

## Appendix 1

### Medical requirements for Class 1 medical certificates

#### 1.1 Cardiovascular system

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

##### 1.1.1 Examination

1.1.1.1. A standard 12-lead resting electrocardiogram (ECG) and report shall be completed on clinical indication, and: for a Class 1 medical certificate, at the examination for the first issue of a medical certificate, then every year until age 60, every 6 months and at all revalidation or renewal examinations thereafter; Electrocardiogram must be interpreted by Cardiologist

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

1.1.1.2 Perform Exercise electrocardiography on clinical indication.

1.1.1.3 Estimation of serum lipids, including cholesterol, shall be required at the examination for the first issue of a medical certificate, then every year until age 60, every 6 months and at all revalidation or renewal examinations thereafter. However, a level > 8 mmol/L (320 mg/dL) should be treated (best with a statin, e.g. simvastatin, atorvastatin) whether or not there are other risk factors present. In the presence of overt coronary artery disease, targets should be: total cholesterol < 5 mmol/l (< 190 mg/dL) and LDL cholesterol < 3 mmol/L (< 115 mg/dL) or, in the presence of diabetes < 4.5 mmol/L (< 175 mg/dL) and < 2.5 mmol/L (< 100 mg/dL), respectively

##### 1.1.2 Blood pressure

1.1.2.1. The blood pressure shall be recorded at each examination, according to chapter 5 procedure.

1.1.2.2. Whose blood pressure at examination consistently exceeds 160 mmHg systolic and/or 95 mmHg diastolic, with or without treatment; shall be assessed as unfit.

1.1.2.3. In aviation, most of the currently employed agents are permissible as on Appendix 5 item 5.2.4. The initiation of medication for the control of blood pressure shall

require a period of temporary suspension of the medical certificate to establish the absence of significant side effects. Recommendation on appendix 5 item 5.2.4

1.1.2.4 Applicants with symptomatic hypotension; shall be assessed as unfit.

### **1.1.3 Coronary artery disease**

1.1.3.1 Applicants for a medical certificate with:

(i) Suspected myocardial ischemia;

(ii) Asymptomatic minor coronary artery disease requiring no anti-anginal treatment; shall be referred to Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand and undergo cardiological evaluation to exclude myocardial ischemia before a fit assessment can be considered.

Recommendation on appendix 5 item 5.2.5

1.1.3.2 Applicants with symptomatic coronary artery; shall be assessed as unfit:

1.1.3.3 Applicants with myocardial ischemia; shall be assessed as unfit: a fit assessment can be considered by Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand. Recommendation on appendix 5 item 5.2.6

1.1.3.4. Applicants with Coronary by-pass surgery or Coronary angioplasty/Stenting shall require a period of 6 months for temporary suspension of the medical certificate before a fit assessment can be considered. Recommendation on appendix 5 item 5.2.7

### **1.1.4 Rhythm/Conduction disturbances**

1.1.4.1 Applicants with disturbance of supraventricular rhythm, including intermittent or established sinoatrial dysfunction, atrial fibrillation and/or flutter and asymptomatic sinus pauses; shall be assessed as unfit, shall undergo satisfactory cardiological evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.8

1.1.4.2. Applicants with Asymptomatic sinus tachycardia or Sinus bradycardia shall undergo satisfactory cardiological evaluation before a fit assessment

1.1.4.3. Applicants with Asymptomatic isolated uniform atrial or ventricular ectopic complexes shall undergo satisfactory cardiological evaluation before a fit assessment, if frequent or complex is present, it is more likely that such events are sufficiently frequent to justify review. Recommendation on appendix 5 item 5.2.8

1.1.4.4. Applicants with Incomplete bundle branch block or Stable left axis deviation shall be assessed as fit;

1.1.4.5. Applicants with Complete right or left bundle branch block shall undergo satisfactory cardiological evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.8

1.1.4.6. Applicants with Broad and/or Narrow complex tachycardia shall undergo satisfactory cardiological and Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.8

