

WARNING: this is a summery of the subjects explained during the TAFF Parachuting Course. It contains topics and procedures common to all solo first jumpers in the TAFF. Every subject must be discussed, explained and learned by the student. A Wind Tunnel Instructor and an AFF Instructor is required to teach any sections of this training method.

Before the course, it is necessary to give: 2 photo, insurance, and medical certificate

TAFF

WIND TUNNEL and ACCELLERATED FREE FALL COURSE

This kind of teaching is called TAFF because the learning process is fastener than the traditional Static Line or AFF skydiving courses. The TAFF method provides a consistent personalized instruction for students who really want to become skydivers.

The course will explain techniques, methods, and modern materials.

The first part of the course consist of n° 30 minutes of flying in the Wind Tunnel, together with a Wind Tunnel Instructor, to learn the basics of the belly-fly positions.

The second part consist in n° 5 jumps in freefall from 4000meters where the student will be assisted by two instructors.

In the first jump the student will prove to himself or herself that they can repeat in the air what they just learned in the Wind Tunnel.

During the fly in the Wind Tunnel and in FreeFall, the student must perform certain exercises: IE to look at the instruments, check the altimeter and read the altitude, dummy pulls three times, and pull the handle at the designated altitude (1500 mt).

The entire course consist of 7x"learning" levels, the student attitude is the most important thing to pass a level and not necessarily the number of jumps or sessions (minutes) in the tunnel.

A good work on a level is strictly necessary to pass to the following level, whether in the Wind Tunnel or in FreeFall.

These object are learned and developed by the student thanks to the intensive theory course, and also to the presence of the instructors during the free fall itself.

For every level there are **mandatory targets** and instructional goals, the followings are the 7 levels standard targets and goals:

1st TAFF (Wind Tunnel sessions)

The student assume the freefall position, arch, legs, arms, head (mandatry target);

the student check the altimeter(instructional goal);

and check the position of the hand-deploy handle as briefed (instructional goal);

the student keep concentration and focus on stability position (mandatry target); as soon as the altitude of 1700 mt is reached, the student communicates the "end of the jump" (instructional goal);

at 1500 mt the student must grab the handle to open the canopy (mandatry target);

2nd TAFF (Wind Tunnel sessions)

The student assume the freefall position, arch, legs, arms, head (mandatry target); the student check the altitude and check the position of the hand-deploy handle as briefed (mandatry target); The student keep concentration and focus on stability position and altitude (mandatry target); The student perform a 360° rotation on left and a 360° rotation to the right (mandatry target); as soon as the altitude of 1700 mt is reached, the student communicates the "end of the jump" (instructional goal); at 1500 mt the student grab the handle to open the canopy (mandatry target);

3rd TAFF (Jump from 4000 meters)

The student jump from 4000 mt with n° 2 Jump Masterss, one Jump Master or both of them hold him during the exit; the student assume the freefall position, arch, legs, arms, head (mandatry target);

In freefall the student check the altitude and check the position of the hand-deploy handle as briefed (mandatry target); the student keep concentration and focus on stability position and altitude (mandatry target);

if the student fly in a good position (mandatry target), both the JMs leave the grips and keep flying close to the formation (instructional goal);

if both the JM release the grips, the student can perform a left turn and a right turn (instructional goals);

as soon as the altitude of 1700 mt is reached, the student communicates the "end of the jump";

at 1500 mt the student open the canopy (mandatry target);

check of the canopy, landing circuit, landing in a safe area (mandatry target).

4st TAFF (Jump from 4000 meters)

The student leave the aircraft in back position or with a front loop, $n^{\circ}2$ JMs fly close to him.

the student recover the freefall position, arch, legs, arms, head (mandatry target);

in freefall the student check the altitude and check the position of the hand-deploy handle as briefed (mandatry target); the student perform a left turn and/or a right turn (mandatry target);

as soon as the altitude of 1700 mt is reached, the student communicates the "end of the jump" (instructional goal);

at 1500 mt the student open the canopy (mandatry target);

check of the canopy, landing circuit, landing in a safe area (mandatry target).

