CIVIL AIR REGULATIONS

PART 29

PHYSICAL STANDARDS FOR AIRMEN;
MEDICAL CERTIFICATES

As amended to March 15, 1958

CIVIL
AERONAUTICS BOARD

WASHINGTON, D. C.

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PART 29—PHYSICAL STANDARDS FOR AIRMEN; MEDICAL CERTIFICATES

REVISION OF PART

Because of the number of outstanding amendments to Part 29 there follows a revision of Part 29 incorporating all amendments thereto which were in effect on March 15, 1958.

By the Civil Aeronautics Board.

[SEAL] M. C. MULLIGAN,
Secretary.

Sec.
29.1 Issuance of medical certificates.
29.2 First class.
29.3 Second class.
29.4 Third class.
29.5 Physical deficiencies.

AUTHORITY: §§ 29.1 to 29.5 issued under sec. 205, 52 Stat. 984; 49 U. S. C. 425. Interpret or apply secs. 601, 602, 52 Stat. 1007, 1008; 49 U. S. C. 551, 552.

§ 29.1 *Issuance of medical certificates.* A medical certificate of the appropriate class shall be issued to an applicant if the Administrator or his authorized representative finds that the applicant meets the physical standards prescribed in this part.

§ 29.2 *First class*—(a) *Eye.* Applicant shall have:

(1) A visual acuity of at least 20/20 in each eye separately without correction: *Provided,* That if the vision in either or both eyes is not poorer than 20/50 and is brought up to 20/20 or better in each such eye by glasses, the applicant may be qualified upon condition that correcting glasses be worn while exercising the privileges of his airman certificate.

(2) An average depth perception of 30 millimeters or less on a prescribed depth perception apparatus, with or without correction: *Provided,* That if the depth perception is greater than 30 millimeters without correction, and is corrected to at least 30 millimeters average by glasses, the applicant may be qualified upon condition that such glasses be worn while exercising the privileges of his airman certificate.

(3) No diplopia in any meridian within 35 degrees from the point of visual fixation.

(4) Not more than one diopter of hyperphoria in either eye.

(5) Not more than 10 diopters of esophoria.

(6) Not more than 5 diopters of exophoria.

(7) An abduction of not less than 3 diopters nor more 15 diopters.

(8) An adduction of 6 or more diopters.

(9) A near vision of at least $v=1.00$ at 18 inches with each eye separately without the use of correcting lenses: *Provided,* That if near vision in either or both eyes is poorer than $v=1.00$ at 18 inches the applicant shall possess the necessary correcting lenses.

(10) Normal color vision.

(11) Normal visual fields.

(12) No acute or chronic pathological condition of either eye or adenexae which may interfere with its proper function, may progress to that degree, or may be aggravated by flying.

(b) *Ear, nose, throat, and equilibrium.* (1) Applicant shall be able to hear the whispered voice at 8 feet with each ear separately; shall have no acute or chronic disease of the middle or internal ear; no disease of the mastoid; no unhealed (unclosed) perforations of the ear drum; no disease or malformation of the nose or throat which may interfere with or be aggravated by flying; and no disturbance in equilibrium.

(2) If the hearing acuity for the whispered voice is less than 20 feet in either ear the applicant shall possess a hearing acuity of at least 50 percent of normal in each ear throughout the effective speech and radio range as demonstrated by a standard audiometer.

(c) *General physical condition.* (1) Applicant shall have no organic or functional disease or structural defect or limitation which would be likely to render him unable to safely perform the duties and exercise the privileges of the grade of airman certificate held or sought.

(2) Unless the adjusted maximum readings apply, applicant's reclining blood pressure shall not exceed the maximum readings for his age group, as indicated in the table in this subparagraph. The adjusted maximum readings shall apply to any applicant, age 30 years or more, whose reclining blood pressure exceeds the maximum readings for his age group and whose cardiac and kidney conditions, after complete cardiovascular examination, are shown to be normal.

Age group	Maximum readings (reclining blood pressure in mm.)		Adjusted maximum readings (reclining blood pressure in mm.)	
	Systolic	Diastolic	Systolic	Diastolic
20–29	140	88		
30–39	145	92	155	98
40–49	155	96	165	100
50 and over	160	98	170	100

(3) Applicants 40 years of age or over shall demonstrate a degree of circulatory efficiency compatible with the safe operation of aircraft at high altitudes.

