



Civil Aviation Authority  
of Fiji

## **STANDARDS DOCUMENT - MEDICAL STANDARDS, TESTS AND CERTIFICATION**

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# Standards Document

## Medical Standards, Tests and Certification

### SD – Medical Standards, Tests and Certification

<p><b>Civil Aviation Authority of Fiji</b> Private Mail Bag, NAP 0354 Nadi International Airport Republic of Fiji</p>
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## PREFACE

### General

Fiji's National Aviation Law consists of a three-tier regulatory system, comprising Acts, Regulations and Standards Documents; the purpose of which is to ensure, where deemed appropriate, compliance and conformance with ICAO Standards and Recommended Practices (SARPS).

The three-tier regulatory system represents Fiji's Primary Legislation System and Specific Operating Regulations to meet Critical Elements CE1 and CE2 of ICAO's Eight Critical Element of a safety oversight system.

Standards Documents (SD) are issued by the Civil Aviation Authority of Fiji under the provision of Section 14 (3) (b) of the Civil Aviation Authority Act 1979 (CAP 174A).

Where appropriate, the SD also contains guidance information (Critical Element CE5) on standards, practices, and procedures that are acceptable to the Authority.

Notwithstanding the above, and where specifically indicated in this Standards Document that such a provision is available, consideration may be given to other methods of compliance that may be presented to the Authority provided they have compensating factors that can demonstrate a level of safety equivalent to or better than those prescribed herein. Accordingly, the Authority will consider each case based on its own merits holistically in the context of and relevancy of the alternative methods to the individual applicant.

When new standards, practices, or procedures are determined to be acceptable, they will be added to this document.

### Purpose

This Standards Document – Medical Standards, Tests and Certification is issued by the Civil Aviation Authority of Fiji pursuant to Regulation 56 of the Air Navigation Regulations 1981 (as amended). This Document is intended for use by CAAF, applicants for, and holders of, an aviation licence, permit, rating and/or approval and Medical Assessors, Approved Medical Authorities and Approved Medical Authorities – Specialist.

### Change Notice

This Standards Document has been developed pursuant to the Authority's obligation to provide oversight on aeronautical meteorological service providers and their personnel and service providers obligation to comply with standards notified by the Authority and is the means by which such notification is given.

  
  
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**THERESA LEVESTAM**  
**ACTING CHIEF EXECUTIVE**



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## 1.1 Purpose

This Standards Document provides methods, acceptable to the Authority, and explanatory material for showing compliance with requirements relating to medical matters dealt with under Air Navigation Regulations (1981).

The requirements set out in this Standards Document specify:

- (a) the medical standards to be met for the initial issue and the renewal of certain licences, permits, ratings and approvals;
- (b) the procedures for the issue and renewal of medical certificates;
- (c) the standards to be met for initial appointment and renewals for Medical Assessor, Approved Medical Authority and Approved Medical Authority (Specialist); and
- (d) the maximum periods of validity of medical certificates and MA, AMA, AMA(S) and Medical Board appointments

## 1.2 Related Regulations

This Standards Document relates specifically to Air Navigation Regulation Air Navigation Regulations (1981) but also refers to licences, permits and ratings regulations in other associated Regulations.

## Foreword

1. It needs to be understood from the start of consideration of Air Navigation Regulations (1981) and this Standards Document that Fiji has adopted a slightly different approach from that used by ICAO.

In ICAO practice the term '*Medical Assessment*' is interpreted to mean both the process of an examination to determine whether the candidate meets the required medical Standard and the document issued by the Authority, either directly or by delegated authority, to a candidate who has been assessed as meeting the required Standard.

Fiji practice is that the candidate undergoes an examination and this is referred to as a Medical Assessment. If the candidate is assessed as meeting the required Standard then the candidate is issued, either directly or by delegated authority, with a Medical Certificate that attests to the standard achieved and to the period for which the assessment has been considered to be valid. Candidates are issued with a new Medical Certificate after each successful medical assessment – Medical Certificates are not renewed.

It should be noted that the period of validity may not necessarily be for the period indicated in Annex 1 section 1.2.5.2. Those periods are the *maximum* periods of validity and this may be reduced as is quoted in '1.2.5.2.1. *The period of validity of a Medical Assessment (or in Fiji's case a 'Medical Certificate') may be reduced when clinically indicated.*'

2. The requirements of the Civil Aviation Authority of Fiji Standards Document – Medical Standards, Tests and Certification have been written with the objective of ensuring that as many of those who wish to participate in aviation activities, whether flying as a pilot or working as an engineer or air traffic controller or other ground based job, can do so and that those already working in aviation can continue for as long as possible - given the overriding constraint of aviation safety.
3. In the introduction to the document a numerical approach to the assessment of aviation medical risk has been outlined and, where reliable data has been available, this concept has been used. As aviation safety requires that in-flight incapacitation of aircrew be a very rare event and as statistical evidence to support the requirements is mostly unavailable, the Authority remains committed to the continuing review of this Standards Document and its supporting text in the light of advancing medical knowledge and to up-dating these when data supporting such changes become available. The Authority will also amend the Standards Document to reflect any changes in the Standards and Recommended Practices of the relevant Annex promulgated by the International Civil Aviation Organization.
4. The editing practices used in this document are as follows:
  - A. "Shall" or "Must" is used to indicate a mandatory requirement.
  - B. "Should" or "May" is used to indicate discretion by the Authority, medical examiner, the industry or the applicant, as appropriate.
  - C. "Will" is used to advise readers of action incumbent on the Medical Examiner/Specialist and Authority.

**NOTE:** *In this document:*

- (1) *the use of the male gender includes the female gender and vice versa unless specifically stated otherwise; and*
- (2) *the use of the term "applicant for a medical assessment" also includes the term "the holder of a medical assessment" and vice versa unless specifically stated otherwise.*



## Definitions

**Accredited medical conclusion** means a conclusion reached by the Authority Medical Board of Assessors and one or more medical expert(s) who are acceptable to the Authority to consider the case of a particular applicant. The purpose of the Accredited Medical Conclusion is to determine whether, despite not meeting the medical standards, the applicant's condition is such that it is not likely to jeopardise aviation safety. – refer to 67.63.

**Authority** means the Civil Aviation Authority of Fiji - responsible for the licensing of aviation personnel.

**Medical Assessor** means a physician, appointed full time by the Authority, qualified and experienced in the practice of aviation medicine and competent in evaluating and assessing medical conditions of flight safety significance.

**Approved Medical Authority** means a physician with training in aviation medicine and practical knowledge and experience of the aviation environment, who is designated by the Authority to conduct medical examinations of fitness of applicants for licences or ratings for which medical requirements are prescribed.

**Approved Medical Authority (Specialist)** means a physician with training in specific medical fields related to Aviation Medicine such as Cardiology or Ophthalmology, who is designated by the Authority to conduct specialist examinations of applicants for licences or ratings for which medical requirements are prescribed.

**Likely** means in the context of the medical provisions in this document, means with a probability of occurring that is unacceptable to the medical assessor.

**Medical Examination** means an examination conducted by a Approved Medical Authority or other person acceptable to the Authority for the purpose of establishing whether the candidate meets the specific medical standards for the licence, permit or rating that they hold or for which they intend to apply.

**Medical Assessment** means the report issued by Approved Medical Authority following the testing of medical fitness of the applicant. One component of the report is the 'Results Slip' which is detached and given to the candidate if they have met the standards for a Medical Certificate.

**Medical Certificate** means a certificate issued by the Authority confirming the licence holder meets specific requirements of medical fitness for a class of medical. The issue of a medical certificate is based on the result of the medical assessment.

**Psychoactive substances** means and includes alcohol, opioids, kava, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded

**Problematic use of substances** means the use of one or more psychoactive substances (including kava) by aviation personnel in a way that constitutes a direct hazard to the user or endangers the lives, health or welfare of others and/or causes or worsens an occupational, social, mental or physical problem or disorder

**Renewal** (of a licence, rating or approval) means the administrative action renews the privileges of the rating or approval for a further specified period consequent upon the fulfilment of specified requirements

**Significant** in the context of this document, means to a degree or of a nature that is likely to



jeopardise flight safety.

In this Standards Document where reference is made to a 'licence' that reference should be taken, where the licence is a pilot licence, to include a flying training permit and, where the licence is an air traffic service personnel licence, to include an appropriate ATS permit (air traffic controller permit, flight information service permit, aeronautical facility technician permit).

## Subpart B - Medical Certification

### Medical Assessments and Certificates

#### 1. General

- (a) An applicant for issue of a Medical Certificate shall undergo a medical examination based on the following requirements:
- (i) physical and mental; and
  - (ii) visual and colour perception; and
  - (iii) hearing.
- in accordance with and/or unless not required by, the provisions of this Standards Document.
- (b) If the medical examination is undertaken no more than 45 days prior to the expiry date, the expiry date will be calculated in accordance with the table in 5.1 by the period stated in the table as applicable.
- (c) If the medical examination is not taken within the 45 day period referred to above, the expiry date will be calculated from the date of the general medical examination.
- (e) All licence, permit and rating holders who are required to undergo a medical examination must not exercise the privileges of their licence, permit or rating unless they have undertaken a Medical Examination and hold a Medical Certificate appropriate to the licence, permit or rating.

#### 2. Classes of Medical Assessment and Certificate

- (a) The classes of Medical Assessment and Certificate are established as follows:
- (i) Class 1 Medical Assessment/Certificate which applies to applicants for, and holders of:
    - Commercial Pilot Licences — Aeroplane, Helicopter, Glider and Balloon
    - Airline Transport Pilot Licences — Aeroplane and Helicopter
    - Multi-Crew Pilot Licences
  - (ii) Class 2 Medical Assessment/ Certificate which applies to applicants for, and holders of:
    - Private Pilot Licences — Aeroplane, Helicopter, Glider and Balloon
    - Flying Training Permits
  - (iii) Class 3 Medical Assessment/Certificate which applies to applicants for, and holders of:
    - Air Traffic Controller Licences
    - Flight Information Service Licences
    - Air Traffic Control and Flight Information Service Training Permits
  - (iv) Class 4 Medical Assessment/Certificate which applies to applicants for and holders of:
    - Aeronautical Facility Technician licences
    - Aircraft Maintenance Engineer licences
- (b) The Medical Authority will report to the Authority any individual case where, in the Medical Authority's judgement, an applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence being applied for, or held, is not likely to jeopardise flight safety.
- (c) The requirements to be met for the renewal of a Medical Certificate are the same as those for the initial assessment except where otherwise specifically stated.

