot and left knee on the floor (with the door on the left hand side it will be the left foot and right knee).
Body position will be facing forward with the trunk slightly bent in the direction of the propeller with the arms in the free fall position (90 degrees to the trunk and 90 degrees to the forearms).

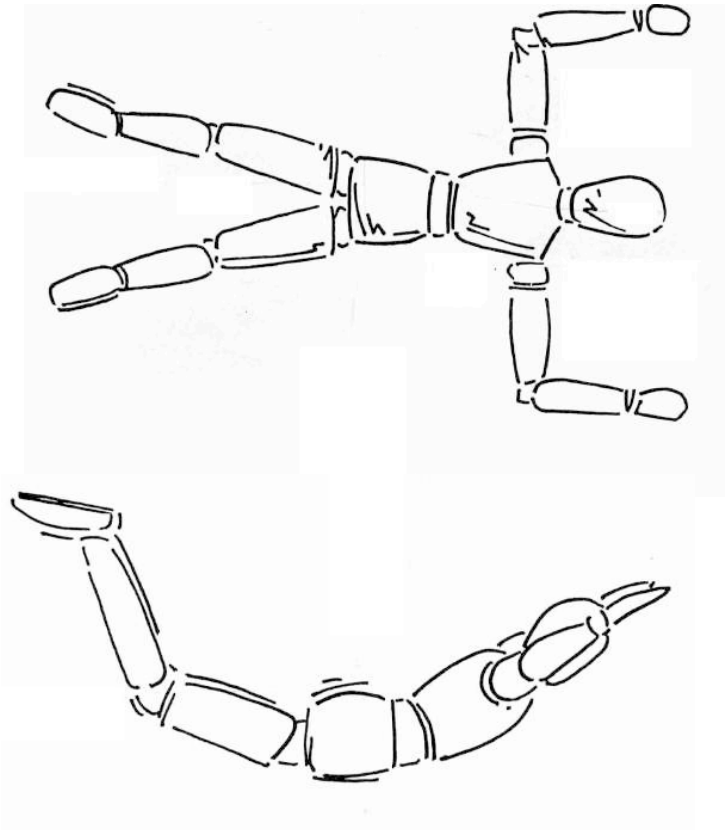
Remember the engine noise will be very loud so shout to your instructors to ensure they can hear you.

The sequence to be performed will be to look at the instructor on the left and ask him: READY? ... wait for your OK, look at the instructor on the right and ask him: READY? ... wait for your OK, look forward with your head up and shout at the same time you swing your body: OUT ... INSIDE ... OUT and you push forward (never down or up).

FREEFALL:

We need to fall in a stable position, what we are looking for to fall stable is that the center of gravity (the pelvis) is the lowest part of our body (this we call arching) and at the same time our body is symmetrical. On our left side there is the same surface as on our right side and from our center of gravity forwards we have the same surface as backwards.

We will achieve this by forcing to our pelvis forwards while we put tension on our legs and toes to carry them slightly stretched and leave our arms relaxed with elbows bent at 90 degrees letting the air lift them to the correct position. We keep our head up looking at the horizon.



STABLE POSITION

It is important that we leave the plane in the stable position, not jump first and then arch.
In our first jump and during the first three or five seconds of free fall we experience what is called “sensory block”, the fact of being in a completely unknown environment for the first time makes us feel slightly confused.

We will be in from 13,000 feet to 6,000 feet and at that height we will open the parachute, the speed of descent is about 200 km / h and it takes 50 seconds to cover the 7,000 feet.

During the free fall the instructors will communicate with you by signals and depending on which level you are at you will have some exercises to do. Throughout the course at 6,000 feet the exercises are finished and you will signal to the instructor “no more work”, you do this by moving your head from left to right.

Then you will look at the altimeter until the 6,000 feet that you will make the opening signal, you will pull the deployment handle of the main canopy and check the parachute above your right shoulder counting ... one thousand one, one thousand two .... until one thousand five.

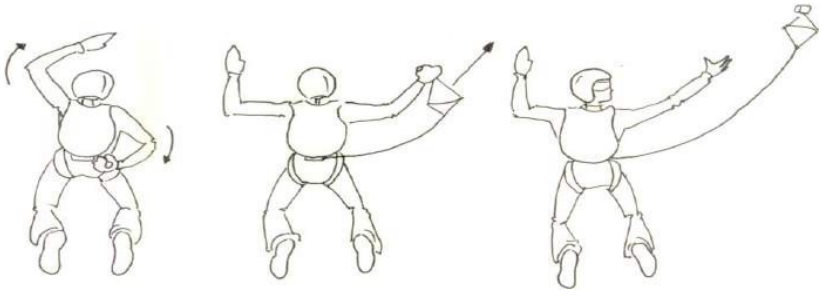
NOTE: Remember to keep a good arch throughout the jump, from the moment we leave the plane until the parachute is fully open.

SEQUENCE OF OPENING:

Starting from the correct body position (good arching), we search with the right hand the pilot chute while we compensate by simultaneously moving our left arm to the front, placing it in front of our head.

Gripping the pilot chute firmly, we pull it out of his pocket and throw it hard as we turn our wrist leaving the palm of our hand facing the sky.

CORRECT OPENING PROCEDURE.

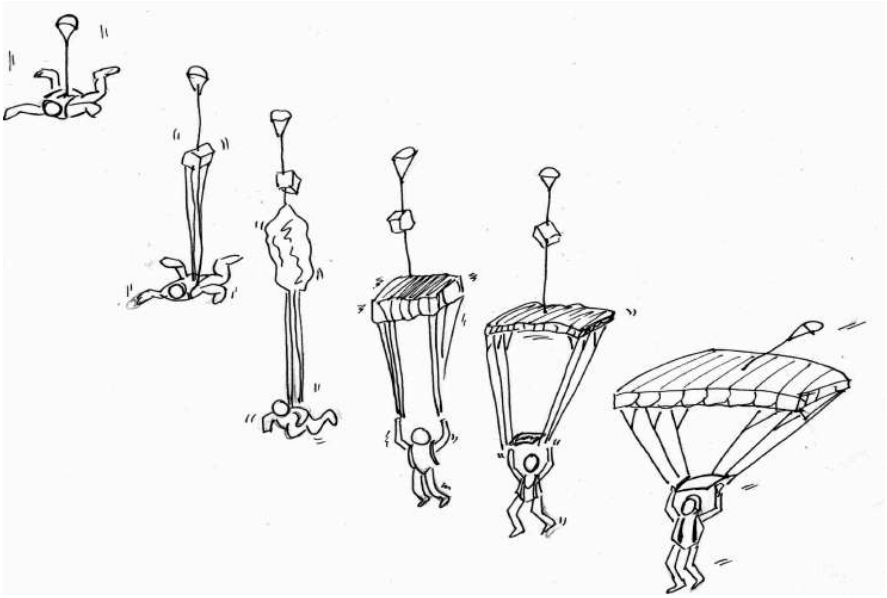


OPENING:

It is important to remember that the air behind our bodies and those of our instructors is not “clean air”, it is disturbed by the bodies falling through it. This disturbance is called “burble” and it can cause the pilot chute to take time to catch air and inflate, for this reason it is important to throw the pilot chute firmly away from the body and into clean air so that it inflates quickly.

Once inflated the pilot chute pulls the closing pin out of the container's closing loop allowing the flaps to open, it then pulls the bag and the lines clear of the container until the lines open the bag and allow the main canopy to open and inflate. This process is slowed slightly by the slider. The slider is a rectangular piece of fabric through which the parachute lines are routed and which prevents the canopy opening too fast.

SEQUENCE OF CANOPY DEPLOYMENT



Once your canopy is open you must check that it is flying correctly and that you can land it safely.

The first thing to do is to carry out a **TAP** check, that is to check

Traffic ie what other canopies are around you,

Altitude, how high are you and

Position, where are you in relation to the intended parachute landing area.

Once you have established you are in a safe position and in clear air you should do a flight test. First carry out 3 “flares”, that is pull both toggles all the way down, this ensures that the canopy is fully open and that the slider is all the way down. When you have done this turn your canopy 90 degrees right followed by 90 degrees left (remember your TAP check first) to make sure the canopy flies straight and turns accurately.

FLYING YOUR CANOPY:

Your canopy flies exactly the same way as any wing ie air flowing over the curved upper surface causes a lowering in pressure while the air passing under the lower surface causes increased pressure, the result is lift.

