

Air Carrier Training Aviation Rulemaking Committee (ACT ARC)

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**ACT ARC Recommendation 18-3:  
Harmonization of Guidance for Level C Differences**

**I. Submission**

The recommendations below were submitted by the Air Carrier & Contract Training Workgroup (AC&CT WG)<sup>1</sup> for consideration by the Air Carrier Training Aviation Rulemaking Committee (ACT ARC) Steering Committee at F2F-17. The ACT ARC Steering Committee adopted the recommendations with unanimous consent, and they are submitted to the Federal Aviation Administration as ACT ARC Recommendation 18-3.

**II. Statement of the Issue**

The discrepancy between Advisory Circular (AC) 120-53B<sup>2</sup> and FAA Order 8900.1 Volume 3, Chapter 19, Section 9, Paragraph 3-1314 C<sup>3</sup> creates inconsistent application in both the development of differences training programs and subsequent FAA approvals for both Part 142 and Part 135 training. This is especially true in regard to the FAA National Simulator Program qualification and Training Center Program Manager/Principal Operations Inspector approval of the systems integration equipment needed to support Level C differences training and checking.

For example, some Flight Standardization Board reports recommend Level 4 or higher Flight Training Devices in various Operator Difference Requirements (ODR) tables as a means to accomplish training and checking on selected Level C avionics differences. However, Level C is defined as systems integration training in both the AC and 8900.1 guidance. Systems integration training is, in turn, defined as Ground Training in related 8900.1 guidance. If a level 4 or higher Flight Training Device is *required* for this training, the Level D classification would be more appropriate.

Successfully completing ground or systems training subjects should not *require* a qualified Flight Training Device (Level 4 or higher). Although it is always possible to use a qualified Flight Training Device or a Full Flight Simulator to accomplish systems integration training and checking, other suitable non-NSP qualified systems integration training equipment should not be overlooked or excluded.

**III. Recommendations**

The ACT ARC recommends the following regarding FAA guidance for Level C Differences training:

1. Standardize Level C training and checking requirements found in AC 120-53B and FAA Order 8900.1 Volume 3, Chapter 19, Section 9, Paragraph 3-1314 C.

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<sup>1</sup> The AC&CT WG is comprised of ACT ARC Steering Committee Members including 135 operators, 142 training centers, and membership organizations/industry associations.

<sup>2</sup> Advisory Circular 120-53B, Guidance for Conducting and Use of Flight Standardization Board Evaluations, November 5, 2013.

<sup>3</sup> FAA Order 8900.1, General Technical Administration, Training Programs and Airman Qualifications, Flightcrew Aircraft Ground Training Curriculum Segments.

2. Remove the *requirement* for a *Flight Training Device* for training at the Level C classification. Any training or checking requiring a qualified Flight Training Device or Full Flight Simulator should remain classified as Level D.

#### IV. Rationale

The discrepancy between AC 120-53B and FAA Order 8900.1 Volume 3, Chapter 19, Section 9, Paragraph 3-1314 C creates inconsistent application in both the development of differences training programs and subsequent FAA approvals for both Part 142 and Part 135 training. Clarifying and harmonizing language in these two FAA documents should end the confusion over training equipment needed to conduct Level C (Systems Integration) differences training. To support this recommendation, the ACT ARC provides the following examples of how language could be clarified and harmonized in both documents:

- **AC 120-53B, Appendix 2, Page 7, Para (3) Level C Training.** Level C training is applicable to related aircraft having part task differences that affect knowledge, skills and/or abilities. Level C training can only be accomplished through use of training equipment that is capable of systems integration training. The training objectives focus on mastering individual systems, procedures, or tasks, as opposed to performing highly integrated flight operations and maneuvers in “real time.” Level C may require self-instruction or aided instruction, but cannot be adequately addressed by a knowledge requirement alone. Training equipment capable of systems integration training is required to accomplish the more complex tasks related to operation of particular aircraft systems. Typically, the minimum acceptable training equipment for level C training would be interactive computer-based training, cockpit procedure trainers, or part task trainers (e.g., FMS or traffic collision avoidance system (TCAS)).
- **AC 120-53B, Appendix 2, Page 8, Para (4) Level C Checking.** Level C checking requires a partial proficiency check using training equipment suitable for meeting level C (or higher) difference training requirements. Checking methods appropriate to Level C differences are demonstrations of skill in the procedures affected by the difference. In the case of an FMS computer, checking might consist of preflight programming of the computer and a demonstration of its use in navigation, climbs, and descents.
- **FAA Order 8900.1, Para 3-1314 C. Level C Differences.** Level C differences are part task differences that affect knowledge, skills, and/or abilities. Level C differences are great enough to require systems integration training but not great enough to require actual flight training (see Volume 3, Chapter 19, Section 5 for a definition and description of systems integration training). Training equipment capable of systems integration training is required to accomplish the more complex tasks related to operation of particular aircraft systems. An example of a Level C difference is the installation of a flight management system (FMS) computer. Typically, the minimum acceptable training equipment for level C training would be interactive computer-based training, cockpit procedure trainers, or part task trainers (e.g., FMS or traffic collision avoidance system (TCAS)). Level C differences checking also requires equipment capable of systems integration training. Checking methods appropriate to Level C differences are demonstrations of skill in the procedures affected by the difference. In

the case of an FMS computer, checking might consist of preflight programming of the computer and a demonstration of its use in navigation, climbs, and descents.

**Note:** The ACT ARC's preference for 8900.1, Para 3-1314 C. Level C Differences is to mirror the structure and content of the AC with separate paragraphs for Training, Checking and Currency. Alternately, for minimum impact on the handbook guidance.

## **V. Background Information**

### AC&CT WG Scope of Work:

These recommendations partially address the following component of the AC&CT WG Scope of Work, which is “consider strategies to improve 135 operator training and checking, including training/checking conducted by 142 training centers.”

### ACT ARC Initiatives:

These recommendations address the following Steering Committee Initiative assigned to the AC&CT WG. Initiative #9 tasks the AC&CT WG with establishing a Workgroup to make recommendations about the relationship between training centers and air carriers in order to achieve standardization (where appropriate) in the following areas:

9.1 Check Airman Qualification

9.2 Flight Instructor Qualification

9.3 Air Carrier Training Curriculum delivered by Part 142 Training Centers