

(iii) *Aviation Meteorology*.—intermediate aviation meteorology with special emphasis on atmospheric pressure density, altimetry and upper wind circulations; knowledge of aviation weather codes and plotting; aircraft observation procedures, synoptic meteorology including simple analysis and interpretation of weather charts; principles of aerologation; elementary world climatology; detailed knowledge of Indian climatology and of meteorological procedures relating to aviation;

(iv) *Signals (Practical)*.—transmission and interpretation of aural and visual signals;

(d) *Experience*.—He shall produce evidence of having satisfactorily completed within a period of 2 years immediately preceding the date of application the following air navigation experience as a Navigator—

(i) not less than 200 hours of cross-country flight time of which not less than 100 hours including 50 hours by night shall have been completed on flights of not less than 1,000 nautical miles without landing or of at least 5 hours duration each during which he shall have navigated an aircraft by the use of dead reckoning, radio bearing and such other aids as may be available to him and shall have made 50 astronomical observations of heavenly bodies including not less than 25 by night and that he shall have appropriately and satisfactorily used the results of those observations in navigating an aircraft. Out of this flight time of 100 hours, not less than 50 hours including not less than 15 hours by night shall have been completed and out of these 50 astronomical observations, not less than 15 by day and 10 by night shall have been made within a period of 12 months immediately preceding the date of application for license;

(ii) the remainder of 200 hours as mentioned in sub-clause (i) shall have been completed on flights of not less than 3 hours duration each;

Provided that a pilot who has satisfactorily completed as a pilot-navigator on flights of not less than 3 hours duration each, at least 300 hours including not less than 50 hours by night shall not be required to produce evidence of experience required under this clause;

(e) *Skill*.—He shall demonstrate in flight by day and by night within a period of six months immediately preceding the date of application that he is competent to navigate an aircraft by dead reckoning, celestial and radio/radar observations.

2. Validity.—The period of validity shall commence from the date of issue or renewal of the licence. The Licence may be valid for a period not exceeding 12 months from the date of a medical examination, except when a candidate has been medically examined during 30 days immediately preceding the date of expiry of the licence, full period of validity may be allowed from the date of the expiry.

3. Renewal.—The licence may be renewed on receipt of satisfactory evidence of applicant:

(a) having undergone a medical examination in accordance with clause (b) of paragraph 1;