You have the controls to direct your canopy ie toggles and risers. Pulling on rear risers will have the same effect as pulling down on the toggles (it will turn or slow the canopy) but more energy is required to have an equivalent effect when using risers when compared to using toggle inputs. Remember that making turns results in loss of altitude, you will lose approximately three times as much height in a turn as you would in the same amount of time in straight and level flight.

When flying straight the best and most efficient way to fly your canopy is in full drive ie arms right up and brakes fully off. When making turns toggle inputs of around 50% are the best.

In turbulent conditions 30% brakes will make the flight more comfortable while still maintaining pressure in the canopy. Full brakes in these conditions can cause a loss of canopy pressure which can result in the canopy stalling, that is collapsing and falling backwards. To regain control of a stalled parachute you must smoothly and gradually raise your arms releasing the brakes the canopy will then re inflate and fly normally.

Throughout your canopy flight it is important that you remain observant and conscious of your altitude and position and the altitude and position of other canopies around you(TAP).

As a general rule of flight all canopies below you have priority over you.

If you find that you are heading directly towards another canopy both pilots should turn right to avoid collision.

During your canopy flight always maintain both vertical and horizontal separation from other parachutes.

If you find yourself flying in cloud and visibility is poor apply 50% brakes and make a continuous, slow, right turn this will prevent you from flying too far from the intended parachute landing area.

TRAFFIC AND LANDING.

Once you have carried out your TAP (Traffic, Altitude, Position) checks and checked your canopy for correct flight and landing abilities, you must use the references you will have taken before the jump to fly your canopy to the holding area. Here you will wait, making figure of eight turns, until you are at 1000 feet.

At 1000 feet you will begin your final traffic. This begins by flying your canopy downwind (with the wind behind you) until you reach an altitude of between 500 and 600 feet. You will then turn and fly a “base leg” which means you will fly across the direction of the wind until you reach a height of 200 to 300 feet at which point you will turn your canopy into wind and fly your final (landing) leg.

It is important that you land your canopy “into wind” so establishing wind direction is very important when you begin your traffic to ensure that your final turn takes you in a direction facing the relative wind. Use your altimeter to ensure that you make your traffic turns at the correct altitude.

When you are on your final (landing) leg of your traffic plan you must get your body into landing position, that is feet and knees together and knees slightly bent. Your arms should be extended all the way up with the control toggles in your hands allowing your parachute to gain its maximum speed.

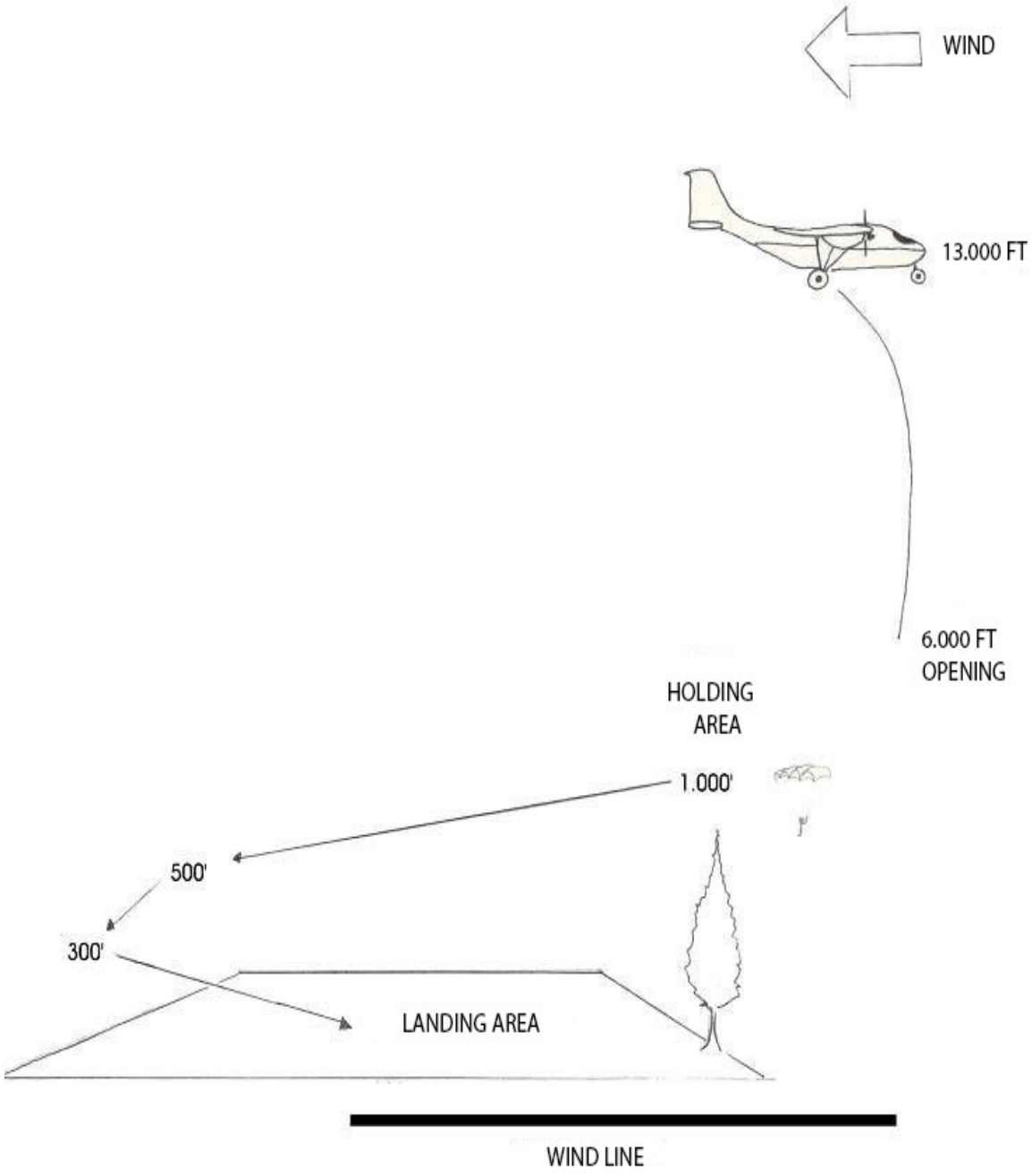
At between 3 and 4 meters from the ground you “flare” the canopy, this is just a controlled stall and it is achieved by simultaneously and smoothly pulling down on both toggles so that the moment of 100% braking matches the moment your feet touch the ground. If you flare high you must VERY GENTLY raise the control toggles to 75% and then re brake to 100%.

NB

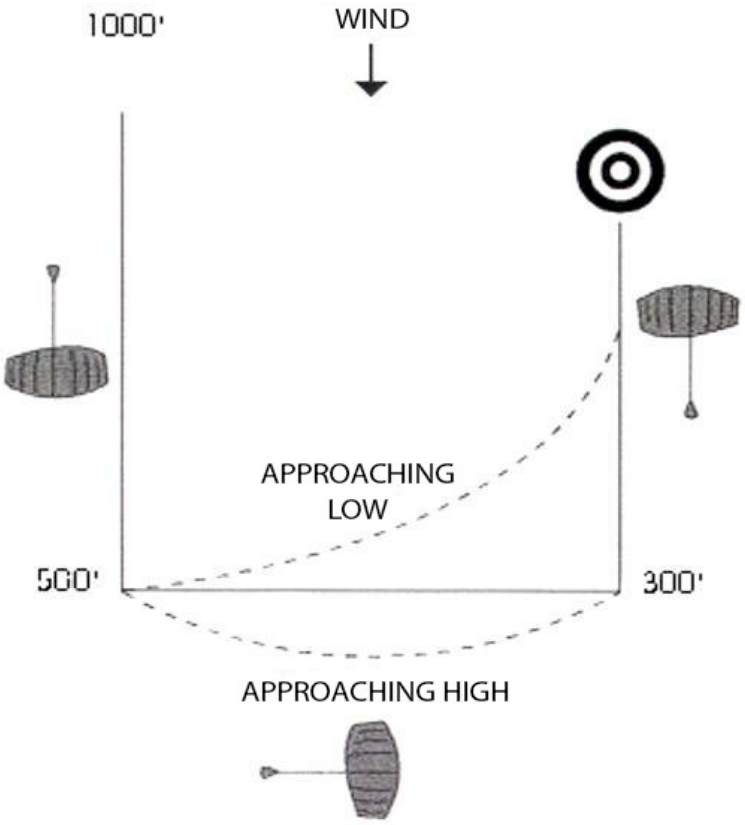
Below 1000 feet do not make turns of more than 90 degrees.

