

Editorial

Thank you for accessing the first issue of Volume 4 of the *Journal of Aviation Technology and Engineering* (JATE). On behalf of the JATE Associate Editors and members of the Editorial Board, we are proud to report that our global readership continues to grow. In the past year, readers from across the world downloaded 18,116 full-text article impressions. This progress further validates the mission of JATE to promote bridging the fields of aviation technology, engineering, and human factors.

Volume 4, Issue 1 contains five scholarly research articles addressing timely topics spanning the role of technology in the mitigation of runway incursions, interface design, pilot instrument proficiency, airline fuel efficiency, and airport privatization.

This issue commences with “Validation of New Technology Using Legacy Metrics: Examination of SURF-IA Alerting for Runway Incursion Incidents” by Robert Joslin. The author draws from his multifaceted experience as the FAA’s chief scientific and technical advisor for Flight Deck Technology, skills as both a government and military test pilot, and expertise as an adjunct assistant professor for Embry-Riddle Aeronautical University in this study. His research uses expert raters and actual high-risk incidents with regard to the mitigation of hazardous incidents.

The impact of aviation technology is further explored in the article that follows by NASA’s Stephen M. Casner: “Increasing Participation in the Pilot Weather Reporting (PIREP) System Through User Interface Design.” Casner provides two alternative designs of a cockpit PIREP interface, which are a sharp contrast to the traditional submission of PIREPS. The research methodology utilized was a survey that evaluated two experimental weather reporting systems with regard to the likelihood of pilot use in order to submit PIREPS.

St. Louis University doctoral student William Jeffrey “Jeff” Edwards follows with a general aviation case study of a pilot who experienced a fatal accident while operating in instrument meteorological conditions. This qualitative research study observes factors related to pilot proficiency that can lead to a loss of control accident.

A team of researchers from Australia’s Swinburne University of Technology conducted a qualitative study that both calculated and compared airline fuel efficiencies through the use of publicly available data. The aim of this research was to establish a benchmark of fuel efficiency that can be utilized by the airlines.

The issue concludes with a study of operational and financial efficiency of airports through the utilization of a cross-regional analysis. A total factor productivity approach is used to measure efficiencies at select airports in the United States, United Kingdom, and Latin America. This research was conducted by Embry-Riddle Aeronautical University’s Bijan Vasigh, Transylvania University’s G. Rod Erfani, and Brian W. Sherman, a revenue accountant for a U.S. regional airline.

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Finally, we again would like to express our gratitude to the James and Sherry Raisbeck Foundation for their sponsorship of the *Journal of Aviation Technology and Engineering*. Thank you for your readership.

Best regards,

John H. Mott, Executive Editor

Mary M. Fink, Managing Editor

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