## Subpart D – Medical Tests

This section contains the ICAO Medical Standards as adopted by Fiji for licences, permits and other approvals outside those recognised by ICAO.

### 1. General physical and mental requirements

- (a) An applicant for any class of Medical Certificate must be free from:
- (i) any abnormality, congenital or acquired; or
  - (ii) any active, latent, acute or chronic disability; or
  - (iii) any wound, injury or sequelae from operation; or
  - (iv) any effect or side-effect of any prescribed or non-prescribed therapeutic, diagnostic or preventative medication taken;

such as would entail a degree of functional incapacity which is likely to interfere with the safe operation of an aircraft or with the safe performance of functions and duties.

**NOTE:** *Use of herbal medication and alternative treatment modalities requires particular attention to possible side-effects.*

### 1.1 General visual acuity test requirements

- (a) The varying methods that can be used for the measurement of visual acuity could well lead to differing evaluations. To achieve uniformity, therefore, equivalence in the methods of evaluation is to be obtained by adoption of the following tests of visual acuity:
- (i) Visual acuity tests conducted in an environment with a level of illumination that corresponds to ordinary office illumination (30-60 cd/m<sup>2</sup>).
  - (ii) Visual acuity measured by means of a series of Landolt rings or similar optotypes, placed at a distance from the applicant appropriate to the method of testing adopted.

### 1.2 General colour perception requirements

- (a) The Authority has established the following standards for the use of methods of examination as will ensure reliable testing of colour perception:
- (i) The applicant must demonstrate the ability to perceive readily those colours the perception of which is necessary for the safe performance of duties.
  - (ii) In the case of the Class 4 Medical Standard the applicant must be assessed against the full spectrum of colours, not just those used in aviation lights. Modern equipment uses display screens with images of a variety of colours and its components include wires and other material of a variety of colours. The ability to be able to correctly identify the colour of a display item or an electrical wire or other component is necessary to ensure an adequate level of aviation safety.
  - (ii) The applicant must correctly identify a series of pseudoisochromatic plates in day-light or in artificial light of the same colour temperature such as that provided by CIE standard illuminants C or D<sub>65</sub> as specified by the International Commission on Illumination (CIE).
- (b) An applicant failing to obtain a satisfactory result in such a test must be assessed as unfit unless able to readily distinguish the colours used in air navigation, including the servicing of equipment necessary for ensuring the safety of aircraft operations and, when relevant, correctly identify aviation coloured lights and equipment. Applicants who fail to meet these criteria must be assessed as unfit except for Class 2 assessment which may be assessed as fit with the following licence condition endorsed - "valid daytime only".

**NOTE:** Guidance on suitable methods of assessing colour vision is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984). ICAO recommends that sunglasses worn during the exercise of the privileges of the licence, permit or rating held should be non-polarizing and of a neutral grey tint.

### 1.3 General hearing test requirements

(a) The following standards have been established for the use of methods of examination as will ensure reliable testing of hearing:

- (i) Applicants must demonstrate a hearing performance sufficient for the safe exercise of their licence and rating privileges.
- (ii) Applicants for Class 1 Medical Certificate will be tested by pure-tone audiometry, using calibrated audiometry equipment or other methods providing equivalent results, at first issue of the Assessment, not less than once every five years up to the age of 40 years, and thereafter not less than once every two years.
- (iii) Applicants for Class 2 Medical Certificate will be tested by pure-tone audiometry using calibrated audiometry equipment, at first issue of the Assessment and, after the age of 50 years, not less than once every two years. Alternatively, other methods providing equivalent results may be used.
- (iv) Applicants for Class 3 Medical Certificate will be tested by pure-tone audiometry using calibrated audiometry equipment, at first issue of the Assessment, not less than once every four years up to the age of 40 years, and thereafter not less than once every two years. Alternatively, other methods providing equivalent results may be used.
- (iv) Applicants for Class 4 Medical Certificate will be tested by pure-tone audiometry using calibrated audiometry equipment, at first issue of the Assessment, not less than once every four years up to the age of 40 years, and thereafter not less than once every two years. Alternatively, other methods providing equivalent results may be used.

(b) At medical examinations, other than those mentioned in (a)(ii), (iii) and (iv) above, where audiometry is not performed, applicants must be tested in a quiet room by whispered and spoken voice test.

**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).

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

**NOTE:** For the purposes of testing hearing in accordance with the requirements, the sound level of an average conversational voice at 1m 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:** Guidance on assessment of applicants who use hearing aids is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).

**NOTE:** Attention is called to requirements for applicants for or holders of a private pilot licence to meet Class 1 audio requirements if they also hold or are applying for an instrument rating.

## 4.1 Class 1 Medical Assessment

### 4.1.1 Class 1 Assessment issue and renewal

4.1.1.1 An applicant for a commercial pilot licence — aeroplane, helicopter, glider, balloon, a multi-crew pilot licence — aeroplane, or an airline transport pilot licence — aeroplane, helicopter is required to undergo an initial medical examination for the issue of a Class 1 Medical Assessment.

4.1.1.2 Except where otherwise stated in this section, holders of commercial pilot licence — aeroplane, helicopter, glider, balloon, a multi-crew pilot licence — aeroplane, or an airline transport pilot licence — aeroplane, helicopter shall have their Class 1 Medical Assessments renewed at intervals not exceeding those specified in 5.1.

4.1.1.2.1 In alternate years, for Class 1 applicants under 40 years of age, the medical examiner, at their discretion, may omit certain routine examination items related to the assessment of physical fitness, whilst increasing the emphasis on health education and prevention of ill health.

**NOTE:** *Guidance to reduce the emphasis on detection of physical disease, whilst increasing the emphasis on health education and prevention of ill health in applicants under 40 years of age, is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.1.1.3 When the Authority is satisfied that the requirements of this section and the general provisions of 4.1.1 and 4.1.2 have been met, a Class 1 Medical Certificate is issued.

### 4.1.2 Class 1 Physical and mental requirements

4.1.2.1 The applicant must not suffer from any disease or disability which could render that applicant likely to become suddenly unable either to operate an aircraft safely or to perform assigned duties safely.

4.1.2.2 The applicant must have no established medical history or clinical diagnosis of:

- a) an organic mental disorder;
- b) a mental or behavioural disorder due to use of psycho-active substances; this includes dependence syndrome induced by alcohol or other psychoactive substances;
- c) schizophrenia or a schizotypal or delusional disorder;
- d) a mood (affective) disorder;
- e) a neurotic, stress-related or somatoform disorder;
- f) a behavioural syndrome associated with physiological disturbances or physical factors;
- g) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;
- h) mental retardation;
- i) a disorder of psychological development;
- j) a behavioural or emotional disorder, with onset in childhood or adolescence; or
- k) a mental disorder not otherwise specified;

such as might render the applicant unable to safely exercise the privileges of the licence

applied for or held.

- 4.1.2.2.1 An applicant with depression, being treated with antidepressant medication, will be assessed as unfit unless the medical board, having access to the details of the case concerned, considers the applicant's condition as unlikely to interfere with the safe exercise of the applicant's licence and rating privileges.

**NOTE:** *Guidance on assessment of applicants treated with antidepressant medication is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *Mental and behavioural disorders are defined in accordance with the clinical descriptions and diagnostic guidelines of the World Health Organization as given in the International Statistical Classification of Diseases and Related Health Problems, 10th Edition — Classification of Mental and Behavioural Disorders, WHO 1992. This document contains detailed descriptions of the diagnostic requirements, which may be useful for their application to medical assessment.*

- 4.1.2.3 The applicant must have no established medical history or clinical diagnosis of any of the following:

- a) 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;
- b) epilepsy; or
- c) any disturbance of consciousness without satisfactory medical explanation of cause.

- 4.1.2.4 The applicant must 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.

- 4.1.2.5 The applicant must not possess any abnormality of the heart, congenital or acquired, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

- 4.1.2.5.1 An applicant who has undergone coronary bypass 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 will be assessed as unfit unless the applicant's cardiac condition has been investigated and evaluated in accordance with best medical practice and is assessed by the medical board not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

- 4.1.2.5.2 An applicant with an abnormal cardiac rhythm will be assessed as unfit unless the cardiac arrhythmia has been investigated and evaluated in accordance with best medical practice and is assessed by the medical board not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

**NOTE:** *Guidance on cardiovascular evaluation is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

- 4.1.2.6 Electrocardiography forms part of the heart examination for the first issue of a Medical Assessment.

- 4.1.2.6.1 Electrocardiography must be included in re-examinations of applicants over the age of

50 no less frequently than annually.

4.1.2.6.2 Electrocardiography is required in re-examinations of applicants between the ages of 30 and 50 no less frequently than every two years.

**NOTE:** *The purpose of routine electrocardiography is case finding. It does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation.*

**NOTE:** *Guidance on resting and exercise electro-cardiography is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.1.2.7 The systolic and diastolic blood pressures must be within normal limits.

4.1.2.7.1 The use of drugs for control of high blood pressure will be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

**NOTE:** *Guidance on the subject is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.1.2.8 There must be no significant functional or structural abnormality of the circulatory system.

4.1.2.9 There must be no acute disability of the lungs nor any active disease of the structures of the lungs, mediastinum or pleurae likely to result in incapacitating symptoms during normal or emergency operations.

4.1.2.9.1 Chest radiography is required in the initial examination.

**NOTE:** *Periodic chest radiography is usually not necessary but may be a necessity in situations where asymptomatic pulmonary disease can be expected.*

4.1.2.10 Applicants with chronic obstructive pulmonary disease will be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed by the medical board not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

4.1.2.11 Applicants with asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations will be assessed as unfit.

4.1.2.11.1 The use of drugs for control of asthma will be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

**NOTE:** *Guidance on hazards of medication and drugs is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.1.2.12 Applicants with active pulmonary tuberculosis will be assessed as unfit.

4.1.2.12.1 Applicants with quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous in origin, may be assessed as fit.

**NOTE:** *Guidance on assessment of respiratory diseases is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *Guidance on hazards of medications and drugs is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*



*Aviation Medicine (Doc 8984).*

4.1.2.13 Applicants with significant impairment of function of the gastrointestinal tract or its adnexa will be assessed as unfit.