5th TAFF (Jump from 4000 meters)

The student leave the aircraft in back position or with a front loop, n°2 JMs fly close to him. the student recover the freefall position, arch, legs, arms, head (mandatry target); in freefall the student check the altitude and check the position of the hand-deploy handle as briefed (mandatry target); the student perform a left turn and/or a right turn or a loop as briefed (instructional goal); as soon as the altitude of 1700 mt is reached, the student communicates the "end of the jump" (mandatry target); at 1500 mt the student open the canopy (mandatry target); check of the canopy, landing circuit, landing in a safe area (mandatry target).

6th TAFF (Jump from 4000 meters)

The student jump with n°1 JM that fly close to him.

the student recover the freefall position, arch, legs, arms, head (mandatry target);

in freefall the student check the altitude and check the position of the hand-deploy handle as briefed (mandatry target);

the student perform one or more loopings (mandatry target) and a track (instructional goal);

as soon as the altitude of 1700 mt is reached, the student communicates the "end of the jump" (mandatry target);

at 1500 mt the student open the canopy (mandatry target);

check of the canopy, landing circuit, landing in a safe area (mandatry target).

7th (Jump from 4000 meters)

The student jump with autonomy, the JM or the LD (Load Director) go with him on the aircraft and check the exit point, but the student go in freefly with no more Jump Master.

The student jump from the aircraft with a loop and recover the freefall position, arch, legs, arms, head...

The student keep concentration and focus on stability position and altitude... at 1500 mt the student communicates the "end of the jump" and open the canopy (mandatry target);

check of the canopy, landing circuit, landing in a safe area (mandatry target).

EQUIPMENT

The equipment for AFF course is a complete kit which includes a rig with a main canopy activated by hand-deploy system which opens by pulling the handle and releasing it in the correct position, and a reserve canopy which is activated by a spring pilot chute that works by pulling the reserve handle. In addition there must be an automatic activation device able to open the reserve canopye at a predeterminated altitude in the event of unforeseen circumstances. The main canopy is about 250 sq.ft. and the reserve is very similar to the main.

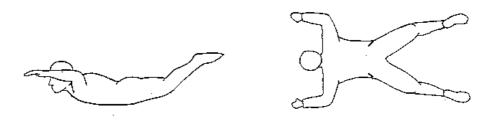
- JUMP SUIT
- HELMET (WITH EARTH/AIR RADIO FOR FIRST JUMPS)
- ALTIMETER AND GLASSES
- GLOVES (IN WINTER, provided by student)
- (PERSONAL) SPORT SHOES (provided by student)

WIND TUNNEL Sessions (the "box" position)

The principles of freefall flight are quite simple; after all, you are dealing with just two things: your airfoil (body) and the wind. In a perfect, relaxed arch, or box man, you will fall straight down at a constant rate. To an observer falling along side, you appear stationary.

The standard freefall position, also called "box" man, is the neutral freefall position from which all maneuvers are carried out. Relative to a stationary observer, by altering your body position you can turn in place, move up and down, backwards and forwards, or sideways.

From the box position you can easily initiate turns, forward, backward, and sideways movement, and changes in fall rate. From the side, the body presents a continuous smooth curve to the wind. The head is up, the arms higher than the body, and the legs are bent at a 45-degree angle, leaving the lower leg slightly extended into the wind.



From above, the elbows are straight out from the shoulders and the hands are at least as far out as the elbows. The knees are slightly spead so that the feet are as wide apart as the elbows. Seen from the front, there is a smooth curve from side to side with the hips at the lowest point. Note that head, shoulders, and knees are all held high relative to the hips and chest.

The most commonly used maneuvers are turns, forward and backward movement, and faster or slower falling. All are accomplished by changing the flow of air around your body.



