

PROJECT

LightAir

Light weight airframe structures through combination with high performance materials

Funding: European (Horizon 2020)

Duration: Nov 2018 - Nov 2020

Status: Complete

Total project cost: €571,345

EU contribution: €499,465



Call for proposal: H2020-CS2-CFP07-2017-02

[CORDIS RCN : 218798](#)

Objectives:

A further step towards more light weight airframe parts is the combination of existing materials with new high-performance materials. This project aims at qualifying new high-performance materials for airframe structures following a building block approach. To do so, the three first levels of the building block approach will be covered, including coupons, elements and sub-structural details. State-of-the-art test will be introduced in the qualification test campaign that will provide useful material parameters for damage tolerance analysis.

Methodology:

The consortium is formed by experienced partners in composite material testing and design. All the coupons and parts will be manufactured by an experienced manufacturer equipped with the latest manufacturing technologies, with the most demanding quality certifications and currently qualified by Airbus and Airbus Helicopters.

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Other programmes: JTI-CS2-2017-CfP07-AIR-02-51 Light weight, certifiable airframe structures through combination with high performance materials

Lead Organisation:

Universitat De Girona

Address:

PLACA SANT DOMENEC 3
17004 GIRONA
Spain

Organisation Website:

<http://www.udg.es>

EU Contribution: €239,525

Partner Organisations:

Airborne Composites SL**Address:**

Pic de Peguera 15
17003 Girona
Spain

Organisation Website:

<http://www.airborne.com.es>

EU Contribution: €167,720

Ikerlan - Technological Research Centre**Address:**

Paseo J.M. Arizmendiarrieta 2
20500 MONDRAGON
Spain

Organisation Website:

<http://www.ikerlan.es>

EU Contribution: €92,220

Technologies:

Aircraft design and manufacturing
Blast-resistant lightweight materials and structural concepts

Development phase: Validation

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Other specified

Geo-spatial type: Other