Federal Aviation Agency

Washington, D.C.

Civil Aeronautics Manual 40

Scheduled Interstate Air Carrier Certification and Operation Rules

Supplement No. 10, CAM 40 dated Sept. 15, 1959 **Oct. 1, 1963**

SUBJECT: Correction on Page 61 issued by Supplement No. 9.

This supplement furnishes a new page 61 to include paragraph (c) of section 40.302 which was inadvertently omitted when Supplement No. 9 was prepared.

Remove the following pages:
61 and 62

Insert the following new pages:
61 and 62

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Flight Standards Service.

ATTACHMENTS.

ficiency check. The proficiency check may be given at any time during the month preceding or following the month in which it becomes due. The effective date of the check, if given within the preceding or following month, shall be the same as if given within the month in which it became due. Where such pilots serve in more than one airplane type, at least every other successive proficiency check shall be given in flight in the larger airplane type.

(Amendment 40–19, published in 24 F.R. 7865, Sept. 30, 1959, effective Oct. 29, 1959.)

(2) The pilot proficiency check shall include at least the following:

(i) The flight maneuvers specified in section 40.282(b)(1), except that the simulated engine failure during take-off need not be accomplished at speed V_1, nor at actual or simulated maximum authorized weight,

(ii) Flight maneuvers approved by the Administrator accomplished under simulated instrument conditions utilizing the navigational facilities and letdown procedures normally used by the pilot: *Provided,* That maneuvers other than those associated with approach procedures for which the lowest minimums are approved may be given in a synthetic trainer which contains the radio equipment and instruments necessary to simulate other navigational and letdown procedures approved for use by the air carrier.

[(3) Subsequent to the initial pilot proficiency check, an approved course of training conducted in an approved airplane simulator, if satisfactorily completed, may be substituted at alternate 6-month intervals for the proficiency checks required by subparagraph (1) of this paragraph if the simulator meets the minimum standards set forth in Appendix C and:

[(i) The simulator is maintained at the same level as required for initial approval;

[(ii) A functional preflight check of the simulator is performed each day prior to commencing simulator flight training or proficiency checks;

[(iii) A daily discrepancy log is maintained and an entry of each discrepancy is made by the simulator instructor or check airman before termination of each training or check flight; and

[(iv) If a modification is made to the airplane, a corresponding modification is made to the simulator if necessary for flight crew training or proficiency checks.

[The simulator may be used with inoperative instruments or equipment, if they are not applicable to the particular phase of training being given.

[(Amendment 40–39, published in 28 F.R. 3474, April 10, 1963, effective June 10, 1963.)]

(c) Prior to serving as pilot in command in a particular type of airplane, a pilot shall have accomplished during the preceding 12 months either a proficiency check or a line check in that type of airplane.

40.302–1 *Pilot check—proficiency requirements (FAA rules which apply to sec. 40.302(b)).* The following items are required by the Administrator to determine the proficiency of the pilot in command:

(a) *Equipment examination (oral or written).*

(1) The equipment examination shall be pertinent to the type of aircraft to be flown by the pilot-in-command and may be given (i) in the air carrier's ground school, (ii) during a routine line check under the supervision of an authorized company check pilot, or (iii) during the proficiency check.

(2) The examination shall at least contain questions relative to engine power settings, airplane placard speeds, critical engine failure speeds, control systems, fuel and lubrication systems, propeller and supercharger operations, hydraulic systems, electric systems, anti-icing, heating and ventilating, and pressurization system (if pressurized). A record should be maintained in the pilot's file which will indicate the date, condition under which equipment examination was given, and grade received.

(b) *Taxiing, sailing, or docking.* Attention shall be directed to the manner in which the pilot-in-command conducts taxiing, sailing, or docking with reference to the taxi instruction as issued by airport traffic control or other traffic control agency, and taxi instruction which may be published in the air carrier's operations manual, and general regard for the safety of the air carrier's and other equipment which may be affected by taxiing, sailing, or docking operation.

(c) *Runup.* Attention to detail in the use of cockpit checklist and cockpit procedure shall be observed on all proficiency flights.

(d) *Takeoff.* For those air carriers authorized takeoff minimums of less than 300–1, the pilot being examined shall whenever practicable execute a takeoff solely by reference to instruments, or at the option of the check pilot, a contact takeoff may be made following which instrument conditions shall be simulated at or before reaching 100 feet with the subsequent climb conducted solely by reference to instruments. The check pilot shall observe the pilot's ability to maintain a constant heading during the takeoff run, his proficiency in handling power, flap and gear operation during the critical period between takeoff (off ground) and reaching 500 feet. Should it become necessary for the check pilot to give assistance after becoming airborne, the maneuver shall be considered as unsatisfactory.

(e) *Climbs and climbing turns.* Climbs and climbing turns shall be performed in accordance with the airspeeds and power settings as prescribed by the air carrier or those set forth in the Airplane Flight Manual. The use of proper climb speeds and designated rates of climb shall be considered in determining the satisfactory performance of this phase of the proficiency flight.

(f) *Steep turns.* Except as provided hereinafter, steep turns shall consist of at least 45 degrees of bank. The turns shall be at least 180° of duration (but need not be more than 360°). Smooth control application, and ability to maneuver aircraft within prescribed limits, shall be the primary basis for judging performance. When information is available on the relation of increase of stall speeds vs. increase in angle of bank, such information shall be reviewed and discussed. As a guide, the tolerance of 100 feet plus or minus a given altitude shall be considered as acceptable deviation in the performance of steep turns. Consideration may be given to factors other than pilot proficiency which might make compliance with the above tolerances impractical. For example, where the range of vision from the safety observer's position is obstructed in certain types of aircraft while in a steep left turn, the degree of left bank in such instances may be reduced to not less than 30 degrees.

(g) *Maneuvers (minimum speeds).* Maneuvers at minimum speeds shall be accomplished while using the prescribed flap settings as set forth in the Airplane Flight Manual. In addition, attention shall be directed to airplane performance as related to use of flaps vs. clean configuration while operating at minimum speeds. Attention shall be directed towards the pilot's ability to recognize and hold minimum controllable airspeeds to maintain alti-

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