

Topic:

Development of a lightweight retractable landing gear



Fakultät für Luftfahrt,
Raumfahrt und Geodäsie
Lehrstuhl für Luftfahrtsysteme



Description

AkaModell München is a student club that designs, builds, and flies model aircraft. The aim is to use the theoretical theory from the lectures and directly transfer it to a flying aircraft. Therefore, we often compete in international student competitions. For this year's competition, we developed two engineering projects for the aerospace bachelor.

A retractable landing gear brings the benefit of reducing drag in cruise flight, with the penalty of extra weight and volume. Especially for small aircraft such as model planes and especially for competition aircraft, those penalties easily outweigh the advantages of drag reduction. To still get the benefits of drag reduction, an ultra-lightweight retraction mechanism can be developed. The AkaModell München is competing in a student competition this summer. We are interested in implementing such a landing gear. As part of this engineering project, you can contribute to the competition aircraft and learn to optimize in the ultra-lightweight field.

Different retractable landing gear approaches can be discussed and further developed by the team. The landing gear can be prototyped with the 3D printer at LLS. If the function of the concept is proven, it will be built out of lightweight materials.

Student profile

The student should be motivated in **practical mechanical engineering**.

Previous interest in **CAD** and model aircraft experience are beneficial but not required.

A reliable work ethic and clean documentation of the tasks is required.

Timeframe

Please send your application until Thursday 22.11.2023.

You can use bullet points and please try to stay within half a page A4.

Contact

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