THE EVOLUTION OF SAILPLANE WING DESIGN

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The development of sailplane airfoils and the wing planform geometries are clearly intertwined. While the design trade-offs with airfoils will be discussed, this presentation will focus on the evolution of planar and non-planar wing planforms. This evolution has been mostly dictated by the ever-changing mission of the sailplane along with the materials that were available at the time. What the future holds is, of course, uncertain, but the recent development of ultra-light weight structures and the exploitation of so-called microlift suggest that the prospects for the future evolution of sailplane wing design will be just as interesting as has been the past.