



## 0861ED4 ENHANCED ICING PERFORMANCE ANGLE OF ATTACK

# HIGH ACCURACY DURING EXTREME ICING

## Qualified to FAA/EASA Appendix D/P

The Collins model 0861ED4 Enhanced Icing Performance Angle of Attack (AOA) Sensor is the first of its kind that is qualified to FAA/EASA Appendix D/P ice crystal icing requirements on Airbus A320/A330 series aircraft.

With over 60 years of air data experience and innovation, Collins Aerospace is at the forefront of air data technology – researching, designing, manufacturing, qualifying and supporting custom solutions.

The robust design of our AOA sensors relays vital information for aircraft flight control by providing highly accurate AOA information throughout the flight envelope, even in extreme icing conditions. Our AOA sensors have demonstrated success around the world on most commercial transport aircraft in operation.

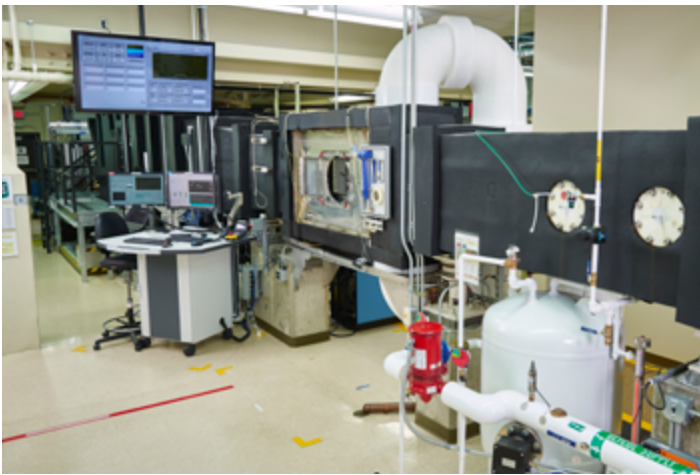
### KEY FEATURES AND BENEFITS

- Robust design with industry-leading icing performance in severe icing conditions, meeting FAA/EASA Appendix D/P requirements
- Patent-pending, environmentally sealed moisture management features for improved reliability
- Self-regulating, solid-state vane and case heaters with MTBF greater than 1 million hours (established via field data)
- Easy installation and maintenance
- Form/fit/function (F/F/F) replacement for Thales model C16291AB (intermixable/interchangeable) on recent production aircraft
- F/F/F replacement on older aircraft if applied with a Service Bulletin
- Direct-drive, dual-output resolver improves performance and reliability
- Active heater monitoring
- Integrated cover plate eases installation
- New low-drag swept vane design with improved accuracy and sensitivity
- Rotating surfaces actively controlled above freezing

## STATE-OF-THE-ART TESTING CAPABILITIES

Collins Aerospace has one of the most capable icing wind tunnels in the world. Aerodynamic and icing testing is essential to analyze the effectiveness of air data products. This on-site icing wind tunnel enables us to meet stringent icing requirements for air data probes set forth by the world's aviation regulatory agencies.

The icing wind tunnel offers significantly increased capabilities, such as colder temperatures and higher altitudes, and can produce both solid ice particles and supercooled liquid water droplets in high concentrations. Extensive wind-tunnel testing enables us to optimize the design for performance throughout the flight envelope and environmental conditions experienced in flight.



Our facility includes one of the most capable icing wind tunnels in the world – blasting supercooled water or ice particles at Mach 0.9 and providing temperatures to  $-90^{\circ}\text{F}$  ( $-67^{\circ}\text{C}$ ) and altitudes to 50,000 feet (15,420 meters).

## CUSTOMIZED DESIGN

To ensure your AOA sensor delivers precisely the performance you need, we can customize its design. We'll take in account the local airflow conditions created by the unique shape of your aircraft model and the flight envelope it is designed to meet.

Our aerodynamic experts can also assist you with determining the optimal probe location on your aircraft.



Photo courtesy of Airbus

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