

Federal Aviation Administration (FAA)
Flight Standards Service
Air Carrier Training Aviation Rulemaking Committee (ACT ARC)

Recommendation 16-7: Petition ICAO to Review Aeronautical Experience Requirements for Airline Transport Pilot (ATP) Applicants

I. Submission

The recommendation below was submitted by the Education, Training and Experience Alternatives for an ATP Workgroup (ATP WG) for consideration by the ACT ARC Steering Committee at F2F-10. The ACT ARC Steering Committee adopted the recommendation with the consent of all members except the National Air Disaster Foundation (NADF). This recommendation is submitted to the Associate Administrator for Aviation Safety (AVS-1) as ACT ARC Recommendation 16-7.

II. Statement of the Issue

In accordance with ACT ARC Initiative #29, the ATP WG is developing recommendations for an alternative path to an ATP certificate with restricted privileges (Restricted ATP or R-ATP). The current paths to an R-ATP are outlined in Title 14 of the Code of Federal Regulations (14 CFR) 61.160 and prescribe the eligibility requirements for obtaining an ATP certificate with reduced aeronautical experience. For an R-ATP, the total time as a pilot and the minimum cross country time requirements are the only minimums that have been reduced in § 61.160 from the time requirements for an unrestricted ATP certificate in 14 CFR 61.159.

14 CFR 61.159(a)(6) permits a pilot seeking an ATP or R-ATP certificate to obtain not more than 100 hours of the total aeronautical experience required in a flight simulation training device (FSTD), provided the FSTD represents an airplane and the aeronautical experience was accomplished as part of a training course approved under 14 CFR part 121, 135, 141, or 142.¹

14 CFR 61.159(a)(6) is in conformance with International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARP). Annex 1 to the Convention on International Civil Aviation states, to the extent a licensing authority determines experience as a pilot under instruction in an FSTD is acceptable toward the total time required for an ATP certificate, a maximum of 100 hours so obtained may be applied.

The ATP WG envisions one such path to R-ATP certification will be an intensive, air carrier administered, Enhanced Qualification Program (EQP) integrating rigorous candidate assessment standards, academic coursework, and training in FSTDs as part of an approved training course.

Anecdotal evidence indicates that a pilot currently entering indoctrination training with an air carrier often has obtained 75 to 100 hours of flight instruction in FSTDs as part of a training course approved under part 121, 135, 141, or 142 in satisfying training and experience requirements for the FAA certificate(s) and rating(s) obtained. Given the amount of flight training expected to be administered in FSTDs under EQPs, by the time pilots complete EQP training, they will have exceeded 100 hours in FSTDs as part of approved training courses. Without an increase in allowable FSTD time to be credited towards the total time requirements, some of the valuable training time received will not count toward minimum certification requirements.

¹ 14 CFR 61.159(a)(6) applies to the total aeronautical experience required under § 61.159(a) (ATP) or § 61.160 (R-ATP). Presumably, if the FAA promulgates regulations creating air carrier EQP programs, it will incorporate them into § 61.160 or amend § 61.159(a) as necessary to permit pilots obtaining R-ATP certification through an EQP to obtain the specified number of hours in an FSTD.

For this reason, in support of the ATP WG recommendation to establish an alternative pathway to an R-ATP for pilots training under an EQP, the ATP WG is separately recommending that such pilots be permitted to apply up to 200 hours of aeronautical experience obtained in appropriate FSTDs toward the requirements for an R-ATP. (See ACT ARC Recommendation 16-8(j): Use of FSTDs to Acquire Aeronautical Experience Toward an R-ATP Certificate.) The rationale underlying this recommendation also supports an argument to increase the amount of FSTD time pilots may apply toward an unrestricted ATP certificate. Because the restriction contained in § 61.159(a)(6) is derived from an ICAO SARP, amending it will require either modification of the underlying SARP or FAA filing a difference from the SARPs.

