

Research Proposal

Title – Transforming Safety in General Aviation Instructional Flying: Analysis of Fatal Accidents from 2010-2016

Program of Study – Aeronautics

Presentation Type – PowerPoint

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Category – Applied

Abstract: Airline accident statistics and accident rates have been studied extensively by the aviation safety industry. However, the body of knowledge lacks regarding general aviation instructional accident rates. The central aim of this study is to quantify the accident rate for fatal general aviation instructional accidents from January 1st, 2010 through January 1st, 2016. Further, the study will set the stage for a cost/benefit analysis to evaluate implemented safety mitigations. The National Transportation Safety Board's (NTSB) database will be analyzed to review accident data for all instructional accidents with fatalities during certificated single engine and piston light twin aircraft operations. The Cast/ICAO Common Taxonomy Team (CICCT) Aviation Occurrence Categories framework document will be used to categorize the accidents. After final data categorization has been complete, and trends in the data have been observed, the FAA general aviation survey will be used to determine an applicable accident rate, which will be viewed in a Department of Transportation (DOT) methodological lens to conduct a cost/benefit

analysis for evaluation of the various safety mitigations. The final results of this study will be shared to advance safety throughout collegiate aviation.