

## FEDERAL REGISTER

Friday, December 5, 1959

[Reg. Docket No. 42; Amdt. 40-22]

PART 40—SCHEDULED INTERSTATE  
AIR CARRIER CERTIFICATION AND  
OPERATION RULES

## 40.300 Qualification requirements.

(b) Check airmen shall certify as to the proficiency of all pilots being examined, as required by §§ 40.302, 40.303, and 40.305, and such certification shall become part of the airman's record.

9. By amending § 40.301 to read as follows:

## § 40.301 Pilot recent experience.

No air carrier shall schedule a pilot in command or second in command to serve as such in scheduled air transportation unless within the preceding 90 days he has made at least 3 takeoffs and 3 landings in the airplane of the particular type on which he is to serve.

10. By amending § 40.305 to read as follows:

## § 40.305 Proficiency check; second in command.

(a) An air carrier shall not utilize a pilot as second in command until he has satisfactorily demonstrated to a check pilot or a representative of the Administrator his ability to pilot and navigate airplanes to be flown by him and to perform his assigned duties. Thereafter, he shall not serve as second in command unless each 12 months he successfully completes a similar pilot proficiency 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. The pilot proficiency check shall include at least an oral or written equipment examination, and the procedures and flight maneuvers specified in § 40.282(c)(1). The pilot proficiency check may be demonstrated from either the right or left pilot seat.

(b) Subsequent to the initial pilot proficiency check for the second in command, an approved course of training in an airplane simulator which meets the requirements of § 40.302(b)(1), if satisfactorily completed, may be substituted at alternate 12-month intervals for the proficiency check required by paragraph (a) of this section.

(c) Satisfactory completion of the proficiency check in accordance with the requirements of § 40.302(b) will also meet the requirements of this section.

The provisions of this amendment shall become effective January 1, 1961, except as otherwise provided in § 40.290.

(Secs. 313(a), 601, 604, 605, 72 Stat. 752, 775, 776; 49 U.S.C. 1354, 1421, 1424, 1425)

Issued in Washington, D.C., on December 1, 1959.

JAMES T. PYLE  
Acting Administrator.

F.R. Doc. 59-10289; Filed, Dec. 4, 1959;  
8:49 a.m.]

## Maximum Age Limitations for Pilots

Notice was given in Draft Releases 59-6 (24 F.R. 5247) that a proposal was under consideration to amend Parts 40, 41 and 42 of the Civil Air Regulations to provide, in part, maximum age limits for utilizations of pilots in air carrier operations by an air carrier.

It was pointed out in the draft release that the number of active air carrier pilots age 60 or over has been increasing significantly in recent years, that pilots in this age group are being employed in the carriage of a substantial number of passengers, both in piston and jet powered aircraft, and that this number will increase substantially within the next few years. Absent some limitation in the regulations, this condition could continue until a number of active pilots have, within the next 5 years, reached ages 65 to 70, and together with the then larger group over age 60 become increasingly responsible for a growing percentage of air carrier operations.

The draft release points out the reasons indicating that a hazard to safety is presented by utilization of pilots of these ages in air carrier operations. These include the fact that there is a progressive deterioration of certain important physiological and psychological functions with age, that significant medical defects attributable to this degenerative process occur at an increasing rate as age increases, and that sudden incapacity due to such medical defects becomes significantly more frequent in any group reaching age 60.

Such incapacity, due primarily to heart attacks and strokes, cannot be predicted accurately as to any specific individual on the basis of presently available scientific tests and criteria. On the contrary, the evidences of the aging process are so varied in different individuals that it is not possible to determine accurately with respect to any individual whether the presence or absence of any specific defect in itself either led to or precluded a sudden incapacitating attack. Any attempt to be selective in predicting which individuals are likely to suffer an incapacitating attack would be futile under the circumstances and would not be medically sound. Such a procedure, in light of the knowledge that a substantial percentage of any group of persons will suffer from such attacks after reaching age 60, would therefore be ineffective in eliminating the hazard to safety involved.

This conclusion is emphasized by the fact that, in the case of one large group under medical supervision over an extended period, some 85% of the persons who had a heart attack for the first time had the attack within six months to a year after a thorough medical examination had found the individual in a condition normal to his age and without any evidence to suggest the imminence

of such an attack. In addition, the general good health of an individual, or the appearance of good health, are not determinative as to whether he will suffer a heart attack from the conditions that are normal as a result of age.

