

Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Admin- istration, Department of Transpor- tation

SUBCHAPTER D—AIRMEN

[Docket No. 7201; Amdt. No. 61-31; 121-26]

PART 61—CERTIFICATION: PILOTS AND FLIGHT INSTRUCTORS

PART 121—CERTIFICATION AND OP- ERATIONS: DOMESTIC, FLAG, AND SUPPLEMENTAL AIR CARRIERS AND COMMERCIAL OPERATORS OF LARGE AIRCRAFT

Flight Maneuvers

This amendment to Parts 61 and 121 of the Federal Aviation Regulations: (1) Clarifies certain provisions of the recent flight maneuvers amendment (Amdts. 61-27, 121-24 published in the FEDERAL REGISTER on January 11, 1967; 32 F.R. 260); (2) postpone for 6 months the effective date for certain maneuvers contained in that amendment insofar as they apply to training and proficiency checks of pilots, other than pilot in command and second in command in a crew of three or more pilots; and (3) conforms and clarifies § 61.155 as recently adopted in Amendment 61-24 that established standards for the issuance of helicopter instrument ratings.

Postponement of effective date for certain maneuvers. By letter dated March 15, 1967, the Air Transport Association of America (ATA) petitioned the FAA for: (1) An amendment of certain of the rules adopted by the FAA in the recent Flight Maneuvers amendment (Amdts. 61-27, 91-36, and 121-24); and (2) a postponement of the April 15, 1967, effective date of the provisions sought to be amended for 6 months or until disposition of the petition by the FAA.

The primary changes requested by the ATA petition relate to the applicability of four maneuvers to initial and recurrent training and proficiency checks of second in command pilots (other than a second in command in a crew of three or more pilots) under Part 121 of the Federal Aviation Regulations. The four maneuvers (preceded by the paragraph reference to Appendix F of Part 121) are:

1. Item III(c)(2) One ILS approach with a simulated failure of one powerplant.
2. Item III(d) Circling approaches.
3. Item II(e)(2) One missed approach from a simulated instrument approach with a simulated failure of the most critical powerplant.
4. Item IV(a) Steep turns.

The ATA petition requests that the applicability of these four maneuvers for initial and recurrent training and proficiency checks be limited to pilots in command and second in command in a crew of three or more pilots. ATA maintains, among other things, that the FAA did not have adequate cost/benefit data upon which to base its decision that each second in command should be trained and checked in these maneuvers. ATA indicates that its member airlines are gathering detailed information regarding the additional aircraft flight time required by the four items listed above, and that it hopes to submit this data to the FAA by April 15, 1967. However, ATA maintains that unless the effective date of these maneuvers, as they apply to second in command pilots, is postponed pending final action on its petition, the affected airlines will be unduly burdened in complying with the April 15 date and that in some cases complete compliance may result in substantial schedule interruptions. Since final action on the ATA petition for an amendment to the regulations must await the submission of additional data, the reasons stated by ATA for the requested amendment are not discussed herein. Final action on the ATA petition will follow the procedure set forth in Part 11 of the Federal Aviation Regulations. Should the FAA determine that the petition discloses adequate reasons, a notice of proposed rule making will be issued and all interested parties will be able to submit comments thereon.

However, the FAA has determined that the ATA has sufficiently justified its request for a postponement of the effective date of the four maneuvers listed above insofar as they apply to pilots other than pilots in command and second in command of a crew of three or more pilots. In view of the major changes contained in Amendments 61-27 and 121-24, which take effect April 15, 1967, the FAA believes that postponement of this small part of the Part 121 amendment will facilitate an orderly transition to the new requirements on that date. Therefore, Appendix F of Part 121 is being amended to limit the applicability of the four maneuvers listed above, until October 15, 1967, to pilots in command and second in command of a crew of three or more pilots. Since Appendix F is referenced in § 121.418 (a) and (b) and § 121.441(b), this postponement applies to initial and recurrent training and proficiency checks. The flight maneuvers required under Part 61 after April 15, 1967, for an airline transport pilot certificate or associated rating as adopted in Amendment 61-27 are not affected by this postponement.

Clarifying amendments. The preamble to Amendments 61-27 stated that the

amendment would authorize the person conducting a practical examination for an ATR or associated class or type rating to waive certain specified maneuvers. However, the words "or type" were omitted from § 61.147(c) as adopted and therefore are being added by this amendment.

Section 61.115(b), as adopted in Amendment 61-24, prescribed the flight maneuvers required for an unrestricted airline transport pilot certificate with a rotorcraft category and helicopter class rating by referencing the maneuvers required in § 61.147. Since § 61.147 was completely revised in Amendment 61-27, it is necessary to revise § 61.155 to specifically set forth therein the maneuvers previously incorporated by reference. The introductory language of paragraph (b) of § 61.155 is being revised to make it clear that an applicant for an unlimited rotorcraft ATR must, in addition to the maneuvers set forth in paragraph (b), perform any additional maneuvers required in paragraph (a) only if he has not previously complied with paragraph (a). In addition, the requirement for climbs and climbing turns is amended to make it clear that this maneuver is not required only where the applicant has previously obtained a limited rating under paragraph (a) and the applicant holds a helicopter instrument rating. Also, a new paragraph (d) is being added to make it clear that the examining inspector has the same authority as under § 61.147 to modify any maneuvers necessary for the safety of the operation.

