

EIGHTH “B” SCHEDULE (Regulations 44, 46)

MEDICAL CERTIFICATION

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SUBPART A: GENERAL

8.701 APPLICABILITY

This Schedule prescribes the medical standards and certification procedures for issuing and reissuing Class 1, Class 2 and Class 3 medical certificates.

8.705 DEFINITIONS

For the purpose of This Schedule, the following definitions shall apply —

- (1) **“accredited medical conclusion”**. The conclusion reached by one or more medical experts acceptable to the Licensing Authority for the purposes of the case concerned, in consultation with flight operations or other experts as necessary.
- (2) **“civil aviation medical examiner”**. A physician appointed by the Civil Aviation Authority to examine the medical fitness of candidates for issue or revalidation of Jamaica Pilot and Air Traffic Control personnel licences and who report their findings to the DFS.
- (3) **“likely”**. In the context of the medical provisions in this Schedule, means with a probability of occurring that is unacceptable to the Medical Assessor.
- (4) **“medical assessment”**. The evidence issued by the Authority that the licence holder meets specific requirements of medical fitness.
- (5) **“medical assessor”**. A physician qualified and experienced in the practice of aviation medicine who evaluates medical reports submitted to the Authority by Civil Aviation Medical Examiners.
- (6) **“medical standards flexibility”**. Under special circumstances such as applicants with monocular vision or a physical handicap, flexibility may be applied and the licence issued or validated subject to a successful practical test to assure that the applicant’s exercising of the privileges of the licence applied for is not likely to affect air safety. Where flexibility is applied, the privileges of the licence may be restricted. See Subsection 8.770.
- (7) **“practical test”**. A practical test is a test in addition to all other standard medical requirements together with the licensing standards of skill, knowledge and experience for the licence applied for. A practical test will only be conducted when requested by the CAME and approved by the DFS. A practical test shall only be requested when it is necessary to obtain an accurate evaluation of the applicant’s capabilities. The initial practical test shall be conducted by an Aviation Safety Inspector as directed by the DFS. Subsequent practical tests for the same applicant with the same deficiency may at the discretion of the DFS, be delegated to a suitably qualified flight instructor.
- (8) **“psychosis”**. A mental disorder in which the individual has manifested delusions, hallucinations, grossly bizarre or disorganised behaviour or other commonly accepted symptoms of this condition; or the individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganised behaviour or other commonly accepted symptoms of this condition.
- (9) **“psychoactive substance”**. Alcohol, sedatives, hypnotics, anxiolytics, hallucinogens, opioids, cannabis, inhalants, central nervous system stimulants such as cocaine, amphetamines and similarly acting sympathomimetics, phencyclidine or similarly acting arylcyclohexylamines and other psychoactive drugs and chemicals.
- (10) **“rendering (a licence) valid”**. The action taken by the Authority to accept the license of another ICAO Contracting State (of ICAO) as —
 - (i) An alternative to issuing its own license or certificate; or
 - (ii) The basis for issuing its own license or certificate.
- (11) **“significant”**. In the context of the medical provisions in this Schedule, means to a degree or of a nature that is likely to jeopardize flight safety.
- (12) **“substance abuse”**. Refers to —
 - (i) The use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;
 - (ii) A verified positive drug test result acquired under an anti-drug program or internal program of Jamaica government; or

- (iii) Misuse of a substance that the Authority, based on case history and qualified medical judgement relating to the substance involved, finds will cause a person to be unable to safely perform the duties, or exercise the privileges of, an airman certificate.
- (13) **“substance dependence”**. A condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by increased tolerance, manifestation of withdrawal symptoms; impaired control of use or continued use despite damage to physical health or impairment of social, personal, or occupational functioning.

8.710 ACRONYMS

The following acronyms are used in this Schedule –

- (1) CAME -Civil Aviation Medical Examiner;
- (2) dB – decibels;
- (3) DFS – Director, Flight Safety;
- (4) ICAO - International Civil Aviation Organization.