1.1.4.7. Applicants who have undergone ablation therapy should be assessed as unfit evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.8

1.1.4.8. Applicants for a Class 1 medical certificate with a history of: pacemaker implantation; shall undergo satisfactory cardiological and Aeromedical center or The Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment can be considered. Recommendation on appendix 5 item 5.2.8

#### **1.1.5. General**

1.1.5.1. Applicants with peripheral arterial disease before or after surgery; shall undergo satisfactory cardiological and Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.5-5.2.6

1.1.5.2. Applicants with aneurysm of the abdominal aorta, before or after surgery; shall be assessed as unfit. Applicants with Infra-renal abdominal aortic aneurysm shall undergo satisfactory cardiological and Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.9

1.1.5.3. Applicants with cardiac valvular abnormalities; shall be assessed as unfit;

1.1.5.3.1. Applicants with functionally insignificant cardiac valvular abnormalities; shall undergo satisfactory cardiological and Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.10

1.1.5.3.2. Applicants with an established history of cardiac valve surgery; shall be assessed as unfit; shall undergo satisfactory cardiological and Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment. Recommendation on appendix 5 items 5.2.10

1.1.5.4. Applicants with an established history or diagnosis of cardiovascular condition requiring systemic anticoagulant therapy shall undergo satisfactory cardiological and Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.11, 5.6.6

1.1.5.5. Applicants with an established history or diagnosis of abnormality of the pericardium, myocardium or endocardium; shall be assessed as unfit; shall undergo satisfactory cardiological and Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.12.

1.1.5.6. Applicants with an established history or diagnosis of congenital abnormality of the heart, before or after corrective surgery; shall be assessed as unfit; shall undergo satisfactory cardiological and Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.13.

1.1.5.7. Applicants with heart or heart/lung transplantation. shall be assessed as unfit:

1.1.5.8. Applicants with an established history or diagnosis of recurrent vasovagal syncope shall be assessed as unfit: shall undergo satisfactory cardiological and Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand evaluation before a fit assessment. Recommendation on appendix 5 item 5.2.14

## **1.2. Respiratory system**

### **1.2.1. General**

1.2.1.1. Applicants with significant impairment of pulmonary function shall be assessed as unfit. A fit assessment may be considered once pulmonary function has recovered and is satisfactory.

1.2.1.2. Posterior/anterior chest radiography may be required at initial, revalidation or renewal examinations when indicated on clinical or epidemiological grounds.

1.2.1.3. For a Class 1 medical certificate, applicants are required to undertake pulmonary function tests at the initial examination and on clinical indication.

### **1.2.2. Disorder**

1.2.2.1. All applicants with chronic obstructive airways disease [due to] Chronic Bronchitis and/or Emphysema require careful and individual evaluation and assessment. In general, though all applicants for initial medical certificates with an established history of COAD requiring continuous medication shall be assessed as unfit. Recommendation on appendix 5 item 5.3.2.

1.2.2.2. Applicants with a history or established diagnosis of asthma requiring medication shall undergo respiratory evaluation with a satisfactory result before a fit assessment can be considered. Recommendation on appendix 5 item 5.3.3.

1.2.2.3. Applicants with a history or established diagnosis of active inflammatory disease of the respiratory system shall undergo respiratory evaluation with a satisfactory result before a fit assessment can be considered.

1.2.2.4. Applicants with a history or established diagnosis of active sarcoidosis shall undergo respiratory evaluation with a satisfactory result before a fit assessment can be considered. Recommendation on appendix 5 item 5.3.4.

1.2.2.5. Applicants with a history or established diagnosis of pneumothorax; shall undergo respiratory evaluation with a satisfactory result from Aeromedical center or the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand before a fit assessment can be considered. Recommendation on appendix 5 item 5.3.6.

1.2.2.6. Applicants with a history or established diagnosis of major thoracic surgery; should not be assessed as fit until three months have elapsed and shall undergo respiratory evaluation with a satisfactory result before a fit assessment can be considered. Recommendation on appendix 5 item 5.3.7.

