ACT ARC Recommendation 19-2
Improving and Expanding Operational Suitability Evaluations under Existing Bilateral Aviation Safety Agreements (BASA)

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-20, August 14-15, 2019. The ACT ARC Steering Committee adopted the recommendations, and they are submitted to the Federal Aviation Administration (FAA) as ACT ARC Recommendation 19-2.

II. Statement of the Issue

Effective validation procedures do not exist between bilateral partners in the area of operational suitability evaluations, in particular for topics within the scope of the Flight Standardization Board (FSB), such as pilot type rating determination and flight crew training. As a result, original equipment manufacturers (OEM) face the burden and cost of having to conduct the same evaluation with multiple aviation regulatory authorities, often with no added safety value.

While there are regulatory and procedural differences between bilateral partners, technical evaluation principles and standards are similar (*e.g.*, the content of FAA Advisory Circular (AC) 120–53 is similar to the European Aviation Safety Agency (EASA) Certification Specification (CS) CS-FCD (Flight Crew Data)). Accordingly, OEMs have conducted joint operational suitability evaluations acceptable to the participating authorities. The FAA and its bilateral partners have recognized this and have identified current opportunities to expand validation of operational suitability evaluation elements, such as flight crew data through the Validation Improvement Roadmap developed by the Certification Management Team (CMT).[1] Although discussions have taken place between the FAA and EASA, little progress has been made toward the principal goal of validation in this domain.

The purpose and benefit of a Bilateral Aviation Safety Agreement (BASA) is to enhance the acceptance of the Certificating Authority's (CA) approvals and findings of compliance without extraneous technical review by the Validating Authority (VA). The guiding principle is to enable reliance on the CA to the greatest extent practicable. The globalization of the aviation industry and emergence of new participants has resulted in increased resource demands on civil aviation authorities. Maximum use of BASAs and full recognition of CA capabilities are essential to streamlining validation efforts.

To date, the majority of validation activities associated with bilateral agreements have focused on airworthiness and environmental certification of products. For example, the FAA and its CMT bilateral partners have developed processes and procedures limiting the level of involvement of an importing authority. Under the Technical Implementation Procedures (TIP) revision 6, the FAA and EASA have agreed to mutually accept Technical Standard Orders (TSO) and European Technical Standard Orders (ETSO), and the CMT participants are developing procedures to fully accept Supplemental Type Certificates (STC). EASA, for its part, has agreed

[1] The Certification Management Team is composed of the Directors of the Certification Services/Departments of the FAA, EASA, Transport Canada Civil Aviation (TCCA) and the Agência Nacional de Aviação Civil (ANAC). These authorities determined that the increasing globalization of the aviation industry necessitates greater collaboration among the authorities in order to harmonize regulatory systems and effectively respond to common industry issues.

to accept Parts Manufacturer Approvals (PMA) without further showing. This leads to approvals that are more efficient and reduces extraneous burden on applicants.

The FSB WG believes more can and should be done to streamline the acceptance of products and services between the United States and its bilateral partners from Europe, Canada, and Brazil - the other States of Design with which the United States has entered into BASAs. Specifically, the FSB WG believes mutual acceptance should be accelerated for operational suitability elements within the scope of the FSB. In 2015, EASA and the FAA agreed to extend the validation efforts to operational evaluations of Operational and Maintenance aspects. In March 2017, BASA TIP revision 5.1, for the first time, proposed validation procedures for the Maintenance Review Board (MRB) and the Master Minimum Equipment List (MMEL). It also introduced reference to all EASA Operational Suitability Data (OSD) elements and indicated that EASA and the FAA are still working together to develop validation processes for the remaining operational suitability aspects. The FSB WG notes that the reciprocal acceptance of operational evaluation data under the scope of FSB reports (FSBR) is still lagging and contributes to unnecessary costs and burdens for the OEMs and the FAA, as well as delayed entry into service for newly type certificated or modified airplanes when the FAA is the VA.

III. Recommendation(s)

The ACT ARC proposes the following recommendations for FAA consideration.

ACT ARC Recommendation 19-2: The FSB WG recommends that the FAA enter into discussions with its bilateral partners to devise a road map for achieving the long-term objective of mutual recognition and acceptance of each other's operational suitability approvals and findings of compliance to the greatest extent practicable.