Turns are also based on deflection of air. In the neutral position, equal amounts of air spill off both sides of the body. To turn right, our box man banks his arms, just as an airplane does in a turn. More air flows off the left side, creating a right turn. Note that the position of the arms relative to each other does not change; both arms tilt as a unit. The rest of the body remains neutral. To stop the turn, simply return to neutral.

AIRCRAFT BOARDING and climing to altitude PROCEDURE (for all the Jumps)

- CHECK THE EQUIPMENT AND HARNESS (ON THE GROUND), INSTRUCTOR CAN HELP THE STUDENT IN WEARING THE EQUIPMENT AND ADJUSTING IT CORRECTLY.
- BOARDING WITH HELMET ON HEAD, SECURE BELTS.
- 300 mt: TAKE OFF THE HELMET.
- 1500mt: COMUNICATE TO THE INSTRUCTOR THE "END JUMP" AND CHECK THE HAND-DEPLOY HANDLE.
- 2500 MT REPEAT TO THE INSTRUCTOR THE JUMP PROCEDURE.
- 3000mt: CHECK THE EQUIPMENT.
- 3500mt: PUT ON GLASSES AND HELMET, TURN ON THE RADIO (if present)
- 4000mt: START THE AFF JUMP

Free Fall

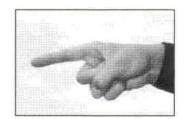


FREE FALL BODY POSITION

3° TAFF LEVEL (first Jump in freefall)

- RIGHT POSITIONING ON THE DOOR
- EXIT PROCEDURE : CALL"OK" TO THE RIGHT INSTRUCTOR WHO RESPONDS "OK", CALL"OK" TO THE LEFT INSTRUCTOR WHO RESPONDS "OK", LOOK AT THE HORIZON (PROPELLER), AND EXIT WITH UP DOWN ARCH...
- CHECK BODY POSITION, ARCH, LEGS, ARMS, HEAD...
- HORIZONTAL (REFERENCE)
- READ ALTITUDE AND COMUNICATE IT TO THE INSTRUCTOR ON THE RIGHT
- THREE CHECK OF HAND-DEPLOY HANDLE (ARCH, REACH, TOUCH)
- HORIZONTAL (REFERENCE)
- READ ALTIMETER AND COMMUNICATES IT TO THE INSTRUCTOR ON THE RIGHT
- FREE TIME (CHECK BODY POSITION AND ALTITUDE EVERY 3/4 SECONDS)
- 1700 MT COMUNICATE THE END JUMP AND BEGIN OPENING PROCEDURE
- 1500 MT OPEN THE CANOPY(ARCH, REACH, GRIP, PULL, CHECK)