Other factors, even less susceptible to precise measurement as to their effect but which must be considered in connection with safety in flight, result simply from aging alone and are, with some variations, applicable to all individuals. These relate to loss of ability to perform highly skilled tasks rapidly, to resist fatigue, to maintain physical stamina, to perform effectively in a complex and stressful environment, to apply experience, judgment and reasoning rapidly in new, changing and emergency situations, and to learn new techniques, skills and procedures. The progressive loss of these abilities generally starts well prior to age 60; and, even though they may be significant in themselves prior to age 60, they assume greater significance at the older ages when coupled with the medical defects leading to increased risk of sudden incapacitation.

The older pilots as a group fly the largest, highest-performance aircraft, carrying the greatest number of passengers over the longest non-stop distances, operating into and out of the most congested airports near the largest cities, and traveling in flight in and through traffic lanes with the highest density of air traffic. A great many of these flights involve the newest, largest, fastest and most highly powered jet aircraft. The possible hazards inherent in the older pilot's medical condition are entirely too serious to determine the question of safety by an attempt to balance the increased chances of an incapacitating attack against the possibility that the pilot might not be engaged in the carriage of a large number of passengers at the time of such an attack.

In exploring all the ramifications of the problems involved, the nature of air traffic and air carrier operations in the future has been considered. Present indications are that the very large increases that have taken place in recent years are small in relation to the increases yet to occur. Projection of the number of pilots who will be in the 60 to 70 year age group, in an era of extreme density and frequency of jet and piston air carrier operations involving many millions of passenger miles, indicates a probability of sudden incapacitation of some of these pilots in the course of flight. While medical science may at some future time develop accurate, validly selective tests which would safely allow selected pilots to fly in air carrier operations after age 60, safety cannot be compromised in the meantime for lack of such tests. This is particularly so in light of the statutory directives contained in section 601(b) of the Federal Aviation Act of 1958 that, "In prescribing standards, rules, and regulations . . . the Administrator shall give full consideration to the duty resting upon air carriers to perform their services with the highest possible degree of safety in the public interest . . .", and that, "The

Administrator shall exercise and perform his powers and duties under this Act in such a manner as will best tend to reduce or eliminate the possibility of, or recurrence of, accidents in air transportation \* \* \*

To the extent that a progressive loss of certain abilities generally starts well prior to age 60, further consideration is required of those aspects of safety in flight concerned with factors other than incapacitation. Especially with the development and increasing use of larger and higher performance aircraft and more complicated traffic conditions, growing importance attaches to the ability of pilots to learn new techniques, skills, and procedures, and to unlearn and discard previously learned and well-established patterns of behavior.

For this reason, the draft proposal included a provision to establish age 55 as the age prior to which an individual must obtain a type-rating for turbo-jet powered aircraft in power to act as pilot-in-command for such aircraft in air carrier service. Age 55 was selected on the basis that it marks the point at which the detrimental effects of age on physiological and psychological functions have become significant.

All interested persons have been given an opportunity to comment and all comments received have been given careful consideration. Many strong arguments were made, both in favor of and against the draft proposal. Some of the comments in favor of the proposal recommended more stringent action than that now being taken in this amendment, and referred to opinions and conclusions more far-reaching than those expressed above. Some of these were received from active airline pilots, although a majority of those identifying themselves as airline pilots from whom comments were received were adverse to the proposal.

The Air Transport Association, representing the major air carriers, was in favor of the proposal as to age 60. The Air-Line Pilots Association, from which most complete and voluminous comments were received, was opposed to all proposals, but offered no practicable substitute to achieve the safety aims of this amendment. The position taken was that qualification of a pilot should be determined on an individual selection basis without any limitation as to chronological age. This is rejected as an inadequate safety standard in light of the present inability of medical science to provide a reliable and valid basis for selection.

Some requests for a public hearing were received. In the rule-making process, a public hearing has basically the same purpose as written comments, namely, to inform the Agency of the facts and opinions of the public concerning the proposed rule. It serves a useful purpose, however, when it provides something more than usually is obtained from written comments. Normally, this would involve situations where facts and views cannot be expressed adequately by written comments, where written comments cannot properly be evaluated

without further development in a public hearing, or where written comments which have been received raise new issues which require further public consideration and this can be accomplished most satisfactorily and expeditiously in a hearing.