Section 121.419(a)(3) as contained in Amendment 121-24 was intended to reflect the substance of present § 121.419(a)(6), including the cross-reference thereto contained in § 121.420(a)(6). However, an unintended substantive change was made by failing to limit the requirement for zero flap landings to a pilot in command or a second in command in a crew requiring three or more pilots. Section 121.419(a)(3) is therefore amended to correct this unintended substantive change.

In adopting the requirements for Takeoffs (Pt. 61, App. A, Item II; Pt. 121, App. F, Item II) a definition of "takeoff" was included. The FAA realizes that the application of this definition to each of the takeoffs described would preclude touch and go takeoffs and would require more full stop landings and standing takeoffs than was intended. In addition, the altitude (or flap retraction) limitation contained in the definition could unnecessarily add to the time required for a flight check by requiring that each takeoff must continue to a given altitude before proceeding to another maneuver. The FAA believes that its basic purpose can be achieved by deleting this defini-

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tion of "takeoff" and by modifying the requirement for one normal takeoff to make it clear that this takeoff must be from a standing start. The basic purpose of this limitation is to ensure that where more than one pilot is being flight checked in the same operation, each pilot performs at least one takeoff from a standing start.

The requirement for at least one ILS approach with a simulated failure of one powerplant (Item III(c)(2) of both Appendices) contains the following parenthetical statement: "The simulated failure should start before initiating the final approach and must continue to touchdown or to commencement of the missed approach procedure". To avoid any inference that where the ILS approach is followed by a missed approach procedure, the simulated failure could be terminated as soon as the missed approach is started, the words "to the commencement of" are being deleted and the word "through" inserted. The FAA did not intend that this maneuver should be further complicated by an increase in power during the missed approach procedure. In addition, Item III(c) of Appendix F authorizes each instrument approach procedure other than ILS to be performed in a synthetic instrument trainer. However, this item does not contain specific language permitting this maneuver to be observed by any approved check airman or approved instructor of the certificate holder. It was not intended that these maneuvers must be performed before the same approved check airman who observes those maneuvers performed in actual flight and therefore this item is being amended to include an authorization consistent with the comparable provision in Appendix A of Part 61.

As presently written, the requirement for a circling approach (Item III(d) of both appendices) would appear to prohibit a circling approach from being made other than following a complete instrument approach (or simulated instrument approach) and only using an approved procedure for the airport involved. It was not intended to so limit the performance of this maneuver. For example, the FAA would be satisfied with a circling approach maneuver that commenced at any altitude above the circling approach ceiling, provided that instrument conditions are simulated to the circling approach ceiling altitude. Therefore, Item III(d) in both appendices is being amended to remove the language that would preclude acceptance of such a circling approach maneuver. This change would not prevent performance of the maneuver following a complete instrument approach procedure.

The FAA intended that at least two missed approaches be performed in ATR, type rating and proficiency flight checks. However, as set forth in Item III(e) (of both appendices) it is likely that more than two missed approaches would have to be performed or in some cases that, to perform the required missed approaches, an additional ILS approach would be re-

quired. These results are possible because inclusion of the word "normal" in subparagraph (1) of paragraph (c) prevents combining the ILS missed approach with the missed approach with a simulated engine failure. Actually, the FAA does not wish to prohibit such a combination provided at least two missed approaches are performed. Thus, if the ILS missed approach is performed with a simulated engine failure, the other required missed approach could be accomplished following a rejected landing as required by Item II(f). Item III(e) is therefore amended to authorize the intended flexibility. In addition, the first sentence of subparagraph III(e)(2) of Appendix F to Part 121 is being revised to be consistent with the description of the same maneuver in Appendix A to Part 61.

In view of the imminence of the effective date of the subject amendments, and since these amendments impose no additional burden on any person, I find that notice and public procedure thereon are impractical and that good cause exists for making these amendments effective on less than 30 days notice.

In consideration of the foregoing, Parts 61 and 121 of the Federal Aviation Regulations are amended, effective April 15, 1967, as follows:

§ 61.147 [Amended]

1. Section 61.147(c) is amended by inserting after the words "airplane class" the words "or type".

2. In § 61.155, paragraph (b) is amended and paragraph (d) is added, to read as follows:

§ 61.155 Rotorcraft rating: aeronautical skill.

