



RESEARCH BRIEF

Research Request:

Recurrent Simulator Training

Research Response:

Two common policies exist for simulator training frequency: annual and semi-annual. There are operators that conduct semi-annual training, and it can be reasonable to assume an increase in training frequency would be beneficial. However, there are no studies available regarding simulator training frequency that account for all variables and provide an accurate conclusion regarding impact on proficiency. For example, a small operator may only be able to send one crewmember at a time to semi-annual training because of flight scheduling requirements, losing the opportunity for intra-company CRM training. Dependant upon how in-depth and structured the training program is, it could be inferred that ensuring company crew pairing once a year is possibly more beneficial than semiannual session with single individuals. Most insurance companies require simulator and ground training annually. Generally, this is common practice in the business aviation industry.

-Abstracted from:
Business & Commercial Aviation- November 2008.
Recurrent Training for the Small Flight Department
By David Esler

Listed below are multiple sources of simulator training practices.

IS-BAO and ARGUS International

The current ISBAO and ARGUS audit standards state current industry best practice is to conduct annual recurrent training in each type aircraft. The ARGUS standard also specifies initial, transition, differences, emergency and upgrade training be completed, as per the FAR's. The ISBAO and ARGUS standards are below:

IS-BAO

5.1.5 It is recommended that flight simulators be used for flight training to the maximum degree practicable. Industry best practices are to use flight simulators for initial and annual recurrent training.

ARGUS International

- Does the Training Program Manual include the following training modules?
- Initial, transition, upgrade (135.343, .345, .347)
- Differences (135.345, .347)
- Recurrent (135.343, .351)
- Emergency (135.331)
- Does the Operator require each pilot to attend annual simulator training per type?

Airline

Part 121 airlines are currently moving towards the FAA Advanced Qualification Program (AQP), and some have already implemented it. The AQP is a voluntary alternative to the regulatory requirements under Parts 121 and 135 for pilot training and checking. Under AQP at a sample airline, recurrent LOFT training is performed in a full real-time simulated flight. Maneuver validation training is also completed, as well as other components including ground school. This sample airline program is completed every nine months by the Captain and First Officer and is a seven day process.

Currently, at a typical airline (without AQP) there is three days of ground school and one day of a recurrent proficiency check for both the Captain and First Officer. This results in approximately four hours of simulator time, with two of those specifically focusing on pilot-flying duties for each pilot. This is accomplished every six months for Captains, and annually for First Officers.

FAA AQP Program: http://www.faa.gov/training_testing/training/aqp/

FAA

Under Part 61 (and 91.5) of FAA regulations, the pilot in command must receive a proficiency check annually. Part 135 of the regulations are more specific in their requirements. Below are excerpts from the FAA regulations.

61.58 Pilot-in-command proficiency check: Operation of aircraft requiring more than one pilot flight crewmember.

(a) Except as otherwise provided in this section, to serve as pilot in command of an aircraft that is type certificated for more than one required pilot flight crewmember, a person must—

(1) Within the preceding 12 calendar months, complete a pilot-in-command proficiency check in an aircraft that is type certificated for more than one required pilot flight crewmember;

135.247 Pilot qualifications: Recent experience.

(D) Within the preceding 12 months prior to the month of the flight, the pilot must have completed a training program that is approved under part 142 of this chapter. The approved training program must have required and the pilot must have performed, at least 6 takeoffs and 6 landings to a full stop as the sole manipulator of the controls in a flight simulator that is representative of a turbine-powered airplane that requires more than one pilot crewmember. The flight simulator's visual system must have been adjusted to represent the period beginning 1 hour after sunset and ending 1 hour before sunrise.

135.343 Crewmember initial and recurrent training requirements.

No certificate holder may use a person, nor may any person serve, as a crewmember in operations under this part unless that crewmember has completed the appropriate initial or recurrent training phase of the training program appropriate to the type of operation in which the crewmember is to serve since the beginning of the 12th calendar month before that service. This section does not apply to a certificate holder that uses only one pilot in the certificate holder's operations.

135.351 Recurrent training.

(a) Each certificate holder must ensure that each crewmember receives recurrent training and is adequately trained and currently proficient for the type aircraft and crewmember position involved.

(b) Recurrent ground training for crewmembers must include at least the following:

(c) Recurrent flight training for pilots must include, at least, flight training in the maneuvers or procedures in this subpart, except that satisfactory completion of the check required by §135.293 within the preceding 12 calendar months may be substituted for recurrent flight training.

135.293 Initial and recurrent pilot testing requirements.

No certificate holder may use a pilot, nor may any person serve as a pilot, unless, since the beginning of the 12th calendar month before that service, that pilot has passed a written or oral test, given by the Administrator or an authorized check pilot, on that pilot's knowledge in the following areas—

(b) No certificate holder may use a pilot, nor may any person serve as a pilot, in any aircraft unless, since the beginning of the 12th calendar month before that service, that pilot has passed a competency check given by the Administrator or an authorized check pilot in that class of aircraft, if single-engine airplane other than turbojet, or that type of aircraft, if helicopter, multiengine airplane, or turbojet airplane, to determine the pilot's competence in practical skills and techniques in that aircraft or class of aircraft.