

Editorial

Thank you for your interest in Volume 9, Issue 2 of *Journal of Aviation Technology and Engineering* (JATE). The year 2020 has certainly been one of great challenges for the aviation industry. Passenger traffic has been reduced, operating at a fraction of capacity, resulting in layoffs, loss of profits, and route restructuring. At the same time, the industry is also being called to action, finding ways to safely preserve and transport COVID-19 vaccines. The global response to this pandemic will certainly be a topic of future research studies.

This second issue of Volume 9 of JATE contains five articles that have undergone a double-blind peer review process and have been selected for publication.

Leading off the issue is *Modeling Land and Hold Short Operations: Balancing Safety and Arrival Rate* by a duo of researchers from Embry-Riddle Aeronautical University. This article takes into consideration the impact of the COVID-19 pandemic, while noting the predicted recovery of the industry. The anticipated future growth of the industry and the strain on the current system are discussed with emphasis on impacts on runway safety.

Next, Miazor Fidelis Ekom of Changchun University of Science and Technology explores the use of composite materials as an alternative to conventional aluminum alloys in aircraft. Here the Beechcraft King Air 250 is studied utilizing CATIA Version 5 software. Safety, financial issues, and weight are among factors researched.

Human Factors Analysis and Classification System (HFACS) was utilized by Embry-Riddle researchers Steven Esser and Hans-Joachim K. Ruff-Stahl in examining German F-104 Starfighter accidents. After studying accidents involving this aircraft which took place from 1978 to 1986, it was concluded that the aircraft's engine contributed to more than half of the accidents studied.

Purdue University's John Mott, Chuyang Yang, and Darcy Bullock analyze the impact of ADS-B position data technology to calibrate signal strength received from Mode C transponders. To improve accuracy of operations counts, this research evaluates the impact of further calibration. Test results from aircraft transponder records over a 58-day period from Purdue University Airport and Terre Haute Regional Airport are presented.

Finally, a team of researchers from Florida Institute of Technology contribute their research results in *Airplane Pitch Response to Rapid Configuration Change: Flight Test and Safety Assessment*. In the absence of flight data recorders in general aviation aircraft, researchers are often left to speculate as to whether these accidents involved stalls due to uncommanded response after flap extension. In-flight data seem to support this. Recommendations to the FAA regarding maximum stick pitch and wheel forces are presented.

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