Below 300 feet (on final approach) do not make any turns but minor adjustments can be made.

CORRECT LANDING PATTERN



CORRECT LANDING PATTERN



DEBRIEFING.

After landing take your parachute to the packing area and leave it with the packers. Your instructor will debrief your jump with the aid of video footage and he will advise what went well and what can be improved in your next jump.

EMERGENCIES PROCEDURES

(We will divide the emergency section in each of the areas and order that we will find in each jump: plane, free fall, equipment and landing.)

AIRCRAFT EMERGENCIES:

While in the airplane it is advisable to move around as little as possible in order to minimize the risk of snagging your pilot chute, reserve release handle or cut away handle, if you do have to move try to protect them as much as possible.

If your parachute container does open while in the aircraft and your main or reserve canopy opens you must hug the fabric and prevent it from going into the door and the airstream.

If any part of your parachute, your pilot chute or your deployment bag goes out of the door jump out following it and prepare for a malfunction.

If on exit part of your main canopy gets hooked on the aircraft and you find yourself hanging pull your cut away handle and open your reserve.

Depending on altitude aircraft emergencies will be dealt with as follows:

Below 1000 feet you will land with the aircraft. Adopt the emergency position of hands to head and head between legs.

From 1000 to 3000 feet sit in the door, grab your RESERVE handle with both hands and jump. Count “one thousand, two thousand” then pull the reserve handle.

From 3000 to 5000 feet sit in the door, take hold of your pilot chute handle, jump, arch, count “one thousand, two thousand” and throw your pilot chute forcefully away from your body.

Above 5000 feet jump as normal but remember you may not have time to complete the full scheduled jump.

If you are descending with the airplane your instructor will disconnect your AAD (Cypress, Vigil, Argus).

NB: in case of aircraft emergency, the instructor will be in communication with the pilot (who is the authority on board the plane), and he will tell when to abandon the plane. it is important to keep contact with your instructors inside the plane.

EMERGENCIES IN FREEFALL.

There are three possible emergency situations in free fall:

1) Falling in uncontrolled spin or with your body unstable... In this situation Arch to regain control.
2) Losing contact with an instructor..... Follow instructions from the second instructor.
3) Losing contact with both instructors.....If you have altitude awareness then continue to try to control your body position by arching until 5000 feet then deploy your main parachute. If you are not aware of your altitude count to five (1001, 1002, 1003, 1004, 1005) then open your main canopy.

To open your canopy make the penning signal then grasp the pilot chute ball and throw the pilot chute away from your body and into the airstream

EQUIPMENT MALFUNCTION.

STANDARD EMERGENCY PROCEEDURE FOR EQUIPMENT MALFUNCTON: LOOK FOR THE CUT AWAY HANDLE AND GRASP IT WITH YOUR RIGHT HAND, LOOK FOR YOUR RESERVE DEPLOYMENT HANDLE AND GRASP IT WITH YOUR LEFT HAND. PULL THE CUT AWAY HANDLE BY EXTENDING THE RIGHT ARM FULLY DOWNWARDS AND FORWARDS, WHEN THE MAIN CANOPY IS RELEASED PULL THE RESERVE DEPLOYMENT HANDLE WITH YOU LEFT HAND EXTENDING **YOU ARM FULLY DOWN AND FORWARD.**

This procedure should be followed whenever we have an equipment malfunction. The reserve canopy can be deployed without cutting away the main parachute in circumstances where no handles have been pulled but during the course the procedure outlined above should always be followed.

An equipment malfunction is any situation where the canopy or the control lines are in such condition as to make controlled flight and landing impossible.

There are two types of equipment malfunction:

1) **Total (high speed) malfunctions**. Examples are you are unable to locate the pilot chute handle or have located it but cannot release it from the container. Or you have thrown the pilot chute but nothing has opened.
These malfunctions require quick actions because you are still falling at freefall speed.

2) **Partial (low speed) malfunctions**. These are incidents where the canopy opens partially but does not develop properly and is therefore not able to be flown and landed.

The partial development of the canopy will provide friction which will slow your rate of decent but you must have a minimum height at which you will decide to cut away and open the reserve.

This is the **DECISION ALTITUDE** and it is **2,500 feet**. If you do not have a fully developed and correctly functioning canopy at this altitude you must initiate the emergency procedure.

Decision Altitude 2500 ft does not mean below that altitude you can not cutaway your main parachute. The minimum altitude to cutaway your main parachute is 1000FT. Below 1000FT we open reserve directly.

> There are some cases that at first glance appear to be malfunctions but are in fact just minor incidents eg line twists, however ,you should always be aware that such an minor incident can become a malfunction.

TOTAL MALFUNTIONS:

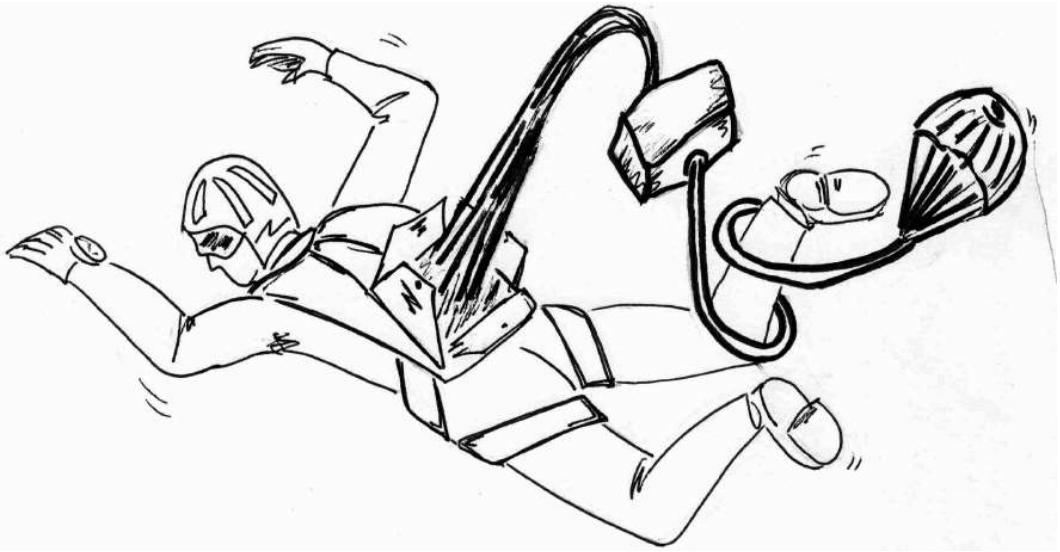
- **Hidden Pilot chute.** Occurs when you cannot find the pilot chute ball and therefore cannot open your main canopy. Make two attempts to find the ball then, if you still cannot locate it go to emergency procedures immediately.

- **Hard pull**. Occurs when you can locate the pilot chute but cannot release it from it's pocket. Make two attempts to release it then go to emergency procedures.

- **Close container**: we pull something but nothing opens or happened. Proceed to emergency procedure.

- **Pilot chute out of the pocket**: grab it securely and pull it away.

