

# **Requirements from National Regulations for Microlight Aircraft and Statistical Parameters for Preliminary Sizing**

Task for the Project

## **Background**

Microlight aircraft are sold all over the world with different maximum take-off mass. Which aircraft can be flown with which license in which country is often unclear as it falls under the national law of the respective country. As a microlight pilot or as a microlight manufacturer the actual country information is very important for developing, manufacturing, flying, selling and reselling microlights of different types. To perform a successful design of a microlight aircraft, requirements as well as some statistical parameters must be known.

## **Task**

The purpose of this project is to provide a clear overview of various national regulations of microlight aircraft. Furthermore, average statistical values for preliminary sizing of microlight aircraft have to be evaluated. The report should follow these steps:

- Determine requirements for microlight aircraft (maximum take-off mass, minimum speed, maximum seating capacity, load factor, ...)
- Determine statistical parameter for microlight preliminary sizing ( $k_{APP}$ ,  $k_L$ ,  $k_{TO}$ , and  $k_E$ ) as defined in the lecture notes.

The report has to be written in English based on German or international standards on report writing.