



Identifiant de la contribution : 267

Type : non spécifié

## JISFA1#5 - Noise of realistic slats with tracks

*mardi 11 juillet 2023 12:00 (20)*

Aircraft noise needs to be mitigated to be compliant with certification requirements and operational restrictions imposed by airports. Aircraft noise comprises engine noise and airframe noise, which itself consists mainly of landing gear noise, slat noise and flap noise. The presentation is focused on noise produced by slats, which significantly contribute to aircraft noise at approach.

Recent works have shown the importance of slat tracks which are structural supports connecting the slat to the wing. These devices are indeed located in a region of high-speed cross-flow generating self-noise and wakes, which impact the slat cove and the wing leading edge causing additional noise sources.

The solutions to reduce slat track noise aim to improve the aerodynamic shape of the track with add-on fairings and to reduce the impact of the wakes on the slat cove.

Results from numerical simulations and from experiments will be shown to illustrate the presentation.

**Presenter(s) :** FLEURY VINCENT

**Classification par session :** JISFA 1 / Aircraft Exterior Noise