



ServoFly T4/1

FLYING OVER THE BARRIERS

The amazing story of a humanitarian and technological project to make possible what seemed impossible!

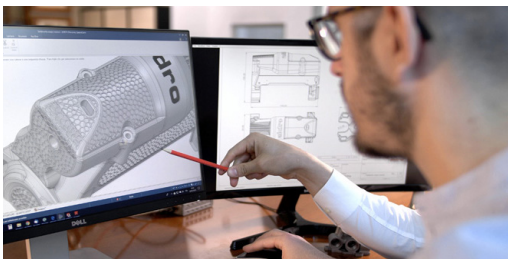
3D Printing allows dreams to come true

SERVOFLY PROJECT IS A DEVICE THAT ALLOWS PEOPLE WITH DISABILITIES TO FLY



Mattia, a young Italian military, due to a serious accident, suffered severe damage and after 4 years of intense medical therapies, he resumed walking and moving only one hand.

Now, his dream is to overcome barriers and take the license to fly an ultralight plane.



Mattia's desire to fly landed at Fano airport, where the young man was welcomed by the Eagles Aviation Academy instructors and the Aero Club Fano pilots, and so his theoretical and practical training began. But to be able to pilot with one hand, it was necessary to find an innovative technical solution, which did not exist. A team of experts was fascinated by the willpower of Mattia and everyone has made available their expertise to realize the guy's dream.



The first idea of the ServoFly project comes from the designer Paolo Picchi, of 4D-Outpost, who, in collaboration with Alberto Taccognelli and Valeria Tirelli of Aidro srl, designed a device to adjust the throttle control bar of the engine and realized it using Additive Manufacturing technology, that offers the freedom to design innovative solutions.



With the metal 3D printers of Aidro srl, a custom-made device was produced to allow a person with disabilities to pilot a plane. Without any structural modification, the aircraft cockpit was integrated with a "plug-and-fly" flight control system, made of aluminum using powder-bed laser fusion technology (LPBF or SLM). This tool was named "ServoFly T4/1", and allows Mattia to fly an ultra-light aircraft with only one hand.

The electronic system was developed by Tecno Elettra Impianti S.r.l., one of the leading Italian companies in electrical wiring. The mechanical tests were carried out by AeroClub experts from the Fano airport and Mattia's training was followed by the Eagles Aviation Academy instructors.

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In collaboration with:



All PEOPLE whose HEART was involved in the ServoFly T4 / 1 PROJECT

Our destiny is formed by our thoughts and our actions. We cannot change the wind but we can orient the sails. *(Anthony Robbins)*

It was a wind that allowed us to push everyone on a single sail, which brought this project to fruition ... It was a wind that comes from inside our hearts! The same wind that made us know !! An invisible thread. *(Paolo Picchi - disegnatore)*



Mattia Negusanti

it is the testimony that dreams, even those that seem impossible, can become true, just believe it.

Mattia's desire to fly arrived at Fano airport, where pilots and flight instructors welcomed him. To realize his dream, however, taking the flying license, needed an idea, a technical project, to help him pilot with one hand. From the enthusiasm and willpower of Mattia, a team of experts was created and thus the ServoFly T4/1 project was born, a device, made in 3D printing, which installed on the throttle control bar, allows to pilot the aircraft with one hand.



Paolo Picchi

he is a DREAM DESIGNER: he sees dreams, succeeds in transforming them into projects and making them become reality. Paolo was the cornerstone around which all the gears, all the people, moved in unison to realize Mattia's dream. Paolo had the idea of designing a device to be installed on the throttle control bar of the aircraft that would allow Mattia to pilot with one hand. He is the father of ServoFly T4 / 1, a project born of 4D-outpost



Valeria Tirelli

CEO of the family-owned business Aidro srl, optimist by nature, got involved in the project conceived by Paolo Picchi and by the will of Mattia. He gave a positive impulse to the realization of the project and still follows its promotion and dissemination with the aim of bringing an example to people with disabilities and the message that with technology, with teamwork and will power, the "impossible" can be achieved.



Alberto Tacconelli

Managing Director of Aidro srl, he has always been fascinated by the technical challenges that seem impossible to achieve. Expert in 3D metal printing technology, he coordinated the production of ServoFly, performed at the Aidro plant, on Lake Maggiore, thanks to the use of EOS printers (powder bed fusion).



Comandante Davide Cecchini

President of the Aero Club Fano and Head of Training of the flying school Eagles Aviation Academy.

He supported Mattia in pursuing his dream of flying and made available people and tools of the school. Davide performed the first test flight with the ServoFly T4/1, the metal 3D printed gas control system, together with Mattia.



Marco Filoni

he was the Commander of the Carabinieri of Pesaro and Urbino in the period in which Mattia was on duty and is the main person who introduced the passion for flying to Mattia. He was involved in the practical training of Mattia with flying lessons.



Matteo Rossini

he plays the Operation Manager role at Fano Airport "Enzo and Walter Omiccioli". He deals with the bureaucratic aspects related to the project and to communication with the Aero Club of Italy.



Leo Cantergiani

President and owner of Tecno Elettra Impanti srl, a world-leading company in the field of wiring and electronics in the high-end motor industry such as Formula 1, Rally, GT, and other cars. Leo became involved in the project and made available the great technical experience, competence and positivity, creating the ServoFly electronic system - gas control device.



Davide Picchi

he is a mechanical and technical expert on Rotax engines. He is an enthusiastic pilot and flies together with the friends of the Aero Club Fano. He supported Paolo in the design of the throttle control and took care of airport tests.



Mirko Misso

plays the role of theoretical instructor at the Eagles Aviation Academy and followed Mattia's classroom preparation. Passionate about motorcycles and planes (his favorite is Spitfire), he likes to pass on his passion for flying and share it with others. He made his first experiences flying at 16 with paragliding, at 18 he took the certificate for free flight, today he is a commercial pilot.