SIGNAL INSTRUCTORS



OPEN



CHECK THE ALTITUDE

FALSE HANDLE





EXTENDING THE LEGS



PUT THE PELVIS DOWN

ARCH

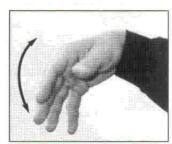






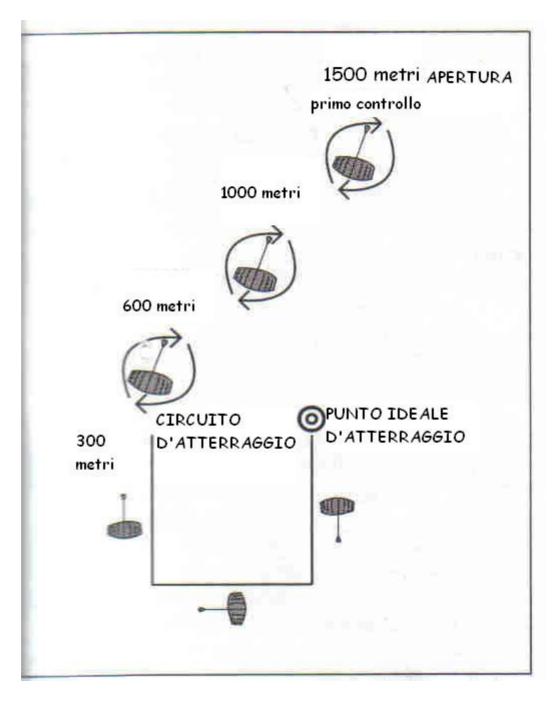
CLAP YOUR FEET

RELAX BREATH

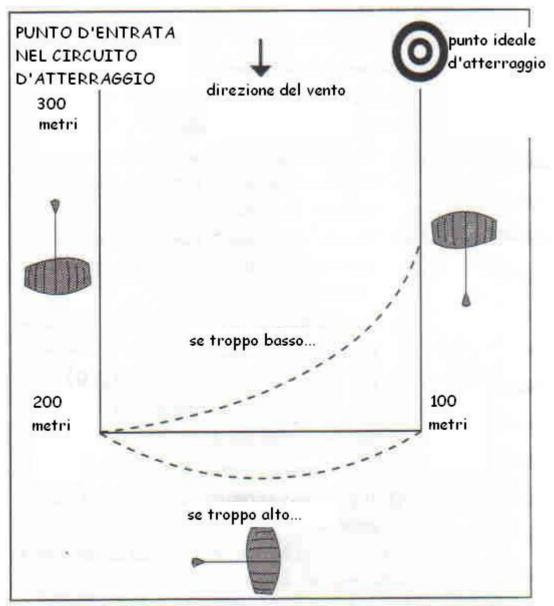


OPEN CANOPY FLYING (landing circuit, landing)

- CHECK CANOPY AFTER OPENING SEQUENCE (1001, 1002, 1003, 1004, 1005)
- CHECK ALTITUDE
- CHECK POSITION COMPARED TO THE FIELD
- GRIP THE TOGGLES AND UNLOCK THE HALF BRAKES
- CHECK THE CONTROLLABILITY OF THE CANOPY (360° RIGHT, 360° LEFT,
 - TRY A FULL BRAKE) AND ENTERING THE LANDING PATTERN



• ENTER THE LANDING PATTERN (AGAINST WIND, BASE, END)...



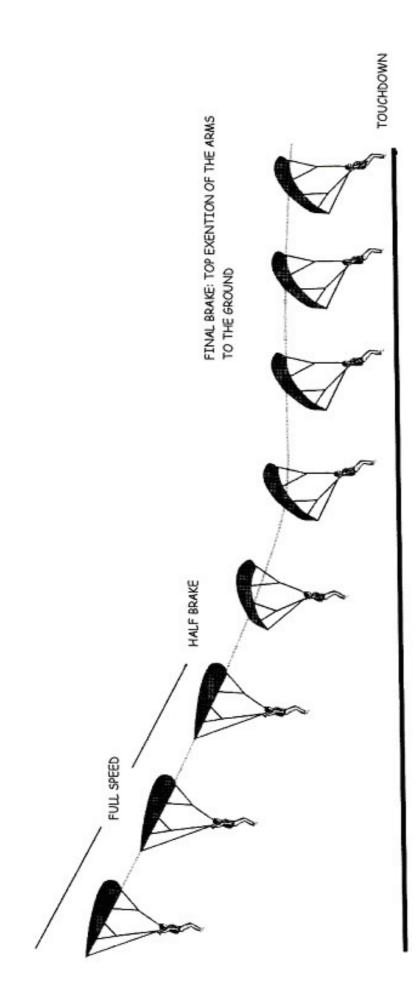
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PRIORITY IN LANDING:

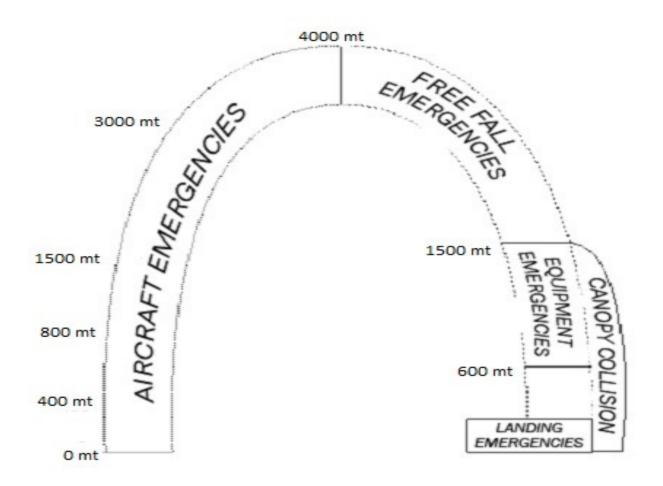
• LANDING :