4.1.2.13.1 Applicants must be completely free from those hernias that might give rise to incapacitating symptoms.

4.1.2.14 Applicants with sequelae of disease of, or surgical intervention on, any part of the digestive tract or its adnexa, likely to cause incapacitation in flight, in particular any obstruction due to stricture or compression, will be assessed as unfit.

4.1.2.14.1 An applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexa with a total or partial excision or a diversion of any of these organs will be assessed as unfit until such time as the medical board, having access to the details of the operation concerned, considers that the effects of the operation are not likely to cause incapacitation in flight.

4.1.2.15 Applicants with metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of their licence and rating privileges will be assessed as unfit.

4.1.2.16 Applicants with insulin-treated diabetes mellitus will be assessed as unfit.

**NOTE:** *Guidance on assessment of Type 2 insulin-treated diabetic applicants under the provisions of 1.2.4.8 is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.1.2.16.1 Applicants with non-insulin-treated diabetes mellitus will 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.

**NOTE:** *Guidance on assessment of diabetic applicants is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.1.2.17 Applicants with diseases of the blood and/or the lymphatic system will be assessed as unfit unless adequately investigated and their condition found by the medical board unlikely to interfere with the safe exercise of their licence and rating privileges.

**NOTE:** *Sickle cell trait or other haemoglobinopathic traits are usually compatible with a fit assessment.*

4.1.2.18 Applicants with renal or genito-urinary disease will be assessed as unfit, unless adequately investigated and their condition found by the medical board unlikely to interfere with the safe exercise of their licence and rating privileges.

4.1.2.18.1 Urine examination is required as part of the medical examination and abnormalities will be adequately investigated.

**NOTE:** *Guidance on urine examination and evaluation of abnormalities is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.1.2.19 Applicants with sequelae of disease of or surgical procedures on the kidneys or the genito-urinary tract, in particular obstructions due to stricture or compression, will be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed by the medical

board not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

4.1.2.19.1 Applicants who have undergone nephrectomy will be assessed as unfit unless the condition is well compensated.

4.1.2.20 Applicants who are seropositive for human immunodeficiency virus (HIV) will be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed by the medical board as not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

**NOTE:** *Early diagnosis and active management of HIV disease with antiretroviral therapy reduces morbidity and improves prognosis and thus increases the likelihood of a fit assessment.*

**NOTE:** *Guidance on the assessment of applicants who are seropositive for human immunodeficiency virus (HIV) is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.1.2.21 Applicants who are pregnant will be assessed as unfit unless obstetrical evaluation and continued medical supervision indicate a low-risk uncomplicated pregnancy.

4.1.2.21.1 For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with 4.1.2.21, the fit assessment should be limited to the period from the end of the 12th week until the end of the 26th week of gestation.

4.1.2.22 Following confinement or termination of pregnancy, the applicant will not be permitted to exercise the privileges of her licence until she has undergone re-evaluation in accordance with best medical practice and it has been determined by the Medical Authority that she is able to safely exercise the privileges of her licence and ratings.

4.1.2.23 The applicant must not possess any abnormality of the bones, joints, muscles, tendons or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

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

4.1.2.24 The applicant must not possess any abnormality or disease of the ear or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

4.1.2.25 There must be:

- a) no disturbance of vestibular function;
- b) no significant dysfunction of the Eustachian tubes; and
- c) no unhealed perforation of the tympanic membranes.

4.1.2.25.1 A single dry perforation of the tympanic membrane need not render the applicant unfit.

**NOTE:** *Guidance on testing of the vestibular function is contained in ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.1.2.26 There must be:

- a) no nasal obstruction; and
- b) no malformation nor any disease of the buccal cavity or upper respiratory tract

which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

4.1.2.27 Applicants with stuttering or other speech defects sufficiently severe to cause impairment of speech communication will be assessed as unfit.

### 4.1.3 Class 1 Visual requirements

The medical examination is based on the following requirements.

4.1.3.1 The function of the eyes and their adnexa must be normal. There must be no active pathological condition, acute or chronic, nor any sequelae of surgery or trauma of the eyes or their adnexa likely to reduce proper visual function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges.

4.1.3.2 Distant visual acuity with or without correction must be 6/9 or better in each eye separately, and binocular visual acuity must be 6/6 or better. No limits apply to uncorrected visual acuity. Where this standard of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

- a) such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held; and
- b) in addition, a pair of suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

**NOTE:** 4.1.3.2 b) is the subject of Standards in ICAO Annex 6, Part I.

**NOTE:** An applicant accepted as meeting these provisions is deemed to continue to do so unless there is reason to suspect otherwise, in which case an ophthalmic report is required at the discretion of the Medical Examiner. Both uncorrected and corrected visual acuity are normally measured and recorded at each re-examination. Conditions which indicate a need to obtain an ophthalmic report include: a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity, and the occurrence of eye disease, eye injury or eye surgery.

4.1.3.2.1 Applicants may use contact lenses to meet this requirement provided that:

- a) the lenses are monofocal and non-tinted;
- b) the lenses are well tolerated; and
- c) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

**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.

4.1.3.2.2 Applicants with a large refractive error must use contact lenses or high-index spectacle lenses.

**NOTE:** If spectacles are used, high-index lenses are needed to minimise peripheral field

*distortion.*

- 4.1.3.2.3 Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60 will be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years thereafter.

**NOTE:** *The purpose of the required ophthalmic examination is (1) to ascertain normal visual performance, and (2) to identify any significant pathology.*

**NOTE:** *Guidance on the assessment of monocular applicants under the provisions of 1.2.4.8 is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

- 4.1.3.3 Applicants who have undergone surgery affecting the refractive status of the eye will be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges.

- 4.1.3.4 The applicant must have the ability to read, while wearing the correcting lenses, if any, required by 4.1.3.2, the N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm and the ability to read the N14 chart or its equivalent at a distance of 100 cm. If this requirement is met only by the use of near correction, the applicant may be assessed as fit provided that this near correction is added to the spectacle correction already pre- scribed in accordance with 4.1.3.2; if no such correction is prescribed, a pair of spectacles for near use must be kept readily available during the exercise of the privileges of the licence. When near correction is required, the applicant must demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements.

**NOTE:** *N5 and N14 refer to the size of typeface used. For further details, see the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *An applicant who needs near correction to meet this requirement will require “look-over”, bifocal or multifocal lenses in order to read the instruments and a chart or manual held in the hand, and also to make use of distant vision, through the windscreen, without removing the lenses. Single-vision near correction (full lenses of one power only, appropriate for reading) significantly reduces distant visual acuity and is therefore not acceptable.*

**NOTE:** *Whenever there is a requirement to obtain or renew correcting lenses, an applicant is expected to advise the refractionist of reading distances for the visual flight deck tasks relevant to the types of aircraft in which the applicant is likely to function.*

- 4.1.3.4.1 When near correction is required in accordance with this paragraph, a second pair of near-correction spectacles must be kept available for immediate use.

- 4.1.3.5 The applicant is required to have normal fields of vision.

- 4.1.3.6 The applicant is required to have normal binocular function.

- 4.1.3.6.1 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.

#### **4.1.4 Class1 Hearing requirements**

- 4.1.4.1 The applicant, when tested on a pure-tone audio- meter, must not have a hearing loss,

in either ear separately, of more than 35 dB at any of the frequencies 500, 1 000 or 2 000 Hz, or more than 50 dB at 3 000 Hz.

- 4.1.4.1.1 An applicant with a hearing loss greater than the above may be declared fit provided that the applicant has normal hearing performance against a background noise that reproduces or simulates the masking properties of flight deck noise upon speech and beacon signals.

**NOTE:** *It is important that the background noise be representative of the noise in the cockpit of the type of aircraft for which the applicant's licence and ratings are valid.*

**NOTE:** *In the speech material for discrimination testing, both aviation-relevant phrases and phonetically balanced words are normally used.*

- 4.1.4.1.2 Alternatively, a practical hearing test conducted in flight in the cockpit of an aircraft of the type for which the applicant's licence and ratings are valid may be used.

## **4.2 Class 2 Medical Assessment**

### **4.2.1 Class 2 Assessment issue and renewal**

- 4.2.1.1 An applicant for a private pilot licence — aeroplane, airship, helicopter or powered-lift, glider or balloon must undergo an initial medical examination for the issue of a Class 2 Medical Assessment.

- 4.2.1.2 Except where otherwise stated in this section, holders of private pilot licences — aeroplanes, airships, helicopters or powered-lift, gliders or balloons must have their Class 2 Medical Assessments renewed at intervals not exceeding those specified in this standards document.

- 4.2.1.3 When the Authority is satisfied that the requirements of this section and the general provisions of 4.2.1 and 4.2.2 have been met, a Class 2 Medical Assessment will be issued to the applicant.

### **4.2.2 Class 2 Physical and mental requirements**

The medical examination shall be based on the following requirements:

- 4.2.2.1 The applicant must not suffer from any disease or disability which could render that applicant likely to become suddenly unable either to operate an aircraft safely or to perform assigned duties safely.

- 4.2.2.2 The applicant must have no established medical history or clinical diagnosis of:

- a) an organic mental disorder;
- b) a mental or behavioural disorder due to psychoactive substance use; this includes dependence syndrome induced by alcohol or other psychoactive substances;
- c) schizophrenia or a schizotypal or delusional disorder;
- d) a mood (affective) disorder;
- e) a neurotic, stress-related or somatoform disorder;
- f) a behavioural syndrome associated with physiological disturbances or physical factors;
- g) a disorder of adult personality or behaviour, particularly if manifested by repeated

overt acts;

- h) mental retardation;
- i) a disorder of psychological development;
- j) a behavioural or emotional disorder, with onset in childhood or adolescence; or
- k) a mental disorder not otherwise specified;

such as might render the applicant unable to safely exercise the privileges of the licence applied for or held.

- 4.2.2.2.1 An applicant with depression, being treated with antidepressant medication, should be assessed as unfit unless the medical assessor, having access to the details of the case concerned, considers the applicant's condition as unlikely to interfere with the safe exercise of the applicant's licence and rating privileges.

**NOTE:** *Guidance on assessment of applicants treated with antidepressant medication is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *Mental and behavioural disorders are defined in accordance with the clinical descriptions and diagnostic guidelines of the World Health Organization as given in the International Statistical Classification of Diseases and Related Health Problems, 10th Edition — Classification of Mental and Behavioural Disorders, WHO 1992. This document contains detailed descriptions of the diagnostic requirements, which may be useful for their application to medical assessment.*

- 4.2.2.3 The applicant must have no established medical history or clinical diagnosis of any of the following:

- a) 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;
- b) epilepsy;
- c) any disturbance of consciousness without satisfactory medical explanation of cause.

