

Air Carrier Training Aviation Rulemaking Committee (ACT ARC)

ACT ARC Recommendation 21-3
Additions and clarifications to the “Definitions” section of AC 120–53B, Change 1

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 21-3.

II. Statement of the Issue

In 2016, the FAA published Advisory Circular (AC) 120–53B, Change 1, “Guidance for Conducting and Use of Flight Standardization Board Evaluations” In developing this revision, the FAA created a formatting template for use by FAA Aircraft Evaluation Group (AEG) offices that has not been made publicly available.

The new format has several sectional headings that now appear in FSB Reports (FSBR). Most are of a general nature, while others speak to aspects of the FSB that are not clearly defined. As an example, although there is a section and basic definition for “operational suitability” in the template, it is not defined in AC 120–53B, Change 1. Similarly, a number of terms in use are not defined in the AC, while other terms that are defined would benefit from greater clarity or explanation.

This recommendation addresses what the FSB WG feels is a need for additional information or explanation of terms and listed definitions currently contained in AC 120–53B, Change 1. Such improvements to the “Definitions” section of the AC would better define and explain FAA guidance and the responsibilities of OEM applicants and industry stakeholders.

III. Recommendations

The ACT ARC recommends the FAA consider the following actions:

1. Include definitions of specific FSBR sections and terms not found elsewhere in AC 120–53B, Change 1 that address the purpose and scope of such sections. Examples of such terms are:
 - a. Operational Evaluation
 - b. Operational Suitability
 - c. Special Emphasis Items

Ensuring that the AC contains all needed definitions and including some explanation behind the purpose of these various sections would be helpful for industry stakeholders involved in creating, commenting on, and assisting in the development of FSBRs and their related evaluations.

The ACT ARC proposes the following additions and improvements to the current “Definitions” section of AC 120–53B, Change 1:

2. Operator Difference Requirements (ODR)

Add to the definition of “ODR” the following: “Applicant original equipment manufacturers (OEM), when possible, provide comprehensive ODRs based on FSB evaluations to operators of their aircraft. These ODRs are also used by operators to develop training programs and may be included in evaluation data as reference.”

Originally included as “example ODRs” in earlier revisions of AC 120-53, these documents were meant only to provide examples to both operators and FAA for subsequent submittal and approval of the FAA-approved airline ODR. Examples of operator ODRs have been removed in AC 120-53B, Change 1, along with any reference to OEM-produced ODRs that have been contained in some legacy FSBs. Although not “approved” by the FAA, these OEM-provided ODRs have become the technical basis for airline applications for FAA approval and are critical and necessary output of AEG evaluations.

3. Definition of currency

To provide a more complete understanding of how currency is addressed in FSB evaluations, the ACT ARC recommends that the use and evaluation of currency difference levels be reinstated throughout AC 120-53B, Change 1 and re-introduced into the Difference Tables.

As part of the changes incorporated in AC 120–53B, Change 1, references to currency difference levels have been removed. The AC still states, however, that the AEG is an, “Organization that sets training, checking, currency, type rating, Master Minimum Equipment List (MMEL), and maintenance standards for assigned certificated aircraft types”. Although a satisfactory definition of currency remains in the document, a full explanation of why currency levels have been removed would aid industry in understanding how currency is addressed within the framework of an FSB evaluation.

4. Definition of Type Rating

Add to the definition of “Type Rating” a definition of “Same Pilot Type Rating” as follows: “A same pilot type rating is assigned when no greater than level D training differences are determined between aircraft with the same aircraft Type Certificate (TC) (series).”

The definition of Type Rating in AC 120-53B includes a definition of “Common Type Rating”, which describes the relationship between type ratings for aircraft with different TCs. For similar reasons, the addition of a definition of “Same Type Rating” would clarify the full use of the term related aircraft and the differences between related aircraft with

different TCs (common type rating) and related aircraft of the same TC (same type rating).

5. Definition of Related Aircraft

There is confusion about the term related aircraft. It should be clarified that aircraft previously defined as “variants” are now included in the term “related” even though most are the “same” type rating. Such aircraft fall within the definition of “related” and the differences are trained and checked at the appropriate levels.

6. Definition of Difference Tables

The definition contained in AC 120–53B, Change 1 should be revised to make clear that the difference tables are determined by the FAA as a product of a successful FSB evaluation, and should emphasize that they are not ODR tables and that OEM-produced ODR tables are available (if produced by OEM).

7. Definition of Operational Suitability

The definition of operational suitability as stated in the FSB is “An AEG determination that an aircraft or system may be used in the National Airspace System (NAS) and meets the applicable operational regulations (e.g., Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 121, 133, 135).” This definition is general in nature and does not explain or address the processes and responsibilities of either the FAA or the applicant. Operational suitability of newly certified aircraft is, however, a core responsibility of the FAA AEG offices. A more defined and technical definition would offer the AEGs a clear understanding of what their responsibilities are and how to carry them out. Such a definition that explains the technical parameters and scope of this responsibility would also allow both the applicant and FAA to have a clear, mutual understanding of their roles and responsibilities during FSB evaluations. As an example, with a defined requirement in the definition, the FAA should be required to establish parameters, criteria, and number of flights used for the FSB operational suitability assessment.

This recommendation is in line with ACT ARC Recommendation 20-6, “Operational Suitability Demonstration/Evaluation Activities”, published by the ACT ARC in March 2020, and is in line with the recommendations of the Safety Oversight and Certification Aviation Rulemaking Committee (SOC-ARC)

IV. Rationale and Discussion

Without a complete understanding of the terms used within the FSB evaluations and present in AC 120–53B, Change 1, industry applicants, users and interested parties have difficulty understanding applicable FAA policy and the results of Flight Standardization Board Reports and activities that follow the AC and template guidance. Terms and sections of the FSB template, published as an internal directive to FAA personnel, also inform the Aircraft Evaluation Groups regarding FSB tasks and FAA policy. The ACT ARC believes that these recommended

definitions and clarifying language will better define and explain FAA guidance and the responsibilities of OEM applicants and industry stakeholders.

V. Background Information

Recommendation 21-3 addresses Item 2 in the FSB WG Scope of Work and ACT ARC Initiative #43 (see below):

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