Special Issue

Formation Flight of Fixed-Wing Aircraft

Message from the Guest Editor

Over the last few years, the massive diffusion of unmanned aerial vehicles (UAV) has fostered research in the areas of control and path planning, especially with the application of this technology to multi-rotor platforms; coordinated flight for swarms of multi-copters has also been investigated. Despite this, formation flight in association with fixed-wing aircraft has received less attention. The present Special Issue is dedicated to the broad and open topic of fixed-wing swarms, with at least four major focal points:

- Dynamics and simulation of the swarm;
- Mission planning, path planning and guidance;
- Intra-formation logics, including in terminal maneuvers (take-off, landing), collision/threat avoidance maneuvers, as well as flying rendezvous and split-up procedures;
- Swarm operations, including application scenarios, airspace integration issues, mission profitability studies, and possibly including results of practical testing.

Quality contributions in these and related fields are welcome in order to gather a significant body of knowledge in this growing field.

Guest Editor

Prof. Dr. Carlo E. D. Riboldi

Department of Aerospace Science and Technology, Politecnico di Milano, via La Masa 34, 20156 Milano, Italy

Deadline for manuscript submissions

30 May 2026

Aerospace

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.0

mdpi.com/si/219583

Aerospace
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
aerospace@mdpi.com

mdpi.com/journal/aerospace

Aerospace

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.0

mdpi.com/journal/aerospace

MDPI

About the Journal

Message from the Editor-in-Chief

You are welcome to contribute a research article or a comprehensive review for consideration and publication in *Aerospace* (ISSN 2226-4310), an on-line, open access journal.
Aerospace adheres to rigorous peer-review as well as editorial processes and publishes high quality manuscripts that address both the fundamentals and applications of aeronautics and astronautics. Our goal is to enable rapid dissemination of high impact works to the scientific community.

Editor-in-Chief

Prof. Dr. Konstantinos Kontis
School of Engineering, University of Glasgow, James Watt Building South, University Avenue, Glasgow G12 8QQ, Scotland, UK

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Aerospace) / CiteScore - Q2 (Aerospace Engineering)