Standard 424 – Medical Requirements – Canadian Aviation Regulations (CARs)

From: <u>Transport Canada</u>



See also **Subpart 404**

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Foreword

The Personnel Licensing and Training Standards Respecting Medical Requirements outline the basic specifications for the medical requirements for applicants for or holders of Personnel Permits, Licences and Ratings in compliance with Subpart 404 of the *Canadian Aviation Regulations*.

Division I - General

424.01 Definitions

The words and expressions used in these Standards have the same meaning as in the General Provisions, Part I of the *Canadian Aviation Regulations* with the following additions or expanded explanations:

"Civil Aviation Medical Examiner" (CAME) - means a physician appointed by the Minister to examine the medical fitness of candidates for issue or revalidation of Pilot and Canadian Civil Aviation Personnel Licences and who report their findings to the Civil Aviation Medicine Division.

Generally such authorization applies to physicians in private practice who are appointed on an individual basis to provide the Civil Aviation Medical

Examiner service in a particular area. However, limited authorization also applies to Flight Surgeons of the Canadian Forces for the examination of candidates who are members of the Canadian Forces, and to physicians

in other countries provided the physician is authorized as a civil aviation medical examiner by a member State of the International Civil Aviation Organization.

"medical category" - means the medical category classification relating to the degree of medical fitness necessary for the various aviation activities. i.e. A Medical Category 1 holder shall be considered fit for any licence for its respective duration of validity unless otherwise specified. It embraces all types of licence involving flying for hire and reward and is essentially the standard for the professional pilot.

"medical certificate" (MC) - is a document issued periodically to validate aviation licences which require special standards of medical fitness as laid down in the Personnel Licensing Standards Respecting Medical Requirements. MCs are issued by the Minister of Transport following receipt of a medical examination report assessed medically fit or fit subject to any restriction or limitation.

"accredited medical conclusion" - is defined as the conclusion reached by one or more medical experts with specialized knowledge or training in aviation medicine, acceptable to the Licensing Authority for the purposes of the case concerned, in consultation with specialists in flight operations or other experts as necessary specialists in flight operations, or other experts as necessary.

"eye specialist" - means either an ophthalmologist or optometrist, unless otherwise specified.

"Civil Aviation Medicine Division Medical Staff" - means the Regional Aviation Medical Officer, the Aviation Medical Officer, or Headquarters Medical Staff, but does not include Civil Aviation Medical Examiners.

Division II - Medical certificate

424.04 Issuance and Validity Period of Medical Certificate (1) Issuance

- (a) Minimum medical fitness requirements for the various types of licence are broadly defined by international agreement through the International Civil Aviation Organization (ICAO). Canadian medical requirements honour this agreement, and procedures and standards outlined in this document reflect International Standards and Recommended Practices.
- (b) A Medical Certificate is a necessary prerequisite for every licence which is subject to the Personnel Licensing Standards. Medical Certificates are issued by the Minister of Transport through the office of the Regional Director, Aviation Licensing following receipt of:
 - (i) a medical examination report, provided the candidate meets the pertinent medical standards and has been assessed medically fit or fit subject to any restriction or limitation recommended by Civil Aviation Medicine Division Medical Staff; or
 - (ii) in the case of a Student Pilot Permit -- Ultra-light aeroplanes, a Pilot Permit -- Ultra-light aeroplanes, a Pilot Permit -- Recreational -- Aeroplanes, a Student Pilot Permit -- Gliders or a Pilot Licence -- Gliders the candidate completes and submits Part B Civil Aviation Medical Declaration of the Application for a student pilot permit ultra-light aeroplanes or a pilot permit ultra-light aeroplanes (form 26-0297 in english or form 26-0301 in french) see Appendix III.