1.2.2.7. Applicants with active pulmonary tuberculosis shall be assessed as unfit. Recommendation on appendix 5 item 5.3.5.

1.2.2.8. Applicants with quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous in origin, may be assessed as fit. Recommendation on appendix 5 item 5.3.5.

1.2.2.9. Applicants with unsatisfactorily treated sleep apnea syndrome should be assessed as unfit.

### **1.3. Digestive system**

#### **1.3.1. General**

1.3.1.1. Applicants shall not possess any functional or structural disease of the gastro-intestinal tract or its adnexa which is likely to interfere with the safe exercise of the privileges of the applicable license(s).

#### **1.3.2. Disorder**

1.3.2.1. Applicants with disorders of the gastro-intestinal system including: recurrent dyspeptic disorder requiring medication; pancreatitis; shall be assessed as unfit. A fit assessment may be considered after successful treatment. Recommendation on appendix 5 item 5.4.1.

1.3.2.2. Applicants with disorders of the gastro-intestinal system including: Asymptomatic gallstones; shall be assessed as Recommendation on appendix 5 item 5.4.2.

1.3.2.3. Small multiple asymptomatic stones with functional gall-bladder may, however, cause colic and potential incapacitation and are disqualifying until adequately treated. Recommendation on appendix 5 item 5.4.2.

1.3.2.4. Applicants with disorders of the gastro-intestinal system including: an established diagnosis or history of chronic inflammatory bowel disease; shall be assessed as unfit.

1.3.2.5. Applicants with disorders of the gastro-intestinal system including: an established diagnosis or history of chronic inflammatory bowel disease; A fit assessment may be considered after successful treatment or full recovery after surgery and subject to satisfactory gastroenterological evaluation. Recommendation on appendix 5 item 5.4.3.

1.3.2.6. Applicants shall be free from hernia that might give rise to incapacitating symptoms.

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

1.3.2.8. Applicants who have undergone a surgical operation on the digestive tract or its adnexa, involving a total or partial excision or a diversion of any of these organs, should be assessed as unfit for a minimum period of 3 months or until such time as the effects of the operation are no longer likely to interfere with the safe exercise of the privileges of the applicable license(s). Recommendation on appendix 5 item 5.4.4

1.3.2.9. Infectious hepatitis is disqualifying. A fit assessment may be considered after full recovery. Recommendation on appendix 5 item 5.4.6.

#### **1.4. Metabolic, Nutritional and Endocrine diseases**

1.4.1. Applicants shall not possess any functional or structural metabolic, nutritional or endocrine disorder which is likely to interfere with the safe exercise of the privileges of the applicable license(s).

1.4.2. Applicants with metabolic, nutritional or endocrine dysfunction may be assessed as fit subject to demonstrated stability of the condition and satisfactory aeromedical evaluation.

1.4.3. Applicants with diabetes mellitus not requiring insulin shall be assessed as unfit unless it can be demonstrated that blood sugar control has been achieved. Recommendation on appendix 5 item 5.5.2. and 5.5.3

1.4.4. Applicants with diabetes mellitus requiring insulin shall be assessed as unfit.

1.4.5. Applicants with a Body Mass Index equal or more than 35 may be assessed as fit only if the excess weight is not likely to interfere with the safe exercise of the applicable license(s) and a satisfactory cardiovascular risk review has been undertaken. Recommendation on appendix 5 item 5.10.1

1.4.6. Addison's disease is disqualifying. Recommendation on appendix 5 item 5.5.4

1.4.7. Applicants with hyperthyroidism should be assessed as unfit Recommendation on appendix 5 item 5.5.5

1.4.8. Applicants with hypothyroidism should be assessed as unfit. Recommendation on appendix 5 item 5.5.6

#### **1.5. Hematology**

1.5.1. Applicants shall not possess any hematological disease which is likely to interfere with the safe exercise of the privileges of the applicable license(s).