8.715 MEDICAL CERTIFICATES

- (a) The Authority issues three classes of medical certificates that are intended to indicate the minimum medical qualification —
 - (1) Class 1, for the exercise of commercial privileges as a flight crewmember, except for glider and balloon pilots;
 - (2) Class 2, for the exercise of student, private, glider or balloon pilot privileges; and
 - (3) Class 3, for the exercise of air traffic controller privileges.
- (b) The period of validity of the medical examination is calculated from the first day of the month following the date of the medical declaration of the medical examination.
- (c) All periods of validity are based on the age of the applicant at the time of undergoing the medical examination.
- (d) When a temporary validation form is marked “fit” by a CAME, the licence to which it relates is considered to be validated until a new medical certificate is issued or until the expiration of 90 days following the date of the medical re-examination, whichever is the earlier.

8.716 MEDICAL EXAMINATION REQUIREMENTS

Licence Required	Class Required	Medical Report Required	Electro-cardiogram Required	Audiogram Required
Airline Transport, Commercial, Flight Engineer	1	Every 12 months- (see Note 1.)	At the initial exam and then every two years after age 30 and then every year after age 40.	As required by paragraphs (a) and (b) (2) of Subsection 8.840.
Private, glider, balloon Student	2	Every 60 months- (see Note 2.)	At the initial exam and at the first exam after age 30 and every 2 years until age 50 and annually thereafter.	As required by paragraphs (a) and (b) (1) of Subsection 8.840.
Air Traffic Controller	3	Every 48 months- (see Note 3.)	At the initial exam and at the first exam after age 30 and every 2 years until age 50 and annually thereafter.	As required by paragraphs (a) and (b) (2) of Subsection 8.840.

(Note 1: Holders of airline transport pilot licences and holders of commercial pilot licences who are engaged in single pilot commercial air transport operations who have passed their 40th birthday require a medical report every 6 months.)

(Note 2: Holders of private, glider or balloon pilot licences who have passed their 40th birthday, require a medical report every 24 months. After passing their 50th birthday, a medical report is required every 12 months.)

(Note 3: Holders of air traffic controller licences who have passed their 40th birthday, require a medical

report every 24 months. After passing their 50th birthday, a medical report is required every 12 months.)

SUBPART B: AVIATION MEDICAL EXAMINERS

8.725 AVIATION MEDICAL EXAMINER: DEFINITION AND AUTHORITY

- (a) The Authority will designate and authorize each CAME within Jamaica to —
 - (1) accept applications for physical examinations necessary for issuing medical certificates under this Schedule;
 - (2) conduct physical examinations for medical certificates under the general supervision of the Authority; and
 - (3) recommend issuance or denial of medical certificates in accordance with this Schedule, subject to reconsideration by an authorized representative of the Authority.
- (b) Each CAME shall be qualified and licensed in the practice of medicine and shall have received training in aviation medicine and be knowledgeable of the conditions in which the holders of licenses and ratings carry out their duties.
- (c) Each CAME shall report to the Authority any individual case where, in the examiner's judgement, an applicant's failure to meet any requirement is not likely to jeopardize flight safety.

8.730 DELEGATION OF AUTHORITY

- (a) The Authority will delegate to each CAME the authority to —
 - (1) examine applicants for and holders of medical certificates to determine whether they meet applicable medical standards; and
 - (2) recommend issuance, renewal, denial or withdrawal of medical certificates, medical waivers or special authorizations to an applicant based on meeting or failing to meet applicable medical standards.
- (b) The Authority may delegate to a qualified medical doctor the authorization as a representative of the Authority, to review medical records submitted to the Authority, re-evaluate applicants' and holders of medical certificates for fitness and on occasion, to visit and review the applicants' files held by a CAME.
- (c) The Authority retains the right to reconsider any action of a CAME.

SUBPART C: MEDICAL CERTIFICATION PROCEDURES

8.745 APPLICABILITY

This Section prescribes the medical certification procedures required for the issuance of all medical certificates.

8.750 MEDICAL RECORDS

- (a) Each applicant for a medical certificate shall, in a form and manner prescribed by the Authority, sign and furnish the CAME with a personally certified statement of medical facts concerning personal, familial and hereditary history that is as complete and accurate as the applicant's knowledge permits.
- (b) Medical confidentiality shall be respected at all times and all medical reports and records shall be securely held with accessibility restricted to authorized personnel. When justified by operational considerations, the medical assessor shall determine to what extent pertinent medical information is presented to relevant officials of the Authority.
- (c) Whenever the Authority finds that additional medical information or history is needed, the Authority will request that the applicant —
 - (1) furnish that information; or
 - (2) authorize any clinic, hospital, physician or other person to release to the Authority all available information or records concerning that history.

