CAR 34

February 15, 1946

CIVIL AERONAUTICS BOARD
WASHINGTON, D. C.

CIVIL AIR REGULATIONS DRAFT RELEASE NO. 62

SUBJECT: Certification requirements for flight navigators.

With this Draft Release the Board is circulating a proposed new Part 34 of the Civil Air Regulations, which provides for the certification of flight navigators.

The proposed new Part 34 of Civil Air Regulations - Flight Navigator Certificate - prescribes substantially the same minimum requirements which were developed in collaboration with the aviation industry in May 1945, and which are being presented to the Provisional International Civil Aviation Organization now in session at Montreal, as the United States recommendation for use as international standards.

At the present time this airman certificate is required only for implementing the regulations applying to our air carriers engaged in scheduled air transportation outside the United States. However, the adequacy of the proposed regulations as applied to scheduled operations within the United States should also be considered as the employment of larger transport aircraft and the authorization of long range flights in our domestic scheduled operations may soon make it necessary to require such airman to be included in the crew on some of the domestic air carrier operations.

In accordance with its established policy, the Board earnestly desires to secure your views regarding these proposed regulations.

Your recommendations or comment should be forwarded to the Civil Aeronautics Board, Commerce Building, Washington 25, D. C., on or before May 1, 1946.

/s/ Fred A. Toombs

Fred A. Toombs
Secretary

PART 34 - FLIGHT NAVIGATOR CERTIFICATES
(PROPOSED)

34.0 Certificate.
34.1 General.
34.2 Privileges and limitations.

34.0 CERTIFICATE

34.00 Issuance. A flight navigator certificate will be issued to an applicant who meets the requirements prescribed herein.

34.01 Age. 21 years.

34.02 Citizenship. A citizen of the United States or of a foreign country which grants reciprocal flight navigator privileges to citizens of the United States on equal terms and conditions with citizens of such foreign country.

34.03 Education. Read, write, speak, and understand the English language.

34.04 Physical standards. The physical standards of the third class prescribed in Part 29.

34.05 Experience. At least 200 hours of flight navigation including dead reckoning, celestial and radio navigation, not more than 50 hours of which may be simulated flight approved by the Administrator, or be a graduate of a flight navigator course approved by the Administrator.

34.06 Knowledge. Pass a written examination on the following subjects:

(a) such provisions of the rules and regulations governing civil aviation as are pertinent to the navigation of aircraft;

(b) the fundamentals of air navigation including flight planning and cruise control;

(c) practical meteorology, including the analysis of weather maps, weather reports, 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) sending and receiving international Morse code, at a speed of at least 5 words per minute.

34.07 Skill.

(a) Pass a practical examination in the adjustment of navigational flight equipment.

(b) Accomplish practical tests in aircraft navigation by (1) dead reckoning, (2) celestial, and (3) radio aids to navigation.

34.1 GENERAL

34.10 Application. Application shall be made on a form furnished by the Administrator.

34.11 Duration. A flight navigator certificate shall expire 24 months after month of issuance. (For example, a certificate issued any time in the month of April 1945 will expire on the last day of April 1947.)

34.12 Renewal. Application for renewal of a flight navigator certificate shall be made on a form furnished by the Administrator and may be mailed or presented to a representative of the Administrator within 60 days prior to the month of expiration.

34.13 Reinstatement. An expired flight navigator certificate may be reinstated within 24 calendar months after the date of expiration upon application and satisfactory demonstration to a representative of the Administrator that he is thoroughly familiar with all current information regarding the operation, maintenance, and repair of the navigational systems used.

34.14 Surrender. Any flight navigator shall, upon request, deliver his certificate to the Administrator, if it has been suspended or revoked.

34.15 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.

34.2 PRIVILEGES AND LIMITATIONS

34.20 Certificate possession.* A flight navigator, when serving as such, shall have in his possession his flight navigator certificate and his medical certificate or other evidence satisfactory to the Administrator showing that he has met the physical requirements appropriate to his certificate within the preceding 12 calendar months.

34.21 Operation during physical deficiency.* A flight navigator shall not serve as such in any aircraft during the period of any known physical deficiency which would render him unable to meet the physical requirements prescribed for the issuance of his currently effective medical certificate.

34.22 Recent experience.* A flight navigator shall serve as such in any aircraft in scheduled air transportation only if within the 12 preceding months he has served as flight navigator for at least 75 hours or has demonstrated his continued proficiency to a representative of the Administrator or to a person designated by the Administrator for that purpose.

*These operational rules are included in this Part for study and comment and may subsequently be deleted from this Part and placed in Parts 41 and 61.