

Air Carrier Training Aviation Rulemaking Committee (ACT ARC)

**ACT ARC Recommendation 21-1
Extended Applicability of Related Aircraft Terminology and Operational Use**

I. Submission

The recommendations below were submitted by the Flight Standardization Board Workgroup (FSB WG) for consideration by the Air Carrier Training Aviation Rulemaking Committee (ACT ARC) Steering Committee at its April 28, 2021, meeting. The ACT ARC Steering Committee adopted the recommendations, and they are submitted to the Federal Aviation Administration (FAA) as ACT ARC Recommendation 21-1.

II. Statement of the Issue

“Related aircraft” is a term used by Advisory Circular (AC) 120–53B, Change 1 (AC 120–53B) in several different contexts. As currently written in the AC, related aircraft can refer to different aircraft models with either the same or different type certificate (TC) that have been evaluated and determined to have commonality in operating and/or handling characteristics. The stated purpose of AC 120–53 is to, describe an “acceptable means . . . of compliance with applicable Title 14 of the Code of Federal Regulations (14 CFR) that provide for differences in training and qualification between aircraft with the same type certificate (TC).” This definition of related aircraft and its stated use is aircraft-centric and not limited to any operational part. However, the training and qualification credits stemming from related aircraft demonstrations between aircraft of differing type certificates are currently only provided under Title 14 Code of Federal Regulations (14 CFR) part 121. This has caused confusion as to whether it is acceptable under AC 120–53 for applicants to request evaluations of aircraft that might not operate under part 121. The ACT ARC believes it would be beneficial for the FAA to revise AC 120-53B to clearly state how related aircraft differences training applies to operational parts other than 14 CFR part 121 and also clarify that an applicant may request an FSB evaluation regardless of the part under which an aircraft may operate. The ACT ARC recognizes that some of the requested revisions to AC 120-53B may require regulatory changes.

III. Recommendations

For operators and training providers to use such documented training and qualification credits for all aircraft, including those aircraft having different type certificates (TC), the ACT ARC recommends the FAA consider the following actions:

1. Harmonize the designation of “related aircraft” and “related aircraft difference training” in 14 CFR parts 91 subpart K, 135, and 142 (for use of part 142 instructors, Training Center Examiners (TCEs) and Check Airmen) to be consistent with that of part 121, with the goal of allowing aircraft-centric determinations of commonalities and the resulting training credits across these operational parts.
2. Revise AC 120–53B, Change 1 to extend the scope of “related aircraft” and “related aircraft difference training” to 14 CFR parts 91 subpart K, 135, and 142 (for use of part 142 instructors, TCEs and Check Airmen).

3. Update all corresponding regulations and guidance in 14 CFR parts 91 subpart K, 135, and 142 (for use of part 142 instructors, TCEs and Check Airmen) to allow documented training and qualification credits between not only aircraft with the same TC, but also between aircraft of differing TCs. Such regulatory and guidance updates should include associated safety assurance system provisions as these may apply to differences training and related aircraft differences training.

To provide all original equipment manufacturer (OEM)/modifier applicants the benefits of a documented FAA evaluation of training and qualification credits for their aircraft, the ACT ARC recommends—

4. The FAA consider revising AC 120–53B, Change 1 to clarify that the original equipment manufacturer (OEM)/Applicant should have the latitude to request evaluation of any candidate aircraft it considers could be successfully demonstrated as related to a base aircraft under the evaluation process defined in AC 120–53B, Change 1. This determination should be independent of the operating rules under which the related aircraft are likely to be operated.

IV. Rationale and Discussion

This FAA’s definition of related aircraft is, “Any two or more aircraft of the same make with either the same or different TCs that have been demonstrated and determined by the Administrator to have commonality.”¹ This definition of related aircraft and its stated use is aircraft-centric and not limited to any operational part. However, the FAA has, in AC 120–53, only provided an acceptable means for providing related aircraft differences training and qualification between aircraft with different TCs operated under 14 CFR part 121.

As stated in the AC, the FAA’s purpose in developing AC 120–53 was to provide a process, “Intended to enhance safety by” (among other things) “encouraging aircraft manufacturers to design with the goal of developing common characteristics between related aircraft” and “Providing a recommended framework for application of suitable credits or constraints to better address new technology and future safety enhancements”.

The processes and evaluations of aircraft and the determinations of creditable differences between aircraft described in AC 120–53 are based on technical design criteria and operational use of the aircraft, and are not impacted by the regulatory part under which the aircraft is operated. Likewise, the differences evaluated between aircraft, whether between aircraft of the same or different TCs, are similar and the outcomes are unrelated to the TC.

V. Background Information

Recommendation 21-1 addresses Item 2 in the FSB WG Scope of Work and ACT ARC Initiative #43 (see below):

¹ FAA Order 8900.1, 3-1071 FF.

FSB WG Scope of Work:

2. Examine how the FAA could improve its current product (FSB Report) to meet the interests of all stakeholders.

ACT ARC Initiatives:

- Initiative #43: Examine how the FAA could improve its current Flight Standardization Board (FSB) Process and product (FSB Report) to meet the interests of all stakeholders.

References

- FAA Advisory Circular 120–53B, change 1, October 24, 2016.
- FAA Order 8900.1