(b) An applicant for an airline transport pilot certificate with a rotorcraft category and a helicopter class rating not limited to VFR must perform the maneuvers set forth in this paragraph and if he has not obtained a certificate under paragraph (a) of this section, must perform any additional maneuvers required in that paragraph:

- (1) Equipment test (oral).
- (2) Preflight check.
- (3) Taxiing, or sailing and docking.
- (4) Runups.
- (5) Takeoffs.
- (6) Climbs and climbing turns (not required if applicant holds a helicopter instrument rating and a certificate under paragraph (a) of this section).
- (7) Maneuvers at slow speed.
- (8) Airport traffic pattern.
- (9) Accuracy approaches and spot landings (single-engine rating only).
- (10) Landing technique.
- (11) Cross-wind takeoff.
- (12) Traffic control procedure.
- (13) Steep turns.
- (14) Timed turns (not required if applicant holds a helicopter instrument rating).
- (15) Recovery from unusual attitudes.
- (16) Use of radio equipment.
- (17) Orientation.
- (18) Beam bracketing.
- (19) Cone (station) identification.
- (20) Instrument approach proce-

dures.

- (21) Missed approach procedures.
- (22) Use of directional radio.
- (23) Rapid descent.
- (24) Engine(s)-out procedure (multi-engine rating only).
- (25) Maneuvering with engine(s)-out (multiengine rating only).
- (26) Maneuvering for landing at weather minimums.
- (27) Takeoff and landing with simulated engine(s) failure (multiengine rating only).
- (28) Emergencies.
- (29) Smoothness and coordination.
- (30) Judgment.

The maneuvers described in subparagraphs (6), (7), (13), (14), (15), (17), (18), (19), (20), (21), (22), (23), and (25) of this paragraph must be performed solely by reference to instruments. The FAA flight inspector conducting the test may require the maneuvers described in subparagraphs (6), (14), and (15) to be performed on a partial panel.

(d) Any maneuver required by this section may be modified by the examining inspector as necessary for the reasonable and safe operations of the rotorcraft being used.

§ 121.419 [Amended]

3. Section 121.419(a)(3) is amended by inserting after the words "zero flap landings" the parenthetical "(pilot in command and second in command in a crew requiring three or more pilots)".

4. Appendix A of Part 61 is amended as follows:

a. Item II is amended by striking out the first sentence and by amending paragraph (a) to read as follows:

II Takeoffs.

(a) One normal takeoff. For the purpose of this maneuver a takeoff begins when the airplane is taxied into position on the runway to be used.

b. The parenthetical in Item III(c)(2) is amended by striking out the words "to commencement of" and inserting in place thereof the word "through".

c. Item III(d) is amended by striking out the words "using an approved procedure for the airport involved" in subparagraph (1); by striking out the word "instrument" the first time it appears in subparagraph (2); and by inserting the words "portion of the" after the word "instrument" in subparagraph (2).

d. Item III(e) is amended by striking out the words "At least two missed" and by inserting the word "Missed" in place thereof; by striking out the word "normal" wherever it appears in subparagraph (1); and by adding the following new flush sentence after subparagraph (2):

III Instrument Procedures.

- (e) * * *
- (1) * * *
- (2) * * *

The requirements of subparagraphs (1) and (2) may be combined provided at least two missed approaches are performed.

5. Appendix F of Part 121 is amended

as follows:

a. Item II is amended by striking out the first sentence and by amending paragraph (a) to read as follows:

II *Takeoffs.*

(a) One normal takeoff. For the purpose of this maneuver a takeoff begins when the airplane is taxied into position on the runway to be used.

* * * * *

b. Item III is amended: (1) By striking out the words "to commencement of" in subparagraph (c) (2) and inserting in place thereof the word "through"; (2) by adding the following sentence to subparagraph (c) (2) "Until October 15, 1967, this maneuver is required only for a pilot in command or a second in command in a crew requiring three or more pilots"; and (3) by adding the words "if observed by an approved check airman or an approved instructor" before the period at the end of the last sentence of paragraph (c).

c. Item III(d) is amended: (1) By striking out the words "using an approved procedure for the airport in-

volved" in subparagraph (c) (1); (2) by striking out the word "instrument" the first time it appears in subparagraph (2); (3) by inserting the words "portion of the" after the word "instrument" in subparagraph (2); and (4) by adding the following sentence to the flush paragraph "Until October 15, 1967, this maneuver is required only for a pilot in command or a second in command in a crew requiring three or more pilots".

d. Item III(e) is amended by striking out the words "At least two missed" in the introductory sentence and by inserting the word "Missed" in place thereof; by striking out the word "normal" wherever it appears in subparagraph (1); by striking out the words "immediately following" in subparagraph (2) and by inserting the word "with" in place thereof; and by adding the following new flush paragraph after subparagraph (2):

- III *Instrument Procedures*
- (e) * * *
- (1) * * *
- (2) * * *

The requirements of subparagraphs (1) and (2) may be combined provided at least two missed approaches are performed. However, until October 15, 1967, subparagraph (2) and the requirement for at least two missed approaches apply only to a pilot in command or a second in command in a crew requiring three or more pilots.

(e) Item IV(a) is amended by adding the following new sentence at the end thereof: "Until October 15, 1967, this maneuver is required only for a pilot in command or a second in command in a crew requiring three or more pilots".

This amendment is made under the authority of (Secs. 313(a), 601, 602, 604, Federal Aviation Act of 1958; 49 U.S.C. 1354(a), 1421, 1422, 1424).

Issued in Washington, D.C., on April 12, 1967.

WILLIAM F. MCKEE,
Administrator.