#### CIVIL AIR REGULATIONS

# PART 34 FLIGHT NAVIGATOR CERTIFICATES

## Effective August 1, 1947

# CIVIL AERONAUTICS BOARD



WASHINGTON, D. C.

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34.0 Requirements for certificate.	34.06 Knowledge.
34.00 Îssuance.	34.07 Skill.
34.01 Age.	34.1 Certification of rules.
34.02 Citizenship.	34.10 Application.
34.03 Education.	34.11 Duration.
34.04 Physical standards.	34.110 Temporary certificates.
34.05 Experience.	34.12 Reexamination.

#### EXPLANATORY STATEMENT OF PART 34

In accordance with the provisions of Title VI of the Civil Aeronautics Act of 1938 it is unlawful for any person to serve in any capacity as an airman in connection with any civil aircraft used in air commerce without an airman certificate authorizing him to serve in such capacity, or in violation of the terms of any such certificate. A flight navigator falls within the definition of airman as defined in that act.

The purpose of this part is to provide a means for compliance with the airman requirements of Title VI of the act with respect to the use in air commerce of those types of aircraft which require the services of flight navigators by providing the standards by which flight navigators may be certificated as airmen.

#### 34.0 REQUIREMENTS FOR CERTIFICATE

- 34.00 Issuance. A flight navigator certificate will be issued to an applicant who meets the following requirements.
  - 34.01 Age. Applicant shall be at least 21 years of age.
- 34.02 Citizenship. Applicant shall be a citizen of the United States or of a foreign government which grants reciprocal flight navigator privileges to citizens of the United States on equal terms and conditions with citizens of such foreign government.
- 34.03 Education. Applicant shall be able to read, write, speak, and understand the English language.
- 34.04 Physical standards. Applicant shall meet the physical standards of the second class prescribed in Part 29 of the Civil Air Regulations.

### 34.05 Experience.

- (a) Applicant shall—
- (1) have at least 200 hours of satisfactory flight navigation including celestial and radio navigation and dead reckoning: Provided, That a pilot who has logged 500 hours of cross-country flight, of which 100 hours shall have been at night, may be credited with not more than 100 hours toward this experience; and
- (2) have satisfactorily determined his position in flight not less than 25 times by night by celestial observations and not less than 25 times by day by celestial observations in conjunction with other aids; or
- (b) Applicant shall be a graduate of a flight navigator course approved by the Administrator.
  - 34.06 Knowledge. Applicant shall pass a written examination on the following subjects:
- (a) those provisions of the Civil Air Regulations pertinent to the duties of a navigator in the navigation of aircraft;
- (b) the fundamentals of flight navigation, including flight planning and cruise control;
  (c) practical meteorology, including the analysis of weather maps, weather reports,
  and weather forecasts; weather sequence abbreviations, symbols, and nomenclature;
  - (d) types of air navigation facilities and procedures in general use; (e) the calibration and use of instruments used in air navigation;
  - (f) navigation by dead reckoning;

(g) navigation by celestial means;

(h) navigation by means of radio aids;

(i) pilotage and map reading;

(j) interpretation of navigational aid identification signals.

34.07 Skill.

(a) Applicant shall pass a practical examination in the operation of flight navigational equipment.

(b) Applicant shall accomplish practical tests in aircraft navigation by:

(1) dead reckoning;

(2) celestial means; and

(3) radio aids to navigation.

#### 34.1 CERTIFICATION RULES

- 34.10 Application. Application shall be made on a form and in the manner prescribed by the Administrator.
- 34.11 Duration. A flight navigator certificate shall remain in effect unless it is suspended, or revoked, or a general termination date for such certificate is fixed by the Board.
- 34.110 Temporary certificates. The Administrator or his authorized representative may issue a temporary flight navigator certificate for a period of not to exceed 90 days, subject to the terms and conditions specified therein by the Administrator.
- 34.12 Reexamination. Applicants who have failed in any examination may apply for reexamination on the part failed after 30 days from the date of such failure.