- 1. WITH THE CANOPY PARALLEL TO THE GROUND
 - 2. IN A CLEAR AREA FREE OF OBSTACLES
 - 3. AGAINST WIND

AT 3 METERS FLARE HALF BRAKES TO THE GROUND, FROM UP TO DOWN USING STEADY AND PROGRESSIVE ACTIONS TO FULL EXTENTION OF THE ARMS ARMS



- AIRCRAFT EMERGENCIES
- FREE FALL EMERGENCIES
- EQUIPMENT EMERGENCIES
- LANDING EMERGENCIES



AIRCRAFT EMERGENCIES

THE INSTRUCTORS WILL EXPLAIN THE AIRCRAFT EMERGENCY PROCEDURE GIVING AN IDEA OF WHAT WOULD BE THE ORDERS IN SUCH A SITUATIONS. IT IS IMPORTANT TO KNOW THEM WELL TO DO THEM FASTER and EFFICIENTLY

1. 0/400 metres

- Everybody must land with the aircraft
- Take a position to avoid a probably impact
- Leave the aircraft after landing

2. 400/800 metres

- Take positioning on aircraft door gripping reserve handle with the left hand.
- Exit and count 1001,1002,1003, then pull reserve handle

3.800/1500 metres

- Take positioning on aircraft door gripping main hand-deplopy handle with the right hand
- Exit and count 1001,1002,1003, then pull main hand-deploy parachute handle

4.1500/3000 metres

- Exit with instructors and take the positioning of the briefing level you are doing
- Do all the exercises the altitude permits
- Opening (5000 ft)

5.3000/4000 metres

• Regular jump

N.B. IF IT IS NOT POSSIBLE TO REACH THE LANDING TARGET AREA, SELECT ANY CLEAR AREA FREE OF OBSTACLES YOU CAN CONFORTABLY REACH.

PREMATURE DEPLOYMENT IN AIRCRAFT

If it is possible firmly keep hold of the pilot chute and land with the aircraft. If the pilot chute goes out the door, the only thing to do is to jump immediately following it before being extracted by the opening canopy.

FREE FALL EMERGENCIES

LOSS OF THE INSTRUCTORS

STABLE JUMP

In case of stable jump, students must keep the arch, check constantly the altitude and pull the hand-deploy no lower than 1500 metres.

UNSTABLE JUMP

If, for any reason, it is not possible to keep a stable position or if cannot check the altitude, then relax... and pull the hand-deploy to open the canopy.

PRIORITY OF EVERY JUMP (MANDATORY TARGETS)

OPEN THE PARACHUTE

OPEN THE PARACHUTE AT THE ALTITUDE REQUESTED

OPEN THE PARACHUTE AT THE ALTITUDE REQUESTED IN A STABLE POSITION

NOTE: PULLING THE HANDLE IS MORE IMPORTANT THAN STABILITY

EQUIPMENT EMERGENCIES

The Parachute equipment properly rigged and maintained to the highest standard of security for the correct work, but students must be very well trained to be able to apply the emergency procedure in the right sequence.

MALFUNCTIONS

Malfunctions can be total (high speed) and partial (low speed). Most of the partial malfunctions can be resolved.