- 4.2.2.4 The applicant must 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.

- 4.2.2.5 The applicant must not possess any abnormality of the heart, congenital or acquired, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

- 4.2.2.5.1 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 must 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.

- 4.2.2.5.2 An applicant with an abnormal cardiac rhythm must 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.

**NOTE:** *Guidance on cardiovascular evaluation is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.6 Electrocardiography shall form part of the heart examination for the first issue of a Medical Assessment after the age of 40.

4.2.2.6.1 Electrocardiography will be included in re-examinations of applicants after the age of 50 no less than every two years.

4.2.2.6.2 Electrocardiography should form part of the heart examination for the first issue of a Medical Assessment.

**NOTE:** *The purpose of routine electrocardiography is case finding. It does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation.*

**NOTE:** *Guidance on resting and exercise electrocardiography is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.7 The systolic and diastolic blood pressures must be within normal limits.

4.2.2.7.1 The use of drugs for control of high blood pressure must be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

**NOTE:** *Guidance on the subject is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.8 There must be no significant functional nor structural abnormality of the circulatory system.

4.2.2.9 There must be no disability of the lungs nor any active disease of the structures of the lungs, mediastinum or pleura likely to result in incapacitating symptoms during normal or emergency operations.

4.2.2.9.1 Chest radiography should form part of the initial and periodic examinations in cases where asymptomatic pulmonary disease can be expected.

4.2.2.10 Applicants with chronic obstructive pulmonary disease must be assessed as unfit 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.

4.2.2.11 Applicants with asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations must be assessed as unfit.

4.2.2.11.1 The use of drugs for control of asthma will be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

**NOTE:** *Guidance on hazards of medication and drugs is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.12 Applicants with active pulmonary tuberculosis must be assessed as unfit.

4.2.2.12.1 Applicants with quiescent or healed lesions, known to be tuberculous or presumably

tuberculous in origin, may be assessed as fit.

**NOTE:** *Guidance on assessment of respiratory diseases is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *Guidance on hazards of medication and drugs is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.13 Applicants must be completely free from those hernias that might give rise to incapacitating symptoms.

4.2.2.13.1 Applicants with significant impairment of the function of the gastrointestinal tract or its adnexa will be assessed as unfit.

4.2.2.14 Applicants with sequelae of disease of or surgical intervention on any part of the digestive tract or its adnexa, likely to cause incapacitation in flight, in particular any obstruction due to stricture or compression, must be assessed as unfit.

4.2.2.14.1 An applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexa with a total or partial excision or a diversion of any of these organs will be assessed as unfit until such time as the medical assessor, having access to the details of the operation concerned, considers that the effects of the operation are not likely to cause incapacitation in flight.

4.2.2.15 Applicants with metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of their licence and rating privileges will be assessed as unfit.

4.2.2.16 Applicants with insulin-treated diabetes mellitus will be assessed as unfit.

**NOTE:** *Guidance on assessment of Type 2 insulin-treated diabetic applicants under the provisions of 1.2.4.8 is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.16.1 Applicants with non-insulin-treated diabetes mellitus must 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.

**NOTE:** *Guidance on assessment of diabetic applicants is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.17 Applicants with diseases of the blood and/or the lymphatic system will be assessed as unfit unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges.

**NOTE:** *Sickle cell trait and other haemoglobinopathic traits are usually compatible with fit assessment.*

4.2.2.18 Applicants with renal or genito-urinary disease will be assessed as unfit unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges.

4.2.2.18.1 Urine examination will form part of the medical examination and abnormalities will be adequately investigated.

**NOTE:** *Guidance on urine examination and evaluation of abnormalities is contained in the ICAO*



*Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.19 Applicants with sequelae of disease of, or surgical procedures on, the kidneys or the genito-urinary tract, in particular obstructions due to stricture or compression, must be assessed as unfit 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.

4.2.2.19.1 Applicants who have undergone nephrectomy must be assessed as unfit unless the condition is well compensated.

4.2.2.20 Applicants who are seropositive for human immunodeficiency virus (HIV) must be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed as not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

**NOTE:** *Early diagnosis and active management of HIV disease with antiretroviral therapy reduces morbidity and improves prognosis and thus increases the likelihood of a fit assessment.*

**NOTE:** *Guidance on the assessment of applicants who are seropositive for human immunodeficiency virus (HIV) is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.21 Applicants who are pregnant must be assessed as unfit unless obstetrical evaluation and continued medical supervision indicate a low-risk uncomplicated pregnancy.

4.2.2.21.1 For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with 4.2.2.21, the fit assessment should be limited to the period from the end of the 12th week until the end of the 26th week of gestation.

4.2.2.22 Following confinement or termination of pregnancy, the applicant will not be permitted to exercise the privileges of her licence until she has undergone re-evaluation in accordance with best medical practice and it has been determined that she is able to safely exercise the privileges of her licence and ratings.

4.2.2.23 The applicant must not possess any abnormality of the bones, joints, muscles, tendons or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

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

4.2.2.24 The applicant must not possess any abnormality or disease of the ear or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

4.2.2.25 There must be:

- a) no disturbance of the vestibular function;
- b) no significant dysfunction of the Eustachian tubes; and c) no unhealed perforation of the tympanic membranes.

4.2.2.25.1 A single dry perforation of the tympanic membrane need not render the applicant unfit.

**NOTE:** *Guidance on testing of the vestibular function is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.2.26 There must be:

- a) no nasal obstruction; and
- b) no malformation nor any disease of the buccal cavity or upper respiratory tract; which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

4.2.2.27 Applicants with stuttering and other speech defects sufficiently severe to cause impairment of speech communication will be assessed as unfit.

### **4.2.3 Class 2 Visual requirements**

The medical examination will be based on the following requirements:

4.2.3.1 The function of the eyes and their adnexa must be normal. There must be no active pathological condition, acute or chronic, nor any sequelae of surgery or trauma of the eyes or their adnexa likely to reduce proper visual function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges.

4.2.3.2 Distant visual acuity with or without correction must be 6/12 or better in each eye separately, and binocular visual acuity must be 6/9 or better. No limits apply to uncorrected visual acuity. Where this standard of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

- a) such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held; and
- b) in addition, a pair of suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

**NOTE:** *An applicant accepted as meeting these provisions is deemed to continue to do so unless there is reason to suspect otherwise, in which case an ophthalmic report is required at the discretion of the Authority. Both uncorrected and corrected visual acuity are normally measured and recorded at each re-examination. Conditions which indicate a need to obtain an ophthalmic report include: a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity, and the occurrence of eye disease, eye injury or eye surgery.*

4.2.3.2.1 Applicants may use contact lenses to meet this requirement provided that:

- a) the lenses are monofocal and non-tinted;
- b) the lenses are well tolerated; and
- c) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

**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.*

4.2.3.2.2 Applicants with a large refractive error must use contact lenses or high-index spectacle

lenses.

**NOTE:** *If spectacles are used, high-index lenses are needed to minimise peripheral field distortion.*

4.2.3.2.3 Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60 should be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years thereafter.

**NOTE:** *The purpose of the required ophthalmic examination is (1) to ascertain normal visual performance, and (2) to identify any significant pathology.*

**NOTE:** *Guidance on the assessment of monocular applicants under the provisions of 1.2.4.8 is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.2.3.3 Applicants who have undergone surgery affecting the refractive status of the eye will be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges.

4.2.3.4 The applicant must have the ability to read, while wearing the correcting lenses, if any, required by 4.2.3.2, the N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm. If this requirement is met only by the use of near correction, the applicant may be assessed as fit provided that this near correction is added to the spectacle correction already prescribed in accordance with 4.2.3.2; if no such correction is prescribed, a pair of spectacles for near use must be kept readily available during the exercise of the privileges of the licence. When near correction is required, the applicant must demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements.

**NOTE:** *N5 refers to the size of typeface used. For further details, see the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *An applicant who needs near correction to meet the requirement will require “look-over”, bifocal or multifocal lenses in order to read the instruments and a chart or manual held in the hand, and also to make use of distant vision, through the windscreen, without removing the lenses. Single-vision near correction (full lenses of one power only, appropriate for reading) significantly reduces distant visual acuity and is therefore not acceptable.*

**NOTE:** *Whenever there is a requirement to obtain or renew correcting lenses, an applicant is expected to advise the refractionist of the reading distances for the visual flight deck tasks relevant to the types of aircraft in which the applicant is likely to function.*

4.2.3.4.1 When near correction is required in accordance with this paragraph, a second pair of near-correction spectacles must be kept available for immediate use.

4.2.3.5 The applicant must have normal fields of vision.

4.2.3.6 The applicant must have normal binocular function.

4.2.3.6.1 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.

#### **4.2.4 Class 2 Hearing requirements**

**NOTE:** *Attention is called to requirements for applicants for or holders of a private pilot licence to meet Class 1 audio requirements if they also hold or are applying for an instrument rating.*

4.2.4.1 Applicants who are unable to hear an average conversational voice in a quiet room, using both ears, at a distance of 2 m from the examiner and with the back turned to the examiner, must be assessed as unfit.

4.2.4.2 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, 1,000 or 2,000 Hz, or more than 50 dB at 3,000 Hz, must be assessed as unfit.

4.2.4.3 An applicant who does not meet the requirements in 4.2.4.1 or 4.2.4.2 should undergo further testing in accordance with 4.1.4.1.1.

### **4.3 Class 3 Medical Assessment**

#### **4.3.1 Class 3 Assessment issue and renewal**

4.3.1.1 An applicant for an air traffic service training permit, air traffic controller licence or the initial issue of a flight information service officer licence will undergo an initial medical examination for the issue of a Class 3 Medical Assessment.

4.3.1.2 Except where otherwise stated in this section, holders of air traffic controller licences will have their Class 3 Medical Assessments renewed at intervals not exceeding those specified in this standards document

4.3.1.3 When the Authority is satisfied that the requirements of this section and the general provisions of 4.3.1 and 4.3.2 have been met, a Class 3 Medical Assessment shall be issued to the applicant.

#### **4.3.2 Class 3 Physical and mental requirements**

4.3.2.1 The applicant shall not suffer from any disease or disability which could render that applicant likely to become suddenly unable to perform duties safely.

