Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Administration, Department of Transportation

[Docket No. 7201; Amdts. 61-42; 121-40]

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: Engine Out Landing Requirements

The purpose of these amendments to Parts 61 and 121 of the Federal Aviation Regulations is to amend the two-engine out landing maneuver requirements for pilots of four-engine turbojet powered airplanes.

Under Amendments 61-34 and 121-28, the FAA authorized alternatives to conducting a two-engine out landing maneuver in turbojet powered airplanes pending the completion of a study to consider the related technical and safety factors of such maneuvers as a part of a flight test or recurrent training. Amendments 61-39 and 121-36 continued that authorization until May 1, 1968, to provide additional time needed to complete the study.

plete the study.

The study has been completed and the FAA has determined that pilots of turbojet powered airplanes should continue to demonstrate their ability to conduct two-engine out landing maneuvers in those airplanes. However, pilots for Part 121 certificate holders may demonstrate those maneuvers as part of their approved training program. Under the approved training program the appropriate flight instructor will certify to the FAA when a pilot has satisfactorily performed a two-engine out approach and landing in the particular type of turbojet powered airplane to which he is to be assigned as pilot in command. This performance and certification will be accomplished during the initial flight training of a pilot in command for turbojet powered airplanes. A pilot who has ob-

tained such certification need not perform a two-engine out landing maneuver as a part of a required type rating test

as a part of a required type rating test. As distinguished from the initial training, the two-engine out landing maneuvers with four-engine turbojet powered airplanes are not necessary for the required recurrent training and proficiency checks of the pilots of the Part 121 certificate holders. A substitute method of demonstrating this maneuver at altitude or in simulators, as provided in the interim amendments, may be continued for such training and checks. If the substitute method is used, a one-engine out landing maneuver must be performed by the pilot.

In regard to three-engine turbojet airplanes, the FAA has determined that the procedures authorized in the interim amendments are adequate and should be continued in effect on a permanent basis. Accordingly, they are made a part of these amendments.

To assure the adequacy of the training program in regard to these procedures, the FAA intends as a part of its normal surveillance activities to sample, where necessary, the two-engine out landing pilot training maneuvers of each Part 121 certificate holder. If a certificate holder's training in these maneuvers is found to be unsatisfactory, use of the substitute procedures will not be authorized. Until such time as the deficiencies are corrected to the satisfaction of the Administrator, maneuvering to a landing with simulated failure of 50 percent of the available powerplants will be required in four-engine turbojet powered airplanes.

Since these amendments contain alternative methods of compliance that are less burdensome than those that would otherwise become effective on May 1, 1968, I find that notice and public procedure is impractical and unnecessary and that good cause exists for making them effective on less than 30 days notice.

In consideration of the foregoing, Part 61 and Part 121 of the Federal Aviation Regulations (14 CFR Part 61 and Part 121) are amended, effective May 1, 1968, as follows:

- 1. Appendix A, Item V(d)(1) of Part 61 is amended to read as follows:
- 61 Is amended to read as follows;V. Landings and Approaches to Landings.
- (d) Maneuvering to a landing with simulated failure of 50 percent of the available

powerplants. The simulated loss of power must be on one side of the airplane (center and one outboard engine on three-engine airplanes), except that in turbojet powered airplanes, he maneuvers in subparagraphs (1) and (2) may be substituted for this requirement.

(1) In the case of a four-engine turbojet powered airplane maneuvering to a landing with a simulated failure of the most critical powerplant, if a flight instructor in an approved training program under Part 121 of this Chapter certiles to the Administrator that he has observed the applicant satisfactorily perform a landing in that type airplane with simulated failure of 50 percent of the available powerplants. However, these substitute maneuvers may not be used if the Administrator determines that training in the two-engine out landing maneuver provided in the training program is unsatisfactory.

2. Appendix F, Item V(d)(1) of Part 121 is amended to read as follows:

- V. Landings and Approaches to Landings.
- (d) Maneuvering to a landing with simulated failure of 50 percent of the available powerplants. The simulated loss of power must be on one side of the airplane (center and one outboard engine on three-engine airplanes), except that in the case of a proficiency check for other than a pilot in command the simulated loss of power may be only the most critical powerplant. However, in turbojet powered airplanes, the maneuvers in subparagraphs (1) and (2) may be substituted for this requirement in pilot in command recurrent (as distinguished from initial) training and proficiency checks.
- (1) In the case of a four-engine turbojet powered sirplane, maneuvering to a landing with simulated failure of the most critical powerplant and performance, either in an approved simulator or in flight at altitude, of the maneuver with simulated failure of 50 percent of the available powerplants unless the administrator determines that the training in this maneuver provided by the certificate holder is unsatisfactory.

(Secs. 313(a), 601, and 602 of the Federal Aviation Act of 1958; 49 U.S.C. 1354(a), 1421 and 1422)

Issued in Washington, D.C., on April 30, 1968.

D. D. Thomas, Acting Administrator.