



## INTERNSHIP 2022

### Preliminary design of a hydrogen-powered drone

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#### Avions Mauboussin

Creator of the Corsaire and the Fouga Magister, Pierre Mauboussin represented the spirit of French innovation which is now rising to the challenge of tomorrow's sustainable mobility. Reviving this mythical brand, David Gallezot and his teams are building on his heritage to design the next generation of clean, silent ultra-short take-off and landing aircraft. Alérion M1h: light tandem two-seater Alcyon M3c: hybrid regional multi-engine six-seater.

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#### Job description

As a follow-up project of Alerion's dynamically similar mock-up, a fuel cell-powered drone demonstrator is being designed by the team. In our office located in Belfort, you will assist us in the design of the drone and in the integration of its fuel cell. Your main tasks are:

1. Mass optimisation for drone operations
2. Set up a behavioural model of the drone
3. Design of a modular fuselage, fitting for the chosen components

If time allows it, you will conduct ground tests and the physical integration of the fuel cell in a "test bench" fuselage.

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#### Skills and qualifications

You are in final year of an engineering school, in 2<sup>nd</sup> year of Master or in a gap year. You have experience in CAD modelling and in propulsive/power systems design. You are autonomous and show a strong interest for aeronautics. A pilot license or an experience in amateur aircraft building is appreciated.

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#### Location and duration

From March 2022, 5-6 months internship.

Located in Belfort, Bourgogne-Franche-Comté, France.

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#### How to apply?

Send your CV and cover letter written in French or English to:

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