1.5.2. Applicants require a hematocrit test at each examination. Hematocrit below 32 % requires an unfit assessment, and further tests as clinically indicated. Recommendation on appendix 5 item 5.6.1.

1.5.3. Sickle cell trait or other haemoglobinopathy traits are usually compatible with a fit assessment. Recommendation on appendix 5 item 5.6.1.

1.5.4. Applicants with significant lymphatic enlargement; should be assessed as unfit. Recommendation on appendix 5 item 5.6.2.

1.5.5. Applicants with acute leukemia should be assessed as unfit. Applicants with chronic leukemia should be assessed as unfit. After a period of demonstrated stability a fit assessment may be considered. Recommendation on appendix 5 item 5.6.3.

1.5.6. Applicants with splenomegaly should be assessed as unfit and require investigation. Recommendation on appendix 5 item 5.6.4.

1.5.7. Applicants with polycythemia should be assessed as unfit and require investigation. Recommendation on appendix 5 item 5.6.5.

1.5.8. Applicants with a coagulation disorder should be assessed as unfit. The use of oral anticoagulant medicines is incompatible with certification. Recommendation on appendix 5 item 5.6.6.

1.5.9. Applicants with a thrombocytopenia under 75,000/mm<sup>3</sup> (75×10<sup>9</sup>/L) are unfit for certification. Recommendation on appendix 5 item 5.6.6.

## **1.6. Urinary system**

1.6.1. Applicants shall not possess any functional or structural disease of the renal or genito-urinary system or its adnexa which is likely to interfere with the safe exercise of the privileges of the applicable license(s).

1.6.2. Applicants with renal or genito-urinary disease shall be assessed as unfit, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their license and rating privileges. Urinalysis shall form part of every aero-medical examination.

The urine shall contain no abnormal element considered to be of pathological significance.

Recommendation on appendix 5 item 5.7.3.-5.7.10

1.6.3. Applicants with one or more urinary calculi, or a history of renal colic; may be assessed as fit subject to satisfactory renal/urological evaluation Recommendation on appendix 5 item 5.7.2

1.6.4. Applicants with Hematuria of urological origin shall be assessed as unfit, Recommendation on appendix 5 item 5.7.3

1.6.5. Incapacitation secondary to incontinence will warrant suspension from flight until definitive diagnosis and treatment are performed. Recommendation on appendix 5 item 5.7.4

1.6.6. Applicants with Scrotal problems shall be assessed as unfit, Recommendation on appendix 5 item 5.7.5

1.6.7. Applicants with Urological Infection shall be assessed as unfit, Recommendation on appendix 5 item 5.7.6

1.6.8. Applicants with Congenital and Renal Cystic Diseases shall be assessed as unfit, Recommendation on appendix 5 item 5.7.7

1.6.9. Applicants with Medullary sponge kidney shall be assessed as unfit, Recommendation on appendix 5 item 5.7.8

1.6.10. Applicants with Adult polycystic kidney disease shall be assessed as unfit, Recommendation on appendix 5 item 5.7.9

1.6.11. Temporary aeromedical disqualification may be necessary in the patient with symptomatic obstruction secondary to benign prostatic hyperplasia (BPH) Recommendation on appendix 5 item 5.7.10

1.6.12. Applicants with any sequela of disease or surgical procedures on the kidneys or the urinary tract likely to cause incapacitation, in particular any obstruction due to stricture or compression shall be assessed as unfit. Recommendation on appendix 5 item 5.7.11

1.6.13. Applicants who have undergone a major surgical operation in the urinary apparatus involving a total or partial excision or a diversion of its organs shall be assessed as fit until twelve months have elapsed following major surgical procedures and be re-assessed after

full recovery before a fit assessment can be considered. Recommendation on appendix 5 item 5.7.12

1.6.14. Sildenafil is commonly used in the medical treatment of erectile dysfunction and is not to be used for 24 hours prior to anticipated flight

1.6.15. Applicants with Testosterone replacement shall be assessed as unfit, Recommendation on appendix 5 item 5.7.13

1.6.16. Applicants shall undergo satisfactory oncological evaluation before a fit assessment can be made. Recommendation on appendix 5 item 5.7.14

### **1.7. Sexually transmitted diseases and other infections**

1.7.1. Applicants shall have no established medical history or clinical diagnosis of any infectious disease which is likely to interfere with the safe exercise of the privileges of the applicable license held.