III. Recommendation

The ACT ARC proposes the following recommendation for FAA consideration:

The ACT ARC recommends the FAA petition the International Civil Aviation Organization (ICAO) to amend Annex 1 to the Convention on International Civil Aviation to increase the number of hours of time obtained under instruction in an FSTD an applicant is permitted to apply toward the total time requirement for an ATP certificate from 100 hours to 200 hours, with the provision that any time in excess of 100 hours be obtained in an FSTD appropriately qualified for air carrier training, simulating a multi-engine, turbine powered airplane.

IV. Rationale

Flight simulators provide a safe flight training environment, which reduces the number of training accidents by allowing training for emergency situations (such as fire, total loss of thrust, and systems failures) that cannot be safely conducted in flight. Flight simulators allow pilots to hone skills in management of flight deck automation, which will be critical to operation in a NextGen environment, as well as to coordinate and smoothly transition between automation procedures and conventional stick and rudder skills. Flight simulators also permit the conduct of scenario based training involving factors such as crew resource management (CRM) in ways that would not be feasible in flight. In many cases, flight simulators have proven to provide more thorough training than can be accomplished in the aircraft.

The use of flight simulators and flight training devices in lieu of aircraft has resulted in a reduction in air traffic congestion, noise and carbon emissions, and training costs. The increased use of flight simulators is also consistent with the national policy for fuel conservation.

The FAA has determined that, if a student has prerequisite experience, a qualified flight simulator or flight training device used in an approved training program will provide for an effective transfer of skills to the actual aircraft. The FAA has accordingly recognized the value of flight simulation and has awarded credit for the completion of certain required training, testing, and checking by use of simulation. In 1992, the FAA promulgated a provision permitting pilots to apply up to 100 hours of aeronautical experience obtained in an airplane FSTD, as part of a training course approved under 14 CFR part 142, toward the requirements for an ATP certificate. In 2013, in conjunction with the promulgation of rules providing for the issuance of an R-ATP certificate, the FAA amended the provision to permit 100 hours of aeronautical experience obtained in an airplane FSTD, as part of a training course approved under 14 CFR part 121, 135, 141, or 142, toward the requirements for an unrestricted ATP certificate or R-ATP certificate.

Flight simulation technology has shown enormous advancement since 1992. The ever increasing sophistication of FSTDs, and the correspondingly increasing value of training received in them justifies increasing the 100 hour limitation prescribed by § 61.159(a)(6).

To ensure the quality of FSTD training applied toward the aeronautical experience requirements for an R-ATP certificate supports the recommended increase, the ATP WG has specified, in its recommendation, that only experience obtained in an FSTD appropriately qualified for air carrier training under 14 CFR Part 61, simulating a multi-engine, turbine powered airplane may be so applied. This precludes the use of devices such as Aviation Training Devices approved for use by the FAA under 14 CFR § 61.4(c) to obtain aeronautical experience required for an R-ATP certificate.

All ACT ARC member organizations concurred with this recommendation except NADF. The [NADF dissent](#) appears in its original form (as submitted to the ACT ARC), at the end of this document.

V. Background Information

This recommendation partially addresses the ATP WG Scope of Work and Initiative #29 assigned to the ATP WG.

ATP WG Terms of Reference Scope of Work:

1. Explore the creation of additional paths to fulfill the requirements for the aeronautical education, training and experience required for a US Airline Transport Pilot certificate with restricted privileges (R-ATP).
 - The ATP WG will focus exclusively on ATP certification requirements for Part 121 operations.
2. Determine the components of each additional path. The components may include: pre-enrollment selection criteria and processes; academic education, flight and simulator training and testing; aeronautical experience requirements; instructor/evaluator training and qualification; and data collection, analysis and reporting.
 - Proposed pathways must result in a level of competence, proficiency, and safety equal to or better than the existing regulations.

ACT ARC Initiative(s):

Initiative #29: Recommend additional Training Pathway(s) for ATP Certification.

ICAO Standards and Recommended Practices:

Annex 1, Chapter 2, Section 2.6.3.1.1.