(2) Medical Examination

- (a) Every applicant for a medical certificate or revalidation thereof shall undergo a medical examination by a CAME.
- (b) Every applicant shall, at the time of the medical examination:
 - (i) sign a declaration provided by the CAME stating whether the applicant has previously undergone a medical examination in connection with an application for a medical certificate or revalidation thereof and, where applicable, provide a statement that sets out the results of the most recent such examination;
 - (ii) answer all of the CAME's questions that are pertinent to the assessment of the applicant's medical fitness;
 - (iii) give written authorization for the disclosure of medical information to a physician named by the applicant; and
 - (iv) undergo any other examinations or tests that are required by the CAME in order to assess the applicant's medical fitness.
- (3) [deleted 2008/05/01]

424.05 Medical Standards Flexibility - Limitations and Restrictions

- (1) Under special circumstances such as monocular or paraplegic applicants, flexibility may be applied and the permit or licence issued or validated where the following conditions are met:
 - (a) Accredited medical conclusion indicates that the applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the permit or licence applied for is

not likely to affect air safety. The Licensing Authority shall be satisfied that any relevant ability, skill or experience of the applicant has been given due consideration.

- (b) The permit or licence is endorsed with any special limitation or limitations when the safe performance of the permit or licence holder's duties is dependent on compliance with such limitations or restrictions.
- (c) The applicant complies with any required conditions.
- (2) The Civil Aviation Medical Examiner shall report to the Regional Aviation Medical Office any individual case where, in his judgement, already demonstrated ability, skill and experience of an applicant compensates for a failure to meet a prescribed medical standard without adversely influencing the safe performance of his duties when exercising the privileges of the permit or licence. The exercise of flexibility in this case is the joint responsibility of Civil Aviation Medical Division and Transport Canada Aviation, Personnel Licensing Branch.
- (3) Where flexibility is applied, the privileges of the permit or licence may be restricted. In some cases where flexibility is applied it shall be necessary to have a practical flight test as part of the evaluation. An applicant shall be flight tested under conditions which are compatible with the privileges granted by the permit, licence or ratings held.

(4) Practical Test

(a) A practical test is in addition to all other standard medical requirements together with the licensing standards of skill, knowledge and experience for the permit or licence applied for.

- (b) A practical test will only be conducted when requested by the Regional Aviation Medical Officer (RAMO) or Aviation Medical Officer and approved by the Regional Director Aviation Licensing (RDAL).
- (c) A practical test shall only be requested when it is necessary to obtain an accurate evaluation of the applicant's capabilities.
- (d) Except as provided in (i) and (ii), the initial test will be conducted by a Civil Aviation Inspector of the Aviation Licensing Division. Subsequent tests for the same applicant with the same deficiency may, at the discretion of the RDAL be delegated to a suitably qualified flight instructor.
 - (i) The initial test for private pilot applicants may, at the discretion of the RDAL be delegated to a suitably qualified flight instructor, except when a prosthesis is required to be worn by the applicant or the aircraft is required to be modified.
 - (ii) In the case of an air traffic controller, the practical test shall be conducted in accordance with the Report of Medical Practical Hearing Test (form 26-0503).

 (amended 1999/03/01)
- **(5)** The following are examples of the most common cases, but not limited to these cases, where a practical test shall be required before flexibility of the Medical Standards is applied:

(a) Amputee and Physically-Handicapped Applicants

(i) Applicants who have had an amputation of a limb or part of a limb, or have some other physical disability, may be considered fit for certain types of permits or licences through the application of

flexibility.

- (ii) The practical test will be conducted with the applicant occupying the seat designated in the Aircraft Flight Manual as the seat to be occupied by the pilot-in-command. Where the Aircraft Flight Manual does not specify the seat, it shall be understood to be the seat which, in accepted practice, is occupied by the pilot-in-command.
- (iii) An applicant shall demonstrate the ability to compensate for physical deficiency and to perform competently a task or simultaneous tasks such as map reading, determining course, operating flight computer, conversation, simulating engine failure to estimate the applicant's susceptibility to distraction.
- (iv) The practical test report shall include specific reference to:
 - (A) description of deficiency to be assessed;
 - (B) exercises required to be completed:
 - (I) ground,
 - (II) flight;
 - (C) weather conditions existing;
 - (D) aircraft type and seat occupied by the applicant;
 - (E) exercises completed;
 - (F) simultaneous tasks completed;
 - (G) details of any unusual procedures to compensate for deficiency;

- (H) recommendation for issue or denial of a permit or licence, by type;
- (I) any restrictions required to be entered on the permit or licence;
- (J) duration of flight test.
- (v) Where a restriction is applied to a permit or licence because of an amputation or other physical deficiency, further consideration will be given to a change in the restriction or its removal from the permit or licence where:
 - (A) the applicant has accumulated sufficient flying experience; or
 - (B) the addition of different types of aircraft of different undercarriage, flight control or cockpit configurations is desired.