1.7.2. Applicants with infectious diseases such as.

1.7.2.1. HIV positive. Recommendation on appendix 5 item 5.8.2

1.7.2.2. Immune system impairment.

1.7.2.3. Infectious hepatitis. Recommendation on appendix 5 item 5.8.4.

1.7.2.4. Syphilis. Recommendation on appendix 5 item 5.8.3.

may be assessed as fit subject to satisfactory aero-medical evaluation

### **1.8. Gynecology and obstetrics**

1.8.1. Applicants shall not possess any functional or structural obstetric or gynecological condition which is likely to interfere with the safe exercise of the privileges of the applicable license(s).

1.8.2. An applicant with a history of severe menstrual disturbances unamenable to treatment should be assessed as unfit. Recommendation on appendix 5 item 5.9.2.-5.9.3.

1.8.3. For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with Recommendation on appendix 5 item 5.9.1, A pregnant license holder may be assessed as fit with a multi-pilot limitation during the first 26 weeks of gestation. Close medical supervision must be reported to the medical examiner. Provided the puerperium is uncomplicated and full recovery takes place, she should be able to resume aviation duties two to six weeks after confinement.

1.8.4. An applicant who has undergone a major gynecological operation should be assessed as unfit for a period of 2-3 months or until such time as the effects of the operation are not likely to interfere with the safe exercise of the privileges of the license(s)

Recommendation on appendix 5 item 5.9.4

### **1.9. Musculoskeletal requirements**

1.9.1. Applicants shall not possess any abnormality of the bones, joints, muscles or tendons, congenital or acquired which is likely to interfere with the safe exercise of the privileges of the applicable license(s).

1.9.2. An applicant shall have sufficient sitting height, arm and leg length and muscular strength for the safe exercise of the privileges of the applicable license(s). Recommendation on appendix 5 item 5.10.1

1.9.3. An applicant shall have satisfactory functional use of the musculoskeletal system to enable the safe exercise of the privileges of the applicable license(s). Fitness of the applicants shall be assessed in consultation with The Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand Recommendation on appendix 5 item 5.10.2

1.9.4. Any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness. Recommendation on appendix 5 item 5.10.3-5.10.7

### **1.10. Psychiatric requirements**

1.10.1. Applicants shall have no established medical history or clinical diagnosis of any psychiatric disease or disability, condition or disorder, acute or chronic, congenital or acquired, which is likely to interfere with the safe exercise of the privileges of the applicable license(s).

1.10.2. The applicant shall have no established medical history or clinical diagnosis of: an organic mental disorder; Recommendation on appendix 5 item 5.11.2

1.10.3 The applicant shall have no established medical history or clinical diagnosis of: Dementias; Recommendation on appendix 5 item 5.11.3

1.10.4. The applicant shall have no established medical history or clinical diagnosis of: Mental and behavioral disorder due to psychoactive substances use; this includes dependence syndrome induced by alcohol or other psychoactive substances;) Recommendation on appendix 5 item 5.11.11

1.10.5. The applicant shall have no established medical history or clinical diagnosis of: Schizophrenia or a schizotypal or delusional disorder; Recommendation on appendix 5 item 5.11.4

1.10.6. The applicant shall have no established medical history or clinical diagnosis of: A mood (affective) disorder; Recommendation on appendix 5 item 5.11.5

1.10.7. The applicant shall have no established medical history or clinical diagnosis of: a neurotic, stress-related or somatoform disorder; Recommendation on appendix 5 item 5.11.6