TOTAL MALFUNCTIONS

If the bag of the canopy doesn't open because you fail to lacate the handle, or, after gripping the handle it is impossible to pull it, or after pulling the handle the bag stay closed and we still are in free fall, then locate the cutaway handle of the main canopy and locate the reserve handle, grip with the right hand the cutaway handle and with the left hand the reserve handle. Pull the cutaway handle then put the right hand on the left hand positioned on the reserve handle, and pull it (with both hands). Between total malfunctions there are also pilot chute or pod entangled in the lines, pilot chute in depressed zone, and horseshoe.

PARTIAL MALFUNCTIONS

We have a partial malfunction when the canopy is not correctly open (flame, stuck slider, etc.) that means a little decrease if the falling velocity, but not anought to land safely. If it is not possible to solve the problem we will apply the emergency procedure: locate the cutaway handle of the main canopy and locate the reserve handle, grip with the left hand the cutaway handle and with the right hand the reserve handle, pull the cutaway handle then put the left hand on the right hand positioned on the reserve handle, and pull it (with both hands).

Spinning, deflated external session, stuck slider, broken rope, broken control lines, canopy damage, can be considered **light problems** that can be solved without the need to opening the reserve parachute. If the canopy can be considered safe after a thorough check of control In any case, if there are more than one malfunction, it is mandatory to impliment the emergency procedure (always decide within 600 metres) So, when we try to solve the problem we always have TO CHECK THE ALTITUDE. If there is any doubt, go on with the emergency procedure!







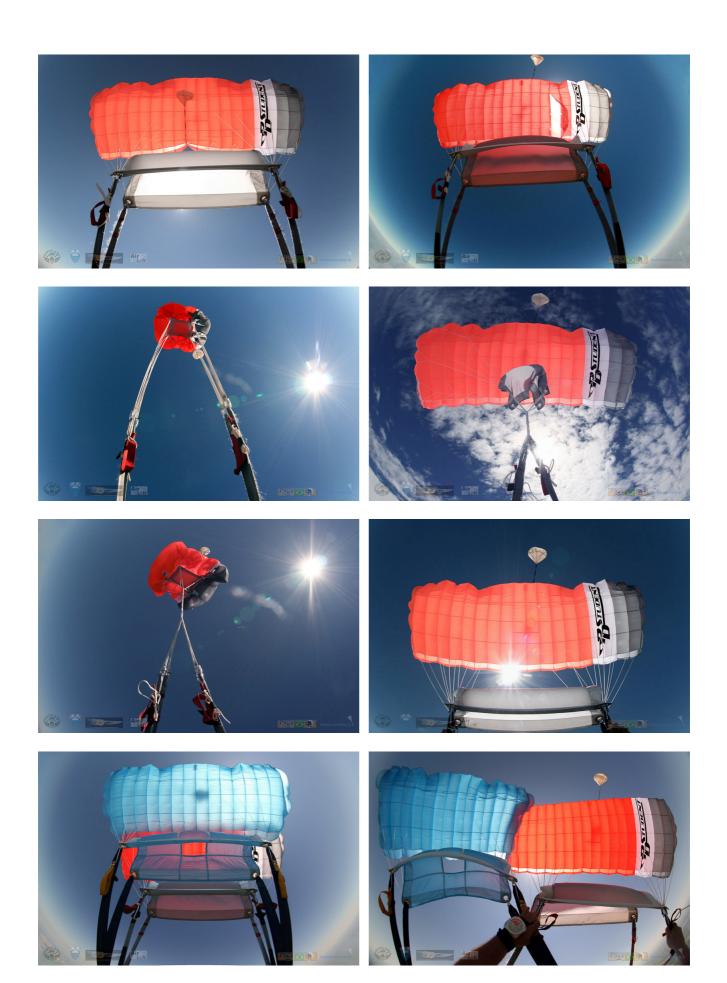












BOTH PARACHUTE DEPLOYED

MAIN CANOPY OPENED, THEN DEPLOYMENT OF THE RESERVE (OR VISAVERSA)

 Try to stop the deployment of the reserve (or the main) while it is opening, then put it between the legs to avoid inflating.
 Do a somersault on landing...

