

Federal Aviation Administration
Flight Standards Service

Air Carrier Training Aviation Rulemaking Committee (ACT ARC)

ACT ARC Recommendation 20-7
Acceptance of Proposed Flight Standardization Board Evaluation Plan

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 F2F-22, March 4-5, 2020. The ACT ARC Steering Committee adopted the recommendations, and they are submitted to the Federal Aviation Administration (FAA) as ACT ARC Recommendation 20-7.

II. Statement of the Issue

The FAA asked the ACT ARC to examine whether the FAA should reconsider its Flight Standardization Board (FSB) Operational Evaluation (OE) process and, if so, to recommend what elements should be included and what standards should be used to ensure consistent conduct of OEs. The ACT ARC established the FSB WG to complete this FAA-initiated tasking. FAA Advisory Circular (AC) 120-53B, Change 1, Appendix 3, *Rating and Level Tests-Planning and Application*, describes the FAA FSB process for determining the pilot type rating and the minimum required training, checking, and currency standards, as applicable to new aircraft types, derivative aircraft and modified aircraft. These processes are referred to as T tests, and the AC describes what should be submitted by the Original Equipment Manufacturer (OEM) to the FSB Chairman for each type of evaluation. The current guidance to FAA aviation safety inspectors in FAA Order 8900.1 does not contain information on how an FSB Chairman should review and accept such evaluation plans. Such guidance would help FSB Chairmen to consistently review and accept OEMs' evaluation plans.

III. Proposed Recommendations

The ACT ARC recommends the FAA—

1. Develop a standard procedure for FSB Chairmen to review, accept, and ensure continued validity of an OEM proposed evaluation plan that has been submitted for validation within an FSB process. This process should be documented in FAA Order 8900.1 and specify the necessary content of an OEM application.
2. Revise both AC 120-53B and FAA Order 8900.1 to state the applicant must adhere to the plan during the evaluation. In the case of changes to the plan, the applicant must update the plan and obtain new acceptance from the FSB Chairman.

IV. Rationale and Discussion

FAA guidance to inspectors serving as FSB Chairmen in Order 8900.1 should give detailed information on how to evaluate and accept an OEM's proposed evaluation plan. Giving more guidance to FSB Chairman should reduce inconsistencies in the review and acceptance of OEM

evaluation plans. Guidance for FSB Chairmen accepting an OEM evaluation plan should address the minimum expected content of the evaluation plan, such as the operational data (pilot type rating, pilot training, operational suitability) to be submitted for evaluation, the evaluation basis, the means of evaluations (including the test-subjects pre-requisites), the proposed level of involvement of the FAA during the evaluation,¹ and the planning of the deliverables and events. The guidance should also be clear that, because FSB Chairmen are not approving a training program for use by an air carrier or training center, it need not be reviewed in the same manner as a training program approval (*i.e.*, minor errors and typos discovered in training materials need not be corrected before the FSB report can be issued).

While many OEMs have existing formats they use to convey the necessary information to FSB Chairmen, this recommendation includes an attachment of best practices for OEMs who may not have established such documents.

The recommendations provided in this document about integrated AEG/FSB activities are complementary to input from the Department of Transportation Special Committee, Joint Authorities Technical Review (JATR), and Safety Oversight and Certification Aviation Rulemaking Committee (SOC ARC).

V. Background Information

ACT ARC Recommendation 20-7 addresses Items 1 and 3.b. and c. in the FSB WG Scope of Work and ACT ARC Initiative #43 (see below):

FSB WG Scope of Work:

1. Examine whether the FAA should reconsider its current process of an FAA operational evaluation.
 - a. If the WG decides that the FAA should reconsider, the WG should examine the possible alternatives to the current process.
- * * *
3. In developing proposed recommendations responsive to (1) . . . , consider, at minimum, the following:
 - b. Would the new or improved operational evaluation include elements that are not included in a current FAA operational evaluation?
 - c. What standards should be used to ensure the consistent conduct of operational evaluation.