(b) Monocular Applicants

- (i) A monocular applicant is an applicant who has lost the use of one eye or whose central vision is such that it cannot be corrected to at least 20/200 (6/60). A monocular applicant shall be granted the issue or revalidation of those permits or licences, for which a Category 3 or lower medical is required, provided that the following conditions are met:
 - (A) on the initial request for flexibility, the applicant has undertaken an eye examination by an ophthalmologist whose report indicates that with respect to the better eye:

- (I) the vision is not less that 20/200 (6/60)corrected to 20/30 (6/9) or better and the equivalent spherical error is not greater than plus or minus 5 diopters;
- (II) the function of the eye and its adnexae shall be normal in all other respects;
- (B) the applicant, following an adequate period of adaptation, has satisfactorily completed a practical (monocular) test conducted by the person designated by the RDAL demonstrating his ability to fly the type of aircraft in which the permit or licence is sought in a competent manner while maintaining an adequate look-out for other traffic and obstructions; and
- (C) the licensing authority's medical advisors have recommended the issue of a permit or licence; and
- (D) an eye specialist's report is required at each renewal of the permit or licence.
- (ii) The practical test of flying ability shall confirm that the applicant has achieved sufficient adjustment to his monocular condition to perform the duties of a private pilot safely and with the degree of competence normally required and shall be required for:
 - (A) issue of a permit or licence to a monocular person;
 - (B) the first renewal after loss of binocular vision if the permit or licence was previously issued; and
 - (C) subsequent renewals where the eye specialist's report

indicates significant deterioration of visual capability since the previous report.

(iii) The practical test is:

- (A) required in addition to the medical examination for the issue of a Student Pilot Permit to monocular applicants; and
- (B) considered, in conjunction with the medical examination reports, when assessing the visual acuity of the applicant for the Permit;
- (iv) Evidence of a satisfactory practical test, is in the form of signed statement by the person conducting the test, confirming that the applicant is competent to perform the normal and emergency manoeuvres appropriate to the type of aircraft in respect of which the permit or licence is sought:
 - (A) in a competent manner; and
 - (B) while maintaining an adequate look-out for other traffic and obstructions.
- (v) The validity of a Medical Certificate shall be for the period normally applicable to the permit or licence, except for the Pilot Licence Glider and Pilot Permit- Recreational which shall be valid for the same period as the Private Pilot Licence.
- (vi) Monocular pilots may obtain a night rating subject to the following conditions:

- (A) the applicant has completed the night and instrument flight time normally required for a night rating for a private pilot licence; and
- (B) a flight instructor designated by the RDAL has certified that the applicant has been flight tested and been found to be capable of performing at night the normal and emergency manoeuvres appropriate to the type of aircraft in a competent manner while maintaining an adequate look-out for other traffic and obstructions.

(c) Substandard Vision in One Eye

- (i) An applicant whose corrected central vision in one eye is less that 20/30 (6/9) but is at least 20/200 (6/60) shall be granted the issue or revalidation of a permit or licence in accordance with the Medical Requirements Standards provided that the following conditions are met:
 - (A) on the initial request for flexibility, the applicant has undertaken an eye examination by an eye specialist whose report indicates that the visual acuity in the better eye meets the vision standards for the permit or licence applied for or held;
 - (B) accredited medical conclusion indicates that the visual defect is unlikely to interfere with safe performance of duties related to the permit or licence considering pathogenesis of the condition, visual fields, etc.;

- (C) the licensing authority is satisfied that any relevant ability, skill or experience of the applicant has been given due consideration. In certain cases a practical test shall be advised;
- (D) an eye specialist's report shall be required annually if the condition causing the reduced vision is not stable.