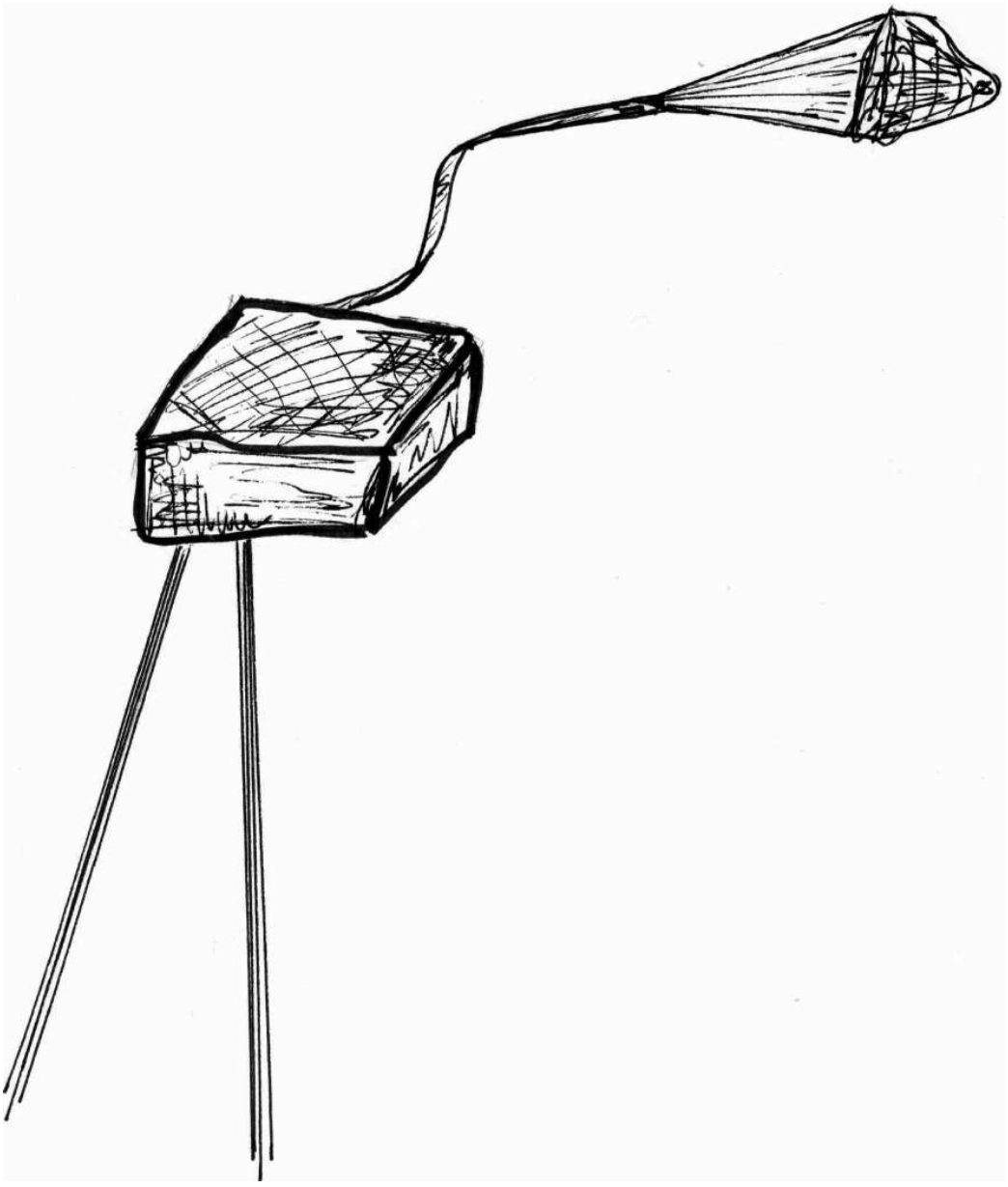
PARTIAL MALFUNCTIONS:



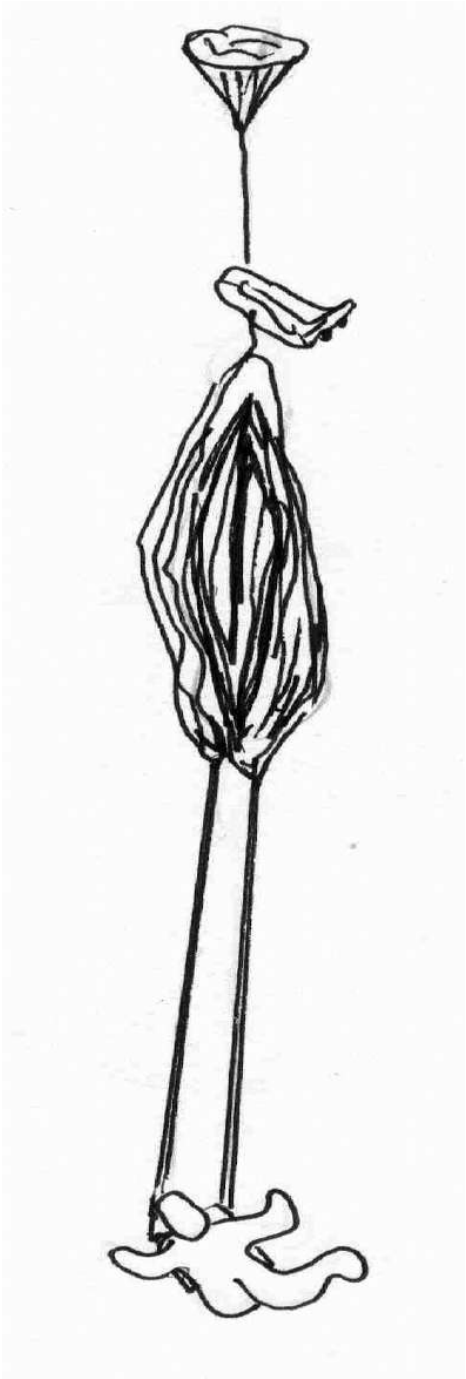
Horseshoe malfunction. This is when the pilot chute, bridle line or other part of your equipment becomes entangled with your body and prevents the parachute from opening. Make two attempts to disentangle then go to emergency procedure.

Opening out of Sequence. This is when the container opens and the parachute begins to deploy while the pilot chute is still in the pocket. In this instance throw the pilot chute and prepare for a possible malfunction (malfunctions are more likely to occur with an out of sequence deployment).

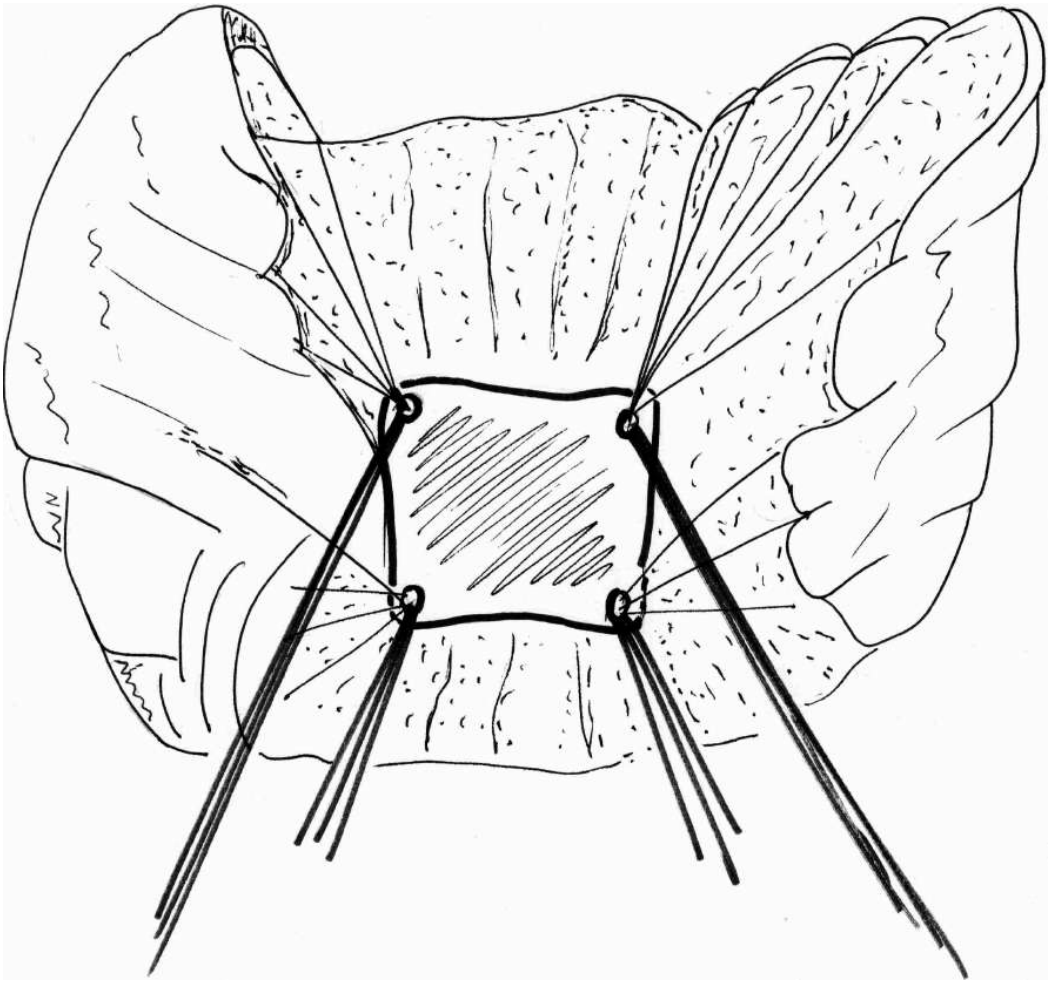
Bag lock. This is when the pilot chute opens the container and the main canopy deployment bag is released but the bag remains closed and the canopy does not deploy. Make your 5 second count then go to emergency procedure if the canopy has not opened.