- (d) If an applicant or holder of a medical certificate fails to provide the requested medical information or history, fails to authorize the release so requested or provides information that is false, the Authority may –
 - (1) suspend, modify or revoke all medical certificates the airman holds; or
 - (2) in the case of an applicant, deny the application for an airman medical certificate.
- (e) If an airman medical certificate is suspended or modified under this Section, that suspension or modification remains in effect until –
 - (1) the holder or applicant provides the requested information, history or authorization to the Authority; and
 - (2) the Authority determines whether the holder or applicant meets the medical standards.

8.755 CAME SUBMISSION OF SIGNED MEDICAL EVALUATION REPORT

- (a) Having completed a medical examination of an applicant, the CAME shall sign the required report and submit directly to the Authority the full details of that evaluation in the form and manner that has been prescribed. If the medical evaluation report is submitted to the Authority in electronic format, adequate identification of the medical examiner shall be established.

(Note: It is critical to aviation safety that the report, once completed by the CAME, is not handled by the applicant. If the applicant is hand-delivering the report to the Authority, it must be sealed in an envelope by the CAME and must be delivered sealed to the Authority.)

- (b) Having begun a medical evaluation of an applicant, the CAME shall submit to the Authority the report required in paragraph (a) whether the evaluation is terminated prior to completion, yielded sub-standard results or was completed satisfactorily.

(Note: It is critical to aviation safety that the Authority is made aware of the results of all medical evaluation of persons applying for or holding licenses that require a medical evaluation.)

- (c) If the medical examination is carried out by two or more medical examiners, the Authority shall appoint one of these to be responsible for coordination the results of the examination, evaluating the findings with regard to medical fitness, and signing the report.

8.760 ISSUANCE OF MEDICAL CERTIFICATE

- (a) The Authority will issue the applicable medical certificate to any person who meets the medical standards prescribed in this Subpart, based on medical examination and evaluation of the applicant's history and condition.
- (b) Each person to be issued a medical certificate shall undergo a medical examination based on the physical and mental standards contained in this Subpart.
- (c) Any person who does not meet the medical standards of this Subpart may apply for the discretionary issuance of a certificate.

8.765 DENIAL OF MEDICAL CERTIFICATE

- (a) The denial of a medical certificate is effective —
 - (1) upon the date of the medical evaluation that determined the applicant was not fit in conformance with the standards of Subpart D of this Schedule; and
 - (2) until such time that the applicant is again determined by the Authority to be fit to exercise the privileges through —
 - (i) an accredited medical conclusion;
 - (ii) a special flight test; or
 - (iii) with respect to a transient condition, until a subsequent satisfactory report is acceptable to the Authority.
- (b) Any applicant who is denied a medical certificate by the Authority may, within 30 days after the date of the denial, apply in writing in duplicate to the Authority for reconsideration of that denial.

- (c) If the applicant does not ask for reconsideration during the 30-day period after the date of the denial, the Authority will consider that he or she has withdrawn the application for a medical certificate.

8.770 SPECIAL ISSUANCE OF MEDICAL CERTIFICATE

- (a) The Authority may issue a Special Issuance of a Medical Certificate (Authorization) to an applicant who does not meet the applicable standards for the medical certificate sought if the applicant shows to the satisfaction of the Authority that —
 - (1) an accredited medical conclusion indicates that in special circumstances the applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence applied for is not likely to jeopardize flight safety; and
 - (2) relevant ability, skill and experience of the applicant and operational conditions have been given due consideration.
- (b) The Authority will issue a medical limitation on a license when the Authority or a CAME determines the safe performance of the license holder's duties is dependent on compliance with such a limitation.

8.780 RENEWAL OF MEDICAL CERTIFICATE

- (a) The requirements for the renewal of a Medical Assessment are the same as those for the initial assessment except where otherwise specifically stated.
- (b) When required to obtain or renew correcting lenses, the applicant should advise the CAME conducting the medical examination of the new prescription, including revised reading distances —
 - (1) for Class 1 medical certificates, for the visual flight deck tasks relevant to the types of aircraft in which the applicant is likely to function.
 - (2) for Class 3 medical certificates, for the duties the applicant is to perform.

