



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: Air Carrier Pilot Remedial Training
and Tracking Program

Date: 12/30/14

AC No: AC 121-39

Initiated by: AFS-200

Change:

1. PURPOSE. This advisory circular (AC) presents guidelines for developing and implementing remedial training and tracking of pilots. These guidelines apply to certificate holders conducting operations under Title 14 of the Code of Federal Regulations (14 CFR) part 121. This AC presents one way, but not necessarily the only way, that certificate holders may comply with the remedial training and tracking requirements prescribed in 14 CFR part 121, § 121.415. This AC may also provide valuable information to certificate holders in developing and implementing remedial training and tracking of other crewmembers and aircraft dispatchers.

2. RELATED REGULATIONS. You can locate the current edition of 14 CFR part 121, Subparts N, O, and Y at: <http://www.ecfr.gov>.

3. RELATED READING MATERIAL. You can locate the current edition of the following ACs at: http://www.faa.gov/regulations_policies/advisory_circulars/.

- AC 120-54, Advanced Qualification Program.
- AC 120-68, Pilot Records Improvement Act of 1996.

4. BACKGROUND.

a. Accidents.

(1) On December 18, 2003, a Boeing MD-10-10F crashed while landing during a visual approach. There were no fatalities, but the airplane sustained substantial damage. The National Transportation Safety Board (NTSB) investigation revealed that the second in command (SIC), who had been the pilot flying, failed to properly arrest the airplane's descent rate (flare) before touching down. A review of the training records of the SIC revealed numerous failed proficiency checks. As a result of this accident, the NTSB recommended that the Federal Aviation Administration (FAA) require all 14 CFR part 121 operators to establish programs to review the performance history of any flightcrew member who has demonstrated performance deficiencies or experienced failures, and to provide additional training and oversight to ensure those deficiencies are addressed and corrected.

(2) On February 12, 2009, a Bombardier DHC-8-400 crashed about 5 nautical miles northeast of the airport while on an instrument approach. The 4 crewmembers, 45 passengers, and 1 person on the ground were killed and the airplane was destroyed by impact forces and a post-crash fire. The NTSB investigation revealed that the pilot in command (PIC), who had been the pilot flying, responded inappropriately to the activation of the stick shaker, which led to an

aerodynamic stall from which the airplane did not recover. A review of the training records of the PIC revealed disapprovals and training problems related to weakness in basic aircraft control and attitude instrument flying within a 3-year period at the air carrier. As a result of this accident, the NTSB reiterated the previous recommendation regarding remedial training and oversight.

b. Rule Changes.

(1) On August 1, 2010, the President signed the Airline Safety and Federal Aviation Administration Extension Act of 2010 (Public Law 111-216). Section 208 directed the FAA “to require part 121 air carriers to establish remedial training programs for flight crewmembers who have demonstrated performance deficiencies or experienced failures in the training environment.”¹

(2) On November 12, 2013, the FAA published the Qualification, Service, and Use of Crewmembers and Aircraft Dispatchers final rule with an effective date of March 12, 2014 applicable to all certificate holders conducting operations under part 121. Section 121.415(h) requires that by March 12, 2019, a certificate holder’s training program must include a process for the regular analysis of individual pilot performance to identify pilots with performance deficiencies during training and checking and multiple failures during checking. In addition, § 121.415(i) requires that by March 12, 2019, a certificate holder’s training program must include methods for remedial training and tracking of the pilots identified by the analysis process.

5. DEFINITIONS. The following are definitions of the terms used in accordance with a remedial training and tracking program.

a. Failure. A failure is when an individual pilot does not satisfactorily complete a proficiency check or line check. This does not necessarily include failure of a specific maneuver/procedure/subject area for which the pilot receives additional training in accordance with § 121.441(e) during a proficiency check, if the pilot resumes the proficiency check and passes that maneuver/procedure/subject area and all other maneuvers/procedures/subject areas during that proficiency check.

b. Performance Deficiency. A performance deficiency is when an individual pilot *repeatedly* does not satisfactorily complete a maneuver/procedure/subject area or combination of maneuvers/procedures/subject areas during training and/or checking. This does not include practice during the normal course of training. However, this may include failure of a specific maneuver/procedure/subject area for which the pilot receives additional training in accordance with § 121.441(e) during a proficiency check even if the pilot resumes the proficiency check and

¹ As stated in the preamble of the Qualification, Service, and Use of Crewmembers and Aircraft Dispatchers final rule, since no accidents have been attributed to flight engineer (FE) performance and the FAA has not identified any issues related to FE training, the remedial training and tracking requirements apply to pilots only.

passes that maneuver/procedure/subject area and all other maneuvers/procedures/subject areas during that proficiency check.

c. Remedial Training. Additional training tailored to an individual pilot to address the performance deficiencies and/or failures identified in the certificate holder's analysis of the individual pilot's training and checking performance.

d. Tracking. A process to manage pilots with performance deficiencies and/or multiple failures to ensure that the performance deficiencies and/or failures are effectively corrected.

6. ANALYSIS PROCESS. Section 121.415(h) requires each training program to include policies and procedures to provide for the regular analysis of individual pilot performance to identify pilots with performance deficiencies during training and checking and multiple failures during checking.

a. Conduct of Analysis. Effective procedures will specify the individual(s) or department(s) responsible for conducting the analysis. For a small certificate holder, this may be the Chief Pilot, Director of Operations, or Director of Safety. For a large certificate holder, this authority may be delegated to the pilot training manager or training department.

b. Frequency of Analysis. Procedures must specify when the analysis will be conducted. Analysis should be conducted at least once every 12 months.

