# Federal Aviation Administration Flight Standards Service

## Air Carrier Training Aviation Rulemaking Committee (ACT ARC)

# ACT ARC Recommendation 20-2 Flight Standardization Board Process Mapping

#### 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 20-2.

#### II. Statement of the Issue

The Flight Standardization Board (FSB) operational evaluation (OE) process for establishing the pilot type rating training and qualification requirements for, and operational suitability of, new and modified aircraft (in accordance with FAA Advisory Circular (AC) 120–53) has been in place for many years. The FAA has successfully used this process to support the industry, and it has formed the basis for similar requirements by other aviation authorities. The FAA asked the ACT ARC to examine whether the FAA should reconsider its 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. Based on review of published FSB reports and input from its members, the FSB WG found that the OE process would benefit from increased standardization between Aircraft Evaluation Group (AEG) offices and in the application of the associated policies and procedures. A review of currently published documents, such as FAA orders in the 8100 series, Advisory Circular (AC) 120–53B, Change 1, and relevant portions of FAA Order 8900.1, indicates there is a wealth of information on policy and process, but this guidance is fragmented and, in some instances, incomplete or conflicting.

### III. Proposed Recommendations

The ACT ARC recommends the FAA consider the following actions, in collaboration with stakeholders<sup>1</sup>—

- 1. Map the OE process in its entirety as it exists today, including all subprocesses.
- 2. Develop a process, utilizing existing materials (including all pertinent recommendations made by the ACT ARC) to the maximum extent, and
  - a. Establishing policy, process, procedure, and work instructions;
  - b. Establishing change management controls;
  - c. Establishing roles and responsibilities for all stakeholders;

<sup>&</sup>lt;sup>1</sup> Industry stakeholders should include the broad range of actors involved in certification, operational evaluation, and training, including end users. At a minimum, industry stakeholders should include original equipment manufacturers (OEM), training providers, operators, and representatives of pilot groups as appropriate for the aircraft under evaluation.

- d. Documenting lessons learned and best practices; and
- e. Including process measures, which can provide for future continuous improvements.
- 3. Implement the process concurrently at each Aircraft Evaluation Group (AEG) office.
- 4. Train all personnel on re-defined policies, processes, and procedures.
- 5. Make all policies, processes, and procedures available to the industry stakeholders.
- 6. In the process of doing this work, identify all current publications where requirements are duplicated, inconsistent, or not congruent with other requirements and develop a plan to address the same.

## IV. Rationale and Discussion

The ACT ARC is contemplating many recommendations. Completing the process mapping exercise is an essential step towards future improvements. The results of the exercise will provide clear, concise, and congruent policies, processes, procedures, and work instructions. These outcomes will ensure an improved and effective process and will help identify areas to improve efficiency as well as the basis for future continuous improvements.

As the OE process serves to bridge the gap between certification and operations, it involves various stakeholders such as the FAA Aircraft Certification Service, Original Equipment Manufacturers (OEMs), AEGs, the FAA Flight Standards Service, training organizations, operators, and pilot labor unions. This work will allow for improved utilization of all available resources to better organize, implement, and account for various responsibilities, as well as clearly identify the responsible party for those activities. Accordingly, the work will lead to benefits such as—

- Improved productivity and output for all stakeholders;
- Better utilization of scarce, qualified, and specialized resources;
- Continuous improvement of the OE process and subprocesses;
- Standardization throughout the process as well as between multiple AEG offices;
- Mitigation of risks associated with process variation, where key requirements may be overlooked or assessed inadequately; and
- Improved operational safety.

As there is more focus on performance-based rules and increased need for global alignment and application of the validation process, well-defined policies and processes will provide for improved confidence in the product and basis for bilateral agreements.

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 20-2 addresses items 1 and 3(a)-(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:
  - a. Would the new or improved operational evaluation include some or all of the elements that are currently included in an FAA operational evaluation?
  - 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 evaluations?

# **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 Orders in the 8100 series
- FAA Order 8900.1
- AC 120–53B
- 14 CFR part 60
- 14 CFR part 121,
- 14 CFR part 135
- 14 CFR part 142
- 14 CFR part 91, subpart K
- 14 CFR part 25