8.785 SPECIAL RENEWAL OF MEDICAL CERTIFICATE

- (a) A licence holder operating in an area distant from designated Jamaica medical examination facilities may receive a special renewal of his or her medical certificate at the discretion and with the written permission of the Authority, provided that such renewal shall only be made as an exception and shall not exceed —
 - (1) a single period of six months in the case of a flight crew member of an aircraft engaged in non-commercial operations.
 - (2) in the case of a flight crewmember of an aircraft engaged in commercial operations, two consecutive periods each of three months provided that in each case a favourable medical report is obtained after examination.
- (b) The examination referred to in paragraph (a), subparagraph (2) of this Subsection must be conducted by —
 - (1) a designated CAME of the area concerned; or
 - (2) in cases where such a designated CAME is not available in the State where the crew member is located, by a physician legally qualified to practise medicine in that area.
- (c) The holder of a private pilot certificate will receive special renewal for a single period not exceeding 24 months where the medical examination is carried out by an CAME designated under ICAO Annex 1 by the Contracting State in which the applicant is temporarily located.
- (d) A report of the medical examination required by this Subsection shall be sent to the Authority before the actual conduct of any aircraft operations during the period specified for special renewal.

SUBPART D: PHYSICAL AND MENTAL STANDARDS

8.810 APPLICABILITY

This Section prescribes the physical medical standards required for all medical certificates.

8.812 GENERAL

- (a) No person may hold or be issued a medical certificate if he or she suffers from any disease or disability that could render that person likely to become suddenly unable to either perform assigned duties safely or operate an aircraft safely.
- (b) Licence holders should inform the Authority of confirmed pregnancy or any decrease in medical fitness of a duration of more than 20 days or which requires continued treatment with prescribed medication or which has required hospital treatment.

8.815 MEDICAL REQUIREMENTS

No person may hold nor be issued a medical certificate who -

- (1) has any organic, functional or structural disease, defect or limitation (active, latent, acute or chronic);
- (2) has any wound, injury or sequelae from operation;
- (3) any abnormality, congenital or acquired; or
- (4) uses any prescribed or non-prescribed medication or other treatment that, based on the case history and appropriate qualified medical judgement relating to the condition(s) involved, the Authority finds-
 - (i) makes the applicant unable to safely perform the duties or exercise the privileges of the license(s) or rating(s) applied for or held; or
 - (ii) may reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the applicant unable to perform those duties or exercise those privileges.

(Note: Use of herbal medication and alternative treatment modalities requires particular attention to possible side-effects.)

8.820 MENTAL STANDARDS

No person may hold nor be issued a medical certificate who has an established medical history or clinical diagnosis of —

- (1) a mood (affective) disorder;
- (2) an organic mental disorder ;
- (3) a bipolar (manic-depressive) disorder;
- (4) a mental or behavioural disorder due to use of psychoactive substances; this includes dependence syndrome induced by alcohol or other psychoactive substances;
- (5) schizophrenia or a schizotypal or delusional disorder;
- (6) a neurotic, stress-related or somatoform disorder;
- (7) a behavioural syndrome associated with physiological disturbances or physical factors;
- (8) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;
- (9) mental retardation;
- (10) a disorder of psychological development; or
- (11) a behavioural or emotional disorder, with onset in childhood or adolescence;

8.825 VISUAL REQUIREMENTS – GENERAL

Each person holding or being issued a medical certificate shall have –

- (1) normally functioning eyes and adnexae;
- (2) normal fields of vision;
- (3) normal binocular function; and

(Note: Reduced stereopsis, abnormal convergence not interfering with near vision and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia need not be disqualifying.)

- (4) no active pathological condition, acute or chronic nor sequelae of surgery or trauma of the eyes or their adnexa which is likely to jeopardise flight safety.

8.827 VISION TESTING REQUIREMENTS

- (a) The corrected and uncorrected visual acuity must be measured and recorded at each examination.

(Note: Applicants who use contact lenses may not need to have their uncorrected visual acuity measured at each re-examination provided the history of their contact lens prescription is known).

