

# Special Issue

## Propulsion/Airframe Integration

### Message from the Guest Editor

Advanced aircraft concepts are increasingly reliant on closer coupling of propulsion systems with airframe aerodynamics, or propulsion/airframe integration (PAI), for optimal performance. For instance, several advanced concepts employ fuselage boundary layer ingestion by turbofan engines to achieve a reduction in mission fuel burn. These benefits occur at the system level, and oftentimes traditional measures of sub-system efficiency, such as thrust-to-weight ratio, lift-to-drag ratio, and propulsion efficiency, are obscured by the integration since sub-system and system characteristics are inseparable. In this issue, manuscripts are sought that report new research on:

- optimized airframe concepts with highly integrated propulsion systems
- systems performance analyses for integrated propulsion systems
- turbomachinery design, aerodynamic response, and aeromechanics for non-uniform inlet flow
- aerodynamics of integrated inlets and exhausts
- aeroacoustics of integrated propulsion systems

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### Guest Editor

Assoc. Prof. K. Todd Lowe

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### Deadline for manuscript submissions

closed (10 December 2017)



## Aerospace

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*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.

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### Editor-in-Chief

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