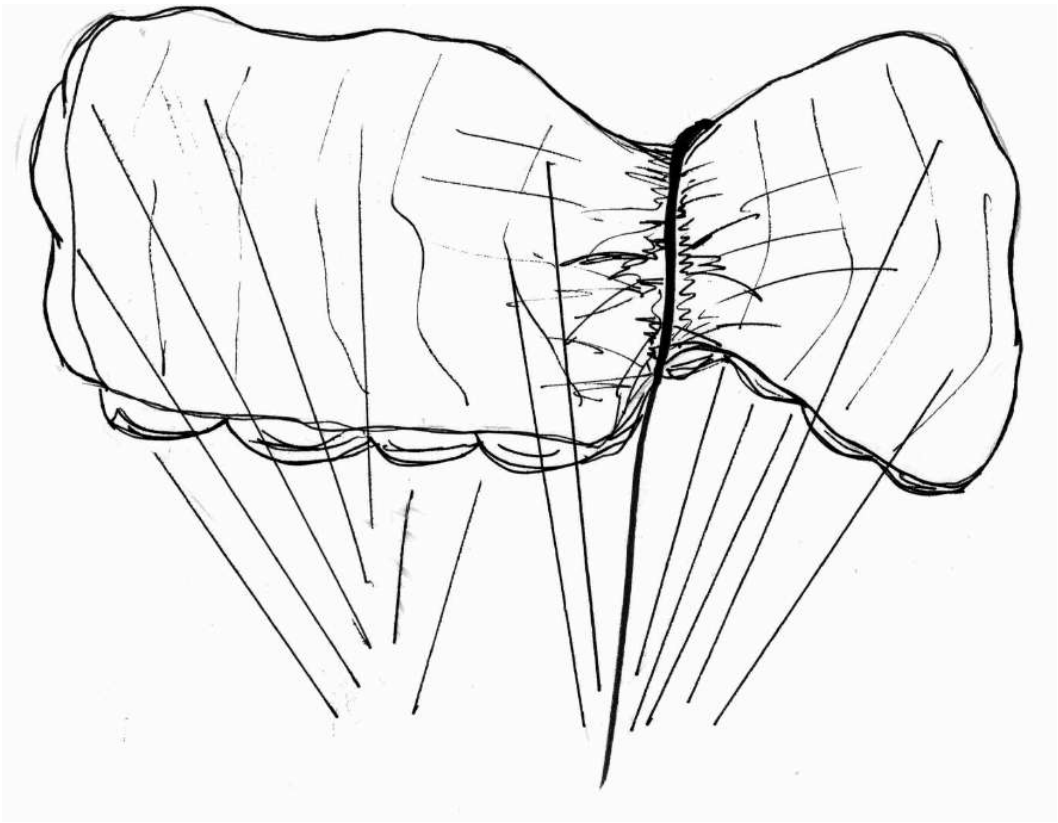
Collapsed canopy. This is when the pilot chute opens the container and the main canopy deployment bag is released, the canopy is going out but not inflating. Make your 5 second count then go to emergency procedure if the canopy has not opened completely.



Slider Hang-up. Occurs when the slider gets entangled with part of the canopy fabric or with the lines preventing it from sliding down.



Line Over. This is when steering lines route over the top of the canopy preventing it from being flown or landed safely.



Tension Knots. These are knots in the canopy lines which prevent the slider from descending fully rendering the canopy impossible to fly and land safely.

Two Canopies Open. When both the main and reserve canopies are open together. If the canopies are one in front of the other do not cut away but fly both using the rear risers of the rearmost canopy. If the canopies are side by side then do not cut away, control both canopies using the rear risers of one canopy. In both cases use gentle inputs and make only smooth wide turns.

If the canopies separate and begin to dive, then cut away the main canopy.

INCIDENTS.

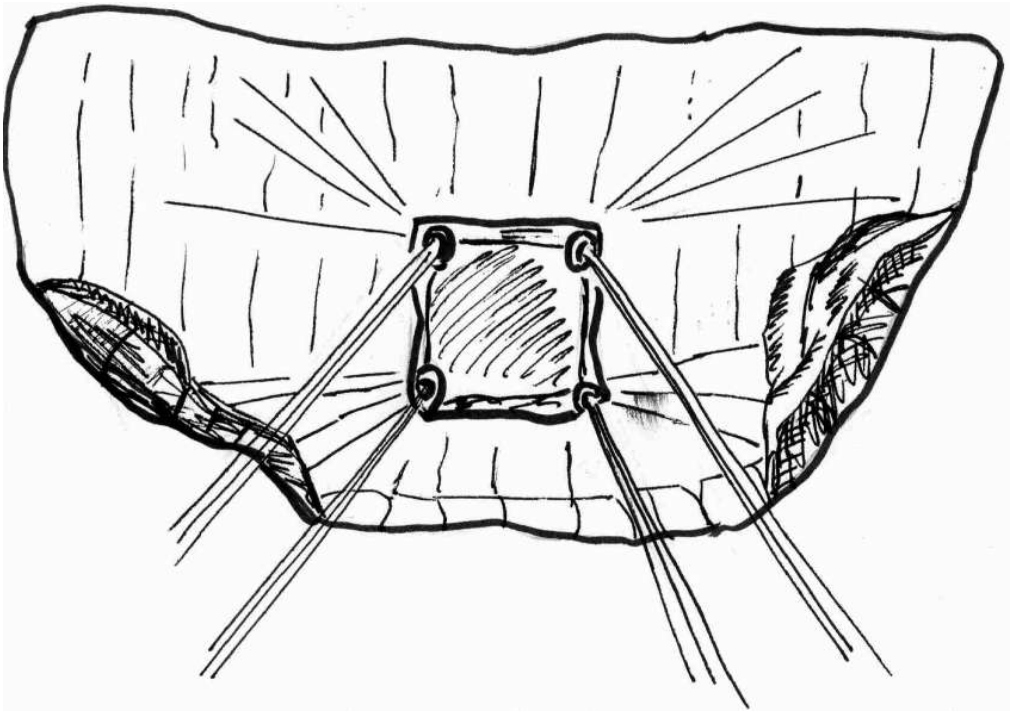
Broken lines. Perform flight test

Damaged Canopy. If the hole is smaller than a head perform flight test.

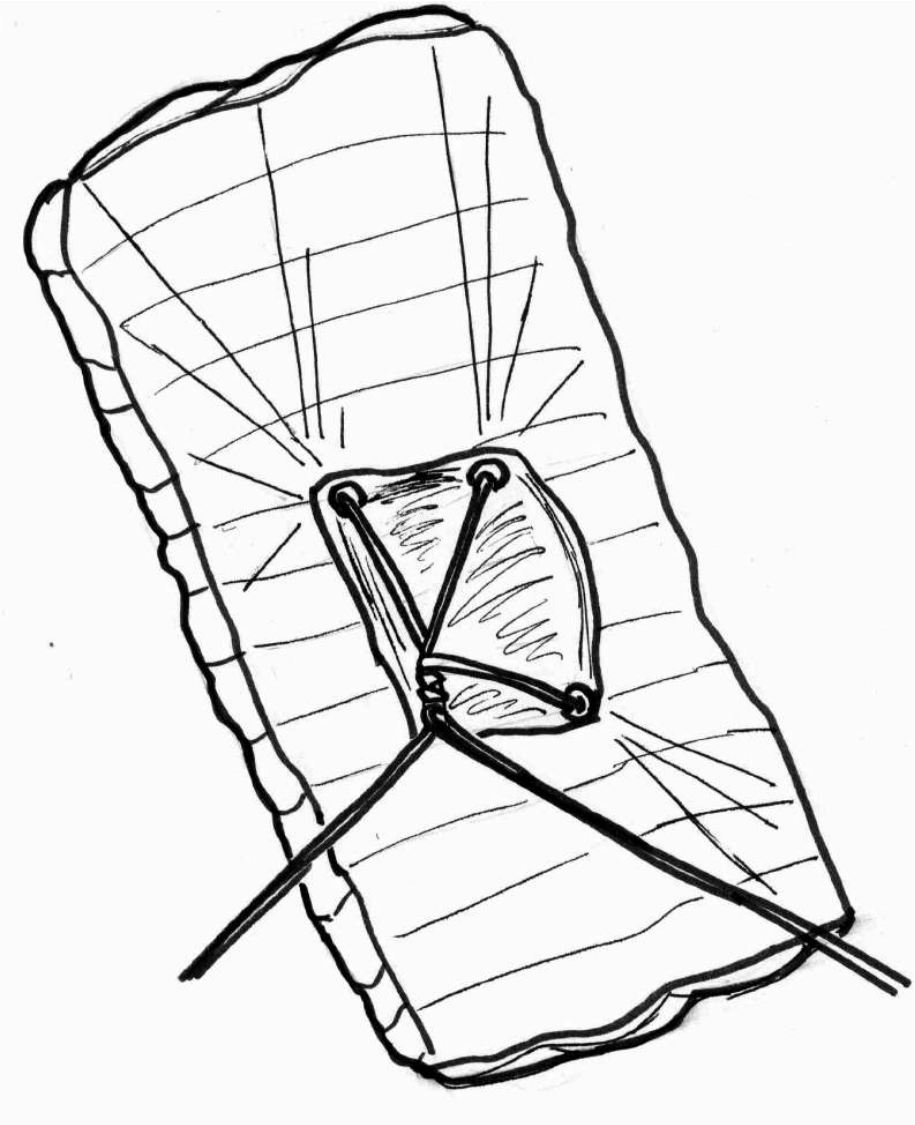
Premature Toggle Release. Releasing the other toggle will stop the canopy turning.

