

FAA AWARDS THE FIRST AND ONLY STC FOR A KING AIR THRUSTSENSE® AUTOTHROTTLE

News / Business aviation, Manufacturer



The first and only Federal Aviation Administration (FAA) Supplemental Type Certification (STC) received by Innovative Solutions & Support for its patented ThrustSense® Autothrottle for retrofit in the King Air. ThrustSense, which provides FADEC like engine protection, is a full regime autothrottle, from takeoff to landing phases of flight, including go-around, that allows the pilot to automatically control the power setting of the engine. ThrustSense computes and controls appropriate power levels reducing pilot workload providing a new level of convenience and safety for the King Air

ThrustSense computes thrust, holds selected speed/torque, and implements appropriate limit protection. When engaged by the pilot, the autothrottle system adjusts the throttles automatically to achieve and hold the selected airspeed guarded by a torque/temperature limit mode. Protection modes will automatically activate, regardless of autopilot engagement state in an attempt to keep airspeed, torque and temperature from exceeding pre-defined targets.

The IS&S ThrustSense Autothrottle ensures stabilized approaches by controlling speeds in the

descent. During high pilot workload the autothrottle prevents the airplane from getting dangerously slow or fast and protects against overtorque and overtemp enhancing the safety and capability of the King Air.

Control of the revolutionary autothrottle is housed in an easy to install Autothrottle Control Panel (ATCP) that provides autothrottle control interface. The optimized design for retrofit allows for no structural modifications to the existing throttle quadrant and can be installed in four days.

This year IS&S will offer a certified software upgrade for King Air Mitigation. ThrustSense will continually monitor multiple engine parameters and will detect the loss of an engine then computes the amount of rudder authority loss due to the reduction of airflow over the rudder. It uses this to calculate the reduction in thrust from the remaining engine to prevent hazardous yaw. Real-time monitoring of YAW provides additional safety in engine-out conditions.

ThrustSense is also the first and only certified autothrottle for the PC-12 Platform and is offered as a standalone installation integrated with the Company's Integrated Stand by Unit (ISU) or with its PC-12 NexGen Flight Deck.

07 MAY 2019

ARTICLE LINK:

<https://virginia.50skyshades.com/news/manufacturer/faa-awards-the-first-and-only-stc-for-a-king-air-thrustsense-autothrottle>