4.3.2.2 The applicant must have no established medical history or clinical diagnosis of:

- a) an organic mental disorder;
- b) a mental or behavioural disorder due to psychoactive substance use; this includes dependence syndrome induced by alcohol or other psychoactive substances;
- c) schizophrenia or a schizotypal or delusional disorder;
- d) a mood (affective) disorder;
- e) a neurotic, stress-related or somatoform disorder;
- f) a behavioural syndrome associated with physiological disturbances or physical factors;
- g) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;

- h) mental retardation;
- i) a disorder of psychological development;
- j) a behavioural or emotional disorder, with onset in childhood or adolescence; or
- k) a mental disorder not otherwise specified;

such as might render the applicant unable to safely exercise the privileges of the licence applied for or held.

- 4.3.2.2.1 An applicant with depression, being treated with antidepressant medication, will be assessed as unfit unless the medical assessor, having access to the details of the case concerned, considers the applicant's condition as unlikely to interfere with the safe exercise of the applicant's licence and rating privileges.

**NOTE:** *Guidance on assessment of applicants treated with antidepressant medication is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *Mental and behavioural disorders are defined in accordance with the clinical descriptions and diagnostic guidelines of the World Health Organization as given in the International Statistical Classification of Diseases and Related Health Problems, 10th Edition — Classification of Mental and Behavioural Disorders, WHO 1992. This document contains detailed descriptions of the diagnostic requirements which may be useful for their application to medical assessment.*

- 4.3.2.3 The applicant must have no established medical history or clinical diagnosis of any of the following:

- a) 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;
- b) epilepsy; or
- c) any disturbance of consciousness without satisfactory medical explanation of cause.

- 4.3.2.4 The applicant must 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.

- 4.3.2.5 The applicant must not possess any abnormality of the heart, congenital or acquired, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

- 4.3.2.5.1 An applicant who has undergone coronary bypass 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 will 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 and rating privileges.

- 4.3.2.5.2 An applicant with an abnormal cardiac rhythm will 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 and rating privileges.

**NOTE:** *Guidance on cardiovascular evaluation is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.3.2.6 Electrocardiography will form part of the heart examination for the first issue of a Medical Assessment.

4.3.2.6.1 Electrocardiography will be included in re-examinations of applicants after the age of 50 no less frequently than every two years.

**NOTE:** *The purpose of routine electrocardiography is case finding. It does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation.*

**NOTE:** *Guidance on resting and exercise electrocardiography is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.3.2.7 The systolic and diastolic blood pressures must be within normal limits.

4.3.2.7.1 The use of drugs for control of high blood pressure is disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence privileges.

**NOTE:** *Guidance on this subject is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.3.2.8 There must be no significant functional nor structural abnormality of the circulatory system.

4.3.2.9 There must be no disability of the lungs nor any active disease of the structures of the lungs, mediastinum or pleurae likely to result in incapacitating symptoms.

**NOTE:** *Chest radiography is usually not necessary but may be indicated in cases where asymptomatic pulmonary disease can be expected.*

4.3.2.10 Applicants with chronic obstructive pulmonary disease will be assessed as unfit 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.

4.3.2.11 Applicants with asthma causing significant symptoms or likely to cause incapacitating symptoms will be assessed as unfit.

4.3.2.11.1 The use of drugs for control of asthma will be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

**NOTE:** *Guidance on hazards of medications is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.3.2.12 Applicants with active pulmonary tuberculosis will be assessed as unfit.

4.3.2.12.1 Applicants with quiescent or healed lesions, known to be tuberculous or presumably tuberculous in origin, may be assessed as fit.

**NOTE:** *Guidance on assessment of respiratory diseases is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *Guidance on hazards of medication and drugs is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.3.2.13 Applicants with significant impairment of the function of the gastrointestinal tract or its adnexae will be assessed as unfit.

4.3.2.14 Applicants with sequelae of disease of or surgical intervention on any part of the digestive tract or its adnexa, likely to cause incapacitation, in particular any obstructions due to stricture or compression, will be assessed as unfit.

4.3.2.14.1 An applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexa, with a total or partial excision or a diversion of any of these organs will be assessed as unfit until such time as the medical assessor, having access to the details of the operation concerned, considers that the effects of the operation are not likely to cause incapacitation.

4.3.2.15 Applicants with metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of their licence and rating privileges will be assessed as unfit.

4.3.2.16 Applicants with insulin-treated diabetes mellitus will be assessed as unfit.

**NOTE:** *Guidance on assessment of Type 2 insulin-treated diabetic applicants under the provisions of 1.2.4.8 is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.3.2.16.1 Applicants with non-insulin-treated diabetes will 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.

**NOTE:** *Guidance on assessment of diabetic applicants is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.3.2.17 Applicants with diseases of the blood and/or the lymphatic system will be assessed as unfit, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges.

4.3.2.18 Applicants with renal or genito-urinary disease will be assessed as unfit unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges.

4.3.2.18.1 Urine examination will form part of the medical examination and abnormalities will be adequately investigated.

**NOTE:** *Guidance on urine examination and evaluation of abnormalities is contained in the Manual of Civil Aviation Medicine (Doc 8984).*

4.3.2.19 Applicants with sequelae of disease of, or surgical procedures on the kidneys or the genito-urinary tract, in particular obstructions due to stricture or compression, will be assessed as unfit 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.

4.3.2.19.1 Applicants who have undergone nephrectomy will be assessed as unfit unless the condition is well compensated.

4.3.2.20 Applicants who are seropositive for human immunodeficiency virus (HIV) will be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed as not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

**NOTE:** *Early diagnosis and active management of HIV disease with antiretroviral therapy reduces morbidity and improves prognosis and thus increases the likelihood of a fit assessment.*

**NOTE:** *Guidance on the assessment of applicants who are seropositive for human immunodeficiency virus (HIV) is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.3.2.21 Applicants who are pregnant will be assessed as unfit unless obstetrical evaluation and continued medical supervision indicate a low-risk uncomplicated pregnancy.

4.3.2.21.1 During the gestational period, precautions should be taken for the timely relief of an air traffic controller in the event of early onset of labour or other complications.

4.3.2.21.2 For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with 4.3.2.21, the fit assessment will be limited to the period until the end of the 26<sup>th</sup> week of gestation.

4.3.2.22 Following confinement or termination of pregnancy the applicant will not be permitted to exercise the privileges of her licence until she has undergone re-evaluation in accordance with best medical practice and it has been determined that she is able to safely exercise the privileges of her licence and ratings.

4.3.2.23 The applicant must not possess any abnormality of the bones, joints, muscles, tendons or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

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

4.3.2.24 The applicant must not possess any abnormality or disease of the ear or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

4.3.2.25 There must be no malformation nor any disease of the nose, buccal cavity or upper respiratory tract which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

4.3.2.26 Applicants with stuttering or other speech defects sufficiently severe to cause impairment of speech communication will be assessed as unfit.

### 4.3.3 Class 3 Visual requirements

The medical examination will be based on the following requirements.

4.3.3.1 The function of the eyes and their adnexa must be normal. There must be no active pathological condition, acute or chronic, nor any sequelae of surgery or trauma of the eyes or their adnexa likely to reduce proper visual function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges.



4.3.3.2 Distant visual acuity with or without correction must be 6/9 or better in each eye separately, and binocular visual acuity must be 6/6 or better. No limits apply to uncorrected visual acuity. Where this standard of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

- a) such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held; and
- b) in addition, a pair of suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

**NOTE:** *An applicant accepted as meeting these provisions is deemed to continue to do so unless there is reason to suspect otherwise, in which case an ophthalmic report is required at the discretion of the Authority. Both uncorrected and corrected visual acuity are normally measured and recorded at each re-examination. Conditions which indicate a need to obtain an ophthalmic report include: a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity, and the occurrence of eye disease, eye injury or eye surgery.*

4.3.3.2.1 Applicants may use contact lenses to meet this requirement provided that:

- a) the lenses are monofocal and non-tinted;
- b) the lenses are well tolerated; and
- c) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

**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.*

4.3.3.2.2 Applicants with a large refractive error must use contact lenses or high-index spectacle lenses.

**NOTE:** *If spectacles are used, high-index lenses are needed to minimise peripheral field distortion.*

4.3.3.2.3 Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60 will be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years

**NOTE:** *The purpose of the required ophthalmic examination is (1) to ascertain normal vision performance, and (2) to identify any significant pathology.*

**NOTE:** *Guidance on the assessment of monocular applicants under the provisions of 1.2.4.8 is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.3.3.3 Applicants who have undergone surgery affecting the refractive status of the eye must be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges.

4.3.3.4 The applicant must have the ability to read, while wearing the correcting lenses, if any, required by 4.3.3.2, the N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm and the ability to read the N14 chart or its equivalent at a distance of 100 cm. If this requirement is met only by the use of

near correction, the applicant may be assessed as fit provided that this near correction is added to the spectacle correction already prescribed in accordance with 4.3.3.2; if no such correction is prescribed, a pair of spectacles for near use must be kept readily available during the exercise of the privileges of the licence. When near correction is required, the applicant must demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements.

**NOTE:** *N5 and N14 refer to the size of typeface used. For further details, see the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *An applicant who needs near correction to meet the requirement will require “look-over”, bifocal or multi-focal lenses in order to read radar screens, visual displays and written or printed material and also to make use of distant vision, through the windows, without removing the lenses. Single-vision near correction (full lenses of one power only, appropriate for reading) may be acceptable for certain air traffic control duties. However, it should be realised that single-vision near correction significantly reduces distant visual acuity.*

**NOTE:** *Whenever there is a requirement to obtain or renew correcting lenses, an applicant is expected to advise the refractionist of reading distances for the air traffic control duties the applicant is likely to perform.*

4.3.3.4.1 When near correction is required in accordance with this paragraph, a second pair of near-correction spectacles must be kept available for immediate use.

4.3.3.5 The applicant must have normal fields of vision.

4.3.3.6 The applicant must have normal binocular function.

4.3.3.6.1 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.

#### **4.3.4 Class 3 Hearing requirements**

4.3.4.1 The applicant, when tested on a pure-tone audio- meter must not have a hearing loss, in either ear separately, of more than 35 dB at any of the frequencies 500, 1,000 or 2,000 Hz, or more than 50 dB at 3,000 Hz.

