

*Cancelled
by 120-35A*

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ADVISORY CIRCULAR

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

SUBJECT: LINE-ORIENTED FLIGHT TRAINING PROGRAMS

1. **PURPOSE.** This circular sets forth one means that would be acceptable to the Administrator for approval of a line-oriented training program under Federal Aviation Regulations (FAR), Section 121.409.
 2. **BACKGROUND.** The Federal Aviation Administration (FAA) has recognized the need for the continued updating and improving of air carrier training programs. FAR 121.441(a) permits a course of training to be substituted for a proficiency check provided the course of training under FAR 121.409(b) consists of at least 4 hours of training at the pilot controls of an approved aircraft simulator and includes the maneuvers listed in Appendix F, FAR 121. Appendix F established procedures for evaluating the individual performance of cockpit crewmembers. These procedures are well founded but have the tendency to isolate the crewmember from the normal operating environment during the evaluation period. Over a period of years, the items to be checked have become stereotyped resulting in the pilot being evaluated knowing exactly what is coming. However, in day-to-day line operation, the possibility of an abnormal or emergency situation occurring is always present. When it does occur, there is an integral crew to cope with the problem. A line-oriented flight training program will place a crewmember in an environment similar to that in which they operate on a daily basis. This type of program will promote the coordinated crew concept by requiring the crew to make decisions and solve problems that can arise in line operations.
 3. **GENERAL.** The following conditions apply when approving this type of training program.
 - a. Operators may not conduct training under the line-oriented flight training (LOFT) concept unless the training syllabus (scenario) is approved by the Administrator and the Administrator determines that the training syllabus (scenario) will provide a level of safety equivalent to the training procedures currently utilized. Additionally, each syllabus
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(scenario) should provide at least 3 hours and 20 minutes of training at respective crew positions in addition to a proper briefing before and after the training. The additional 40 minutes of training necessary to comply with FAR 121.409(b)(1) may be utilized by the certificate holder for specific training requirements subject to the approval of the Administrator.

b. LOFT shall be conducted with crewmember positions occupied by line crewmembers qualified and serving in the respective crew positions. Check pilots and check engineers should not be substituted for line flying personnel.

c. Captains who maintain dual aircraft qualifications may participate in this course, but it may not be substituted for one of the required proficiency checks.

d. Each instructor or check airman used in this course should be currently line qualified. However, professional instructors type rated in the appropriate aircraft, or those personnel previously line qualified in the type aircraft who, because of loss of medical certificate may no longer fly the line, may also be used. This does not delete the requirement for the presence of a check airman when this course is being used to fulfill the proficiency check requirements of FAR 121.427(d)(1) and (d)(2)(ii) and FAR 121.441(a)(2) for pilots other than pilots in command and flight engineers. If an instructor or check airman who is not presently line qualified is used in this course, he shall remain current in line operational procedures by observing operating procedures from the jump seat at least once every 3 months on a regularly scheduled flight. Each instructor or check airman used in this type course should be thoroughly indoctrinated in the LOFT concepts prior to participation.

e. Where training involves a three-man flightcrew, two instructors or check airmen are required (i.e., pilot and flight engineer).

f. The instructor or check airman should adhere to the syllabus and not improvise or add to it. Abnormal or emergency situations should be induced as required. Once an abnormal or emergency condition has been induced, it should remain for the duration of the flight segment unless it is corrected by flightcrew actions.

g. The instructor may not "freeze" the simulator position or problem to allow the flightcrew to cope with a simulated problem. The flight should be representative of "real" flight segment times. In simulating an extended route segment (i.e., in excess of 2 hours), the flight may be advanced along flight planned route to facilitate entry into the descent and approach phase.

h. Prior to the simulator flight, the instructor should conduct a normal preflight briefing issuing a standard flight plan, weather information, dispatch release, etc., as is normally required by the carrier for line operation. The briefing should include an explanation of the LOFT concept. At the end of the training session, a thorough debriefing of the simulator flight should be accomplished. The flightcrew should participate in both the briefing and debriefing.

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i. The instructor or check airman should not make any comments, give suggestions, or provide any input into the operation once the training has commenced. All comments or criticisms should be reserved for post flight debriefing.

j. FAR 121 permits the satisfactory completion of this program to be substituted for the check requirements for first officers and flight engineers as referenced in paragraph d above.

k. FAR 121 provides the operator with the prerogative of continuing training as presently outlined in FAR 121.409 or devising a line-oriented program as outlined herein.

4. TRAINING PROGRAM. Each operator desiring approval of this type program shall submit to the appropriate principal operations inspector (POI) a detailed outline of its proposed program. Principal operations inspectors should ensure that the proposed program meets all of the conditions of this advisory circular. The training program should include the following:


a. Sufficient syllabuses (scenarios) should be developed so crewmembers will not receive the same syllabus during any subsequent training period. At least four approved training syllabuses for a two-man flightcrew and six approved training syllabuses for a three-man flightcrew should be developed to provide for variations and should include abnormal and emergency procedures. These syllabuses should represent a typical flight segment that the operator's flightcrew could realistically expect to fly. The profile should be designed so that the pilot in command will normally fly one segment and the second in command one segment to provide normal division of duties. Prior to approval of LOFT, a sampling of the proposed syllabuses will be flown by appropriately qualified FAA air carrier inspectors to determine adequacy.

b. Aircraft and cockpit checklist procedures should be identical to those used in line operation.

c. Normal radio communications should be used. The instructor or check airman may provide "outside" communications.

d. Simulator en route and approach navigation aids should correspond to those at departure, en route and arrival point. Instrument approach navigation aids should be properly oriented in relation to the airport being used.

e. LOFT is a training course which must be satisfactorily completed. Whenever airman performance during a LOFT course is such that additional training is required, such training shall be provided prior to the airman's return to line operations.


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