

# New Partnership for UAV Research Centre

Delair-Tech and ISAE-SUPAERO (Institut Supérieur de l'Aéronautique et de l'Espace) have announced their partnership for the formation of MIDDLELAB, a joint research centre aimed at bringing together the best of both organisations to pioneer and implement new technologies like fuel cells and solar cells to enhance the endurance of small UAVs. The new laboratory will be partially funded by the Agence Nationale de la Recherche (ANR).

Michael de Lagarde, CEO at [Delair-Tech](#), said ISAE-SUPAERO is home to some of the great minds in aerospace and is an important training and testing ground for technological breakthroughs in all formats. There already is a rich history of collaboration between ISAE-SUPAERO and Delair-Tech, so the company is well-positioned for what comes next, he added.

MIDDLELAB will foster a common passion shared by Delair-Tech and ISAE-SUPAERO for pushing the limits of long endurance mini-UAVs, said Olivier Lesbre, head of ISAE-SUPAERO. Techniques developed in the MIDDLELAB laboratories will keep ISAE-SUPAERO research teams at the leading edge of excellence and contribute to further increase the performance of Delair-Tech mini-UAVs, Lesbre continued.

## Flight performance

MIDDLELAB is a Research Laboratory under the scientific supervision of Prof Jean-Marc Moschetta which formalises the long standing partnership between ISAE and Delair-Tech. Joint research between the companies will consist of studies for optimising aerodynamic design using wind tunnels, advanced chain optimisation for propulsion systems (batteries, controllers, motors, propellers), exploitation of the aircraft's natural environmental flight conditions (wind currents), onboard solar cell energy use, and integrating fuel cell technology into Delair-Tech's small UAV platforms like the [DT-18](#) and [DT-26](#). The main objective of the joint laboratory is twofold: to improve existing performance vectors and to develop those of tomorrow from the perspective of energy conservation and high permanence of flight.