A. BIPLANE

- 1 Steer the front canopy gently using toggles. Leave the brakes stowed on the back canopy. Use the controls in front of the canopy, braking gently and lightly (between 1/3 and half brake)
 2 Decomposed to a longing.
- 2 Do a somersault on landing

B. SIDE BY SIDE

- 1. Leave the control of both canopy loocked.
- 2. Keep command and move parachute gentle with back lines and keep central toggles together with the other hand
- 3. Do a somersault on landing

C. DOWNPLANE

- 1. Cut away the main canopy and choose a free and safe place for landing.
- D. MAIN AND RESERVE CANOPY ENTANGLED
- 1. Try to deflate the last opened canopy
- 2. if it is possible, when the two canopy are already opened, leave the controls stowed and prepared yourself to do the best somersault you can

IN ANY CASE EVALUATE THE PROBLEM, TAKE A FAST DECISION WITH GOOD SENSE AND KEEP CALM and FOCUSED.

CANOPY COLLISION

During the canopy flight every parachutist has the responsibility to keep a safe distance from the other skydivers. If a collision is imminent, in most cases both jumpers should steer to the right. If it is not possible to avoid collision keep arms and legs open and do your best to not get entangled.

LANDING EMERGENCIES

We have to select an open area free of obstacles nearby in which to land from when we grip the toggles and unlock half brakes, fly into the wind to specific, pre-assigned points above the ground, near the landing target area.

Do an upwind landing only if it is strictly necessarily.

WATER

Before landing PUT OFF helmet, glasses, gloves and shoes, DISCONNECT the chest strap, LOOSEN leg straps and, when the water is reached, SLIDE OFF the harness and LEAVE the equipment.

POWER LINES

Follow the direction of the lines during the landing also if not against wind.

TREES

Flare to half brakes, keep your legs tight together, both elbows tightly together and close to your body, keeping the toggles, protect your face with both hands. Try to hold on to the main branch to avoid falling.

OTHER OBSTACLES

Buildings, cars, aircrafts, hangar, streets, etc..., keep your feet tightly together, bend lightly the legs, flat feet and prepare to impact.

Methods of payment for TAFF course:

the TAFF Corse is to be payed by cash, credit card or wire transfer, in one solution at the registration.

N.B.:

MOLI-DZone is a non-profit-making organization and, the amount payed is not refundable as the money is used to pay in advance wind tunnel rent, aircraft rent, fees, instructors and partner agencies.

The amount does not include:

- MEDICAL CERTIFICATE (40€)
- SKYDIVING INSURANCES (minimum 115€)
- ADDITIONAL Wind Tunnel sessions or REJUMPS (if needed)
- USPA Membership (asf for details)

TAFF lessons and Rejumps:

The amount of € 1330,00 include:

- Registration to MOLI-DZone sportive association for the whole year
- All the theory lessons
- TAFF course manual
- n° 30 minutes of Wind Tunnel sessions.
- Rent of the equipment necessary for 5 jumps
- packing of the main canopy for the 5 jumps
- 5 jumps as follow:

1st, 2nd, 3rd jump with 2 Jump Masters and video for every jump, 4th jump with 1 Jump Master and video, 7th jump is the first solo jump, without Jump Master and no video. (video can be added for additional cost)

The 30 minutes Wind Tunnel together with the 5 Jumps should match with the 7 AFF learning levels. To complete the TAFF training is necessary to learn the basic knowledges to fly solo and safe and to have fun into the Wind Tunnel and in skydiving.

To pass a level it is necessarily to hit the "mandatory targets": 1-Open the parachute 2-Awareness of all the steps during the fly in the Wind Tunnel and/or in the FreeFall. 3-From 2° level (still into the Wind Tunnel) it is requested to fly stable in the position explained during the briefing. 4- From 4° level (2nd jump) it is needed a good execution of all the exercises explained during the briefing. 5- The time between a level and the next one cannot be more than 5 weeks.

If a jump should be repeated, it is necessarily to pay the additional lessons: $140,00 \in$ for every additional freefall instructional jump.