U.S. Department
of Transportation

**Federal Aviation
Administration**

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December 23, 2005

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RE: Training and Checking Permitted in a Level C Simulator

We received your letter requesting an interpretation of the Federal Aviation Regulations (FAR) governing initial, transition and upgrade training using a Level C simulator in accordance with Title 14 C.F.R. § 121 Appendix H (Appendix H). The training and checking permitted in a Level C simulator is determined on a case by case basis, and is contingent upon the certificate holder's training program, the simulator's capability and the pilot's qualifications and experience. The following interpretation presumes that the part 119 certificate holder has an approved Advanced Simulation program in accordance with Appendix H, and that all of the pilot and simulator requirements in part 61 and part 121 have been satisfied. If the requirements are not satisfied, a pilot will not be permitted to train and check exclusively in a Level C simulator.

Appendix H outlines (among other things) the initial, transition and upgrade training that can be accomplished in a Level C simulator and the minimum pilot qualifications. For initial and upgrade training, the requirements to use a Level C simulator vary based on whether the training is for second in command (SIC) or pilot in command (PIC) status.[1]

[1] Pilot in command is the person who: 1) has final authority and responsibility for the operation and safety of the flight; 2) has been designated as PIC before or during the flight; and 3) holds the appropriate category, class and type rating, if appropriate for the conduct of the flight. 14 C.F.R. § 1.1 (2005).

Initial Training

Initial Training is the training required for crewmembers who have not qualified and served in the same capacity on another airplane of the same group.[2] 14 C.F.R. § 121.400(c)(1).

Initial SIC Training[3]

A pilot may use a Level C simulator to complete initial SIC flight training if the pilot meets the aeronautical experience requirements of § 61.159. A pilot may also use a Level C simulator to complete the flight training requirements for an initial proficiency check in which an FAA certificate is awarded under Part 61, Subpart G, Airline Transport Pilots. There is no requirement for a properly qualified pilot to complete any portion of initial SIC flight training in an airplane.

Examples:

1. Joe Pilot is an airline transport pilot (ATP) who has satisfied the requisite aeronautical experience requirements in § 61.159. Joe may complete initial SIC flight training exclusively in a Level C simulator.

2. Bob Pilot meets the aeronautical experience requirements in § 61.159, but has not received a type rating. Bob may use a Level C simulator to complete initial SIC flight training, and to complete the flight training portion of an initial proficiency check in which a type rating is awarded.

3. Jim Pilot is a commercial pilot who does not meet the aeronautical experience requirements of § 61.159. Jim may not train exclusively in a Level C simulator. Instead, Jim must accomplish certain maneuvers and procedures in an airplane, as specified in Part 121 Appendices E and F.

Initial PIC Training[4]

A pilot may use a Level C simulator to complete initial PIC flight training if the pilot:

1. is currently serving[5] as SIC in an airplane of the same group;

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[2] Group I airplanes are propeller driven, including reciprocating and turboprop airplanes. Group II airplanes are turbojet powered. 14 C.F.R. § 121.400.

[3] 14 C.F.R. § 121, App. H - Level C Training and Checking Permitted, ¶ 4 (2005) (hereinafter "App. H").

[4] App. H, ¶ 3(a), (b), and (c).

[5] "Currently serving" is not defined in the regulations. The FAA has historically interpreted the term to mean current and qualified to conduct part 121 operations, including satisfying the recency of experience requirements in 14 C.F.R. § 121.439 (i.e. current); and having the requisite part 61 and part 121 aeronautical experience requirements (i.e. qualified).

2. has a minimum of 2,500 flight hours as SIC in an airplane of the same group, and;

3. has served as SIC on at least two airplanes of the same group.

Examples:

1. Jane Pilot has 5,000 hours flight time and currently serves as SIC in the Boeing 757 and 767 airplanes. Jane desires to be PIC on the McDonnell-Douglas DC-10. Jane may complete initial PIC flight training exclusively in a Level C simulator.

2. Sue Pilot has 2,400 hours flight time and currently serves as SIC in the Boeing 757 and 767 airplanes. Sue desires to be PIC on the McDonnell-Douglas DC-10. Sue may not use a Level C simulator to complete initial PIC flight training. Instead, Sue is required to accumulate an additional 100 hours flight time *in the airplane* in order to satisfy the prerequisite experience requirements to use a Level C simulator for initial PIC flight training.

Upgrade Training[6]

Upgrade training is the training required for pilots who have qualified and served as second in command or flight engineer on a particular airplane type, before they serve as pilot in command or second in command, respectively, on that airplane. § 121.400(c)(3).

Upgrade Training from Flight Engineer to SIC

A person may use a Level C simulator to complete the training and checking required to upgrade from flight engineer to SIC if the person meets the aeronautical experience requirements of § 61.159. A pilot may also use a Level C simulator to complete the flight training portion of an initial proficiency check in which and FAA certificate or type rating is awarded under Part 61.

