Acceptable Alternate Means of Airplane Flight Simulator Qualification in Accordance with Advisory Circular (AC) 120-40B

FSTD Guidance Bulletin 07-03

- 1. **Purpose**: Advisory Circular (AC) 120-40B, <u>Airplane Simulator Qualification</u>, Paragraph 8a, <u>Evaluation Policy</u>, authorizes the National Simulator Program (NSP) Manager to accept alternate means of compliance for airplane simulator qualifications. The NSPM has approved the use of several different publications as an alternate means of compliance with AC 120-40B. This bulletin lists and outlines the procedure for using the currently accepted alternate means. The alternate means defined in this bulletin will continue to be accepted by the NSPM for new simulator qualifications until new U.S. regulations become effective under 14 CFR Part 60.
- 2. **Procedure:** The NSPM has determined the following alternate means of qualification for airplane full flight simulators are acceptable.
 - a. International Civil Aviation Organization (ICAO) <u>Manual of Criteria for the Qualification of Flight Simulators, Second Edition.</u>
 - AC 120-40B, with the exception of appendices 1 and 2 will continue to be used for the airplane simulator qualification along with all applicable requirements under 14 CFR 121 appendix H.
 - Qualifications using alternate means based upon ICAO standards only apply to level D airplane flight simulators.
 - Simulator sponsors wishing to meet the most recent international standards under ICAO document 9625 are permitted to substitute the simulator standards and simulator validation tests sections of AC 120-40B with new sections that closely follow the international standards.
 - Appendix 1 (Simulator Standards) of AC 120-40B may be replaced with attachment 1 of this document or ICAO 9625 (second edition) appendix A.
 - Appendix 2 (Simulator Validation Tests) of AC 120-40B may be replaced with attachment 2 of this document or ICAO 9625 (second edition) appendix B.

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- Copies of ICAO 9625 may be obtained from ICAO at www.icao.int..
- To indicate the use of ICAO 9625 Second Edition as an alternate qualification means, use the following nomenclature within the QTG:
 - Cover Page ---

AC120-40B, using ICAO 9625 Second Edition as an Alternate Means of Compliance

Simulator Information Page –

Qualification Criteria: AC-120-40B QTG Criteria: ICAO 9625 Second Edition

- Note that it is insufficient to state "ICAO 9625 Second Edition" (alone) without reference to the Advisory Circular, AC120-40B.
- b. Joint Aviation Authorities (JAA), Joint Aviation Requirements, JAR-STD 1A, Aeroplane Flight Simulators, Amendment 3.
 - AC 120-40B, with the exception of appendices 1 and 2 will continue to be used for the airplane simulator qualification along with all applicable requirements under 14 CFR 121 appendix H.
 - Qualifications using alternate means based upon JAR-STD 1A only apply to level C and D airplane flight simulators.
 - Appendix 1 (Simulator Standards) of AC 120-40B may be replaced with appendix 2 of JAR-STD 1A amendment 3.
 - Appendix 2 (Simulator Validation Tests) of AC 120-40B may be replaced with Advisory Circulars Joint (AJC) Number 1 to JAR-STD 1A, sections 1 and 2.
 - Copies of JAR-STD 1A amendment 3 can be obtained from the Joint Aviation Authorities (JAA) at www.jaa.nl.
 - To indicate the use of JAR-STD 1A as an alternate qualification means, use the following nomenclature within the QTG:

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AC120-40B, using JAR STD-1A Amendment 3 as an Alternate Means of Compliance

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Qualification Criteria: AC-120-40B QTG Criteria: JAR STD-1A Amendment 3

- Note that it is insufficient to state "JAR STD-1A Amendment 3" (alone) without reference to the Advisory Circular, AC120-40B.
- c. Federal Aviation Administration (FAA) Draft Advisory Circular (AC) 120-40C, <u>Airplane Simulator Qualification</u>.
 - AC 120-40B may be replaced in full with Draft AC 120-40C dated Jul 11, 1995 including all appendices.
 - Copies of Draft AC 120-40C may be obtained at www.faa.gov/nsp/.
 - To indicate the use of Draft AC 120-40C as an alternate qualification means, use the following nomenclature within the QTG:
 - 1. Cover Page --

AC120-40B, using Draft AC 120-40C as an Alternate Means of Compliance

2. <u>Simulator Information Page</u> –

Qualification Criteria: AC-120-40B QTG Criteria: Draft AC 120-40C

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- Note that it is insufficient to state "Draft AC120-40C" (alone) without reference to the Advisory Circular, AC 120-40B.
- 3. **Cancellation:** This guidance bulletin supersedes Guidance Bulletins 05-01 and cancelled Guidance Bulletins 03-09, 03-12. Guidance Bulletin 05-01 will be cancelled upon the effective date of this bulletin.

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