- (b) The test for visual acuity must comply with the following –
 - (1) for a visual acuity test in a lighted room, use a test illumination level of approximately 50 lx, normally corresponding to a brightness of 30 cd per square metre; and
 - (2) visual acuity shall be measured by means of a series of optotypes of Landolt, or similar optotypes, placed at a distance of 6 m from the candidate, or 5 m as appropriate.
- (c) The Authority, at its discretion, may require a separate ophthalmic report before issuance of a medical certificate.
- (d) Conditions which indicate a need to obtain an ophthalmic report include –
 - (1) a substantial decrease in the uncorrected visual acuity;
 - (2) any decrease in best corrected visual acuity; and
 - (3) the occurrence of eye disease, eye injury or eye surgery.

8.829 ACCEPTABILITY OF CORRECTING LENSES

- (a) A person may meet the visual acuity fitness for near or distant vision by using correcting lenses.
- (b) Correcting spectacles may be used, provided that –
 - (1) not more than one pair of correcting spectacles is used to demonstrate compliance with visual acuity requirements;
 - (2) single-vision near correction lenses (full lenses of one power only, appropriate to reading) may not be used for both near and distance vision; and

(Note: Single-vision near correction significantly reduces distant visual acuity and therefore is not acceptable).

 - (3) in order to read the instruments, or a chart or manual held in the hand, and to make use of distant vision through the windscreen without removing the lenses, the spectacles may be –
 - (i) "lookover;";
 - (ii) bifocal; or
 - (iii) trifocal.
- (c) An applicant may use contact lenses to meet the distance vision acuity requirement provided that the lenses are –
 - (1) monofocal;
 - (2) non-tinted; and
 - (3) well tolerated.
- (d) Any person that is issued a medical certificate that requires correcting lenses or spectacles shall have a limitation placed on that document requiring them, while exercising the privileges of this certificate, to (as appropriate) –
 - (1) wear the distant-correction lenses at all times;
 - (2) have readily available and use the near-correction spectacles as necessary to accomplish near vision functions; and
 - (3) have a second pair of suitable spectacles (distant- and/or near-correction, as appropriate) available for immediate use.

8.831 DISTANCE VISION REQUIREMENTS

- (a) Each person issued a medical certificate shall have a distant visual acuity in each eye, with or without correcting lenses of at least –
 - (1) for Class 2 certificates, 6/12 (20/40), with binocular visual acuity of 6/9 (20/30) or better; or
 - (2) for Class 1 or 3 certificates, 6/9 (20/30), with binocular visual acuity of 6/6 (20/20) or better.

(Note: Uncorrected distance visual acuity is not a limiting factor).
- (b) An applicant with a large refractive error shall use contact lenses or high-index spectacle lenses.

(Note: If spectacles are used, high-index lenses are needed to minimize peripheral field distortion.)

- (c) An applicant whose uncorrected distant visual acuity in either eye is worse than 6/60 shall provide a full ophthalmic report prior to initial medical evaluation and every 5 years thereafter.
- (d) An applicant who has undergone surgery affecting the refractive status of the eye shall free of those sequelae likely to interfere with the safe exercise of their airman licence privileges.

8.833 NEAR VISION REQUIREMENTS

- (a) Each person issued a medical certificate shall meet the following minimum visual standards for near visual acuity to read, with or without corrective lenses -

(Note 1: When required to obtain or renew correcting lenses, the applicant should advise the CAME of reading distances for (the duties the applicant is to perform).

(Note 2: When required to obtain or renew correcting lenses, an airman should advise the CAME of reading distances for the visual flight deck tasks relevant to the types of aircraft in which the applicant is likely to function)

- (1) N14 (N14 refers to "Times Roman" font) chart or its equivalent at a distance of 100 cm; and
 - (2) N5 chart (N5 refers to "Times Roman" font) at a distance of 30 to 50 cm as selected by the applicant.
- (b) If these near-vision requirements are met only by the use of near-correction and the applicant also needs distant-correction, both corrections must be added to a pair of spectacles to be used to meet the requirements.
 - (c) When near correction is required the applicant shall demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements.

8.836 COLOUR PERCEPTION REQUIREMENTS

- (a) The applicant shall demonstrate the ability to perceive readily those colours the perception of which is necessary for the safe performance of duties and in so doing shall be assessed as fit.
- (b) The applicant shall be able to correctly identify a series of pseudoisochromatic plates (tables) in daylight or in artificial light of the same colour temperature such as that provided by Illuminant "C" or "D65" as specified by the International Commission on Illumination (CIE).
- (c) An applicant failing to obtain a satisfactory score in such a test may nevertheless be assessed as fit provided the applicant is able to readily and correctly identify aviation coloured lights displayed by means of a recognized colour perception lantern in a special test conducted by the Authority.
- (d) An applicant unable to satisfactorily complete the special test provided in Subsection 8.836(c) –
 - (1) shall only be eligible for a Class 2 medical assessment with the following restriction: "Valid for Day Operations Only"; and
 - (2) should be advised any sunglasses worn during the exercise of airman privileges must be non-polarizing and of a neutral grey tint.