(d) Paraplegic Applicants

- (i) A paraplegic who fails to meet the physical requirement specified in the Medical Standards for Civil Aviation Personnel Licensing shall be issued a Student Pilot Permit, Pilot Permit and Pilot Licence for any category of aircraft except a Commercial, or Airline Transport Pilot Licence, provided the applicant meets the requirements set out in subparagraph (ii).
- (ii) For determination of medical fitness, the applicant is required to provide:
 - (A) a report of satisfactory medical examination by a designated Civil Aviation Medical Examiner;
 - (B) a medical examination report, by selected medical specialist(s) identified by the CAME, which states that the condition of the applicant's trunk muscles is adequate for body control;
 - (C) medical information that the paraplegia is stabilized and is not due to underlying chronic or progressive disease;
 - (D) evidence of his ability to complete an external aircraft inspection, to emplane and deplane from an aircraft and to complete the cockpit check by personal demonstration and

without assistance from another person to the person designated to conduct the practical test; and

- (E) evidence of his ability to fly the aircraft in a competent manner in normal and emergency manoeuvres by personal demonstration to the person designated to conduct the practical test. The candidate's ability to bend to any position for the undertaking of required piloting tasks and the adequacy of the condition of the applicant's trunk muscles for body control shall also be assessed during the practical test. The candidate is required to remain in a normal sitting position during difficult flight, for example, in conditions of turbulence. Such demonstrations by the candidate will be without the use of any aids so that the paraplegic's remaining body control and strength may be fully assessed from a practical viewpoint. A shoulder harness shall be worn by the candidate;
- (F) written evidence of satisfactory completion of the requirements in (D) and (E) shall be provided with a written recommendation from a Flight Instructor designated by the Regional Director Aviation Licensing prior to undergoing a Flight Test for issuance of a permit or licence.
- (iii) The privileges of the Student Pilot Permit, Pilot Permit or Private Pilot Licence shall be restricted as follows:
 - (A) the licence shall be endorsed for those hand-controlled aircraft types in which the standard of skill has been satisfactorily demonstrated by flight test;

- (B) the requirement to wear a shoulder harness and carry a serviceable emergency locator transmitter shall appear on the licence;
- (C) the words "paraplegic" and "licence restricted" shall be entered on the Medical Certificate.
- (iv) While the foregoing requirements have been implemented for the issue or revalidation of Pilot Permit - Recreational (Aeroplanes), a Private Pilot Licence (Aeroplanes) and Student Pilot Permit (Aeroplanes), these may be made to apply to other suitably modified aircraft.
- (v) Due to the possibility of deterioration of the condition of the licence holder the <u>validity period</u> of a permit or licence shall be limited to twelve months.

Note:

Limitations and restrictions which may appear on a permit, licence or medical certificate are listed in <u>Appendix II</u>.

Division IV - Medical fitness

424.11 Minister's Assessment

- (1) Medical Examination Reports shall be assessed in accordance with these Standards by:
 - (a) the Civil Aviation Medical Examiner; and

- (b) the Regional Aviation Medical Officer or the Aviation Medical Officer.
- (2) Where specialist reports are required they may be referred to the Chief, Clinical Assessment, for further consultation.
- (3) Where the assessment by the Regional Aviation Medical Officer, the Aviation Medical Officer, or the Chief, Clinical Assessment, is different than that of the Civil Aviation Medical Examiner, the assessment by the Regional Aviation Medical Officer, the Aviation Medical Officer or Chief, Clinical Assessment, shall apply.

424.12 Reconsideration of Assessments

- (1) An applicant assessed unfit at the regional level may submit additional reports from Civil Aviation Medical Examiners, specialist examinations and laboratory reports for reconsideration of the assessment. The applicant may, in addition, request the Regional Aviation Medical Officer, or the Aviation Medical Officer to forward all reports and findings to the Chief, Clinical Assessment for presentation to the Aviation Medical Review Board.
- (2) Appeal may be made to the Civil Aviation Tribunal where:
 - (a) a permit, licence or medical certificate holder is assessed as being unfit to exercise the privileges of his licence, permit or certificate; or
 - (b) a permit, licence or medical certificate is refused renewal.

