



Felix Baumgartner in all its glory

## WINGSUIT WALK ON AIR

There are certain images or metaphors that are normally forbidden to editors due to being trite or cheap. One of them for example, is the use or the abuse of the name Icarus, or of his father Daedalus, concerning any human aerial activities. But in this case, the analogy is so obvious that we make an exception to this editorial instruction. This story is about the real followers of the first mythological Greek flight pioneers, people trying to fly without engine power or even a vehicle, just moving forward with the help of a suit – the so called wingsuit.

This attempt to resist the power of gravity is much older than the history of aviation, besides the charter myth of the Greek father and son there are ancient stories from China from the 6th Century A.D about people trying to fly with wings on their arms. Also, the multi-talented artist Leonardo da Vinci drew sketches of bird-like human flying machines that never were put into production. It took quite a long time until more serious free-fly attempts were made. In fact, it wasn't until the beginning of the 20th Century, when early pioneers tried to fly with the power of their arms and birdlike mechanical wings. They all came down to earth, but most of them not in the same condition as when they had started.

Since the 30s, more than 80 dare-devils have lost their lives trying to fly through the air on wings. Mostly the wind-gliding part of the flight was okay, but in many cases the rigid wing constructions these birdmen were using became entangled with the cords of their parachutes. Or even worse, many of them died horribly because the muscles in their shoulders and upper arms ripped from the pressure of trying to keep the wings extended.

One of the first people ever gliding in the sky was a guy from Lansing, Michigan, USA, in the 1930s, named Clem Sohn. He bailed out from an airplane at a height of approximately 6000 meters in a home-made wingsuit, gliding down until he was only about 300 meters from the ground, when he would open up his parachute for the final descent. Clem, who was also called "The Batman" because of the large goggles he wore, died in 1937 in Vincennes, France during a descent. Ironically, he remarked just before taking off for his last jump: "I feel as safe as you would in your grandmother's kitchen." A crowd of approximately 100.000 watched him dropping to death because both his parachute and emergency chute hadn't opened. The legendary former British RAF parachutist, Harry Ward, had more luck with these strange aerial experiments. He became famous during the heydays of the traveling air circuses from the 1930s for his death-defying performances in the air, and was more or less the first person to survive wingsuit-flying. He jumped off the creeping double-deckers from that era and controlled his free-fall with a winged costume that looked a little like the cape from the early Bela Lugosi Dracula movie. Harry Ward toured two seasons with his spectacular flight show, astonishing crowds from Ireland to India. He wisely decided to cut short his career as a birdman, and is still alive.



Wingsuit's great-grandfather Léo Valentin



Some say wingsuit flying is addictive, others say it is even better than sex.



Many tried to step into Ward's footsteps over the following decades but more or less all of them failed fatally, such as the Frenchman Léo Valentin, who succeeded in flying more than three miles with a rigid wooden wing-construction but was killed in 1956 during an air-show in Liverpool. It is told that he announced before jumping: "This is my 701st jump and it will be my last one." In fact, it was his last, because a part of his wing fell off after crashing with the plane on exit and both parachute and emergency chute wouldn't open. It took some time after that, until the 90s, for the aerial tricksters to use more flexible materials for their wings. In turn, they found out that a principle for many situations in normal life is also applicable to wingsuit flying: less is more. The wings shrunk compared to those of predecessors and so the first wingsuit flyers landed alive. Like the charismatic parachuting legend Patrick de Gayardon, often called 'skygod' with more than 12.000 skydives, who died in 1998, while testing an upgraded suit on a jump over Hawaii, his parachute cords becoming snarled, sending him to his death at approximately 120 mph.

It is since then that the name "Wingsuit" is closely connected to the name of Jari Kuosma from Finland. He was one of the real early pioneers of wingsuit flying, having made it perfect suitable and available for everybody. He later came to know the Croatian Robert Pecnik, and together they developed the first wingsuits for the market. Since then, Kuosma is the president and CEO of 'Birdman International' and has sold more than 2000 wingsuits, provoking a real enthusiasm among many skydivers. Some say wingsuit flying is addictive, others say it is even better than sex. Anyways, whatever people might think about wingsuit flying, it is definitely a new form of flying and can't be compared with 'normal' parachuting. The wingsuit reduces the average falling speed of 120 to 35 miles an hour, in the same time the horizontal velocity is about 100 miles an hour, or in simple words: more wind is hitting your face than your belly. Today, there are numerous different wingsuit designs available which all have ram-air wings between the arms and legs. They are made from the same materials as modern parachutes, zero porosity materials, which are cut in such a way that they inflate to form a wing. The human being in the suit is like the skeleton of the wing, so if you are pushing out your arms and legs you produce a lot of lift and forward speed. This could greatly aid in covering quite large distances like the Spaniards Santi Corella, Tonuses López and Alvaro Bultó have done for example. They crossed the distance of more than 12 miles, from the Strait of Gibraltar between Morocco and Spain in less than 6 minutes. It is told that Jari Kuosma once travelled from one Spanish village to the other by wingsuit, just for dinner.



Ueli Gegenschatz in freefall



Birdman Jari Kuosma

Strange things have happened in the sky since these daredevils took advantage: Patrick de Gayardon once entered the same plane he jumped off a few minutes later. Also the story is told of a pilot frightened nearly to death because of an un-attended birdman passing his plane and greeting him. But, as a birdman, the most important thing you have to take care about when you're flying up there, is that you have to be aware of the risk, like Jari says: "There is no room for error." Most people who were killed by wingsuit jumping died because they were overestimating their own capabilities, trying to pass a mountain or a rock as close as possible and, well, miscalculated the flight path and hit the ground at like 150 miles an hour. But to avoid any confusion, wingsuit flying today is not a sport for those danger-seekers who have already abandoned their life to get a certain kick or thrill. To prevent accidents, these suits are equipped with a cutaway system to release the wings between the arms and body so as to be dealt with swiftly and with full use of the arms in case of any emergency. The wingsuits also provide enough movement that all of the handles for main deployment and emergency drills can be easily reached with the wings attached. But in fact, it's better if you feel comfortable in the air, which means that you should already have enough experience in parachuting. Meanwhile, there are courses for wingsuit jumping everywhere, in parachuting clubs and associations all over, but there are still no general international rules concerning the training or the number of parachute jumps you must have completed before you're allowed to try wingsuit flying. Many experts recommend to not start wingsuit flying until you have about 200 successful 'normal' jumps. In the end, skyflying is parachuting, and at the end of every jump you have to pull the ripcord to land smoothly. So, when you have landed safely, you will figure out that suddenly a kind of bird metamorphosis happens. Up in the air your movements are elegant like those of a raptor, an eagle, a hawk or a buzzard, but back on the ground the elegance of your movement changes to the one of a ratite bird; the penguin! The ram-air wings between your legs make you move quite inelegantly, indeed you look a little like a waddling penguin or a drunken duck. Maybe it's this terrestrial clumsiness which retains women from wingsuit flying. It's a real gender imbalance up there, only 5 to 10 percent of all wingsuit-flyers are feminine. Ladies, the flying supermen are seeking for superwomen up there in the air. And there is no reason for the fair sex not to fly above the clouds... Wingsuit flying is not a question of physical power. Jari Kuosma would not only appreciate this, but he's trying to push the efforts of the so-called 'BirdBabes' forward. He has organized special events just for the 'Skysisters' and has gone on to design more fashionable wingsuits for them. So it's really time for Lucy in the sky... [fb]