Enhancing Crew Resource Management Training in Collegiate Aviation Programs through Jet Simulator Integration

Mr. Chadwin T. Kendall
Metropolitan State University of Denver

Dr. R. Rhett C. Yates
Jacksonville University

This paper explores the integration of a jet simulator into a Crew Resource Management (CRM) course within a collegiate aviation program curriculum. With the increasing complexity of modern aviation operations, practical CRM skills are crucial for ensuring safe and efficient flight operations. Historically, collegiate aviation flight training in the United States has placed heavy pedagogical emphasis on single-pilot flight training and operations with limited CRM education and application. Throughout the past decade, airlines have encouraged more airline-style training applications, such as systems knowledge and CRM, to be taught and applied at the collegiate level. Implementing a jet simulator into a CRM course in collegiate aviation allows theory and fundamentals to be understood and applied. Normal and abnormal operations, crew operational control, situational awareness, automation usage, resource availability, and other concepts can be integrated into a curriculum that enhances a student's understanding of CRM. This paper discusses the history of CRM in collegiate aviation and the integration of a jet simulator into the collegiate aviation curriculum. It proposes recommendations for the broader implementation of jet simulator integration in CRM courses to better prepare future aviation professionals for the challenges of dynamic crew environments.

Keywords: Crew Resource Management, Collegiate Aviation, Flight Training, Curriculum, Simulation