Division V - Medical examiners

424.16 Authority to Conduct Medical Examinations

- (1) Authorization is issued to physicians who are appointed on an individual basis to provide the Civil Aviation Medical Examiner service in a particular area. Authorization may also be issued to Flight Surgeons of the Canadian Forces for the examination of applicants who are regular members of the Canadian Forces or Air Cadets.
- (2) A physician in another country, provided the physician is authorized as a civil aviation medical examiner by a Contracting State may also be authorized to examine the medical fitness of applicants. However, these physicians may not extend the validity period of an existing Medical Certificate.

424.17 Responsibilities of Medical Examiner

- (1) When conducting a medical examination of an applicant for the issuance or renewal of a medical certificate, the CAME shall: (amended 2003/06/01)
 - (a) examine the applicant in accordance with:
 - (i) medical practice recognized by the medical profession, and
 - (ii) the personnel licensing standards; (amended 2003/06/01)
 - (b) record in a medical examination report:
 - (i) the CAME's clinical findings, and
 - (ii) where the applicant meets the requirements of any category of medical certificate, as set out in this section, that category; and

- (c) submit to the Minister:
 - (i) the medical examination report, and (amended 2003/06/01)
 - (ii) any other medical report required for the purpose of establishing medical fitness to hold a permit, licence or rating.
- (2) Where an applicant meets the medical standards for renewal of his or her medical certificate, the CAME shall sign, date and stamp the medical certificate with his or her official stamp, if any, indicating that the applicant is "fit".

 (amended 2003/06/01)

(3) The medical examination shall be sufficiently thorough so as to determine whether the applicant meets the requirements in respect of the category of medical certificate that is applied for or in respect of which a validation is sought.

(amended 2003/06/01)

- (a) The purpose of the medical examination is to determine whether an applicant meets the standards that apply in respect of the issuance of the Medical Certificate that is needed to issue a particular permit, licence or rating. The standards that are applicable in respect of the issuance and the renewal of a permit, licence or rating are basically the same.
- (b) A Civil Aviation Medical Examiner shall be familiar with aeromedical assessment, and shall possess some practical knowledge of flight duties and the flight environment.

- (c) It shall be the responsibility of the Civil Aviation Medical Examiner to examine the Applicant carefully.
- (d) Where the Civil Aviation Medical Examiner cannot reach a conclusion concerning the fitness of an applicant he shall omit the allocation of a category and refer the Medical Examination Report to the Civil Aviation Medical Staff for assessment or further advice.
- (e) The examiners report is made on "Civil Aviation Medical Examination Report" Transport Canada Form 26-0010 (Appendix I). The form requires the signature of both the applicant and the Civil Aviation Medical Examiner. Medical Examiners in other countries may use the above form or an equivalent form of that country.
- (f) Medical examination reports and pertinent specialist or laboratory reports shall be forwarded to the appropriate Regional Office for the attention of the Civil Aviation Medicine Division Medical Staff.

(4) Physical and Mental Requirements for Medical Categories (amended 2003/06/01)

An applicant shall be granted the highest assessment possible on the basis of the finding recorded during the medical examination. An applicant desiring a medical category higher than that necessary for the type of permit, licence or rating requested shall so inform the Civil Aviation Medical Examiner. Where specialist examinations or laboratory tests are required to determine fitness for a higher assessment, these may be arranged by the Civil Aviation Medical Examiner, with the concurrence of the applicant.

The following indicates the standard an applicant must attain for the issuance of a Medical Certificate for each medical category: <u>Physical and mental requirement</u>.

424.18 - 424.20 Reserved

Transport Canada is closely monitoring the COVID-19 situation. In response, we have issued some **transportation-related measures and guidance**. Please check if any of these measures apply to you.

You may experience longer than usual wait times or partial service interruptions. If you cannot get through, please **contact us by email**.

For information on COVID-19 updates, please visit **Canada.ca/coronavirus**.

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