



EDITORS' CHOICE AWARDS 2021

WORKING

TOGETHER

TO DRIVE

INNOVATION

FORWARD

Collaboration. Maybe the term gets thrown around enough to wear thin, but our best efforts rarely derive from flying solo. Even Chuck Yeager would remind you: He was not alone in the cockpit of *Glamorous Glennis*, in any true sense.

During a year marked by lives upended, working together saw us through to 2021. Efforts began long before 2020 in order to achieve the goals met by the teams that we highlight in our Editors' Choice Awards this year. To manage workload and increase safety, to return a US crew to space, and to land a light airplane autonomously—all of these things took collaborative effort, and that's why we've called them out for our recognition.

One of these teams will be selected for our highest award, the *Flying* Innovation Award, but for now, we will share with you the accomplishments that have brought them this far.



Innovative Solutions & Support + Pilatus + Textron Aviation / ThrustSense Autothrottle

Behind the scenes, a big stride forward in workload management has taken place, particularly for single-pilot operations in turboprop aircraft. Autothrottle systems have long been standard equipment on turbine aircraft, but only in the past three years have they inserted themselves onto the flight decks of GA airplanes in swelling numbers. The ThrustSense autothrottle system from Innovative Solutions & Support entered the single-engine-turboprop market with its first installation on the Pilatus PC-12 in 2017—IS&S founder Geoffrey Hedrick apparently wanted the system for his personal airplane—building on the range of products it has developed for commercial and military aircraft, as well as the Eclipse 500/550, since its beginnings in 1988.

A step up from modes—including electronic stability and protection and flight-level change—now found across the board in Garmin flight decks, the ThrustSense makes for a natural evolution into complete envelope protection for singles and twins—with one crux being the development of the single-power lever for the Pratt & Whitney PT6A-series powerplants. In May 2019, IS&S announced certification as a supplemental type certificate for Beechcraft King Airs, followed by the STC for the King Air 300 series with Pro Line Fusion avionics and the new King Air 360 launched by Textron Aviation in August 2020. While the advent of the autothrottle on single-engine turboprops offers a remarkable improvement in workload management, the reduction in cockpit theatrics following a loss of thrust on takeoff in the powerful turboprop twin cannot be undersold.

That's a lot of peace of mind when flying single pilot. Joining forces with Pilatus and Textron Aviation on this development process, IS&S has moved the needle significantly on safety.

Pilatus Aircraft