Canopy sides closed. Release and pull brakes. Perform flight test.

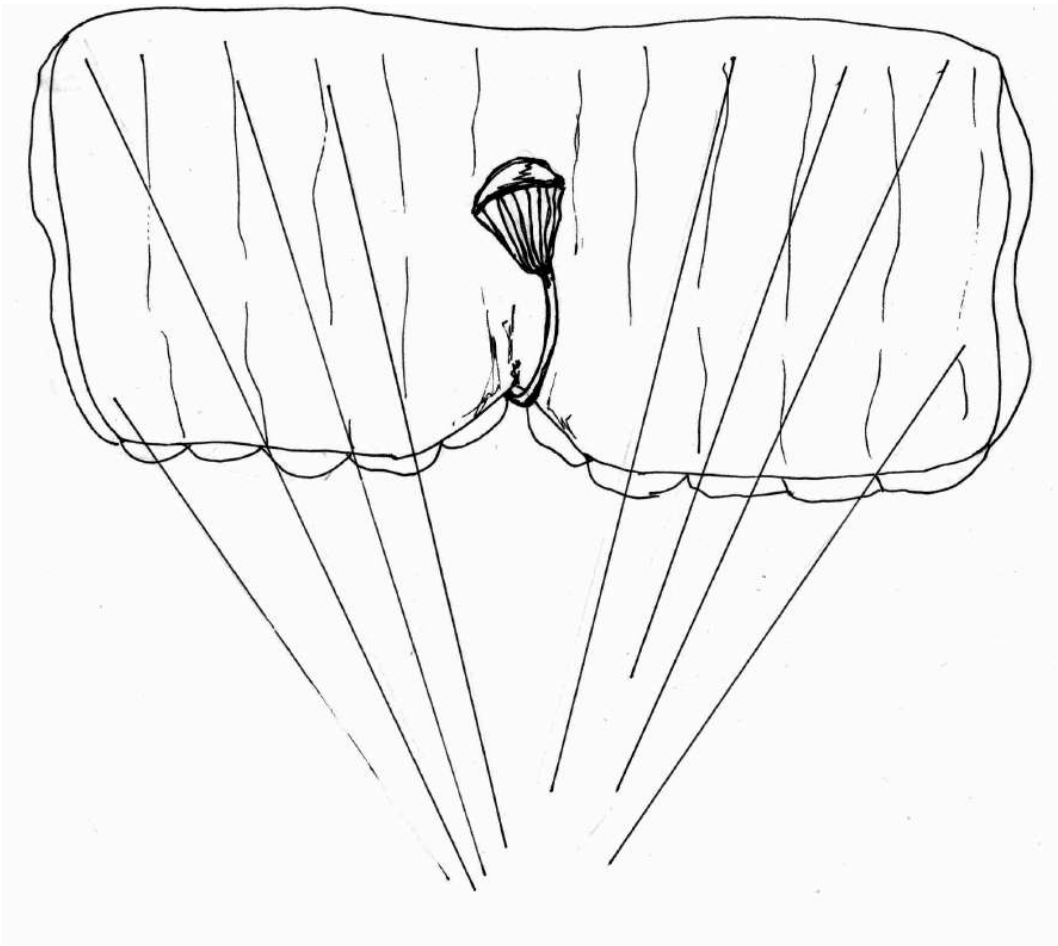
Canopy sides closed and slider up. Release and pull brakes. Perform flight test.



Line Twists. Do not release the brakes. First grasp the risers and pull them apart then kick your legs in the opposite direction of the twists to undo them. When the twists have been kicked out release the brakes and take control of the canopy.



Pilot Chute In Front Of Canopy perform flight test



Canopy collision

Make yourself as small as possible to pass between the lines of the other parachute. It is important to have good communication with the other parachutist in order to decide who will cut away first (this will usually be the one who has passed through the lines once he has cleared his body from the lines.

EMERGENCY LANDING.

The risks in emergency landings can be reduced to a minimum if:

You prepare your landing while you have sufficient height
You avoid obstacles.

Emergency landings should always be carried out using a ***Parachute Landing Role.*** The role is designed to cushion the impact of landing by dividing the force between legs, hip, side, shoulders and back.

It is always preferable to land using the parachute landing role when landing with a cross wind or a tail wind in order to avoid obstacles or low turns.

Landing on hard obstacles (Buildings, ships, cars etc.)
Feet together, knees bent and flexed with tension. Brake before hitting the object and protect yourself with your arms to prevent injury to your face and neck.

Landing in trees. Use the same body position as for landing on hard obstacles. If you become hung up in the trees do not try to get down but wait for help.

Landing on electricity cables. Use the same body position as for landing on hard objects, arms up between the risers and head turned to the side. If you become “hung up” do not touch the ground or any metal parts of your equipment, wait for qualified help.

Landing in water. If you are going to land in water loosen your leg straps about 3 or 4 centimetres and fully release your chest strap. If you are wearing a weight belt discard it and disconnect your reserve static line (RSL). Get your body into the parachute landing roll position (feet and knees together, knees bent and flexed) and as soon as you make contact with the water pull your cut away pad to release your main canopy, bring your arms out of your harness and swim away from your parachute rig. If there are other parachutists with you stay together, it will be easier to locate you.

Landing off the drop zone. If you cannot make it back to the drop zone look for a large, unobstructed field as an alternative landing area. Always decide where you are going to land before you reach 1000 feet.

COMMUNICATION IN FREEFALL.

To communicate in free fall we use hand signals. During the course your instructors will use hand signals to give you instructions, to correct your body position etc.

There are three types of signals your instructors will use:

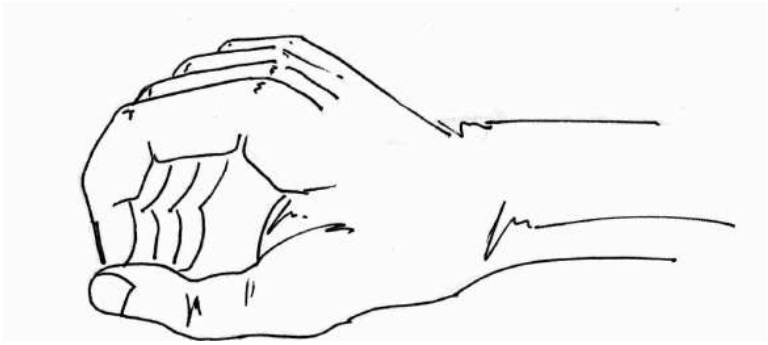
Reminders, if you forget one of the exercises to be performed.

Correction signals, these are used to correct body positions

Safety signals, for safety issues.

Reminder Signals

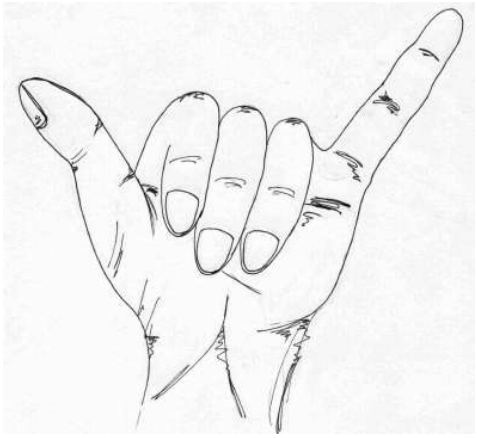
Circle of awareness.