Upgrade Training from SIC to PIC

A pilot may use a Level C simulator to complete the training required to upgrade from SIC to PIC if the pilot:

1. has previously qualified as SIC in the airplane to which he will be upgrading;

2. has at least 500 hours of actual flight time as SIC in an airplane of the same group, and;

3. is currently serving as SIC in an airplane of the same group.

[6] App. H, ¶ 2(a), (b), and (c).

Example:

1. Mary Pilot currently serves as SIC in the Boeing 757 and 767 airplanes. Mary has 1,000 hours flight time in the Boeing 757 and 1,000 hours flight time in the Boeing 767. Mary desires to be PIC on the Boeing 757. Mary may complete upgrade flight training and checking exclusively in a Level C simulator.

Transition Training[7]

Transition training is the training required for pilots who have qualified and served in the same capacity on another airplane of the same group. § 121.400(c)(2). All pilots may use a Level C simulator to transition between two airplanes in the same group. In addition, a PIC may use a Level C simulator to complete the flight training portion of an initial proficiency check in which the respective type rating is awarded.

Example:

1. Sarah Pilot currently serves as PIC on the Boeing 757 airplane. Sarah may use a Level C simulator to complete transition training to serve as PIC on the DC-10 airplane. Sarah may also use the Level C simulator to complete the flight training portion of the initial proficiency check in which the DC-10 type rating is awarded.

Training for Newly Hired Employees

In order to determine the type of training a newly hired employee must receive, the certificate holder must ask three questions:

1. What was the employee's previous employment status (flight engineer, SIC or PIC);

2. What position will the employee hold for the certificate holder (flight engineer, SIC or PIC); and

3. What type of airplane will the employee be qualified in for the certificate holder.

Example:

1. Peter Pilot served as SIC in the DC-10 and MD-11 for ABC Air. Peter is a new hire for XYZ Air and desires to be PIC on the Boeing 757 airplane. Peter must complete initial PIC training; not because he is a new hire, but because he has not qualified as a PIC on an airplane of the same group.

2. Patty Pilot served as SIC in the DC-10 and MD-11 for ABC Air. Patty is a new hire for XYZ Air and desires to be SIC on the Boeing 757 airplane. Patty must

[7] App. H, ¶ 1.

complete transition training because she has previously qualified as SIC on an airplane in the same group, and will be transitioning to SIC in a new airplane type.

3. Paul Pilot served as SIC in the DC-10 and MD-11 for ABC Air. Paul is a new hire for XYZ Air and desires to be PIC on the DC-10 airplane. Paul must complete upgrade training because he is upgrading from SIC in the DC-10 to PIC in the DC-10. Paul is not required to complete initial PIC training because he has already qualified and served as SIC in the DC-10 airplane.

Having determined what type of training is required (initial, transition or upgrade), the next question is whether the training can be accomplished exclusively in a Level C simulator.

Example:

1. Peter Pilot from the example above was unemployed for five years before being hired by XYZ Air. Consequently, Peter does not meet the prerequisite of paragraph 3.a. of Appendix H (i.e. he is not "currently serving" as SIC in an airplane of the same group). This alone does not drive Peter back into an airplane. Instead, if Peter meets the applicable aeronautical experience requirements of parts 61 and 121, Peter could use a Level C simulator to reestablish recency of experience in accordance with § 121.439. This option is available to Peter as a newly hired employee, as well as to any existing employees that meet the other part 61 and 121 requirements.

2. Patty Pilot from our example above was also unemployed for five years before landing the position with XYZ Air. Patty is able to complete transition training exclusively in a Level C simulator because she is transitioning from SIC in one airplane to SIC in another airplane of the same group. There are no "currently serving" or minimum flight time prerequisites for transition training. Thus, there is no requirement for Patty to train in an airplane.

3. Paul Pilot from our example above would be able to complete upgrade training in a Level C simulator provided that he is "currently serving" as SIC in an airplane of the same group and has at least 500 hours of actual flying in an airplane of the same group.

The FAA acknowledges that certain guidance appearing in the Air Transportation Operations Inspector's Handbook (8400.10) may have resulted in a misinterpretation of the Appendix H requirements and an inconsistent application of the rules. We regret any inconvenience this may have caused airmen or certificate holders. The FAA considers this interpretation to be the definitive explanation of the training and checking permitted in a Level C simulator. We are amending the Inspector's Handbook guidance to reflect the opinions given here.

This interpretation was prepared by the Operations Law Branch of the Office of the Chief Counsel and coordinated with the Air Transportation Division of Flight Standards Service. We encourage you to contact us if we can be of further assistance.

Sincerely,

Rebecca MacPherson
Assistant Chief Counsel for Regulations