1.10.8. The applicant shall have no established medical history or clinical diagnosis of: a behavioral syndrome associated with physiological disturbances or physical factors; Recommendation on appendix 5 item 5.11.7

1.10.9. The applicant shall have no established medical history or clinical diagnosis of: a disorder of adult personality or behavior, particularly if manifested by repeated overt acts; Recommendation on appendix 5 item 5.11.7-5.11.8

1.10.10. The applicant shall have no established medical history or clinical diagnosis of: Mental retardation;

1.10.11 The applicant shall have no established medical history or clinical diagnosis of: a disorder of psychological development;

1.10.12. The applicant shall have no established medical history or clinical diagnosis of: a behavioral or emotional disorder, with onset in childhood or adolescence

1.10.13. The applicant shall have no established medical history or clinical diagnosis of: (A mental disorder not otherwise specified;)

1.10.14. The applicant shall have no established medical history or clinical diagnosis of: sleep disorders. Recommendation on appendix 5 item 5.11.9

**Recommendation.** 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 license and rating privileges.

**Note;** Mental and behavioral 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, 10<sup>th</sup> Edition — Classification of Mental and Behavioral Disorders, WHO 1992. This document contains detailed descriptions of the diagnostic requirements, which may be useful for their application to medical assessment.

### **1.11. Neurological requirements**

1.11.1. Applicants shall have no established medical history or clinical diagnosis of any neurological condition which is likely to interfere with the safe exercise of the privileges of the applicable license(s).

1.11.2. Applicants with an established history or clinical diagnosis of: Recommendation on appendix 5 item 5.12.

1.11.2.1. Progressive or non-progressive disease of the nervous system;  
Recommendation on appendix 5 item 5.12.1-5.12.4

1.11.2.2. Epilepsy; recurring episodes of disturbance of consciousness of uncertain cause; Recommendation on appendix 5 item 5.12.5-5.12.8

1.11.2.3. Conditions with a high propensity for cerebral dysfunction  
Recommendation on appendix 5 item 5.12.9, 5.12.13, 5.12.14, 5.12.15

1.11.2.4. Recurring episodes of disturbance of consciousness of uncertain cause;

1.11.2.5. Head injury; Recommendation on appendix 5 item 5.12.10

1.11.2.6. Spinal or peripheral nerve injury; Recommendation on appendix 5 item 5.12.11

1.11.2.7. Intracranial neoplasms are not rare and will be encountered in the license holder population. Recommendation on appendix 5 item 5.12.12

1.11.3. Electroencephalography is required when indicated by the applicant's history

or on clinical grounds.

### **1.12. Ophthalmologic requirements**

1.12.1. Applicants shall not possess any abnormality of the function of the eyes or their adnexa or any active pathological condition, congenital or acquired, acute or chronic, or any sequelae of eye surgery or trauma, which is likely to interfere with the safe exercise of the privileges of the applicable license(s). Recommendation on appendix 5 item 5.13.1

1.12.2. A comprehensive eye examination shall form part of the initial examination and be undertaken periodically depending on the refraction and the functional performance of the eye;

1.12.3. A routine eye examination shall form part of all revalidation and renewal examinations.

1.12.4. A comprehensive eye examination shall form part of the initial examination and be undertaken periodically

1.12.4.1. Every 5 years to age 40

1.12.4.1. Every 2 years after age 40

Recommendation on appendix 5 item 5.13.2, 5.14

### **1.13. Visual requirements**

1.13.1. Distant visual acuity, with or without correction, shall be: in the case of Class 1 medical certificates, (20/30), (6/9) or better in each eye separately and visual acuity with both eyes shall be (20/20), (6/6) or better; No limits apply to uncorrected visual acuity.

1.13.2. An eye which has no refractive error is said to be emmetropic. In such an eye, parallel rays of light from a distant object are focused on the retina without the need for any accommodation so that objects in the distance are seen clearly. A comprehensive eye examination shall form part of the initial examination and be undertaken periodically.