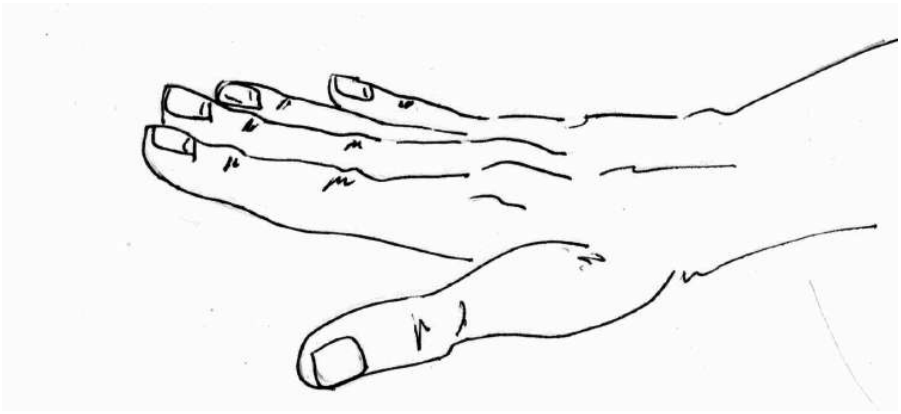
Opening Practice

Reminder Signals

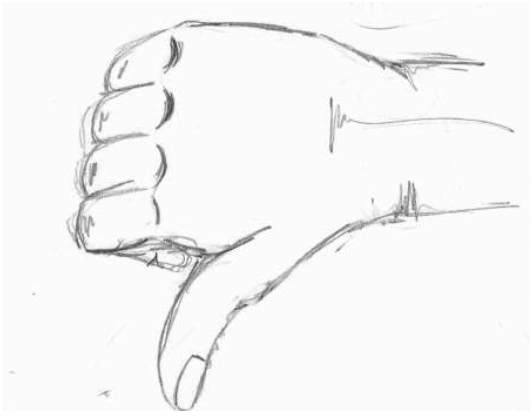
ARMS: Look at your arms, correct them to 90º position.



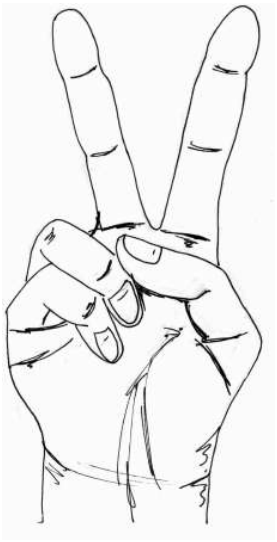
ARCH: Arch your body, check your body position



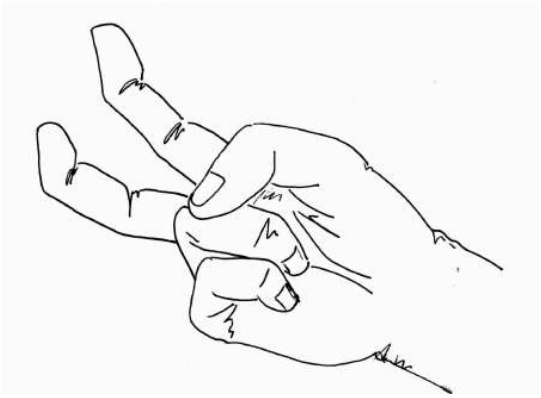
Pelvis down: push pelvis down



Legs out: stretch your legs.



Legs: bend your legs

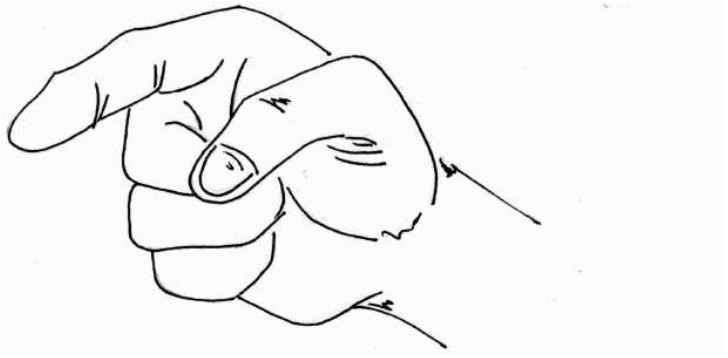


Relax arms and shoulders (this signal is given when your body position is correct but your body is tense. Your instructor will shake his hand slowly in front of you)

Safety Signals:

Check your altimeter: you will fill knocks in your head or the instructor will show his altimeter in front of you touching it with his right hand

Open: Pull



COURSE LEVELS 1 – IV

Before talking about the different levels of the course it should be remembered that the course is tailored specifically to the students individual training requirements, therefore the exercises incorporated into each level will be designed by your instructor to suit your personal needs.

The most important thing is that the student achieves the minimum required objectives for each level so that no levels need to be repeated.

Below you can see the requirements needed to pass each level followed by the sequence of each jump.

13.000FT Check Instructors And Exit

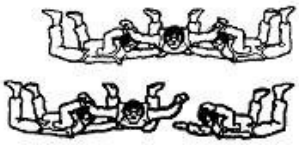
LEVEL 1

ARCH

Circle of Awareness

3 x Practice Pull

Free Time
One instructor will release you
if you have a good position



6.000FT No more work signal

Opening signal

Arch

Locate

Pull

Check Canopy

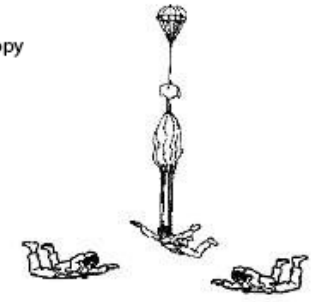
1000

2000

3000

4000

5000



Canopy test

LEVEL 1:

This level will be your first experience of free fall and you will realise how easy it is.

Objectives:
To give the student the experience of free fall.
Perception of orientation in relation to the ground.
Understanding instructor signals
Practice opening drills
Altitude awareness
Opening at 5,000 feet

Sequence of the jump:
Exit the aircraft with two instructors
Circle of awareness (***HASP)*** height, attitude, secondary instructor, primary instructor.
Three practice openings
Control of orientation (facing the horizon)
Altimeter check every three to four seconds
At 6,000 feet signal “no more work”
At 5,000 feet signal and open main canopy.

LEVEL 2

13.000Ft

Check with instructors and jump

ARCH

Circle of Awareness

2 x Practice Pull

Check body position and arch

Follow instructors signals

Check body position and arch

Free Time
Instructor will release you
if you have good body position

6.000Ft

No more work signal

Opening signal

Arch

Locate

Pull

LEVEL2:

During this level you will practice and consolidate your body position and you will make a forward movement in order to understand fully the effect of your legs.

Objectives:
To give the student the experience of free fall.
Perception of orientation in relation to the ground.
Understanding instructor signals
Practice opening drills
Greater perception and refinement of body position
Altitude awareness
Opening at 5,000 feet.

Sequence of the jump:
Exit the aircraft with two instructors.
Circle of awareness ***(HASP)***
Two practice openings
A forward movement
Control of orientation facing the horizon
Check altimeter every 3 to 4 seconds
At 6,000 feet signal “no more work”
At 5,000 feet signal and open main canopy

LEVEL 3

13.000Ft

Check with instructors and jump

ARCH

Circle of Awareness

1 x Practice Pull

Check altitude and arch

Your instructors will release you if you have a good body position

Check Altitude evry 3-5 secs and use horizon for estability

6.000 FT

No more work signal

Opening signal

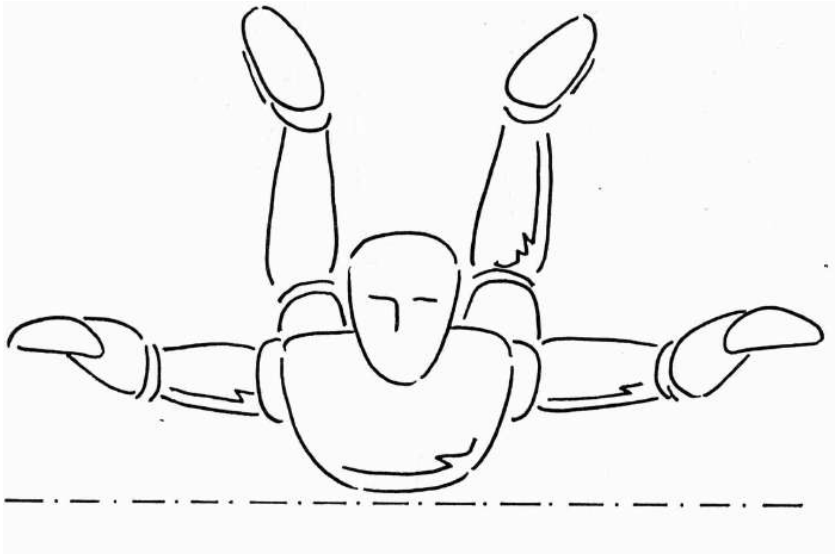
Pull Open Canopy

LEVEL 3:

At this level the instructors will release their hold on you so that you can practice what you have learned in levels 1 and 2.

