HISTOFILE: DOMENJOZ STRANGE SAIL-GLIDER

his story started at the beginning of 2009 when VGCHG member Gàbor Fekecs sent us a photo of the Domenjoz machine in flight asking if we knew about it. Yes, we did and we produced the French patent documents related to this most peculiar flying machine. As usual, Gàbor was one up and produced the US patent, which in fact was just the translation of the French one with a few modifications in the various drawings. So, here we were with an identical patent filed in the nineteen twenties in two countries separated by the Atlantic Ocean as well as photos showing a similar flying machine combining a wing and a yacht sail. In an early Ogden's Amer-

ican museums guide, there was a photo of the American machine located at the Owl Head Transport Museum in Maine. The search was on. As we were planning to go to the Vintage Rally in Elmira in June 2009, by doing a small 1500 km detour, we could go and see this interesting museum piece and judge it for ourselves. Introducing us as reporters of VGC News, the famous international magazine, we asked to see the manager. Soon, the object of the visit was discussed and high hopes were set on gaining further information on the glider and its history. Well, said the manager, we only have a few photos and nothing else. In fact, over the past 20 years, you are only the second person to make an inquiry on this one.

The first person to ask about it told us that, as a child, he had a ride in it or to be more specific, he stood on the undercarriage, held onto the fuselage and had a brief hop with Domenioz. This was a most interesting piece of history but not sufficient to turn the Sail-Glider into a two-seater. Then, it was the manager's turn to ask us how we could contribute. In typical Obama fashion, we said: Yes, we can and described the French articles on hand and the patents available in two languages. Within minutes, we received a twovear free membership on the understanding that we provide the museum research staff with our archive content and a translation of the Domenioz presentation of his machine to a French aviation magazine around 1925. Just for information, the museum aims are all about transport vehicles and their history. This covers aircraft, cars and horse drawn wagons, all displayed in a luxury environment. Most aircraft are airworthy and displayed throughout the year and the main museum patrons belong to the Rockfeller family.





So, as a start, here is the translation of the story as told by Domenjoz to the French aviation magazine editor A Frachet, with a copy of the photos published at the time.

Now, to find out more about Domenjoz, just go to Google and type John Domenioz. On one of the sites, his life, in chronological order, will provide all the information needed about his prolific life. In 1925, the sail-glider and the hangar were destroyed during a storm. In 1928, Domenjoz was back in the USA and applied for a US patent for the sailglider. A machine was built in 1929 and test flown at Old-Orchard beach in Maine. Testing continued during 1930. From 1932, Domenjoz moved onto other projects and eventually the machine found its way to the Old Head Transport Museum where it is currently on display in the aircraft workshop hangar in the company of a Mead Rhon Ranger Primary glider (not spelt Rhön)

Conclusions: Oral and photographic evidences confirm that the machine flew on several occasions. Maybe, due to his skill both as a pilot and as a yachtsman, Domenioz said that he took off unaided on about 10 occasions. However, there is no record that he actually achieved a straight flight using his system. Had he done so, the whole of gliding would have been different, akin to perpetual motion and a round the world flight might have been completed by now? It is also surprising, that, as an experienced pilot. Domenioz continued his experiments as late as 1930 when gliding had become a well established sport much different of the one he knew in 1924.

Finally, if in English our hobby is known as Gliding or Soaring, in French it is called Vol à Voile and in German Segelflug. So in two languages the name of the sport is related to sail flying but equally in English Sailplane is also used.....



Here is the translation of the story as told by Domenjoz to the French aviation magazine

IS AN AIRCRAFT WITH SAIL POSSIBLE ?

The strange experiences of pilot Domenjoz.

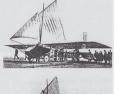
few weeks ago we received the visit A few weeks up.

A pilot from before the war (14-18), he started flying in 1910 on Bleriot, Me Domenjoz did not stop since then to travel over continents, the old and the new one, organizing aircraft meets. He was the first pilot to loop the loop in Spain. He was also successful in America and as such his reputation does not have to be queried. So, when he came to tell us that he

flew an aircraft with a sail, we listened to him with attention and here are the facts as he told us:

It was during the 1922 glider meet at Combegrasse (France) that I developed the idea to fly with a sail in the same way as a sailing boat does on water. As I was born in Geneva, as a youth, I spent a lot of time sailing on our magnificent

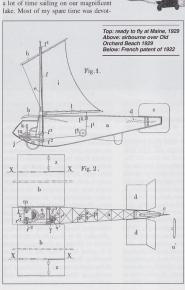
ed to water sports and this was helped by the fact that my father was a boat builder. Thus, I can claim a good knowledge of sailing. Combining this knowledge with the one in aviation gave me the conviction that my idea was feasible. During this time, I found investors to build a experimental machine. Enclosed are the photos of the machine built entirely by myself with the help from a mechanics.





It is a monoplane with half thick strutted wing of 13.20 meters span for a length of 7.50 m. The wing area is 24.60 square meters and the empty weight is 210 kilos without the pilot. As you can see, the lightweight mast supporting the sail is set slightly forward of the centre of gravity of the aircraft.

The first flights took place at Crotoy (France) and I was hoping to carry more experiences until completely successful thus explaining the reason for the silence on my initial tests which were carried out between May and September last year. First of all, the sail area was reduced from 8.25 sq m down to 6.20 sq m. Other details took a lot of time to resolve. A small fore staysail had to be added to the sail. Sail control gear had to be developed in order to have a quick response whilst flying the machine at the same time. That system consists of two steering wheels, one to raise the sail or drop it instantly whilst the second controls the sail area. A rail forming a half circle and located above the sail is used for a small trolley controlling the sail angle. At last, after many trials and tribula-





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offs whilst being towed by a car. As these first attempts were successful, I felt able to climb up to 60 meters whilst still on tow. I then managed to take off alone by the sole mean of wind power. With wind oscillating around 55 km/h, I managed several flights. As a result, I had to modify the sail slightly and had to add a jib.

Another flight was attempted, the wind was particularly strong and gusty and upon landing and leaving the machine, the sail being at right angle to the wind court a strong gust and the machine turned over. Damages were slight but having ran out of funds, I had

to postpone any further trials until a later time. This was disappointing as I felt that success was not far away. My initial conviction about the project has now become a certainty. I have no doubts that I will be able to achieve long distance sailing flights. So, here was the story as told by Mr

Domenjoz. What conclusions can we draw out from these declarations? That the concept of an aircraft with sail is original and daring. That the results are positive as Domenjoz actually took off and flew the aircraft. However, more experimentation will be required before such a solution becomes viable as a mean of flight without engine. In any case, something was gained from this concept and, as such, we hope that it will be followed.

Finally, as insufficient data were obtained from the experiments, it was difficult to form an valid opinion on the concept of the aircraft with sail. We can only wish that Mr Domenjoz will find the necessary backing to eventually prove without fail that navigating with sail will be possible in the air as it is on the sea.