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.

¹ The level of involvement would be included if the recommendations in Proposed Recommendation FSB-4 are accepted and implemented.

References

- FAA AC 120-53B, Change 1, October 24, 2016.
- JTA 4.1.202, Section 7.7.
- FAA Order 8900.1 Vol. 3 Ch. 2 Sec. 6.
- FAA Order Vol. 3 Ch. 19. Sec. 2 Paragraphs 3-1100 C and 1101 (except E).

ATTACHMENT 1

Content of an Evaluation Plan

This attachment outlines the information that an applicant should submit to support evaluation of a project in accordance with the T tests described in AC 120–53B Change, 1 or other equivalent evaluation basis (e.g., EASA CS-FCD (Flight Crew Data) initial issue). The items below are representative of information prepared by OEMs for past evaluations, and are submitted with the concurrence of the OEM members of the ACT ARC.

Description of the project:

- Describe the objective of the project, for instance:
 - Establishment of the type-rating, minimum pilot training, checking, and currency requirements for a new aircraft type or a derivative aircraft;
 - Impact on the pilot type rating, and establishment of the minimum pilot training, checking, and currency requirements for a modified aircraft;
 - Establishment of credits between related aircraft (credits in training, checking, and/or currency); and/or
 - Establishment of the operational suitability of a new aircraft type, a derivative aircraft, a modified aircraft, or an operational capability (e.g., steep approach or required navigation performance (RNP)).
- Describe the applicability of the project:
 - Identification of an aircraft configuration (e.g., for a new aircraft type);
 - Identification of a base aircraft and candidate aircraft (e.g., for a derivative aircraft or for credits between related aircraft);
 - Identification of a design modification (e.g., modified cockpit avionics) related to the project; or
 - Identification of an operational capability (e.g., steep approach or RNP) related to the project.
- Describe the timeline of the project events, from application to planned approval date and entry into service.
- Provide the list of documents to be produced to support the evaluation with planned delivery dates.
- Provide the list of other approved pilot-oriented manuals impacted by the project (e.g., Aircraft Flight Manual (AFM))

Establishment of the evaluation basis:

- Describe the evaluation basis applicable to the project (e.g., AC 120–53B, Change 1). There could be multiple evaluation bases (e.g., AC 120–53B, Change 1, EASA CS-FCD initial issue) in cases of joint evaluation involving multiple authorities (or in cases of validation between authorities).
- Describe the paragraphs or the sections of the evaluation basis affected by the project (e.g., AC 120–53B, Change 1, Appendix 3, sections 4 & 5) or the applicable elements of the test process used by the project (e.g., T2 and T3 tests)
- List any FAA Issue Papers (or equivalent documents used by other authorities such as EASA Certification Review Items (CRI)) applicable to the project and to be considered when conducting of the operational evaluation.

Submission of the operational data for evaluation:

- Provide the first version of operational data submitted for evaluation (e.g., Master Differences Requirements (MDR) table, Operator Difference Requirements (ODR) table, pilot pre-requisites, and special emphasis areas).

Description of the evaluation plan and the evaluation means:

- Describe the different steps of the evaluations.
- Define the expected profiles and prerequisites for the (pilot) test subjects, propose the number of test subjects, define any currency or refresher training proposed for the test subjects, and indicate whether line pilots from operators are proposed as test subjects.
- If applicable, describe the training syllabus (structure, content, and media to be used) proposed to support the evaluation of the operational data, including any supporting data (e.g., operational manuals).
- If applicable, provide the flight profiles (e.g., T2 flight), the flight simulation training device (FSTD) session profiles (e.g., Line Oriented Flying (LOF)) proposed to support the evaluation. Describe any specific conditions and flight crew role arrangements for these flights or FSTD sessions.
- Describe the proposed level of involvement of the authorities throughout the evaluation. There could be different level of involvement between the authorities (the primary authority may have a higher level of involvement than a secondary authority participating in a joint evaluation or validating the operational data).