Objectives:
Experience of free fall
Control of the three axis ie maintain a stable position in free fall
Altitude awareness
Opening at 5,000 feet

Sequence of the jump.
Exit the aircraft with two instructors
Circle of awareness ***(HASP)***
1 practice opening
Control of orientation and stable position facing the horizon
Altimeter checks every 3 to 4 seconds
At 6,000 feet signal “no more work”
At 5,000 feet signal and open main canopy



NEUTRAL POSITION

LEVEL 4

13.000Ft

Check with instructors and jump

ARCH

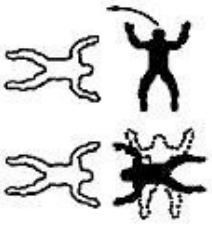
Circle of Awareness

Instructor will release you and move in front of you

If you have a good body position
Instructor will move to your side
you will have to turn 90º
to be in front of instructor again

Check Altitude

If we have altitude enough
we will repeat exercise
on the other side



6.000 Ft

No more work signal

Opening signal

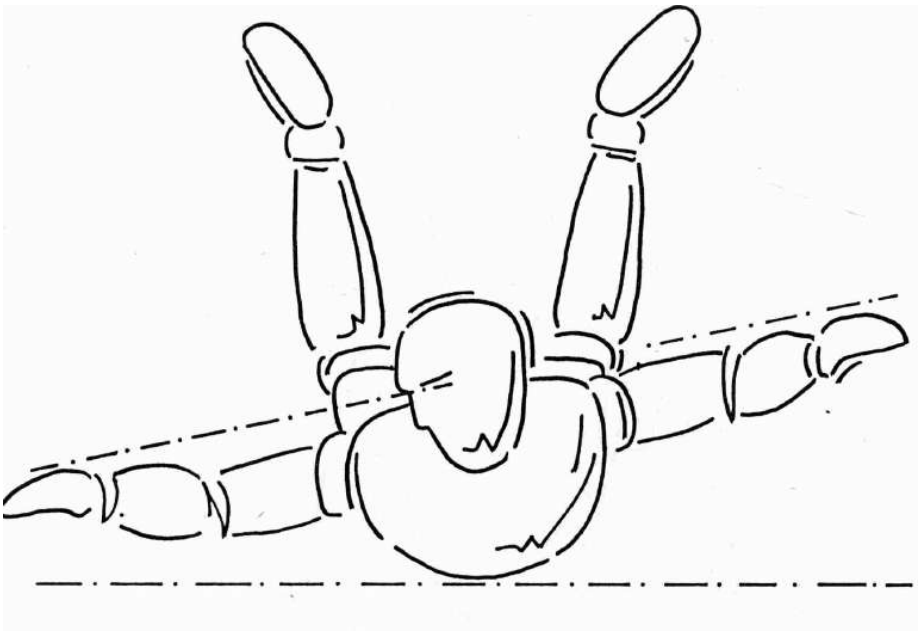
Pull

LEVEL IV

On level four you will jump with one instructor. You will begin to learn the techniques for turning and you will practice them in front of him.

Objectives:
Experience of free fall
Control of the starting and stopping of turns of less than 90 degrees
Altitude awareness
Opening at 5,000 feet

Sequence of the jump:
Exit aircraft with one instructor
Control the orientation (with respect to the instructor) of turns of less than 90 degrees.
Maintain altitude awareness checking your altimeter every 3 to 4 seconds and after every turn.
At 6,000 feet signal “no more work”
At 5,000 feet signal and open main canopy



TURN TECHNIQUE

13.000Ft

Check with instructor and jump

LEVEL 5

ARCH

Circle of Awareness

Instructor will move in front of you and give you signal to turn

360° Right Turn

Stop and altitude check

360° Left Turn

6.000Ft

No more work signal

Opening signal

Pull

Level V:

In this level you will consolidate the techniques for making turns by making controlled 360 degree turns.

Objectives:
Experience of free fall
Make controlled 360 degree turns
Altitude awareness
Opening at 5,000 feet

Sequence of the jump:
Exit the aircraft with one instructor
Make controlled 360 degree turns at the instructor's signal
Control of the starting and stopping of turns of less than 90 degrees
Maintain altitude awareness checking your altimeter every 3 to 4 seconds and after every turn.
At 6,000 feet signal “no more work”
At 5,000 feet signal and open main canopy

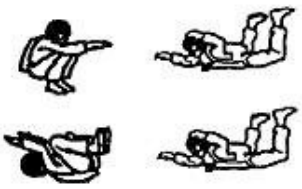
LEVEL 6

13.000Ft Check Instructor and exit

Arch

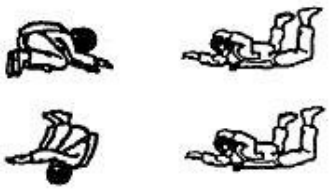
Circle of awareness

Looping back on instructor comand



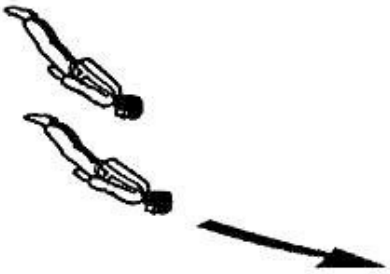
Stop and check altitude

Looping front on instructor comand



Stop and check altitude

5 sec Track whe instrcutor gives you signal

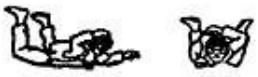


stop check alti

6.000 Ft No more work signal

Opening Signal

Pull



LEVEL VI

In this level you will leave the aircraft alone (although your instructor will follow you out). You will learn to perform loops and you will learn the “track” body position.

Objectives:
Experience of free fall
Perform controlled loops and carry out short tracks
Altitude awareness
Opening at 5,000 feet

Sequence of the jump:
Depart the aircraft alone
Control your orientation and perform exercises at your instructor's signal
Maintain altitude awareness checking your altimeter every 3 to 4 seconds and after every exercise.
At 6,000 feet signal “no more work”
At 5,000 feet signal and open main canopy

LEVEL 7

13.000Ft

Check with instructor and jump

ARCH

Circle of Awareness

Looping back

Stop and alti check

360° right turn

Stop and alti check

360° left turn

Stop and check alti

5 seconds track

Stop Alti check

6.000Ft

No more work signal

Opening signal

Pull

LEVEL VII

Level seven is the level at which you will have to demonstrate to your instructor everything learned in previous levels. He will be a mere spectator and you will execute the whole sequence of the jump without him having to intervene.

Objectives:
Experience in free fall
Control of all exercises
Altitude awareness
Opening at 5,000 feet

Sequence of the jump:
Exit the aircraft alone
Carry out loops
Track for 5 seconds
Turn right 360 degrees
Turn left 360 degrees
Check altimeter every 3 to 4 seconds and after every exercise
At 6,000 feet signal “no more work”
At 5,000 feet signal and open main canopy.

WHAT YOU SHOULD DO NOW:

Congratulations, you're already a Skydiver. But we have to continue learning.

Start by following a tradition inviting us to a few beers while we watch and discuss your jumps.

From now on, continuity is very important so as not to lose skills. You must make at least one jump per month, otherwise you will have to do an instructor check jump.

First of all, read the following pages of this manual so you know or remember all the safety regulations of this dropzone. Any questions, ask an instructor.

Here is a basic guide to what you should do each time you come to jump with us:

- Do "check-in" in the burble app on your mobile so that we know you are here through our computer system

- Find an instructor and discuss your progression to guide you in your next jump

- Manifest on a flight with enough time to take your material, check it, and be ready to get on the plane in the 5-minute notice

- Communicate to the organizer, or person with more experience of the jump, your intentions, what type of jump you are going to do and altitude of opening

- Remember what you learned, protect your equipment in the climb on the plane and review your jump mentally

- Once on the ground place your rig and the packing card as you have been taught, take off your jumpsuit and place all your material in its right place

- Fill your jump log book, stamp it at the office and have it signed by an instructor