4.3.4.1.1 An applicant with a hearing loss greater than the above may be declared fit provided that the applicant has normal hearing performance against a background noise that reproduces or simulates that experienced in a typical air traffic control working environment.

**NOTE:** *The frequency composition of the background noise is defined only to the extent that the frequency range 600 to 4 800 Hz (speech frequency range) is adequately represented.*

**NOTE:** *In the speech material for discrimination testing, both aviation-relevant phrases and phonetically balanced words are normally used.*

4.3.4.1.2 Alternatively, a practical hearing test conducted in an air traffic control environment representative of the one for which the applicant's licence and ratings are valid may be used.

## 4.4 Fiji Class 4 Medical Assessment

### 4.4.1 Class 4 Visual requirements

The medical examination will be based on the following requirements.

4.4.1.1 The function of the eyes and their adnexa shall be normal. There shall be no active pathological condition, acute or chronic, nor any sequelae of surgery or trauma of the eyes or their adnexa likely to reduce proper visual function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges.

4.4.1.2 Distant visual acuity with or without correction must be 6/9 or better in each eye separately, and binocular visual acuity must be 6/6 or better. No limits apply to uncorrected visual acuity. Where this standard of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

- a) such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held; and
- b) in addition, a pair of suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

**NOTE:** *An applicant accepted as meeting these provisions is deemed to continue to do so unless there is reason to suspect otherwise, in which case an ophthalmic report is required at the discretion of the Authority. Both uncorrected and corrected visual acuity are normally measured and recorded at each re-examination. Conditions which indicate a need to obtain an ophthalmic report include: a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity, and the occurrence of eye disease, eye injury or eye surgery.*

4.4.1.2.1 Applicants may use contact lenses to meet this requirement provided that:

- a) the lenses are monofocal and non-tinted;
- b) the lenses are well tolerated; and
- c) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

**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.*

4.4.1.2.2 Applicants with a large refractive error must use contact lenses or high-index spectacle lenses.

**NOTE:** *If spectacles are used, high-index lenses are needed to minimise peripheral field distortion.*

4.4.1.2.3 Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60 will be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years

**NOTE:** *The purpose of the required ophthalmic examination is (1) to ascertain normal vision performance, and (2) to identify any significant pathology.*

**NOTE:** *Guidance on the assessment of monocular applicants under the provisions of 1.2.4.8 is contained in the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

4.4.1.3 Applicants who have undergone surgery affecting the refractive status of the eye will

be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges.

- 4.4.1.4 The applicant must have the ability to read, while wearing the correcting lenses, if any, required by 4.4.1.2, the N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm and the ability to read the N14 chart or its equivalent at a distance of 100 cm. If this requirement is met only by the use of near correction, the applicant may be assessed as fit provided that this near correction is added to the spectacle correction already prescribed in accordance with 4.4.1.2; if no such correction is prescribed, a pair of spectacles for near use must be kept readily available during the exercise of the privileges of the licence. When near correction is required, the applicant must demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements.

**NOTE:** *N5 and N14 refer to the size of typeface used. For further details, see the ICAO Manual of Civil Aviation Medicine (Doc 8984).*

**NOTE:** *An applicant who needs near correction to meet the requirement will require “look-over”, bifocal or multi-focal lenses in order to read radar screens, visual displays and written or printed material and also to make use of distant vision, through the windows, without removing the lenses. Single-vision near correction (full lenses of one power only, appropriate for reading) may be acceptable for certain working conditions. However, it should be realized that single-vision near correction significantly reduces distant visual acuity.*

**NOTE:** *Whenever there is a requirement to obtain or renew correcting lenses, an applicant is expected to advise the refractionist of reading distances for the air traffic control duties the applicant is likely to perform.*

- 4.4.1.4.1 When near correction is required in accordance with this paragraph, a second pair of near-correction spectacles must be kept available for immediate use.

4.4.1.5 The applicant must have normal fields of vision.

4.4.1.6 The applicant must have normal binocular function.

4.4.1.6.1 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.

## 4.4.2 Class 4 Hearing requirements

4.4.2.1 The applicant, when tested on a pure-tone audiometer must not have a hearing loss, in either ear separately, of more than 35 dB at any of the frequencies 500, 1,000 or 2,000 Hz, or more than 50 dB at 3,000 Hz.

4.4.2.1.1 An applicant with a hearing loss greater than the above may be declared fit provided that the applicant has normal hearing performance against a background noise that reproduces or simulates that experienced in their typical working environment.

**NOTE:** *The frequency composition of the background noise is defined only to the extent that the frequency range 600 to 4 800 Hz (speech frequency range) is adequately represented.*

**NOTE:** *In the speech material for discrimination testing, both aviation-relevant phrases and phonetically balanced words are normally used.*

4.4.2.1.2 Alternatively, a practical hearing test conducted in a normal working environment representative of the one for which the applicant's licence and ratings are valid may

be used.

## 5. Period of Validity of Medical Assessments

### 5.1 Maximum period of medical assessment validity

5.1.1 The table below sets out the maximum periods of validity in months of various forms of approval.

Licence, Permit or Approval Type or Rating	Medical Assessment Class	Period of Validity of Medical Assessment - months			
		Under 40 years of age	Over 40 years of age		Over 60 years of age
			Single pilot	Multi-crew	
Flying Training Permit	2	60	24	Not applicable	
PPL (A) (H) (G) or (B)	2	60	24		
CPL (A) (H) (G) or (B)	1	12	6	12*	6
ATPL (A)	1	12	6	12*	6
Air Traffic Controller	3	48	24		12
ATS Training Permit	3	48	24		12
Flight Information Service Officer	3 (Initial) 4 (Renew)	48	24		12
Aeronautical Facility Technician Licence	4	48	24		12
Aircraft Maintenance Engineer	4	48	24		

**NOTE:** Attention is called to requirements for applicants for or holders of a private pilot licence to meet Class 1 audio requirements if they also hold or are applying for an instrument rating.

**NOTE:** The expiry date of the medical assessment is calculated on the basis of the information contained in this sub-paragraph and will be shown in the licence.

**NOTE:** Notwithstanding the notes and data in the table, a medical assessment issued prior to the holder's 40<sup>th</sup> birthday will not be valid for Class 2 or Class 3 privileges after the holder's 42<sup>nd</sup> birthday and a medical assessment issued prior to the holder's 50<sup>th</sup> birthday will not be valid for Class 2 or Class 3 privileges after the holder's 51<sup>st</sup> birthday

**NOTE:** The medical validity for the pilot over the age of 40 will be 12 months instead of 6 months when operating only in a multi crew aircraft environment, unless otherwise reduced elsewhere. This is the corollary of Annex 1, 1.2.5.2.2.

**NOTE:** The medical validity for an ATPL, commercial or multi-crew pilot licence holder over the age of 60 will be 6 months when operating in any commercial operation including multi crew unless otherwise reduced elsewhere Refer Annex 1, 1.2.5.2.3.

### 5.2 Reduction of Maximum Validity Period

5.2.1 Where a Approved Medical Authority has doubt about the fitness of the applicant or an aspect of fitness during the medical assessment, the Approved Medical Authority will refer the results of the assessment to the Authority for review by the Authority's Medical Board of Assessors.

**NOTE:** Where there is doubt about the fitness of the applicant, the detachable medical slip will not be provided to the applicant.

5.2.2 Reduction of period of validity of a medical assessment may be imposed by the Authority's Medical Assessor when clinically indicated.

### 5.3 Decrease in medical fitness

5.3.1 Licence, permit or rating holders must not exercise the privileges of their licence, permit or related ratings at any time when they are aware of any decrease in their medical fitness that might render them unable to safely exercise those privileges. Furthermore, the holder and the operator must without undue delay seek the advice of the Authority or its designated representative, or Approved Medical Authority when becoming aware of:

- (i) hospital admission for more than 12 hours; or
- (ii) surgical operation or invasive procedure; or
- (iii) the regular use of medication; or
- (iv) the regular use of correcting lenses.

5.3.2 Every holder of a Medical Certificate issued in accordance with Air Navigation Regulations (1981) and this Standards Document who:

- (i) suffers any significant personal injury involving incapacity to undertake the privileges and functions authorised by the licence and rating; or
- (ii) suffers any illness involving incapacity to undertake those privileges and functions throughout a period of 20 days or more;

must inform the Authority in writing of such injury or, in the case of illness, as soon as the period of 20 days has elapsed. The Medical Certificate will be deemed to be suspended upon the occurrence of such period of illness and in the case of injury or illness the suspension will not be lifted until the holder has been medically examined and pronounced fit to resume the privileges and functions of their licence, permit or ratings or upon the Authority exempting, subject to such conditions as it thinks fit, the holder from the requirement of a medical examination.

### 5.3 Additional medical examination

5.3.1 Where the Authority has reasonable doubt about the continuing fitness of the holder of a medical assessment, the Authority may require the holder to submit to further examination, investigation or tests. The reports will be forwarded to the Authority for review by the medical board of assessors.

### 5.4 Licence Holders aged 60 years or more

5.4.1 The holder of a pilot licence who has attained the age between 60 and 65 years must not act as pilot in command of an aircraft engaged in international commercial air transport operations except as a member of a multi-pilot crew and provided that there is another flight crew member who has not attained age 60.

5.4.2 All the privileges cease for the holder of a pilot licence who has attained the age of 65 years engaged in international commercial air transport.

## 6. Use of medication and or drugs

- (a) The use of any prescription or non-prescription medication or drug, including those

used for the treatment of a disease or disorder, will be considered disqualifying unless the drug has been demonstrated, to the satisfaction of the Authority, to be generally compatible with the safe exercise of the privileges of the licence, permit or rating and the individual has developed no significant side effects after an adequate period of observation.

- (b) All procedures requiring the use of a general or spinal anaesthetic will be disqualifying for at least 7 days.
- (c) All procedures requiring local or regional anaesthetic will be disqualifying for at least 48 hours.

## 6.1 Use of psychoactive substances

- 6.1.1 Holders of licences must not exercise the privileges of their licences and related ratings while under the influence of any psychoactive substance (including kava) which might render them unable to safely and properly exercise these privileges.
- 6.1.2 Holders of licences must not engage in any problematic use of substances.
- 6.1.3 All licence holders who engage in any kind of problematic use of substances will be identified and removed from their safety-critical functions. Return to the safety-critical functions may be considered after successful treatment or, in cases where no treatment is necessary, after cessation of the problematic use of substances and upon determination that the person's continued performance of the function is unlikely to jeopardise safety.
- 6.1.4. Applicants for medical assessments must undergo blood and urine tests for the purpose of identifying problematic use of substances at intervals as determined by the Approved Medical Authority.

