

# AIRCRAFT WINGS: PRESENT AND FUTURE

C. NICULIȚĂ<sup>1</sup>   A. BENCZE<sup>1</sup>   I. CÂNDEA<sup>1</sup>

**Abstract:** *This paper aims to present the actual stage in the development of aircraft wings design and technologies. Various wings shapes and parameters are presented in order to understand the aero-dynamical and technological requirements for the construction of a wing. The internal structure of a wing is also presented. Firstly, an updated list of variable geometry aircrafts types and the research in this field is provided. Then, based on the available technologies, the critical research directions for adaptive and morphing wings, as well as for smart materials are presented.*

**Key words:** *aircraft, wing, structure, adaptive wing, morphing.*

---

<sup>1</sup> Dept. of Mechanics, Transilvania University of Braşov.