(1) Initial, Transition, Upgrade, and Requalification. An individual pilot's performance should be analyzed after the completion of initial, transition, upgrade, or requalification training. Analysis may also be necessary before the completion of the training due to poor pilot performance during training.

(2) Recurrent. An individual pilot's performance should be analyzed after the completion of each recurrent training or checking event. This includes ground training, flight training, proficiency checks, and line checks.

c. Records Reviewed During Analysis. Effective procedures will specify the types of records that will be reviewed during the analysis. This may include instructor/check pilot comments and forms used during training and checking.

(1) Initial Training of New-Hire Pilots. The analysis should include a review of the pilot's performance during the training to identify performance deficiencies and/or multiple failures.

(2) Initial for Other than New-hire Pilots, Transition, Upgrade, Requalification, and Recurrent. The analysis should include a review of the pilot's performance during all training and checking with the certificate holder to identify performance deficiencies and/or multiple failures.

d. Identification of Performance Deficiencies and Multiple Failures. Effective procedures will specify how to identify performance deficiencies and multiple failures. For a certificate holder without an electronic recordkeeping system, this may require manual review of the paper training/checking forms in the pilot's file. For a certificate holder with an electronic

recordkeeping system, the capabilities of the system may allow an electronic query or a manual review of electronic records and/or paper forms may be necessary.

7. REMEDIAL TRAINING. Section 121.415(i) requires each training program to include policies and procedures for remedial training of pilots who have been identified through the certificate holder’s analysis process as having performance deficiencies and/or multiple failures. Remedial training is separate from required recurrent training and checking. Regardless of any additional training or checking that a pilot completes during remedial training, recurrent training and checking is still required at the intervals specified in 14 CFR part 121. A pilot’s due month for recurrent training or checking may not be changed based on completion of any additional training or checking required by the certificate holder’s remedial training and tracking program.

a. Conduct of Remedial Training. Procedures must specify that remedial training will be conducted by an appropriately qualified instructor or check pilot. In accordance with § 121.401(c), the instructor or check pilot conducting the remedial training must certify as to the proficiency and knowledge of the pilot upon completion of the remedial training.

b. Content of Remedial Training. The content of remedial training must be tailored to the individual pilot to address the performance deficiencies and/or failures. Effective procedures will specify the individual(s) or department(s) responsible for determining the content of the remedial training. For a small certificate holder, this may be the Chief Pilot, Director of Operations, or Director of Safety. For a large certificate holder, this may be a training review board consisting of representatives from the training department and the labor organization.

c. Methods of Remedial Training. Procedures must specify the method(s) of remedial training that will be used to address performance deficiencies and/or failures. Examples of possible methods of remedial training are shown below.

For performance deficiencies or failures during:	Remedial training may include:
Ground training and/or equipment exam portion of proficiency checks.	One-on-One training with an instructor, repeat of all ground training modules, or a combination.
Flight training, flight portion of proficiency checks, and/or line checks.	Additional ground and flight training, additional line-oriented flight training (LOFT), repeat of all flight training modules, or a combination.

8. TRACKING. Section 121.415(i) requires each training program to include policies and procedures for tracking of pilots who have been identified through the certificate holder’s analysis process as having performance deficiencies and/or multiple failures. Tracking is separate from required recurrent training and checking. Regardless of any additional training or checking that a pilot completes during tracking, recurrent training and checking is still required at the intervals specified in part 121. A pilot’s due month for recurrent training or checking may not be changed based on completion of any additional training or checking required by the certificate holder’s remedial training and tracking program.

a. Conduct of Tracking. Effective procedures will specify the individual(s) or department(s) responsible for conducting the tracking. For a small certificate holder, this may be

the Chief Pilot, Director of Operations, or Director of Safety. For a large certificate holder, this authority may be delegated to the pilot training manager or training department.

b. Frequency of Tracking. Effective procedures will specify when tracking will be conducted and will require tracking to be conducted more frequently than recurrent training/checking.

c. Methods of Tracking. Procedures must specify the method(s) of tracking. Examples of possible methods of tracking are shown below.

Method of Tracking:	Appropriate for:
Additional PIC line checks	Failures of line checks.
Additional PIC line checks, or SIC line checks or observations	Failures of proficiency checks or performance deficiencies due to unsatisfactory performance of routine line maneuvers/procedures/subject areas.
Additional proficiency checks	Failures of proficiency checks or performance deficiencies due to unsatisfactory performance of abnormal/emergency procedures.
Additional flight training	Performance deficiencies of training only maneuvers/procedures (e.g., low-altitude wind shear).

d. Duration of Tracking. Effective procedures will specify that tracking of individual pilots will continue until the performance deficiencies and/or failures are effectively corrected. Effective procedures will include the specific indicators used to determine that the pilot has mastered the maneuver(s)/procedure(s)/subject area(s), in which he or she has previously demonstrated weakness. The timeframe of tracking may vary based on the performance deficiencies and failures and the individual pilot performance during remedial training and tracking.

9. RECORDKEEPING. In accordance with § 121.683, each certificate holder must maintain a record for each individual pilot to show compliance with the remedial training and tracking requirements of § 121.415(h) and (i). The record must include the instructor or check pilot certification required by § 121.401(c).

10. FLIGHTCREW MEMBER PAIRING. Certificate holders should consider implementing policies, procedures, and controls that prohibit operations if both the PIC and the SIC have performance deficiencies and/or failures that are currently being addressed and corrected through the remedial training and tracking program.



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