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Aerospace & Aviation

## **Press Release**

## AERTEC Solutions develops a portable device that will revolutionise aircraft ground testing systems

- The Dongle AIM is a portable, wireless device that provides a much more costeffective solution for aeronautical manufacturing as well as MRO.
- This prototype, manufactured entirely in Andalusia, has been developed by AERTEC Solutions using proprietary technology, in collaboration with Airbus Defence and Space as part of the European Clean Sky 2 PASSARO project.

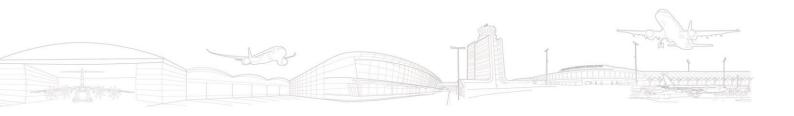
October 19, 2020 – The Dongle AIM is a portable, wireless device that makes it possible to perform aircraft ground testing remotely – without moving aircraft to a testing station. It offers a much more cost-effective solution by optimizing tasks related to aeronautical manufacturing and also aircraft maintenance (MRO), providing engineers with more agile way to perform preliminary diagnostic testing.

In the **aircraft industrial process**, ground tests are essential for verifying that all systems (fuel, hydraulics, pneumatics, oxygen, fire extinction, flight and mission control, etc.) function correctly:

- One component of ground testing systems is the Aircraft Interface Device (AID); this equipment stimulates aircraft systems and captures their response to process it in a computer-assisted test system.
- Current interface devices are made of multiple electronic cards integrated in a rack (a small cupboard that contains an array of computer, electronic or communication devices) that manages the exchange of signals between the ground testing system and the aircraft.
- This is an expensive, complex procedure requiring massive wiring to perform the tests. It also requires the physical presence of the aircraft at the testing station.

The Dongle AIM simplifies this procedure by offering the option to make a wireless connection between the testing system (AID) and the aircraft. This makes it possible to conduct aircraft ground testing remotely, thus eliminating the expense of transporting an aircraft to a stationary testing station.

Versatility is also another key feature of this device. Engineers can configure it to send and receive a wide variety of signals ranging from digital or analogue, to specific aircraft communication protocols (ARINC-429).







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The Dongle AIM prototype has already passed laboratory tests. At the end of this year, it will carry out the first tests on aircraft. From there, this device is on the fast track to revolutionising aircraft ground testing.

The cutting-edge Dongle AIM is 100% Andalusian, designed, developed and manufactured in the South of Spain. AERTEC Solutions is based in Malaga with offices and personnel around the world. The firm has over 10 years' experience in design, integration and maintenance of test benches (electrical, electronics, hydraulics, mechanics etc.) for different aircraft systems such as power plants, brake systems, communications, fuel, data buses, flight controls and more.

Dongle AIM has been developed in within the framework of European Clean Sky 2's Airframe Integrated Technology Demonstrator (Airframe ITD) programme. AERTEC Solutions is a Core Partner in Airframe ITD and collaborates with Airbus Defence and Space in European Clean Sky 2's PASSARO project.

## **AERTEC Solutions**

AERTEC Solutions is an international technology firm specialised in aeronautics and defence. The firm began in 1997 and works in the aeronautical industry, aerospace and defence systems and airports.

AERTEC Solutions is an Airbus Group Preferred Provider (Tier 1) in engineering manufacturing services and project management of civil and military aviation programmes. The firm is a participant in the major world aeronautical programmes such as the A350XWB, the A400M, A320 and A330MRTT, among others. AERTEC Solutions engineers design aerospace systems for aircraft, unmanned air vehicles for both civil and military purposes, and precision guidance systems for Defence. The TARSIS 75 and TARSIS 25 are light, tactical RPAS designed by AERTEC with proprietary technology for Security and Defence as well as civil use.

AERTEC Solutions employs more than 600 aeronautical experts and has offices in Spain, the United Kingdom, Germany, Colombia and United Arab Emirates.

For more information:

**AERTEC Solutions Press Office:** 

Celia Ruiz

T. (+34) 954 62 27 27 M. (+34) 654 74 64 73

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