

# Our startups in aerospace domain

#### **ISAE-SUPAERO**

aims to develop the entrepreneurial spirit and skills of students and staff, and to encourage the creation of businesses by members of the Institute's community, in particular deep-tech startups in the aeronautics, space and defense sector.

## Start-ups hosted in Innovspace, our incubator and fablab

#### **Alpha Impulsion**

Alpha Impulsion is developing a breakthrough propulsion technology that has the potential to significantly reduce launch costs and space debris.



**ELDA** 

HA IMPULSION

#### **DYCSYT**

DYCSYT (DYnamics and Control of SYsTems) is specialized in modeling and robust control, in particular for flexible space systems.

#### **ELDA Technology**



#### **EMBRYA**



EMBRYA creates innovative Artificial Intelligence/ Machine Learning accelerators delivering increased performance and flexibility and reduced Swap for intelligent applications on embedded systems.

#### The Spaceflight Institute



The Spaceflight Institute is the world's first certified astronaut training program. Dedicated to commercial space missions and space emergency management, it offers immersive preparation through an astronaut boot camp.

#### **Tacita Dynamics**

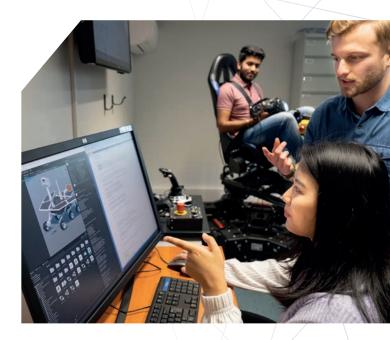
TACITA Dynamics offers unique solutions implementing an innovative vibration damping strategy called "Energy Pumping". This new type of absorber, which focuses on exploiting non-linear dynamic phenomena, opens up new possibilities for reducing vibration and shock issues.

#### VIRAJ H2



Viraj H2 is developing a hybrid powertrain based on 3 axes:

- Use of a high-temperature fuel cell, rarely used and still little studied in aeronautics, but with great potential;
- Hybridization of this fuel cell with a turboprop to combine the advantages of both technologies;
- Recovering heat and steam from the fuel cell and injecting it into the turbine, to reduce NOx emissions and increase efficiency.



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# Start-ups created and developped in Toulouse by ISAE-SUPAERO's alumni

#### Ascendance Flight Technologies



Ascendance Flight Technologies develops an hybrid electric propulsion technology for sustainable aircraft.

## Beyond Aero



Beyond Aero develops the first electrical business aircraft propulsed with hydrogen, certifiable and profitable. Beyond Aero's teams have designed a cutting-edge hybrid propulsion system that seamlessly combines hydrogen tanks and batteries to power the rotating propeller.

#### Diodon Drone Technology



DIODON Drone Technology designs and manufactures all-terrain drones for use in difficult environments. For these missions, the company develops an unique inflatable structure that acts as a bumper and a buoy.

#### **EXOTRAIL**



Exotrail designs, develops, and operate mobility solutions for an agile space. Its aim is to allow small satellite to move in space in order to optimize their deployment, increase their performances and reduce space pollution. These mobility solutions range from highly flexible high-thrust propulsion systems for small satellites, mission simulation and operation software, and orbital transfer vehicles.

#### **HINFACT**



Hinfact builds the future of Aviation Training focusing on Course design and compliance, Instructor support, data analysis, training management with topics such as Eye Tracking, Gaze Tracking, Human-Computer Interaction, Human Factors, Human-Machine Interface, Safety, Pilot Training...

#### U-Space Nanosatellites



U-Space Nanosatellites designs and builds next-generation nanosatellites for constellation operators. This company develops a range of 3U, 6U, 12U, and 16U nanosatellite products that address the public and private constellation market.

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