**NOTE:** *The Manual on Prevention of Problematic Use of Substances in the Aviation Workplace (ICAO Doc 9654) is the basis for guidance on suitable methods of identification (which may include biochemical testing on such occasions as pre-employment, upon reasonable suspicion, after accidents incidents, at intervals, and at random) and on other prevention topics.*

## 7. Additional or Supplementary Medical Information

### 7.1 Visual Correction Required

- 7.1.1 When the applicant or holder requires visual correction in order to meet the visual standard, the following will be endorsed onto the medical certificate: *“Correcting lenses when worn for aviation purposes shall permit the licence or permit holder to meet the visual requirements at all distances. No more than one pair of spectacles shall be used to meet the requirements. A spare set of similarly correcting spectacles shall be readily available when the licence or permit holder is exercising the privileges of the licence or permit”*

### 7.2 Licence or Certificate Conditions or Endorsements

- 7.2.1 There may be situations where there is an accredited medical conclusion that it would be in the interests of aviation safety that a pilot not fly solo but can, under certain conditions, still continue to exercise the privileges of their licence, permit or rating. A similar situation could arise with the holder of an ATS licence or permit:
  - 7.2.1.1 For a private pilot the risk of the situation can be mitigated by requiring the carriage of a safety pilot who is competent and current to act as pilot in command should the need arise.
  - 7.2.1.2 For a commercial pilot with an instructor rating the risk of the situation can be mitigated by

requiring that the 'student' be qualified and assessed as competent to bring the flight to a safe conclusion.

7.2.1.3 For the holder of an air traffic service licence it may be necessary to have competent relief readily available.

7.2.5 When such cases arise they will be assessed and dealt with by the Authority. Licence endorsements would, respectively, be likely to be 'Safety Pilot Required', 'Student Competency Required' or 'Relief Readily Available' or words to a similar effect.

### **7.3 Special Examinations**

7.3.1 Special examinations may be required from time to time at the discretion of the Approved Medical Authority or Authority's Medical Assessor. These examinations may include but are not limited to:

- Chest x-ray
- Electroencephalogram
- Haemoglobin
- Electrocardiogram
- Audiogram
- Extended otorhino-laryngological examination
- Extended ophthalmological examination
- Lipid profile
- Pulmonary function tests
- Urinalysis
- Colour vision
- Treadmill
- Any other examination as required by the Authority

7.3.2 When a special examination is required, the requirement is endorsed on the Medical Certificate issued by the Authority.

### **7.4 Accredited Medical Conclusion**

7.4.1 An Accredited Medical Conclusion is a conclusion reached by the Authority's Medical Board of Assessors and selected expert(s), who are acceptable to the Authority to consider the case of a particular applicant. The purpose of the Accredited Medical Conclusion is to determine whether, despite not meeting the medical standards, the applicant's condition is such that it is not likely to jeopardise aviation safety. – refer to 67.63

### **7.5 Medical Board of Assessors**

7.5.1 The Authority may appoint a Medical Board of Assessors to review or make assessments on cases that are unable to be satisfactorily resolved by an individual Approved Medical Authority or for circumstances as determined by the Authority including accredited medical conclusions.

7.5.2 The Medical Board of Assessors will include the medical assessor and two or more Approved Medical Authority on the Medical Board of Assessors acting on behalf of the Authority in all aspects of the Authority's responsibilities as specified in this document. It is desirable that at least one Board member has specialist experience in the area under consideration. The board will include an observer from the appropriate CAAF Department.

7.5.3 The chairperson for the Medical Board of Assessors will be appointed by the Authority.



## 7.6 Acceptable means of identification

7.6.1 The types of photographic identification that are acceptable to the Authority for purposes of this standards document are:

- A valid and current passport
- A valid and current driving licence
- A valid and current Fiji National Provident Fund card
- Photographic identity cards issued by the Fiji Military Force, Fiji Police or the Fiji Fire Service
- Fiji Airport Identity Card
- A statutory declaration of photographic identity made in accordance with the Statutory Declarations Act 1970.
- A valid Fiji Pilot's Licence

## 7.7 Special Circumstances

7.7.1 It is recognised that the provisions of all parts of this SD will not cover every possible situation. If the medical standards prescribed in this SD are not met, the appropriate Medical Certificate shall not be issued unless the following conditions are fulfilled:

- a) Accredited medical conclusion indicates that in a special circumstance the applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence or permit applied for is not likely to jeopardise flight safety;
- b) relevant ability, skill and experience of the applicant and operational conditions have been given due consideration; and
- c) the licence or permit is endorsed with any special limitation or limitations when the safe performance of the licence or permit holder's duties is dependent on compliance with such limitation or limitations.

## Subpart E, F, G - Medical Assessor (MA), Approved Medical Authority (AMA) and Approved Medical Authority (Specialist) (AMA(S))

### 8.1 General

8.1.1 The Authority uses the services of a medical assessor to evaluate a monthly quota of reports submitted to the Authority by the Approved Medical Authority. The medical assessor can request and shall be given access to any prior aviation medical documentation held on a candidate for an aviation medical examination by any Approved Medical Authority or the Authority.

8.1.2 The Authority will determine the number and location of examiners and specialists it requires, taking account of the number, gender and geographic distribution of those of the population who may, from time to time, need to undertake an aviation medical assessment.

8.1.3 An Approved Medical Authority will normally be authorised for a period not exceeding 2 years provided that the period does not extend beyond the practitioner's 70<sup>th</sup> birthday. Authorisation to perform aviation medical examinations shall be at the discretion of the Authority.

8.1.4 Authorisation for a Approved Medical Authority or medical assessor beyond 70 years of age is at the discretion of the Authority.

## 8.2 Medical Assessor and Approved Medical Authority Training

8.2.1 The Medical Assessor (MA) and Approved Medical Authority (AMA) must be qualified and licensed in the practice of medicine and have received training in Aviation medicine. The medical assessor (MA) and Approved Medical Authority (AMA) should have acquired practical knowledge and experience of the conditions in which the holders of licences, permits and ratings carry out their duties.

### 8.2.2 Approved Medical Authority Competencies

8.2.2.1 To be eligible for the issue of a Approved Medical Authority certificate, an applicant must, in addition to satisfying other general requirements, demonstrate competence in performing the functions of a Approved Medical Authority. There are four generic competence categories: identification, assessment, management, and audit/review.

**NOTE:** For the holders of Approved Medical Authority Certificates, the competencies relate to the conduct of examinations for the purpose of issuing a Class 1, 2, 3 or 4 medical certificate or the colour vision assessment for the issue of an AME licence.

**NOTE:** The competencies are set at 3 levels as follows:

**Awareness** theoretical knowledge of the subject only

**Practised** actual practical experience such that the person could operate under supervision

**Expert** the person can operate without supervision and could supervise others.

8.2.2.2 The table below describes each competency and lists the competency level required of the holders of a Approved Medical Authority Certificate.

DESCRIPTION OF COMPETENCIES REQUIRED	LEVEL OF COMPETENCY FOR A AMA
<b>IDENTIFICATION</b>	
1 Apply clinical skills to accurately diagnose and evaluate conditions and situations that have the potential to interact adversely with the aviation environment by utilising: <ul style="list-style-type: none"> <li>• Clinical history taking:</li> <li>• Physical and mental examination:</li> <li>• Further investigations or consultant reviews (whether performed or arranged by medical examiner):</li> <li>• Diagnostic skills:</li> <li>• Liaison with colleagues, other health professionals, and other organisations.</li> </ul>	expert
2 Identify aspects of an applicant’s medical condition or situation that may cause the applicant to interact adversely with the aviation environment.	expert
3 Identify the competing or conflicting interests inherent in regulatory medical practice.	expert
4 Access additional information, such as journals, scientific research, internet resources, colleagues, and specialist advisors, to support the assessment of an applicant’s suitability and safety to operate in an aviation environment.	expert
<b>ASSESSMENT</b>	
5 Employ evidence-based medical principles and processes in determining and analysing the suitability and safety of an applicant to operate within the aviation environment.	expert
6 Determine and analyse the legislation, regulations, and medico-legal considerations relating to the safety and suitability of an applicant to operate within the aviation environment.	expert
7 Critically analyse and utilise additional information, such as journals, scientific research, internet resources, colleagues, and specialist	expert

	advisors, to support the assessment of an applicant’s suitability and safety to operate in an aviation environment.	
<b>MANAGEMENT</b>		
8	Assessing the risk related to an applicant operating in the aviation environment by applying the necessary standards, methodologies, and processes.	expert
9	Manage conflicting or competing interests in a manner that does not compromise aviation safety or the quality of clinical decision making.	expert
10	Effectively communicate: <ul style="list-style-type: none"> <li>• Risk assessment determinations and considerations to applicants, the CAA, colleagues, and other organisations</li> <li>• Information concerning the relevant legislation and regulations to applicants</li> <li>• With colleagues, consultants, and others as necessary for the purposes of obtaining additional information, advice, and guidance concerning regulatory risk management decisions.</li> </ul>	expert
11	Manage practice administration and record keeping systems so that: <ul style="list-style-type: none"> <li>• Regulatory risk assessment and risk management decisions and actions are reliably and thoroughly documented</li> <li>• Regulatory risk assessment and risk management decisions can be effectively and unambiguously communicated</li> <li>• Regulatory risk assessment and risk management decisions and actions are easily retrievable over time.</li> </ul>	expert
<b>REVIEW/AUDIT</b>		
12	Be a constructive participant in monitoring, review, and audit activities through: <ul style="list-style-type: none"> <li>• Taking an active involvement in review processes</li> <li>• Appreciating and accepting review findings and outcomes.</li> <li>• Implementing review recommendations.</li> </ul>	practised

8.2.2.3 The medical assessor (MA) and Approved Medical Authority (AMA) shall have completed Basic and Advance Training in Aviation Medicine prior to designation by the Authority.

**8.2.3 Basic Training in Aviation Medicine**

8.2.3.1 The basic training for doctors responsible for the medical selection and surveillance of personnel who are required to meet an aviation medical standard shall consist of a minimum of 60 hours of lecture including practical work (examination techniques).

8.2.3.2 A final examination shall conclude the basic training course. A certificate shall be awarded to a successful candidate.