Rationale and discussion: Both the FAA and its bilateral partners, such as EASA, recognize that the ultimate objective under a risk-based validation approach is to achieve full acceptance of CA approvals and findings of compliance by the VA, without any further technical assessment or requirement for issuance of a validation approval. Both authorities have committed to a Validation Implementation Roadmap (VIR) to achieve this end. The VIR aims to accomplish this by developing and applying risk-based validation principles resulting in a reduction of the level of technical involvement in validation to the areas with the greatest risk of safety and non-compliance. To date, however, except for the MMEL, the authorities have not addressed the operational suitability elements necessary for entry into service. The FSB WG encourages the FAA to accelerate its discussions with EASA and its other bilateral partners to incorporate these missing operational suitability elements into the scope of the validation procedures.

The following recommendations are provided by the FSB WG to develop this road map.

Recommendation 19-2.a: (Confidence Building)

The FAA should develop confidence building activities with its bilateral partners to develop mutual confidence in approvals and findings of compliance within the scope of the FSB. Such activities should also leverage previous experiences in joint evaluations.

Recommendation 19-2.b: (Regulations and Standards Differences)

The FAA should, with input from industry representatives, initiate discussions with its bilateral partners, to compare its regulations (*e.g.*, Title 14 Code of Federal Regulations (14 CFR) part 121), policies, and technical standards (*e.g.*, FAA AC 120–53)) within the scope of the FSB with

the equivalent policies and standards of its bilateral partners, with the objective of identifying similarities. This includes identifying minor differences that could be reconciled or harmonized in the near future and major differences that would remain. This comparison should also be used to identify the initial safety emphasis items between the bilateral partners (*i.e.*, the areas of interest of a validation authority with respect to a certification authority).

Recommendation FSB-2.c: (Working Process Differences and TIP)

The FAA should initiate discussions with its bilateral partners to compare its FSB process with the equivalent processes of its bilateral partners, with the objective of identifying process differences that:

- Can be disregarded in instances of validation;
- Must be adapted in instances of validation (*e.g.*, U.S. public comment); and
- Must be considered as specific to the VA in instances of validation.

The FAA should initiate with its bilateral partners the development of a validation procedure in the TIP for the topics within the scope of the FSB, with consideration of the specific process differences for the VA.

IV. Rationale and Discussion

The recommendations above directly support and elaborate on recommendations previously made to the regulatory authorities over a number of years. Specifically, they directly support the Safety Oversight and Certification Aviation Rulemaking Committee (SOC ARC) recommendations provided to the FAA in December 2018. The SOC ARC's *Initiative 6: Actively promote partnerships among international stakeholders* listed these 6 elements for change:

A. Establish common practices among bilateral partners for assessing confidence in safety systems.
B. Engage foreign CAAs [civil aviation authorities] to develop globally acceptable standards, policies, and methods of compliance.
C. Enhance the oversight capabilities of foreign CAAs.
D. Maximize the recognition of bilateral partners' safety systems to reduce duplicative certification activities.
E. Promote the acceptance of safety and efficiency enhancing standards and best practices within ICAO [International Civil Aviation Organization].
F. Demonstrate commitment to FAA and AIR's [Aircraft Certification Service] international strategies and goals.

The contents of this document represent the FSB WG's initial, high-level recommendations with respect to bilateral operational evaluation efforts, and will be followed by lengthier, more detailed recommendations. Among the concepts under discussion by the FSB WG is a recommendation for a single report fulfilling the roles of the existing FSBR and EASA OSD reports. Implementation of such a recommendation would involve a number of very significant considerations. The FSB WG would like to ensure sufficient time for a thorough discussion and resolution of all such considerations before it issues such a recommendation.

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

Recommendation 19-1 addresses 3.d in the FSB WG Scope of Work and ACT ARC Initiative #43 (see below):

FSB WG Scope of Work:

- 3.d. If parties other than the FAA will be wholly or partly responsible for conduct of operational evaluations—

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  - How would the FAA validate operational evaluations conducted by other parties?

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.

Source Reports

- *Agreement Between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety*, May 2011;
- *EASA-FAA Certification Oversight Board Validation Improvement Roadmap – 2022*, August 24, 2018;
- *Safety Oversight and Certification Aviation Rulemaking Committee (SOC-ARC) Recommendation Report to the Federal Aviation Administration*, December 31, 2018; and
- *ASD/GAMA/AIA letter* to Executive Director, FAA - Flight Standards Service (AFX).