

(1) Pass the flight test for that class of aircraft; or

(2) Satisfactorily complete an approved flight engineer training program that is appropriate to the additional class rating sought.

§ 63.35 Knowledge requirements.

(a) An applicant for a flight engineer certificate must pass a written test on the following:

(1) The regulations of this chapter that apply to the duties of a flight engineer.

(2) The theory of flight and aerodynamics.

(3) Basic meteorology with respect to engine operations.

(4) Center of gravity computations.

(b) An applicant for the original or additional issue of a flight engineer class rating must pass a written test for that airplane class on the following:

(1) Preflight.

(2) Airplane equipment.

(3) Airplane systems.

(4) Airplane loading.

(5) Airplane procedures and engine operations with respect to limitations.

(6) Normal operating procedures.

(7) Emergency procedures.

(8) Mathematical computation of engine operations and fuel consumption.

(c) Before taking the written tests prescribed in paragraphs (a) and (b) of this section, an applicant for a flight engineer certificate must present satisfactory evidence of having completed one of the experience requirements of § 63.37. However, he may take the written tests before acquiring the flight training required by § 63.37.

(d) An applicant for a flight engineer certificate or rating must have passed the written tests required by paragraphs (a) and (b) of this section since the beginning of the 24th calendar month before the month in which the flight is taken. However, this limitation does not apply to an applicant for a flight engineer certificate or rating if—

(1) The applicant—

(i) Within the period ending 24 calendar months after the month in which the applicant passed the written test, is employed as a flight crewmember or mechanic by a U.S. air carrier or commercial operator operating either

under part 121 or as a commuter air carrier under part 135 (as defined in part 298 of this title) and is employed by such a certificate holder at the time of the flight test;

(ii) If employed as a flight crewmember, has completed initial training, and, if appropriate, transition or upgrade training; and

(iii) Meets the recurrent training requirements of the applicable part or, for mechanics, meets the recency of experience requirements of part 65; or

(2) Within the period ending 24 calendar months after the month in which the applicant passed the written test, the applicant participated in a flight engineer or maintenance training program of a U.S. scheduled military air transportation service and is currently participating in that program.

(e) An air carrier or commercial operator with an approved training program under part 121 of this chapter may, when authorized by the Administrator, provide as part of that program a written test that it may administer to satisfy the test required for an additional rating under paragraph (b) of this section.

(Sec. 6, 80 Stat. 937, 49 U.S.C. 1655; secs. 313(a), 601 through 605 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421 through 1425); sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)); and 14 CFR 11.49)

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§ 63.37 Aeronautical experience requirements.

(a) Except as otherwise specified therein, the flight time used to satisfy the aeronautical experience requirements of paragraph (b) of this section must have been obtained on an airplane—

(1) On which a flight engineer is required by this chapter; or

(2) That has at least three engines that are rated at least 800 horsepower each or the equivalent in turbine-powered engines.

(b) An applicant for a flight engineer certificate with a class rating must present, for the class rating sought, satisfactory evidence of one of the following: