

Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Agency

[Reg. Docket No. 6458; Amdt. 68-3]

PART 63—CERTIFICATION: FLIGHT CREWMEMBERS OTHER THAN PILOTS

Flight Engineer Certificates and Training Courses

The purpose of this amendment is to revise Subpart B of Part 63 to require class ratings for flight engineers and to add an appendix to Part 63 that sets forth the requirements for obtaining approval of a flight engineer training course. The changes effected by this amendment were proposed in Notice 65-3 published in the FEDERAL REGISTER on February 4, 1965 (30 F.R. 1196).

The comments received on this proposal almost unanimously agreed that the present requirements for a flight engineer certificate are out of date and require revision. Most of the comments received approved of the Agency's approach in accomplishing this revision but several of the commentators questioned the adequacy of this approach and proposed alternative ways of updating the present rules. For example, one pilots association stated that its opposition to the Agency's proposal was primarily because the regulatory requirements for a flight engineer would not recognize its belief that a Commercial Pilot's Certificate and an Instrument Rating are needed to qualify a third crewmember for the operation of modern transport airplanes. Similarly, one industry group thought the Agency should permit a commercial pilot certificate to be substituted for a flight engineer certificate for qualification as a flight engineer in air carrier operations, if the pilot has completed an air carrier training program approved under FAR 121. Those proposals are outside the scope of Notice 65-3 and cannot be adopted without further notice and public participation. However, they will be carefully considered by the Agency to determine whether future regulatory action is justified.

Several comments stated that the proposed regulation did not adequately recognize the fact that the training programs of the air carriers and commercial operators operating under FAR Part 121 are, under existing regulations, approved by the FAA and these commentators argued that completion of such a training course should be considered automatic qualification for a flight engineer certificate. While this proposal goes beyond the scope of Notice 65-3, the Agency does agree that since air carrier and commercial operator training courses conducted under FAR Part 121 are approved by the Administrator some changes to reflect this approval are warranted. These changes are discussed hereafter under the specific sections affected.

The overall question as to the amount of emphasis to be placed on "maintenance" training and experience was the most controversial part of this proposal. Some commentators took the position that in modern air carrier operations the flight engineer is not expected to do maintenance either on the ground or in flight and that including "General Maintenance" as a knowledge requirement in § 63.35 and "Basic Maintenance" as a subject in the proposed curriculum in Appendix C was inappropriate. Other commentators argued that the proposed curriculum does not provide adequate maintenance training and that in view of the complexity of modern transport aircraft, specific curriculum recognition should be given to training in electrical and electronic principles.

The Agency recognizes that in the modern transport fleet of aircraft the flight engineer is no longer used as an in-flight maintenance man. In fact, under the Federal Aviation Regulations a flight engineer would be prohibited from performing maintenance unless he held a mechanic's or repairman's certificate or performed the work under the supervision of the holder of such a certificate. Accordingly, the agency agrees that the inclusion of "general maintenance" as a knowledge requirement and "basic maintenance" as a curriculum requirement is no longer appropriate.

In addition to those changes discussed above, this amendment contains additional changes from the notice as discussed below:

Section 63.35 Knowledge requirements. As proposed, paragraph (d) of § 63.35 would in effect permit an applicant to take a flight test more than two years after passing the written test if the applicant was continuously employed in a position equivalent to the one that qualified him to take the written test or if he continuously participated in an approved training program of a United States air carrier or commercial operator, or a United States scheduled military air transportation service. One comment objected to the exception from the two year requirement for continuous employment, in any case, and for credit for any training other than in a flight engineer training course. After reviewing this proposal the Agency agrees that mere continuous employment as a mechanic or as a pilot does not assure that the applicant has a reasonable recollection of the subjects covered in the written test. However, where the applicant has, during the period following the written test, continuously participated in a maintenance, flight engineer, or pilot training program it is reasonable to assume that the applicant has had continuing exposure to these subjects. Accordingly, as adopted, this section excepts from the two year requirement only these applicants who have continuously participated in a maintenance, flight engineer, or pilot training program, of a United States air carrier or commercial operator, conducted under FAR Part 121, or conducted by a United States scheduled military air transportation service.

Since air carriers and commercial operators operating under Part 121 must have approved training programs a new paragraph (e) is being added to § 63.35 to permit such an air carrier or commercial operator, when authorized by the Administrator, to provide as part of that program a written test that it may administer to satisfy the test required for an additional rating under § 63.35(b).

Section 63.37 Aeronautical experience requirements. One comment proposed that the experience requirements be liberalized to give credit for flight time in any airplane if subsequently verified by successful completion of at least a pilot second in command approved air carrier or commercial operator training program. The Agency does not believe that credit should be given for pilot flight time in an airplane not relevant to the duties of a flight engineer. However, since flight time as a pilot in command or second in command (performing the functions of a pilot in command, under the supervision of a pilot in command), in a transport category airplane, is relevant to a flight engineer's duties this section has been amended to give credit for such time.

Section 63.41 Retesting after failure. Paragraph (b) of this section has been rewritten to make it consistent with the comparable requirements of § 61.27(d) (2), as amended by Amendment 61-17 adopted after the issue of Notice 65-3. As stated in the preamble to that amendment, its purpose was to permit more flexibility in determining the amount and type of additional instruction required of an applicant who has failed a test.

Section 63.43 Flight engineer courses. The Agency agrees, and § 63.43 is amended accordingly, that an air carrier or commercial operator with an approved training course should be permitted to apply for approval of a flight engineer course under Part 63 without submitting duplicative information to that furnished the Agency in obtaining the FAR 121 approval.

Section 63.45 Exchange of flight engineer certificates. This section, as proposed in the notice, permits a flight engineer to exchange his present certificate, including a limited flight engineer certificate, for a new certificate at any time within five years from the effective date of this amendment. However, after two years from the effective date of this amendment a person who has not made such an exchange may not continue to exercise the privileges of his present certificate.

Appendix C. One comment recommended that the proposed requirements for a flight engineer training program be issued as an advisory circular rather than as an appendix to Part 63. The subjects and classroom hours set forth in the appendix are considered to be the minimum programmed hours that the Agency would accept in initially approving a flight engineer training course. As such, these required standards must, to comply with the Administrative Procedure Act, be prescribed according to the Agency's regulatory process rather than as an advisory circular.

(As published in the Federal Register 30 F.R. 14558/ on November 23, 1965)

1517 [0994]

The Agency does agree that provision should be made for approving reductions in the required hours of ground school training where a school is able to show that the effectiveness of its training warrants such a reduction. Appendix C as adopted includes such a provision that is comparable with the authorization for a reduction in programmed hours in an approved training program under FAR 121 contained in § 121.414(b)(4).

The Agency also agrees that an air carrier or commercial operator with an approved flight engineer training course under FAR 121, that is monitored by the FAA under that Part, should be relieved from the annual reporting requirements in Appendix C to avoid duplicate reporting and recordkeeping.

Several comments indicated that the requirement that approval of a ground or flight course would be discontinued whenever less than 80 percent of the students pass the written or practical test, as applicable, could prove unfair where a small number of students is involved. The Agency agrees, and this provision, as adopted, permits the Administrator to continue approval of a training course where the 80 percent requirement is not met, if he finds that the failure rate was based on less than a representative number of students or that the course operator has taken satisfactory steps to improve the training effectiveness.

The "Inspection" requirements are revised to be consistent with the comparable requirements throughout the FAR's.

Interested persons have been afforded an opportunity to participate in the making of this amendment, and due consideration has been given to all matter presented.

The recordkeeping and reporting requirements contained herein have been approved by the Bureau of the Budget in accordance with the Federal Reports Act of 1942.

In consideration of the foregoing, Part 63 of Chapter I of Title 14 of the Code of Federal Regulations is amended effective February 22, 1966, as set forth below.

Issued in Washington, D.C., on November 16, 1965.

D. D. THOMAS,
Acting Administrator.

§ 63.3 [Amended]

1. By amending § 63.3 by amending the title to read "Certificates and ratings required" and by inserting the phrase "with appropriate ratings" after the words "flight engineer certificate" in paragraph (a).

§ 63.11 [Amended]

2. By amending § 63.11 by inserting the words "and appropriate class ratings" after the word "certificate" in paragraph (a) and after the period in paragraph (b).

3. By amending Subpart B of Part 63 to read as follows:

Subpart B—Flight Engineers

Sec.
63.31 Eligibility requirements; general.
63.33 Aircraft ratings.

Sec.
63.35 Knowledge requirements.
63.37 Aeronautical experience requirements.
63.39 Skill requirements.
63.41 Retesting after failure.
63.43 Flight engineer courses.
63.45 Exchange of flight engineer certificates.

AUTHORITY: The provisions of this Subpart B issued under secs. 813(a), 801, and 602, Federal Aviation Act of 1958; 49 U.S.C. 1354, 1421, 1422.

§ 63.31 Eligibility requirements; general.

To be eligible for a flight engineer certificate, a person must—

- (a) Be at least 21 years of age;
- (b) Be able to read, speak, and understand the English language, or have an appropriate limitation placed on his flight engineer certificate;
- (c) Hold at least a second-class medical certificate issued under Part 67 of this chapter within the 12 months before the date he applies; and
- (d) Comply with the requirements of this subpart that apply to the rating he seeks.

§ 63.33 Aircraft ratings.

(a) The aircraft class ratings to be placed on flight engineer certificates are—

- (1) Reciprocating engine powered;
 - (2) Turbopropeller powered; and
 - (3) Turbojet powered.
- (b) To be eligible for an additional aircraft class rating after his flight engineer certificate with a class rating is issued to him, an applicant must pass the written test that is appropriate to the class of airplane for which an additional rating is sought, and—
- (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 test, 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 test before acquiring the flight training required by § 63.37.

(d) An applicant for a flight engineer certificate must have passed the written test within the 24-month period before the date he takes the flight test. However, this limitation does not apply to an applicant who, after passing the written test, has continuously participated in a maintenance, flight engineer, or pilot training program, of a United States air carrier or commercial operator, conducted under Part 121 of this chapter, or conducted by a United States scheduled military air transportation service.

(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.

§ 63.37 Aeronautical experience requirements.

(a) The flight time used to satisfy the aeronautical experience requirements of paragraph (b) of this section must have been obtained on—

(1) A transport category airplane, if the flight time was in the capacity of pilot in command or second in command; or

(2) An airplane on which a flight engineer is required by this chapter or 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:

(1) At least 3 years of diversified practical experience in aircraft and aircraft engine maintenance (of which at least 1 year was in maintaining multiengine aircraft with engines rated at least 800 horsepower each, or the equivalent in turbine engine powered aircraft), and at least 5 hours of flight training in the duties of a flight engineer.

(2) Graduation from at least a 2-year specialized aeronautical training course in maintaining aircraft and aircraft engines (of which at least 6 calendar months were in maintaining multiengine aircraft with engines rated at least 800 horsepower each, or the equivalent in turbine engine powered aircraft), and at least 5 hours of flight training in the duties of a flight engineer.

(3) A degree in aeronautical, electrical, or mechanical engineering from a recognized college, university, or engineering school; at least 6 calendar months of practical experience in maintaining multiengine aircraft with engines rated at least 800 horsepower each, or the equivalent in turbine engine powered aircraft; and at least 5 hours of flight training in the duties of a flight engineer.

(4) At least 200 hours of flight time in a transport category airplane as pilot

in command, or as second in command performing the functions of a pilot in command under the supervision of a pilot in command.

(5) At least 100 hours of flight time as a flight engineer.

(6) Within the 90-day period before he applies, successful completion of an approved flight engineer ground and flight course of instruction as provided in Appendix C of this part.

§ 63.39 Skill requirements.

(a) An applicant for a flight engineer certificate with a class rating must pass a practical test on the duties of a flight engineer in the class of airplane for which a rating is sought. The test may only be given on an airplane specified in § 63.37(a).

(b) The applicant must—

(1) Show that he can satisfactorily perform preflight inspection, servicing, starting, pretakeoff, and postlanding procedures;

(2) In flight, show that he can satisfactorily perform the normal duties and procedures relating to the airplane, airplane engines, propellers (if appropriate), systems, and appliances; and

(3) In flight, in an airplane simulator, or in an approved flight engineer training device, show that he can satisfactorily perform emergency duties and procedures and recognize and take appropriate action for malfunctions of the airplane, engines, propellers (if appropriate), systems and appliances.

§ 63.41 Retesting after failure.

An applicant for a flight engineer certificate who fails a written test or practical test for that certificate may apply for retesting—

(a) After 30 days after the date he failed that test; or

(b) After he has received additional practice or instruction (flight, synthetic trainer, or ground training, or any combination thereof) that is necessary, in the opinion of the Administrator or the applicant's instructor (if the Administrator has authorized him to determine the additional instruction necessary) to prepare the applicant for retesting.

§ 63.43 Flight engineer courses.

An applicant for approval of a flight engineer course must submit a letter to the Administrator requesting approval, and must also submit three copies of each course outline, a description of the facilities and equipment, and a list of the instructors and their qualifications. An air carrier or commercial operator with an approved flight engineer training course under Part 121 of this chapter may apply for approval of a training course under this part by letter without submitting the additional information required by this paragraph. Minimum requirements for obtaining approval of a flight engineer course are set forth in Appendix C of this part.

§ 63.45 Exchange of flight engineer certificates.

(a) The holder of a flight engineer certificate, including a limited flight engineer certificate, issued before February 22, 1966, may not continue to exercise the privileges of that certificate after

two years after February 22, 1966. However, until five years after February 22, 1966, he may exchange his certificate for a new flight engineer certificate. A class rating is added to the new certificate for each class of airplane on which the applicant has—

(1) Passed a practical test for a flight engineer certificate;

(2) Successfully completed an approved flight engineer training course or air carrier training program; or

(3) Submitted satisfactory evidence that he has acquired at least 25 hours of flight experience performing the duties and functions of a flight engineer on an airplane specified in § 63.37(a).

(b) The holder of a flight engineer certificate issued before February 22, 1966, who does not qualify for a class rating may obtain a class rating by taking the practical test prescribed by § 63.39.

3. By adding an Appendix C to read as follows:

APPENDIX C

FLIGHT ENGINEER TRAINING COURSE REQUIREMENTS

(a) Training course outline—

(1) Format.

The ground course outline and the flight course outline are independent. Each must be contained in a looseleaf binder to include a table of contents. If an applicant desires approval of both a ground school course and a flight school course, they must be combined in one looseleaf binder that includes a separate table of contents for each course. Separate course outlines are required for each type of airplane.

(2) Ground course outline.

(i) It is not mandatory that the subject headings be arranged exactly as listed in this subparagraph. Any arrangement of subjects is satisfactory if all the subject material listed here is included and at least the minimum programmed hours are assigned to each subject. Each general subject must be broken down into detail showing the items to be covered.

(ii) If any course operator desires to include additional subjects in the ground course curriculum, such as international law, flight hygiene, or others that are not required, the hours allotted these additional subjects may not be included in the minimum programmed classroom hours.

(iii) The following subjects and classroom hours are the minimum programmed coverage for the initial approval of a ground training course for flight engineers. Subsequent to initial approval of a ground training course an applicant may apply to the Administrator for a reduction in the programmed hours. Approval of a reduction in the approved programmed hours is based on improved training effectiveness due to improvements in methods, training aids, quality of instruction, or any combination thereof.

<i>Subject</i>	<i>Classroom hours</i>
Federal Aviation Regulations.....	10
To include the regulations of this chapter that apply to flight engineers.	
Theory of Flight and Aerodynamics....	10
Airplane Familiarization.....	90

To include as appropriate:

- Specifications.
- Construction features.
- Flight controls.
- Hydraulic systems.
- Pneumatic systems.
- Electrical systems.
- Anti-icing and de-icing systems.
- Pressurization and air-conditioning systems.

Vacuum systems.	
Pitot static systems.	
Instrument systems.	
Fuel and oil systems.	
Emergency equipment.	
Engine Familiarization.....	45
To include as appropriate:	
Specifications.	
Construction features.	
Lubrication.	
Ignition.	
Carburetor and induction, supercharging and fuel control systems.	
Accessories.	
Propellers.	
Instrumentation.	
Emergency equipment.	
Normal Operations (Ground and Flight).....	50
To include as appropriate:	
Servicing methods and procedures.	
Operation of all the airplane systems.	
Operation of all the engine systems.	
Loading and center of gravity computations.	
Cruise control (normal, long range, maximum endurance).	
Power and fuel computation.	
Meteorology as applicable to engine operation.	
Emergency Operations.....	30
To include as appropriate:	
Landing gear, brakes, flaps, speed brakes, and leading edge devices.	
Pressurization and air-conditioning.	
Portable fire extinguishers.	
Fuselage fire and smoke control.	
Loss of electrical power.	
Engine fire control.	
Engine shut-down and restart.	
Oxygen.	
Total (exclusive of final tests)....	235

The above subjects, except Theory of Flight and Aerodynamics, and Regulations, must apply to the same type of airplane in which the student flight engineer is to receive flight training.

(3) Flight Course Outline.

(i) The flight training curriculum must include at least 10 hours of flight instruction in an airplane specified in § 63.37(a). The flight time required for the practical test may not be credited as part of the required flight instruction.

(ii) All of the flight training must be given in the same type airplane.

(iii) As appropriate to the airplane type, the following subjects must be taught in the flight training course:

SUBJECT

NORMAL DUTIES, PROCEDURES AND OPERATIONS

To include as appropriate:

- Airplane preflight.
- Engine starting, power checks, pretakeoff, postlanding and shut-down procedures.
- Power control.
- Temperature control.
- Engine operation analysis.
- Operation of all systems.
- Fuel management.
- Logbook entries.
- Pressurization and air conditioning.

RECOGNITION AND CORRECTION OF IN-FLIGHT MALFUNCTIONS

To include:

- Analysis of abnormal engine operation.
- Analysis of abnormal operation of all systems.
- Corrective action.

EMERGENCY OPERATIONS IN FLIGHT

To include as appropriate:

- Engine fire control.
- Fuselage fire control.

Smoke control.
Loss of power or pressure in each system.
Engine overspeed.
Fuel dumping.
Landing gear, spoilers, speed brakes, and flap extension and retraction.
Engine shut-down and restart.
Use of oxygen.

(iv) If the Administrator finds a simulator or flight engineer training device to accurately reproduce the design, function, and control characteristics, as pertaining to the duties and responsibilities of a flight engineer on the type of airplane to be flown, the flight training time may be reduced by a ratio of 1 hour of flight time to 2 hours of airplane simulator time, or 3 hours of flight engineer training device time, as the case may be. However, the flight time may not be less than 5 hours.

(v) To obtain credit for flight training time, airplane simulator time, or flight engineer training device time, the student must occupy the flight engineer station and operate the controls.

(b) *Classroom equipment.*

Classroom equipment should consist of systems and procedural training devices, satisfactory to the Administrator, that duplicate the operation of the systems of the airplane in which the student is to receive his flight training.

(c) *Contracts or agreements.*

(1) An approved flight engineer course operator may contract with other persons to obtain suitable airplanes, airplane simulators, or other training devices or equipment.

(2) An operator who is approved to conduct both the flight engineer ground course and the flight engineer flight course may contract with others to conduct one course or the other in its entirety but may not contract with others to conduct both courses for the same airplane type.

(3) An operator who has approval to conduct a flight engineer ground course or flight course for a type of airplane, but not both courses, may not contract with another person to conduct that course in whole or in part.

(4) An operator who contracts with another to conduct a flight engineer course may not authorize or permit the course to be conducted in whole or in part by a third person.

(5) In all cases, the course operator who is approved to operate the course is responsible for the nature and quality of the instruction given.

(6) A copy of each contract authorized under this paragraph must be attached to each of the 3 copies of the course outline submitted for approval.

(d) *Instructors.*

(1) Only certificated flight engineers may give the flight instruction required by this Appendix in an airplane, simulator, or flight engineer training device.

(2) There must be a sufficient number of qualified instructors available to prevent an excess ratio of students to instructors.

(e) *Revisions.*

(1) Requests for revisions of the course outlines, facilities or equipment must follow the procedures for original approval of the course. Revisions must be submitted in such form that an entire page or pages of the approved outline can be removed and replaced by the revisions.

(2) The list of instructors may be revised at any time without request for approval, if the requirements of paragraph (d) of this Appendix are maintained.

(f) *Ground school credits.*

(1) Credit may be granted a student in the ground school course by the course operator for comparable previous training or experience that the student can show by written evidence; however, the course operator must still meet the quality of instruction as described in paragraph (h) of this Appendix.

(2) Before credit for previous training or experience may be given, the student must pass a test given by the course operator on the subject for which the credit is to be given. The course operator shall incorporate results of the test, the basis for credit allowance, and the hours credited as part of the student's records.

(g) *Records and reports.*

(1) The course operator must maintain, for at least two years after a student graduates, fails, or drops from a course, a record of the student's training, including a chronological log of the subject course, attendance, examinations, and grades.

(2) Except as provided in subparagraph (3) of this paragraph, the course operator must submit to the Administrator, not later than January 31 of each year, a report for the previous calendar year's training, to include:

(i) Name, enrollment and graduation date of each student;

(ii) Ground school hours and grades of each student;

(iii) Flight, airplane simulator, flight engineer training device hours, and grades of each student; and

(iv) Names of students failed or dropped, together with their school grades and reasons for dropping.

(3) Upon request, the Administrator may waive the reporting requirements of subparagraph (2) of this paragraph for an approved flight engineer course that is part of an approved training course under Subpart N of Part 121 of this chapter.

(h) *Quality of instruction.*

(1) Approval of a ground course is discontinued whenever less than 80 percent of the students pass the FAA written test on the first attempt.

(2) Approval of a flight course is discontinued whenever less than 80 percent of the students pass the FAA practical test on the first attempt.

(3) Notwithstanding subparagraphs (1) and (2) of this paragraph, approval of a ground or flight course may be continued when the Administrator finds—

(i) That the failure rate was based on less than a representative number of students; or

(ii) That the course operator has taken satisfactory means to improve the effectiveness of the training.

(i) *Time limitation.*

Each student must apply for the written test and the flight test within 90 days after completing the ground school course.

(j) *Statement of course completion.*

(1) The course operator shall give to each student who successfully completes an approved flight engineer ground school training course, and passes the FAA written test, a statement of successful completion of the course that indicates the date of training, the type of airplane on which the ground course training was based, and the number of hours received in the ground school course.

(2) The course operator shall give each student who successfully completes an approved flight engineer flight course, and passed the FAA practical test, a statement of successful completion of the flight course that indicates the dates of the training, the type of airplane used in the flight course, and the number of hours received in the flight course.

(3) A course operator who is approved to conduct both the ground course and the flight course may include both courses in a single statement of course completion if the provisions of subparagraphs (1) and (2) of this paragraph are included.

(4) The requirements of this paragraph do not apply to an air carrier or commercial operator with an approved training course under Part 121 of this chapter providing the student receives a flight engineer certificate upon completion of that course.

(k) *Inspections.*

Each course operator shall allow the Administrator at any time or place, to make any inspection necessary to ensure that the quality and effectiveness of the instruction are maintained at the required standards.

(l) *Change of ownership, name, or location.*

(1) Approval of a flight engineer ground course or flight course is discontinued if the ownership of the course changes. The new owner must obtain a new approval by following the procedure prescribed for original approval.

(2) Approval of a flight engineer ground course or flight course does not terminate upon a change in the name of the course that is reported to the Administrator within 30 days. The Administrator issues a new letter of approval, using the new name, upon receipt of notice within that time.

(3) Approval of a flight engineer ground course or flight course does not terminate upon a change in location of the course that is reported to the Administrator within 30 days. The Administrator issues a new letter of approval, showing the new location, upon receipt of notice within that time, if he finds the new facilities to be adequate.

(m) *Cancellation of approval.*

(1) Failure to meet or maintain any of the requirements of this Appendix for the approval of a flight engineer ground course or flight course is reason for cancellation of the approval.

(2) If a course operator desires to voluntarily terminate the course, he should notify the Administrator in writing and return the last letter of approval.

(n) *Duration.*

Except for a course operated as part of an approved training course under subpart N of Part 121 of this chapter, the approval to operate a flight engineer ground course or flight course terminates 24 months after the last day of the month of issue.

(o) *Renewal.*

(1) Renewal of approval to operate a flight engineer ground course or flight course is conditioned upon the course operator's meeting the requirements of this Appendix.

(2) Application for renewal may be made to the Administrator at any time after 60 days before the termination date.

(p) *Course operator approvals.*

An applicant for approval of a flight engineer ground course, or flight course, or both, must meet all of the requirements of this Appendix concerning application, approval, and continuing approval of that course or courses.

(q) *Practical test eligibility.*

An applicant for a flight engineer certificate and class rating under the provisions of § 63.37(b)(6) is not eligible to take the practical test unless he has successfully completed an approved flight engineer ground school course in the same type of airplane for which he has completed an approved flight engineer flight course.

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