

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.157

National Policy

Effective Date:
06/13/11

Cancellation Date:
06/13/12

SUBJ: Review and Approval of Line Performance/Line Observation Provisions in Air Carrier Training Programs

1. Purpose of This Notice. This notice provides information and the requirements for principal operations inspectors (POI) to follow when approving a line observation program for flight instructors (simulator) and check pilots (simulator) to meet the requirements of Title 14 of the Code of Federal Regulations (14 CFR) part 121, §§ 121.411(f) and 121.412(f), and 14 CFR part 135, §§ 135.337(f) and 135.338(f), as appropriate.

2. Audience. The primary audience for this notice is POIs responsible for the approval and surveillance of part 121 and/or part 135 air carrier training programs. The secondary audience includes Flight Standards personnel in certificate-holding district offices (CHDO), and branches and divisions in the regions and headquarters.

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Air carriers and operators can find this notice on the Federal Aviation Administration's (FAA) Web site at <http://fsims.faa.gov/>. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Terminology Used in This Notice. Parts 121 and 135 use both "check airman" and "check pilot" when referring to individuals who have been authorized to conduct evaluations on behalf of the operator. These terms are interchangeable and considered to be synonymous.

5. Applicability. This notice applies to all part 121 and part 135 air carrier POIs.

6. Title 14 CFR References.

- Sections 121.411(f) and 121.412(f), and
- Sections 135.337(f) and 135.338(f).

7. Background. On June 17, 1996, the FAA amended §§ 121.411, 121.412, 135.337, and 135.338 to create two classes of check airman and flight instructors: simulator-only check airman and flight instructors, and airplane check airman and flight instructors. This amendment was designed to allow some experienced pilots who are not medically eligible to hold the requisite

medical certificates to continue to perform check airmen and flight instructor duties in simulators. This amendment created training requirements and recency of experience requirements for these check airmen and flight instructors. In regard to recency of experience requirements, §§ 121.411(f), 121.412(f), 135.337(f), and 135.338(f) provide that the recency of experience requirements may be accomplished by either flying two flight segments as a required crewmember for the type, class, or category of aircraft involved within the 12 months preceding the performance of any check airmen or flight instructor duty in a simulator, or by satisfactorily completing an approved line observation program within the period prescribed by that program before performing any check airman or flight instructor duties in a simulator. In response to comments to the proposed rule, the FAA clarified that “the recency of experience requirements can be met either in an airplane or in a simulator (that is, by accomplishing two flight segments, or an approved line-observation program)” 61 FR 30734, 30738 (June 17, 1996).

8. Line Performance/Line Observation Requirements for Air Carrier Flight Instructors/Check Pilots (Simulator). All flight instructors (simulator) and check pilots (simulator) (including contract instructors/check pilots) must accomplish one of the following:

- Fly at least two flight segments as a required crewmember for the type, class, or category aircraft involved within the 12 months preceding the performance of any flight instructor/check pilot duty in a flight simulator, or
- Satisfactorily complete an approved line observation program within the period prescribed by that program preceding the performance of any flight instructor/check pilot duty in a flight simulator.

9. Preferred Method of Compliance. The preferred method of compliance with the requirements of §§ 121.411(f), 121.412(f), 135.337(f), and 135.338(f) is to have instructors and check pilots complete line performance or line observations during actual in-flight events. Air carriers that are currently meeting the instructor and/or check pilot line performance/line observation requirements by participating in actual aircraft flights are encouraged to continue using their resources as they have in the past.

10. Line-Operational Simulation (LOS) Program. If an air carrier proposes to comply with the line observation requirements of their operating rule by conducting a Line Operational Simulation (LOS) program instead of through accomplishing an actual flight observation, POIs must carefully compare the proposed program against the LOS requirements described in this notice. Initial and final approvals of LOS simulator programs may only be granted following the POI’s review and determining that the operator’s submission complies with the following requirements.

a. Ground Training Segment—Minimum Segment Content:

(1) Air traffic control (ATC) familiarization and update. The student must visit one of the following ATC facilities; tower, approach control, Terminal Radar Approach Control (TRACON), or en route center and receive a briefing on the activities at the site with emphasis on pilot controller coordination and terminology.

(2) Clearances. Training in the duties of a flight instructor with regards to the use of ATC clearances in a training environment.

- Format of clearances to accurately simulate ATC,
- Ability to provide timeliness of responses typical of controllers,
- Using clearances accurately to create a more realistic scenario in the training environment,
- Accurately providing realistic clearances to enhance instructor credibility and professionalism, and
- Using clearances accurately to correctly simulate correct ATC spacing and controller knowledge of aircraft system performance parameters.

(3) Terminology.

- Common ATC terminology variations,
- International language and terminology considerations (if appropriate), and
- Realistic use in the training environment.

(4) Vectoring. Appropriate use and training benefits/pitfalls.

- Commonly misused vectoring practices,
- Training benefits and importance of correct vectoring to preserve realism, and
- Negative training and associated impact of inaccurate or unrealistic vectors/practices.

(5) ICAO Differences (applicable for those operators that provide instruction for international operators).

- Variations between FAA and International Civil Aviation Organization (ICAO) terminology,
- Foreign airport training and practices, and
- Transition altitudes.

(6) Runway/Taxiway Signage, Surface Movement Guidance and Control System (SMGCS), etc.

- Recent changes in signage and markings,
- Large airports/small airport variances,
- Runway markings,
- Taxiway markings,
- Ground and approach lighting systems, and
- SMGCS: which operators have it, who must comply, under what weather conditions it applies, how to comply with clearances and procedures.

b. Flight Training Segment—Minimum Segment Content. This segment will be designed as a LOS event intended to provide replication of operations within the National Aerospace

System (NAS). It must be designed to realistically simulate, within the limitations of flight simulator technology, a view of the ATC environment that flightcrews may encounter when operating in the NAS. It may not be necessary for an air carrier to include all of the following flight training events in their curriculum submission. The events included must be tailored to reflect the operational environment of the air carrier. For example, international ATC events may not be appropriate for an air carrier limited to domestic operations.

(1) LOS Flight Training Events.

- Normal operations,
- ATC normal abnormal and emergency operations,
- Low visibility taxi and takeoff (use of enhanced taxiing markings and ATC interactions),
- Short approach request,
- Tailwind landing request <10 knots,
- Speed restrictions and expedite requests (e.g., 80 knots to the marker),
- Expedite to an altitude (may be up or down),
- Unexpected clearance to a new fix (flight management system (FMS) exercise),
- Visual approach,
- Special approaches (Required Navigation Performance (RNP) subject to special requirement, Lateral Precision Performance with Vertical Guidance (LPV), precision runway monitor (PRM) etc.),
- Traffic alert,
- Traffic Alert and Collision Avoidance System (TCAS) alert,
- Uncontrolled field approach,
- Special airport operation,
- Special route authorizations,
- RNP approaches and departures,
- Equipment failures affecting navigation reliability, and
- Other events that the operator may deem appropriate.

(2) LOS Program Training Schedule. The operator will develop sufficient LOS programs to ensure students do not repeat the same program within four training cycles as defined within their approved training curriculum. LOS training events may be scheduled throughout the year to accommodate an operator's training profiles. However, if the ground and flight training segments are separated by more than 30 days, then a separate tracking record must be maintained for each segment. Each segment will then have its own 12-month currency cycle.

11. Disposition. We will permanently incorporate the information in this notice into FSIMS before this notice expires. Direct questions concerning the information in this notice to the Air Carrier Training and Part 142 Training Center Branch (AFS-210) at 202-267-8166.

for 

John M. Allen
Director, Flight Standards Service