8.840 AUDITORY REQUIREMENTS

- (a) No person may hold nor be issued a medical certificate having any hearing defect that is likely to jeopardise flight safety.

(Note: The Authority shall use such methods of examination as will guarantee reliable testing of a person's ability to hear).
- (b) Each person holding or being issued a medical certification shall -
 - (1) demonstrate acceptable hearing by at least one of the following tests -
 - (i) hear an average conversational voice in a quiet room, using both ears, at a distance of 2 meters from the examiner, and with the back turned to the examiner; or

(Note 1: For the purposes of testing hearing in accordance with the requirements, the sound level of an average conversational voice at 1 m from the point of output (lower lip of the speaker) is c. 60 dB

(A) and that of a whispered voice C 45 dB (A). At 2m from the speaker, the sound level is 6 dB (A) lower.

(Note 2: For the purposes of testing hearing in accordance with the requirements, a quiet room in which the intensity of the background noise is less than 35 dB (A).

- (ii) understand speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment; and
- (2) for Class 1 medical certificates, applicants shall be tested on a pure-tone audiometer at first issue of the certificate, not less than once every five years up to the age of 40 years, and thereafter not less than once every two years and for Class 3 medical certificates, applicants shall be tested on a pure-tone audiometer at first issue of the certificate, not less than once every four years up to the age of 40 years, and thereafter not less than once every two years. For Class 2 medical certificates, applicants should be tested on pure-tone audiometer at first issue of the certificate, and after the age of 50 years, not less than once every two years. These tests shall provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of minimum acceptable thresholds:

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (dB)	35	30	30	40
Poorer ear (dB)	35	50	50	60

(Note: The reference zero for calibration of pure-tone audiometers is that of the pertinent Standards of the current edition of the Audiometric Test Methods, published by the International Organization for Standardization (ISO).

- (3) for a pilot holding instrument ratings, also be tested in accordance with the timing and standards of the Class 1 medical certificate in paragraph (b), subparagraph (2) of this Subsection.

(Note 1: If a pilot is the holder of an instrument rating, but is not fit to meet the requirements of paragraph (b), subparagraph (2) or (3) of this Subsection, the medical certificate shall be annotated with the limitation "not valid for flight in IFR".)

(Note 2: When tested by pure-tone audiometry, an applicant with a hearing loss, in either ear separately, of more than 35 dB at any of the frequencies 500, 1000 or 2000 Hz, or more than 50 dB at 3000 Hz, shall be assessed as unfit.)

- (c) Where the results of paragraph (b), subparagraph (2) or (3) of this Subsection did not meet minimum requirements, an acceptable alternative test for fitness may be accomplished by incorporating satisfactory results from test (b)(1) and the satisfactory demonstration of the following hearing performance in each ear separately equivalent to that of a normal person against a background noise that will simulate the masking properties of –
 - (1) For pilots, the flight deck noise upon speech and beacon signals; or
 - (2) For air traffic controllers, the noise experienced in a typical air traffic control working environment.

(Note 1: In the choice of speech material, aviation-type material is not to be used exclusively for the above tests. Lists of phonetically balanced words will also be satisfactory).

(Note 2: The frequency composition of the background noise should provide an adequate representation of 600 to 4800 Hz).

8.845 **CARDIOVASCULAR – GENERAL**

- (a) No person may hold nor be issued a medical certificate having any abnormality of the heart, congenital or acquired, which is likely to jeopardise flight safety.

- (b) No person may hold nor be issued a medical certificate having an established medical history or clinical diagnosis of any of the following cardiovascular conditions –

(1) myocardial infarction;

(Note: A person may be assessed as fit and issued a Class 3 medical certificate if that person is indicated by accredited medical conclusion to have made a satisfactory recovery from myocardial infarction.)

(2) angina pectoris;

(3) coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;

(4) cardiac valve replacement;

(5) permanent cardiac pacemaker implantation; or

(6) heart replacement.

