



Air Carrier Enhanced – Part 121 Pilot Training Program (ACE)

Introduction

The ACE program was designed as an alternative means to identify, train, qualify, and monitor new airline pilots. The program is an airline-delivered alternative pathway that contains substantial enhancements reaching a higher level of safety than the current flight training pathways. It provides a comprehensive, structured and disciplined training system with scenario-based and qualitative training enhancements, which offer a meaningful and quantifiable measure of pilot proficiency. The ACE program requires more training than current regulations and will enhance safety for entry level airline pilots more than a metric that focuses solely on flight hours.

The ACE program functions as a pathway to a Restricted ATP (R-ATP) that goes further than similar, currently-approved R-ATP pathways by retaining pilots in the structured program until all restrictions are lifted and a pilot enters the airline's recurrent training program with an unrestricted ATP. Like other R-ATP programs, it is proposed to function within the current legal and regulatory framework as an academic flight training course eligible for FAA approval and credit toward the flight time experience of an unrestricted ATP. As with similar alternative pathways in place today, and in accordance with the FOQ final rule and PL111-216, the program must satisfy the FAA's determination that the program "will enhance safety more than requiring the pilot to fully comply with the flight hours requirement" associated with an unrestricted ATP.

Screening, Testing, and Selection

Training experts tailored the screening and selection process, as well as the training course, relying on expertise gained from years of hiring and training thousands of entry level airline pilots. As a part of the screening and interview process, the ACE program requires testing of key aeronautical knowledge and a demonstration of instrument flying proficiency, which goes well beyond traditional human resources selection practices. Experience has shown that testing for essential knowledge and verifying instrument proficiency are strong indicators of a candidate's potential for success, yet current training regulations do not require these critical components. Applicants must meet established thresholds of performance during the screening and testing phase in order to participate and qualify for training under the ACE program.

Academics

The ACE program incorporates core academics and testing to ensure all candidates entering the program meet an established baseline of foundational aeronautical knowledge. The core academic courses are designed as building blocks so that candidates may only advance in their training by demonstrating mastery of the previous subjects.

The ACE program utilizes systems simulation during ground training to enhance learning. To facilitate the transition from ground training into the simulator, the program requires the use of FAA qualified flight training devices prior to commencing simulator training. The ACE program contains many of the best practices and their associated elements recommended by the FAA in safety, training, and informational alerts (SAFOs & InFOs). Course material will be updated as additional pertinent guidance is published. Human factors elements have been incorporated throughout the program, emphasizing the importance of non-technical skills. The entire program has been designed to move from simple to complex and ultimately to provide targeted training towards the operation of a specific aircraft type at the airline.

Aeronautical Flight Training and Proficiency

Approximately mid-way through flight training, the ACE program requires a proficiency assessment to verify that pilots have acquired the necessary knowledge and skills to that point and are prepared to proceed through the final stages of training. New elements have been added to include a required line familiarization program as well as increased operating experience requirements. In order to more closely track and monitor the proficiency of the new ATP pilots under this program, an increased frequency for recurrent training and evaluation has been established. Increased continuous monitoring and assessment of the pilots are a core function of the ACE program.

Instructors, Audit, Quality Assurance, and Mentorship

Additional requirements have been added for both ground and flight training instructors who deliver training under the ACE program. The program also contains substantial data collection requirements aimed at evaluating the effectiveness of the ACE program in addition to the success of the individual ACE pilots. Evaluation of pilot performance is to be measured against the larger (unrestricted) pilot group, to ensure continuous improvement. Quality assurance components have been built into the ACE program by requiring the airline's Safety Department to conduct audits of the program as part of its overall Safety Management System (SMS).

ACE pilots will be matched with trained mentors and will also receive feedback from each captain with whom they fly following each trip during their first year.

Summary

The ACE program enhancements are aimed at increasing the breadth and quality of the training provided to new airline pilots. This program will provide specific and comprehensive first officer training that will be safer than solely meeting current flight hour requirements. The aviation industry is continuously in pursuit of improved pilot training programs that are anchored by the competencies determined to improve proficiency, and the ACE program squarely delivers on that objective.