

# Call for Papers

## Special Issue on Aircraft Design

**Aircraft design in a practical sense** is to supply the geometrical description of the aircraft. The output is a three-view drawing and a list of aircraft parameters. In case of civil aircraft, a fuselage cross-section and a cabin layout are provided in addition. **Aircraft design in an abstract sense** is to determine the design parameters so as to ensure that the requirements and constraints are met and the design objectives are optimized. Fundamental **requirements** for civil aviation are payload and range. Many **constraints** come from certification rules demanding safety. **Objectives** are often of financial nature like lowest operating costs. Aircraft design always strives for the **best compromise** among conflicting issues. Frequently expert knowledge is needed more than computing power. **Design synthesis** of an aircraft goes from conceptual design to detailed design. Typical is work with statistics, application of inverse methods, and use of optimization algorithms. Proposed designs are analyzed with respect to aerodynamics (drag), structure (mass), performance, stability & control, and aeroelastics – just to name a few. **Modern aircraft** are a complex, computer controlled combination of its structure, engines, and systems. Passengers demand high comfort at low fares, society **demand**s environmentally friendly aircraft, while investors demand a profitable asset.

Authors are invited to submit manuscripts to the field of aircraft design. In addition to original research articles the full range of article types is considered. Potential **topics** include, but are not limited to:

- Industrial visions and case studies
- Innovative aircraft concepts
- Reference aircraft and data sets
- Methodologies and tools for aircraft design and optimization

Authors should read the journal's [Authors' Guidelines](#) carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's [Paper Submission System](#). Manuscript preparation using initially a simple layout based on minimum rules is possible.

Please kindly notice to write "Special Issue" under your title of your manuscript and to select the Paper Field "Special Issue 01 – Aircraft Design" during your submission. In addition please specify the manuscripts contribution related to [AAST's Classification for Aerospace](#): LIFE CYCLE, USAGE, AERONAUTICS: Aircraft, Aerospace SCIENCES, and your PERSPECTIVE.

The **timetable** for this Special Issue is:

Submission Deadline	31 May 2016
Publication Date	30 June 2016

Manuscripts arriving after the submission deadline will be considered for the regular issue in 2016.

For further questions or inquiries please contact the Editorial Assistant at [aast@scirp.org](mailto:aast@scirp.org).

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