8.847 BLOOD PRESSURE AND CIRCULATION

No person may hold or be issued a medical certificate if that person has -

(1) systolic and diastolic blood pressures outside normal limits; or

(Note: The use of drugs for control of high blood pressure shall be disqualifying except for those drugs specified by the Authority, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.)

(2) a significant functional or structural abnormality of the circulatory tree.

(Note: The presence of varicosities does not necessarily entail unfitness.)

8.850 ELECTRO-CARDIOGRAM EXAMINATION

Each person holding or being issued a medical certificate shall demonstrate an absence of myocardial infarction and other clinically significant abnormality on an electrocardiographic examination—

(Note: The purpose of routine electrocardiography is case finding. It does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation but shall form part of the heart examination for the first issue of a medical certificate).

(1) for Class 2 and 3 certificates -

(i) at the first application; then

(ii) every 2 years after the age of 30; and

(iii) every year after the age of 50; and

(iv) in all doubtful cases.

(2) for Class 1 certificates -

(i) at the first application; then

(ii) every 2 years after reaching the 30th birthday; and

(iii) every year after reaching the 40th birthday.

(Note 1: An applicant who has undergone coronary by-pass grafting or angioplasty (with or without stenting) or other cardiac intervention or who has a history of myocardial infarction or who suffers from any other potentially incapacitating cardiac condition shall be assessed as unfit unless the applicant's cardiac condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.)

(Note 2: An applicant with an abnormal cardiac rhythm shall be assessed as unfit unless the cardiac arrhythmia has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.)

8.855 NEUROLOGICAL REQUIREMENTS

- (a) No person may hold nor be issued a medical certificate having any neurological disorder, disturbance of consciousness or neurological condition which is likely to jeopardise flight safety.

- (b) No person may hold nor be issued a medical certificate having an established medical history or clinical diagnosis of any of the following neurological conditions -
- (1) epilepsy;
 - (2) a progressive or non-progressive disease of the nervous system, the effects of which are likely to interfere with the safe exercise of the applicant's licence and rating privileges;
 - (3) a disturbance of consciousness without satisfactory medical explanation of the cause; or
 - (4) a transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause.
 - (5) the applicant shall not have suffered any head injury, the effects of which are likely to interfere with the safe exercise of the applicant's licence and rating privileges.

8.860 RESPIRATORY CAPABILITY

- (a) No person may hold nor be issued a medical certificate having an established medical history or clinical diagnosis of the following medical conditions –
- (1) acute disability of the lungs or any active disease of the structures of the lungs, mediastinum or pleura; active pulmonary tuberculosis; or asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations.
- (Note: The use of drugs for control of asthma shall be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.)*
- (b) Unless there is an accredited medical conclusion indicating that the condition is not likely to affect the safe exercise of the applicant's license and rating privileges, the following medical conditions are also disqualifying -
- (1) Quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous in origin; or
 - (2) Pulmonary disease.

8.865 RADIOLOGY (XRAY) EVALUATION

- (a) A radiography evaluation shall be accomplished during the initial chest examination.
- (b) These evaluations should be conducted as necessary in subsequent medical examinations where there are historical chest cavity issues, symptoms or doubtful clinical cases.

8.870 VESTIBULAR APPARATUS

- (a) No person may hold nor be issued a medical certificate having an established medical history or clinical diagnosis of any of the following medical conditions –
- (1) any disturbance of vestibular function;
 - (2) no disease or condition of the middle or internal ear, nose, oral cavity, pharynx or larynx that -
 - (i) interferes with or is aggravated by flying or may reasonably be expected to do so; or
 - (ii) interferes with, or may reasonably be expected to interfere with, clear and effective speech communication;
 - (3) a disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium;
 - (4) any significant dysfunction of the Eustachian tubes.
- (b) Unless there is an accredited medical conclusion indicating that the condition is not likely to affect the safe exercise of the applicant's license and rating privileges, the following medical conditions are also disqualifying –
- (1) acute or chronic impairment of nasal air entry on either side;
 - (2) serious malformation or serious, acute or chronic affection of the buccal cavity or upper respiratory tract; or
 - (3) unhealed (unclosed) perforation of the tympanic membranes.

(Note: A single dry perforation need not render the applicant unfit).