8.2.3.3 Possession of a certificate of basic training in Aviation Medicine constitutes no legal right to be appointed Approved Medical Authority by the Authority.

**8.2.4 Advanced training in Aviation Medicine**

8.2.4.1 Basic training in Aviation Medicine shall be a compulsory entry requirement

8.2.4.2 Advanced training in Aviation Medicine for doctors should consist of a minimum of 120-hours (60 additional hours to basic training) of lectures and practical work, training attachments and visits to Aviation Medical Centres, Clinics Research, ATC, Simulator, aerodrome and industrial facilities.

8.2.4.3 Training attachments and visits may be spread over 3 years.

8.2.4.4 A final examination shall include this advanced training course in Aviation medicine and a certificate shall be awarded to the successful candidate.

## 8.2.5 Refresher training in Aviation Medicine

8.2.5.1 During the period of authorisation the medical assessor (MA) and Approved Medical Authority (AMA) are required to attend a minimum of 30 hours approved refresher training every 5 years. Scientific meetings and congresses are compulsory once in 5 years. Flight deck or simulator experience may be approved the Authority for a specified number of hours. Air traffic service environment experience may be approved the Authority for a specified number of hours. In both cases the level of approval shall be dependent on the quantity, quality and content of previous refresher training over the last 5 years.

## 8.2.6 Training Syllabus

8.2.6.1 The Aviation Medicine Lecture units above should cover at minimum the following subject matter:

### A. Introduction

- (1) Course organisation and curriculum
- (2) Human factors in the aviation system; Safety Management; development of a 'reporting culture'
- (3) Responsibility of the Approved Medical Authority and medical assessor in aviation safety
- (4) Medically related accidents – multicrew and single pilot operations
- (5) Aviation medicine; history and evolution
- (6) International and national regulations; Chicago Convention - Annex 1
- (7) ICAO Manual of Civil Aviation Medicine; origin, objectives, contents.

### B. Overview of Medical Requirements

- (1) Incapacitation: acceptable aeromedical risk of incapacitation; types of incapacitation; 'two-communication' rule; operational aspects
- (2) Basic principles in assessment of fitness for aviation duties
- (3) Barometric pressure: hypoxia; hypobaria; cabin pressurization; decompression
- (4) Operational and environmental conditions
- (5) Aviation physiology; basic principles
- (6) Accelerations; basic principles; effects on human systems
- (7) Use of medical literature in assessing medical fitness; differences between scientific study populations and licensed populations
- (8) Physical and mental requirements for different licenses
- (9) Visual requirements for different licenses
- (10) Colour perception requirements for different licenses
- (11) Hearing requirements for different licenses

### C. Cardiovascular system

- (1) Relation to aviation duties; risk of incapacitation

- (2) Examination procedures; ECG, laboratory and special examinations
  - (3) Specific cardiovascular conditions; hypertension and its treatment
  - (4) Ischaemic heart disease; ECG findings
  - (5) Angina pectoris
  - (6) Assessment of satisfactory recovery from myocardial infarction
  - (7) Cardiomyopathies; pericarditis; rheumatic heart disease
  - (8) Arrhythmias; conduction defects
  - (9) Congenital heart disease; post-surgical conditions.
- D. Respiratory system
- (1) Relation to aviation duties, risk of incapacitation
  - (2) Examination procedures, spirometry, peak flow, x-ray, special examinations
  - (3) Specific respiratory conditions, asthma and its treatment, chronic obstructive pulmonary disease
  - (4) Lung infections, tuberculosis
- E. Digestive system
- (1) Relation to aviation duties, risk of incapacitation
  - (2) Food poisoning
  - (3) Abdominal pain; gastrointestinal and biliary post-surgical conditions
  - (4) Gastritis; uncomplicated peptic ulcer and its treatment; complications: recurrence, bleeding and perforations
  - (5) Biliary tract disorders
  - (6) Pancreatitis
  - (7) Irritable colon
  - (8) Hernias
- F. Endocrine diseases
- (1) Relation to aviation duties, risk of incapacitation
  - (2) Hyperthyroidism; hypothyroidism
  - (3) Pituitary Disease: anterior pituitary; growth hormone. Posterior pituitary; diabetes insipidus; Addison's disease; pheochromocytoma
  - (4) Diabetes mellitus; basic principles; definitions; aetiology; symptomatology
    - (a) Diagnostic criteria
    - (b) Glucose tolerance tests
    - (c) Classification
    - (d) Anti-diabetic therapy
    - (e) Operational aspects in aviation
    - (f) Satisfactory control criteria for aviation duties.

- G. Haematology
  - (1) Relation to aviation duties, risk of incapacitation
  - (2) Polycythaemia; anaemias; leukaemias; lymphomas
  - (3) Platelet disorders
  - (4) Haemoglobinopathies; geographical distribution; classification; sickling conditions.
  
- H. Urinary system
  - (1) Relation to aviation duties, risk of incapacitation
  - (2) Action to be taken after discovery of abnormalities in routine dipstick urinalysis e.g haematuria; albuminuria
  - (3) Nephritis; pyelonephritis; obstructive uropathies
  - (4) Tuberculosis
  - (5) Lithiasis: single episode; recurrence; post-surgical conditions.
  
- I. Gynaecology-obstetrics
  - (1) Relation to aviation duties, risk of incapacitation
  - (2) Menstrual disorders.
  - (3) Birth control
  - (4) Pregnancy and aviation duties.
  - (5) Miscarriage and abortion.
  
- J. Mental fitness
  - (1) Relation to aviation duties, risk of incapacitation
  - (2) Assessment of mental fitness for aviation duties
  - (3) Psychological testing of intelligence and personality
  - (4) Psychiatric disorders in aviation personnel: neurosis; personality disorders; psychosis; organic mental illness; problematic use of substances
  - (5) Treatment of mental diseases: anxiolytics, antidepressants (in particular selective serotonin reuptake inhibitors); cognitive behavioural therapy; treatment for problematic use of substances
  
- K. Neurology
  - (1) Relation to aviation duties, risk of incapacitation
  - (2) Neurological disorders:
    - (a) seizures – assessment of single episode;
    - (b) epilepsy;
    - (c) multiple sclerosis;
    - (d) head trauma;
    - (e) post-traumatic states;

- (f) vascular diseases;
  - (g) tumours;
  - (h) disturbance of consciousness – assessment of single and repeated episodes
- (3) Role of electro-encephalography in aviation medicine.
- L. Ophthalmology
  - (1) Relation to aviation duties, risk of incapacitation
  - (2) Examination techniques;
    - (a) visual acuity assessment;
    - (b) visual aids;
    - (c) visual fields – acceptable limits for certification;
    - (d) ocular muscle balance;
    - (e) assessment of pathological eye conditions;
    - (f) glaucoma
  - (3) Monocularity and medical flight tests
  - (4) Colour vision
    - (a) Methods of testing: pseudoisochromatic plates, lantern tests, anomaloscopy
    - (b) Importance of standardization of tests and of test protocols
- M. Otorhinolaryngology
  - (1) Relation to aviation duties, risk of incapacitation
  - (2) External ear; tympanic membrane; middle ear
  - (3) Post-surgical conditions
  - (4) Vestibular system; vertigo
  - (5) Hearing assessment; audiometry
  - (6) Nose and paranasal sinuses
  - (7) Special ear nose and throat tests.
- N. Human Immunodeficiency Virus
  - (1) Relation to aviation duties, risk of incapacitation
  - (2) Transmission and clinical manifestations
  - (3) Clinical and operational assessment
  - (4) Treatment
  - (5) Risk of progression
  - (6) Methods of assessing fitness
- O. Malignant Disease
  - (1) Relation to aviation duties, risk of incapacitation

- (2) Different methods of treatment
  - (3) Defining acceptable risk post-treatment
  - (4) Risk of recurrence
  - (5) Importance of site of recurrence with respect to flight safety
  - (6) Using certification assessment charts
- P. Fatigue
- (1) Duty time regulations and flight time limitations
  - (2) Circadian rhythms
  - (3) Sleep hygiene; medication to control sleep.
- Q. Medication and drugs
- (1) Hazards of medications, drugs and alcohol
  - (2) Common side effects; prescription medications; over-the-counter medications; herbal medications; 'alternative' therapies
  - (3) Medication for sleep disturbance
- R. Flexibility
- (4) Accredited Medical Conclusion; consideration of knowledge, skill and experience
  - (5) Trained versus untrained crews; incapacitation training
  - (6) Medical flight tests.
- S. Tropical diseases
- (1) Basic principles
  - (2) Diseases transmitted by vectors
  - (3) Food and water-borne diseases
  - (4) Parasitic diseases
- T. Communicable Diseases
- (1) Preparedness planning and prevention of spread of communicable diseases; World Health Organization International Health Regulations (2005)
  - (2) The SARS experience
  - (3) Disinsection of aircraft; disinfection of aircraft
  - (4) Vaccinations, prophylactic medication use in licence holders
  - (5) Hygiene and sanitation in relation to aviation
  - (6) Catering services; food, water.
- U. Accident investigation and prevention
- (1) Medical factors; the role of the Medical Authority
  - (2) Identification of the victims



(3) Determination of the causes, circumstances and events.

V. General course revision; appraisal and evaluation.

## **9. ICAO Manual of Civil Aviation Medicine**

9.1 The third edition of the ICAO Manual of Civil Aviation Medicine is intended to complement this Standards Document by emphasising the clinical problems encountered in medical certification in civil aviation. It is designed for the experienced Approved Medical Authority as well as for the aviation medical expert and medical assessor, to aid in the approach and management of intricate borderline cases.

9.2 Just as the development and enforcement of standards for medical assessment of civil aviation personnel on an international basis is fraught with difficulties, so is the compilation of a suitable current general medical manual complicated by the heterogeneous nature of aviation medicine and by the economic factors involved. As a necessity certain aspects have to be omitted or can only be discussed in a more cursory manner while, in an attempt to achieve a measure of international uniformity, other more important aspects receive particular emphasis.

9.3 The discussion of the application of the requirements is, however, couched in terms intended to assist the Authority in the implementation of the medical standards. When making a Medical Assessment, the relevant operating environment should be borne in mind. Applicants engaged in single pilot commercial operations carrying passengers clearly require the most careful medical evaluation in order to reduce the risk of in-flight incapacitation. Those engaged in multicrew operations, where there has been effective incapacitation training, may be considered somewhat less stringently. In many such cases flight safety may be adequately protected