Editorial

On behalf of the editors, welcome to Volume 3, Issue 1 of the Journal of Aviation Technology and Engineering (JATE). In concert with the multidisciplinary mission of the JATE, this compilation of four topically diverse articles is comprised of both qualitative and quantitative research from experts with backgrounds and experience ranging from academia to military to industry.

This issue commences with “A Methodology for Designing Airports for Enhanced Security Using Simulation.” This article pairs University of Houston Associate Professor Dr. Christopher A. Chung with Lean Six Sigma Management Consultant Dr. Oliver Nwofia in a joint effort to develop an innovative airport terminal design methodology. This research, conducted in direct response to increased airport congestion coupled with security disruptions, consists of a simulation analysis that offers options for enhanced airport security performance.

Next, a team of 13 faculty and graduate student researchers from Lewis University, led by Associate Professor Randal J. DeMik, investigates the escalation of laser attacks on those operating in the flight deck. “Measuring Intensity of Laser Light Penetrating Flight Decks in Laser Illuminations” documents the intensity levels of lasers through cockpit windshields at a variety of distances. Effects ranging from eye damage to visual distractions are categorized and reported in this study.

Related to the theme of safety, Purdue University Associate Professor Dr. Richard O. Fanjoy and doctoral student Julius C. Keller address concerns with instrument approach phase accidents in the general aviation environment. Their exploratory study analyzes a decade of general aviation instrument approach phase accident data. Focus is given to the role of instrument proficiency checks. Issues involved in instrument training as well as recommendations for future study also are identified and offered.

Finally, “Flight Energy Management Training: Promoting Safety and Efficiency” examines the depth of instruction of such skills in civilian pilot training. Dr. Juan R. Merkt, director of the Davis Aviation Center at Jacksonville University, emphasizes the need for improved energy management training while also providing the framework for curriculum development. Characteristics of an effective training program also are provided.

It is our genuine hope that you enjoy both the content and structure provided by this issue of JATE. You are invited to receive custom e-mail notices pertaining to the journal by visiting http://docs.lib.purdue.edu/jate/. Additionally, JATE continuously is seeking aviation professionals to serve as reviewers. Please contact us if you wish to apply. Your feedback is always welcome and encouraged.

We would also like to acknowledge the James and Sherry Raisbeck Foundation for their sustained support 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
Journal of Aviation Technology and Engineering

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