8.873 BONES, MUSCLES AND TENDONS

No person may hold or be issued a medical certificate having an established medical history or clinical diagnosis of any of the following medical conditions –

- (1) any abnormality of the bones, joints, muscles, tendons or related structures.

(Note: Any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness.)

8.875 ENDOCRINE SYSTEM

No person may hold nor be issued a medical certificate having an established medical history or clinical diagnosis of any of the following medical conditions –

- (1) metabolic, nutritional or endocrine disorders that are likely to interfere with safe conduct of flight;
- (2) diabetes mellitus that requires insulin or any other hypoglycemic drug for control; or

(Note – Applicants with non-insulin treated diabetes mellitus shall be assessed as unfit unless the condition is shown to be satisfactorily controlled by diet alone or by diet combined with oral anti-diabetic medication, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.)

8.880 GASTROINTESTINAL AND DIGESTIVE TRACT

(a) No person may hold nor be issued a medical certificate having an established medical history or clinical diagnosis of any of the following medical conditions –

- (1) disabling disease with important impairment of function of the gastrointestinal tract or its adnexa;
- (2) sequelae of disease of, or surgical intervention on, any part of the digestive tract or its adnexae, likely to cause incapacitation in flight, in particular obstructions due to stricture or compression; or
- (3) hernias that might cause incapacitating symptoms.

(b) Unless there is an accredited medical conclusion indicating that the condition is not likely to affect the safe exercise of the applicant's license and rating privileges, the following medical condition is also disqualifying -

- (1) for Class 1 and 2 medical certificates, an applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae with a total or partial excision or a diversion of any of these organs that may cause incapacitation in flight.

8.885 KIDNEYS AND URINARY TRACT

No person may hold nor be issued a medical certificate having an established medical history or clinical diagnosis of any of the following medical conditions unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges–

- (1) urine containing abnormal element considered to be of pathological significance;
- (2) cases of abnormality of the urinary passages or the genital organs; or
- (3) any sequelae of disease of surgical procedures on the kidneys or the genitor-urinary tract, in particular obstructions due to stricture or compression.

(Note 1: Compensated nephrectomy without hypertension or uraemia may be assessed as fit.)

(Note 2: Urine examination shall form part of the medical examination and abnormalities shall be adequately investigated.)

8.890 LYMPHATIC GLANDS OR DISEASE OF THE BLOOD

Unless there is an accredited medical conclusion indicating that the condition is not likely to affect the safe exercise of the applicant's license and rating privileges, the following medical condition is also disqualifying-

- (1) renal or genitor-urinary disease; or
- (2) for Class 1 and 2 certificates, diseases of the blood and/or the lymphatic system, including sickle cell anemia.

(Note: Sickle cell trait or other haemoglobinopathic traits are usually compatible with a fit assessment.)

8.895 FEMALE ISSUES

Unless there is an accredited medical conclusion indicating that the condition is not likely to affect the safe exercise of the applicant's license and rating privileges, the following medical condition is also disqualifying-

- (1) severe menstrual disturbances that have proven unresponsive to treatment; or
- (2) an applicant who has been diagnosed with a gynaecological disorder or who have undergone a gynaecological operation .

8.900 PREGNANCY

For Class 1 and 2 medical certificates, pregnancy will be a cause of temporary unfitness to exercise privileges –

- (1) during third trimester;
- (2) during the second trimester, unless an medical evaluation by a qualified doctor attests that no significant abnormalities are occurring; or
- (3) following confinement or termination of the pregnancy, until fitness is determined through medical evaluation by a qualified doctor.

8.905 SPEECH DEFECTS

- (a) For Class 1 certificates, each applicant seeking first issuance of a medical certificate who has a noticeable speech defect and stuttering problem must undergo an operational evaluation to determine what limitations must be applied to the use of pilot privileges.
- (b) For Class 3 certificates, cases of speech defects and stuttering shall be assessed as unfit.

8.910 ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

- (a) Applicants with acquired immunodeficiency syndrome (AIDS) shall be assessed as unfit.
- (b) Applicants who are seropositive for human immunodeficiency virus (HIV) shall be assessed as unfit unless full investigation provides no evidence of clinical disease.

(Note: Evaluation of applicants who are seropositive for human immunodeficiency virus (HIV) requires particular attention to their mental state, including the psychological effects of the diagnosis.)