Comments were received covering all the issues involved in the proposed rule. They have been most carefully evaluated with respect to their bearing on some of the requests that were received for a public hearing. In respect to the provision to establish age 55 as the age prior to which an individual must obtain a type-rating for turbojet powered aircraft, it is possible that a hearing may produce further information or data not already encompassed in the scope of the comments received. The comments and other data available appear to be sufficiently precise and determinative in connection with the provisions applicable to utilization of a pilot after attainment of age 60. In this connection, the requests for a public hearing did not indicate any area that the comments have not covered adequately nor was any showing made that they could not be evaluated properly without a public hearing. They did not point out any issue that was not previously considered. On this point a public hearing is likely to repeat opinions and evidence already submitted in the form of written comments. With respect to this provision of the proposed rule, therefore, it does not appear that a public hearing would serve a useful purpose; and it is not deemed necessary in the public interest.

After considering all of the comments received, I find that a public hearing is necessary and appropriate with respect to the proposal concerning eligibility to obtain a type-rating for turbojet powered aircraft after the attainment of age 55 and a notice for such a hearing on January 7, 1960, is being issued. I find further that establishment of a maximum age of 60 for pilots utilized by air carriers in air carrier operations is necessary for safety in air commerce and is in the public interest.

In consideration of the foregoing, § 40.260 of Part 40 of the Civil Air Regulations (14 CFR Part 40) is hereby amended by designating the present text of the section following the caption as paragraph (a) and by adding a new paragraph (b) to read as follows:

§ 40.260 Utilization of airman.

(b) No individual who has reached his 60th birthday shall be utilized or serve as a pilot on any aircraft while engaged in air carrier operations.

This amendment shall become effective on March 15, 1960.

(Secs. 313(a), 601, 602, 604, 72 Stat. 752, 775, 776, 778; 49 U.S.C. 1354(a), 1421, 1422, 1424)

Issued in Washington, D.C., on December 1, 1959.

JAMES T. PYLE,  
Acting Administrator.

[F.R. Doc. 59-10300; Filed, Dec. 4, 1959; 8:49 a.m.]

PART 41—CERTIFICATION AND OPERATION RULES FOR SCHEDULE AIR CARRIER OPERATIONS INSIDE THE CONTINENTAL LIMITS OF THE UNITED STATES

Approval of Air Carrier Training Programs; Qualification of Pilots Other Than Pilots in Command; Proficiency Checks for Pilots Other Than Pilots in Command

The Federal Aviation Agency published a notice of rule making (24 FR 5246) and circulated as Civil Air Regulations Draft Release No. 59-3, dated June 25, 1959, a proposal to amend Part 41 of the Civil Air Regulations to require: (1) Essentially the same training program requirements in Part 41 as are currently contained in Part 40; (2) FAA approval of air carrier training programs; (3) appropriate aircraft ratings for pilots serving as other than pilots in command; and (4) more specific initial training and proficiency checks for pilots serving as other than pilots in command.

Interested persons have been afforded an opportunity to participate in the making of this amendment and due consideration has been given to all relevant matter presented. Because of the importance of this amendment, each portion thereof has been evaluated in the light of such comments.

1. *Training program requirements for Part 41.* Parts 40 and 42 of the Civil Air Regulations currently require each air carrier to establish a training program sufficient to insure that each crew member used by the air carrier is adequately trained and maintains adequate proficiency to perform the duties to which he is assigned. Part 41 of the Civil Air Regulations currently require periodic instruction to be given all pilots but does not contain a specific requirement for the establishment of a training program for each crew member.

Accordingly, as proposed in Draft Release 59-3, in the interest of safety and uniformity in air carrier operations, this amendment incorporates into Part 41 training program requirements essentially the same as those contained in Part 40. In adopting the training program requirements prescribed herein, due consideration has also been given to all comments received in response to Civil Aeronautics Board Draft Release No. 58-24 dated December 24, 1958 (24 F.R. 145) which proposed, among other things, training program requirements for Part 41 essentially the same as those now contained in Part 40.

2. *FAA approval of air carrier training programs.* The air carriers commenting on this portion of the proposal expressed strong opposition to it. Briefly, the air carriers contend that the present regulatory scheme for the establishment of methods and procedures for crew member training programs has been adequate and that no justification has been shown for requiring FAA approval of such programs. The Federal Aviation