

## **Advent Aircraft Systems Earns STC for Breakthrough Anti-Skid Braking System for Beechcraft King Air 300-series turboprops**

Tulsa, OK, February 12, 2016...Advent Aircraft Systems, in collaboration with Beechcraft Corporation, a subsidiary of Textron Aviation Inc., a Textron Inc. (NYSE:TXT) company, has received FAA approval of its advanced-technology GPS/digital anti-skid braking system (Advent eABS™) for installation on Beechcraft King Air B300 series aircraft. This is the first time that a practical anti-skid system has been available for the King Air platform. The STC applies to Beechcraft King Air B300 series aircraft equipped with Rockwell Collins Pro Line GPS 4000S or Garmin G1000/430W/530W avionics.

The Advent eABS may be ordered through all Textron Aviation company-owned service centers as well as selected independent authorized King Air service facilities (see [www.aircraftsystems.aero/dealers](http://www.aircraftsystems.aero/dealers)). In anticipation of the STC and winter weather, Advent has produced a limited number of eABS units that are available for immediate shipment to service centers. Tom Grunbeck, Advent VP of Marketing and Sales, (203) 233-4262, said “We are well positioned to support the initial demand for this exciting product and look forward to assisting with customer inquiries and orders”.

The Advent eABS is a proven, lightweight, low-cost and easily-installed anti-skid braking system designed especially for turbine powered aircraft up to 20,000 lb. MTOW. The system has excellent braking performance and requires no change to existing braking system components. Installation requires minimal downtime, either as a stand-alone installation or during scheduled maintenance. The eABS was first certified on the Eclipse EA500/550 in December 2013, with over 110 ship sets delivered to Eclipse Aerospace to date.

The Advent eABS adds a new level of runway performance and dispatch reliability for King Air operators by providing better directional control, reduced tire wear and shortened stopping distances on dry runways or those contaminated with water, ice and snow. The Advent eABS will eliminate flat-spotted and blown tires during aggressive stopping and includes touchdown protection and a programmable low-speed cut-off. Improved tire wear and less risk of a flat-spotted or blown tire saves the operator money and the time and expense of an unplanned downtime.

To complete certification, a new King Air 350i and flight test support were provided by Beechcraft under a collaborative agreement with Advent. During functional testing typical of day to day operations, Beechcraft test pilots reported enhanced responsiveness and directional control in landing and accelerate/stop tests on both dry and wet runways with the eABS-equipped King Air 350i, to include a heavy weight landing on a dry runway that resulted in a reduction of about 400 feet in landing distance.

Ron Roberts, president of Advent Aircraft Systems, stated, “We have had a tremendous level of interest from operators and service centers in getting our eABS onto the King Air family of aircraft and the completion of FAA certification now enables us to address that interest.” Roberts added, “In addition to the B300 series, we intend to pursue approval for the King Air B200 series in the near future, giving even greater numbers of King Air owners the benefit of anti-skid braking.”

In addition to the B200 series, eABS certifications are in work for the Pilatus PC-12/12NG and Beechcraft Model 3000 (T-6B/C). Variations of the Advent eABS have also been selected for two foreign military trainers in development.

### POH Supplement Planned

The collaborative agreement with Beechcraft included company testing designed to explore, under a separate STC, a revision to the B300 Pilot Operating Handbook (POH) offering reduced landing distances and takeoff field length, which can in turn offer increased payload/range options. Current B300 landing and accelerate/stop distances were certified under FAA regulations which preclude any benefit from reverse thrust in the calculations. However, FAA regulations do allow the use of anti-skid brakes in certifying landing and accelerate/stop performance.

Compared to existing POH distances, data gathered during company performance testing demonstrated a reduction in B300 landing distances and takeoff field lengths of approximately 5% and 10% respectively with the Advent eABS installed and without the use of reverse thrust in dry runway conditions. Once approved by the FAA, the new shorter distances could be of significance to B300 FAR Part 135 and Part 91 subpart K operators in planning for destination or departure airports. For landing, these operators must apply a factor of 1.67 to the published POH dry runway landing distances when selecting a destination airport. In wet or contaminated runway conditions, these same operators must apply an additional factor of 1.15 to the computed dry runway distance and the required effective runway length becomes even greater. Reduced takeoff field length can offer range/payload benefit for a given runway length or allow shorter field lengths for a given aircraft weight.

For both Part 91 and Part 135 operators, a Single Engine Inoperative landing increases initial POH calculated dry landing distances by about 20% before applying any other factors. Having anti-skid braking available in such a situation could be important since use of reverse thrust may not be advisable.

### **About Advent Aircraft Systems**

Advent Aircraft Systems designs, analyzes, manufactures, tests, certifies and supports proprietary components and systems for air vehicles. The company capabilities include hydraulic, pneumatic, electromechanical, environmental control, aircraft sensor, water and oxygen components and systems.

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