



SHARK.AERO:

WHERE 3D PRINTING MEETS AVIATION

Integrating 3D printing has allowed SHARK.AERO to significantly reduce production time, with over 100 plane components – from control grips to landing gear doors – being 3D-printed. This approach saves over 100 work hours per plane, totaling around 400 hours each month. Using high-resistance materials like Prusament ABS and PA (Nylon), SHARK.AERO can produce parts that withstand the demanding conditions of both the cockpit and the engine compartment. The combination of 3D-printed components with custom-made carbon parts offers unique solutions, such as landing gear doors that improve aerodynamics and add 10 km/h to the plane's speed. 3D printing is also integral to mold-making: before each new production run, prototype molds are created and tested, ensuring high precision and efficiency in composite part manufacturing.



“Using 3D printing saves us about 100 work hours per plane.”

Vlado Pekár
CEO of SHARK.AERO

SHARK.AERO is a Czech-Slovak manufacturer of full composite airplane Shark and composite aircraft parts. The company has a rich history spanning over 30 years: they initially started as a subcontractor, but over time, they established their own brand. The Shark is the fastest ultralight aircraft in the world and helped its pilots achieve several Guinness world records.

Location	Senice, Slovakia
Employees	50
Industry	Aviation
Filaments	Parts production, prototyping, proof-of-concept
Use of 3D printing	Prusament PLA, PETG, PETG V0, ABS, PA11, Prusament Resin Model

BENEFITS OF 3D PRINTING AT **SHARK.AERO**:

- ➔ Saves 100+ work hours per plane with 3D-printed components.
- ➔ Boosts aircraft speed by 10 km/h with lightweight landing gear doors.
- ➔ Rapid prototyping streamlines development of 200+ parts per plane.
- ➔ Speeds up production while maintaining quality standards.
- ➔ Frees up workshop resources with complex 3D-printed parts.

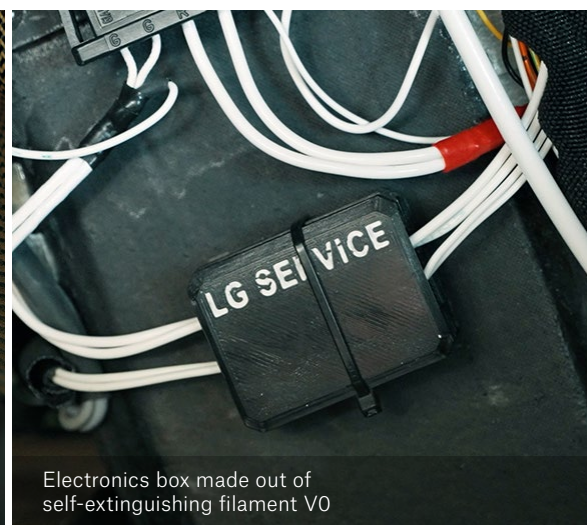
EXAMPLES OF 3D PRINTING AT **SHARK.AERO**:



Even the control sticks are 3D-printed



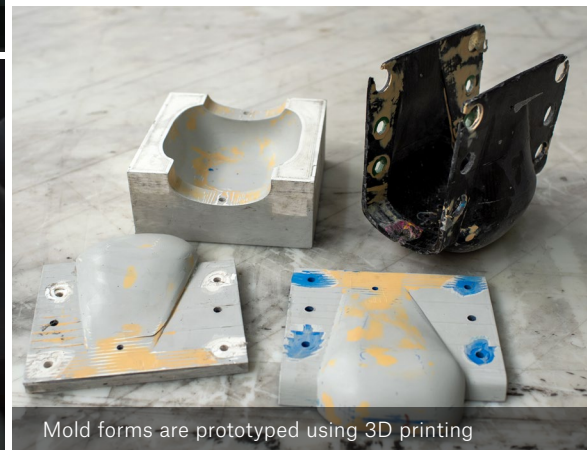
Control stick in cockpit



Electronics box made out of self-extinguishing filament V0



Unique 3D-printed landing gear door mechanism



Mold forms are prototyped using 3D printing