(d) *Nervous system.* Applicant shall have no disease of the mental or nervous system or abnormality of the personality which would be likely to render him unable to safely perform the duties and exercise the privileges of the grade of airman certificate held or sought.

§ 29.3 *Second class*—(a) *Eye.* Applicant shall have:

(1) A visual acuity of at least 20/20 in each eye separately without correction: *Provided,* That if the vision in either or both eyes is not poorer than 20/50 and is brought up to 20/20 or better in each such eye by glasses, the applicant may be qualified upon condition that correcting glasses be worn while exercising the privileges of his airman certificate.

(2) An average depth perception of 30 millimeters or less on a prescribed depth perception apparatus, with or without correction: *Provided,* That if the depth perception is greater than 30 millimeters without correction, and is corrected to at least 30 millimeters average by glasses, the applicant may be qualified upon condition that such glasses be worn while exercising the privileges of his airman certificate.

(3) No diplopia in any meridian within 35 degrees from the point of visual fixation.

(4) Not more than one diopter of hyperphoria.

NOTICE

Advise the Civil Aeronautics Board, Washington 25, D. C., that you have purchased this part of the Civil Air Regulations and that agency will supply you with copies of amendments which have been issued since this printing. Be sure to specify the number of this part, otherwise your request cannot be filled.

(5) Properly balanced eye muscles with an abduction of 3 diopters or more, and adduction of 6 diopters or more.

(6) Sufficient accommodation to pass a test prescribed by the Administrator based primarily upon ability to read official aeronautical maps.

(7) Normal fields of vision.

(8) No pathology of the eye.

(9) The ability to distinguish aviation signal red, aviation signal green, and white.

(b) *Ear, nose, throat, and equilibrium.* Applicant shall be able to hear the whispered voice at 8 feet with each ear separately; shall have no acute or chronic disease of the middle or internal ear; no disease of the mastoid; no unhealed (unclosed) perforations of the ear drum; no disease or malformation of the nose or throat which may interfere with or be aggravated by flying; and no disturbance in equilibrium.

(c) *General physical condition.* Applicant shall have no organic or functional disease or structural defect or limitation which would be likely to render him unable to safely perform the duties and exercise the privileges of the grade of airman certificate held or sought.

(d) *Nervous system.* Applicant shall have no disease of the mental or nervous system or abnormality of the personality which would be likely to render him unable to safely perform the duties and exercise the privileges of the grade of airman certificate held or sought.

§ 29.4 *Third class*—(a) *Eye.* Applicant shall have:

(1) A visual acuity of at least 20/50 in each eye separately without correction: *Provided*, That if the vision in either or both eyes is poorer than 20/50 and is brought up to 20 30 or better in each such eye by glasses, the applicant may be qualified upon condition that such glasses be worn while exercising the privileges of his airman certificate.

(2) No serious pathology of the eye.

(3) The ability to distinguish aviation signal red, aviation signal green, and white.

(b) *Ear, nose, throat, and equilibrium.* Applicant shall be able to hear the whispered voice at 3 feet; shall have no acute or chronic disease of the internal ear, no disease or malformation of the nose or throat which may interfere with or be aggravated by flying, and no disturbance in equilibrium.

(c) *General physical condition.* Applicant shall have no organic or functional disease or structural defect or limitation which would be likely to render him unable to safely perform the duties and exercise the privileges of the grade of airman certificate held or sought.

(d) *Nervous system.* Applicant shall have no disease of the mental or nervous system or abnormality of the personality which would be likely to render him unable to safely perform the duties and exercise the privileges of the grade of airman certificate held or sought.

§ 29.5 *Physical deficiencies.* (a) A limited medical certificate shall be issued to an applicant who fails to meet the physical standards prescribed for the medical certificate sought if the Administrator finds through more extensive medical examinations, practical tests or otherwise that, by the imposition of terms, conditions, or limitations, the applicant, notwithstanding his physical deficiency, can perform the duties and exercise those privileges authorized by the Administrator w i t h o u t endangering safety in air commerce. The operational limitations imposed by the Administrator shall be set forth on the applicant's airman certificate.

(b) Where the Administrator's finding regarding an individual's physical fitness is based upon a practical test, that individual shall not be required to retake such practical test during subsequent physical examinations unless, in the opinion of the Administrator, the individual's physical deficiency has become more pronounced.

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