Exploring Pilot Reliability Certification Program and Changing Attitudes on the Reduction of
Errors in FAR 91 and 135 Pilots

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ABSTRACT
The greatest opportunity for further improving aviation safety is to focus on reducing human errors in the cockpit. The purpose of this research was to evaluate if there was knowledge gain and difference in attitudes towards reducing human error in the cockpit after the implementation of the Pilot Reliability Certification (PRC) program at FAR 135 air carriers and FAR 91 corporate flight departments. The PRC program is a human factors training curriculum focused on personal vulnerabilities to human error and countermeasures in support of aviation safety. Three levels of measurement were used; reactions to the training, a knowledge test, and a modified version of the Cockpit Management Attitudes Questionnaire to measure attitude change. A mixed-method approach was used with quantitative data to measure knowledge gain and attitude change along with qualitative data to explore pilot reactions to the training. A quasi-experimental group (n = 41) who completed the two-day PRC course was compared to a control group (n = 62). The control group did not show a significant improvement in attitude related to CRM skills or the PRC objectives. The quasi-experimental group had a significant improvement in attitudes and knowledge gain. Reaction to the training was also positive with pilots citing the largest benefit was a strengthened human factors knowledge base. They felt the training differed from previous human factors training by being more detailed and in-depth. Pilots cited they would be more conscious of evaluating themselves, their flying partners and their attitude after taking the course.