Editorial

Welcome to the second issue of Volume 4 of the Journal of Aviation Technology and Engineering (JATE). We are pleased to report that the global impact of the JATE continues to grow. Readership continues to expand; over the past year, 19,023 full-text article impressions were downloaded from locations spanning the globe. This is evidenced via a real-time readership map, which is available on our website: http://docs.lib.purdue.edu/jate/readership_map.html#content.

Volume 4, Issue 2 contains five peer-reviewed manuscripts reflecting a variety of disciplines within the fields of aviation technology and engineering. Articles span topics from aircraft stability and control to human factors to nanotechnology.

Leading off this issue is a study of the phenomenon of overbanking tendency for rigid-body, fixed wing aircraft. Author Nihad E. Daidzic is president of AAR Aerospace Consulting, LLC, and is a professor of aviation, adjunct professor of mechanical engineering, and a research faculty member at the University of Minnesota. Daidzic draws his expertise from his experience in academia, as well as his previous work as a researcher at the National Center for Microgravity Research and the NASA Glenn Research Center.

Next is a study that investigated potential differences between two pilot groups: a sample of pilots who had not been involved in an accident and a sample of pilots from the NTSB accident database. Mann-Whitney U tests found significant differences in age and flight time. Logistic regression was also conducted to provide a better understanding of how the variables may be categorized. Author David C. Ison is research chair of the College of Aeronautics and an assistant professor of aeronautics at Embry-Riddle Aeronautical University.

Aviation safety is further explored in “The Effects of Aircraft Certification Rules on General Aviation Accidents.” This study, by Assistant Professor Carolina L. Anderson of Embry-Riddle Aeronautical University, analyzed the frequency of general aviation accidents and rates on the basis of aircraft certification to determine whether or not certification rules played a role. Chi-square and ANCOVA tests were conducted as well as text mining analysis.

One dozen researchers from Lewis University collaborated on “Measuring the Effectiveness of Photoresponsive Nanocomposite Coatings on Aircraft Windshields to Mitigate Laser Intensity.” Data measured reduction in laser intensity when transparent laser attenuating films were applied to aircraft windscreens.

Finally, a team of four researchers from the Florida Institute of Technology created a Trustworthiness of Commercial Airline Pilots Scale to analyze American participants. This research stemmed from a previous study of pilots from India. The methodology of this study includes factor analysis using principle components and a varimax rotation, Cronbach’s Alpha and Guttman split-half tests. The purpose of the scale is to create an improved understanding of a passenger’s mental model of both trust and trustworthiness.

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On behalf of the JATE Associate Editors and members of the Editorial Board, we thank you for your readership.

Best regards,

John H. Mott, Executive Editor
Mary M. Fink, Managing Editor

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