1.13.2.1. A comprehensive eye examination shall form part of the initial examination and be undertaken periodically of applicant with Presbyopia.

1.13.2.2. An applicant shall be able to read an N5 chart (or equivalent) at 30-50 cm and an N14 chart (or equivalent) at 100 cm, with correction, if prescribed.

1.13.3. Applicants shall be required to have normal fields of vision and normal binocular function.

1.13.4. Applicants with diplopia shall be assessed as unfit.

1.13.5. Applicants with abnormal convergence shall be assessed as unfit.

1.13.6. Applicants with heterophoria (imbalance of the ocular muscles) exceeding:

2.0 prism dioptres in hyperphoria at 6 metres

10.0 prism dioptres in esophoria, at 6 metres

8.0 prism dioptres in exophoria, at 6 metres

1.0 prism dioptre in hyperphoria, at 33 centimetres:

8.0 prism dioptres in esophoria, at 33 centimetres:

12.0 prism dioptres in exophoria, at 33 centimetres:

should be assessed as unfit. The applicant should be reviewed by an ophthalmologist and if the fusional reserves are sufficient to prevent asthenopia and diplopia a fit assessment may be considered.

1.13.7. Applicants shall be required to have normal fields of vision

1.13.8. Spectacles and contact lenses. If satisfactory visual function is achieved only with the use of correction:

1.13.8.1. Spectacles and contact lenses. If satisfactory visual function is achieved only with the use of correction: for distant vision, spectacles or contact lenses shall be worn whilst exercising the privileges of the applicable license(s); for near vision, a pair of spectacles for near use shall be kept available during the exercise of the privileges of the license; a spare set of similarly correcting spectacles shall be readily available for immediate use whilst exercising the privileges of the applicable license(s);

1.13.8.2. The correction shall provide optimal visual function, be well tolerated and suitable for aviation purposes;

1.13.8.3. if contact lenses are worn, they shall be for distant vision, monofocal, non-tinted and well tolerated; a spare set of similarly contact lenses shall be readily available for immediate use whilst exercising the privileges of the applicable license(s);

1.13.8.4. Applicants who have undergone eye surgery may be assessed as fit subject to satisfactory ophthalmic evaluation. Recommendation on appendix 5 item 5.14.3

#### **1.14. Color perception**

1.14.1. Applicants shall pass the Ishihara test for the initial issue of a medical certificate.

1.14.2. In the case of Class 1 medical certificates, applicants shall have normal perception of colors or be color safe

1.14.3. Applicants who fail to pass in the Ishihara test shall undergo further color perception testing to establish whether they are color safe. Recommendation on appendix 5 item 5.15

1.14.4. Applicants who fail further color perception testing shall be assessed as unfit. Recommendation on appendix 5 item 5.15

### **1.15. Otorhinolaryngologically requirements**

1.15.1. Applicants shall not possess any abnormality of the function of the ears, nose, sinuses or throat, including oral cavity, teeth and larynx, or any active pathological condition, congenital or acquired, acute or chronic, or any sequelae of surgery or trauma which is likely to interfere with the safe exercise of the privileges of the applicable license(s).

1.15.2. A comprehensive ear, nose and throat (ENT) examination shall form part of the initial examination and every 5 years until the age 40, every 2 years thereafter when clinically indicated. Recommendation on appendix 5 item 5.16

1.15.3. An ear, nose and throat (ENT) examination should form part of all initial, revalidation and renewal examinations.

1.15.4. Applicants for a Class 1 medical certificate with:

1.15.4.1. An active pathological process, acute or chronic, of the internal or middle ear;

1.15.4.2. Unhealed perforation or dysfunction of the tympanic membrane(s);  
Recommendation on appendix 5 item 5.16.3

1.15.4.3. Disturbance of vestibular function; Recommendation on appendix 5 item 5.16.4

1.15.4.4. Significant restriction of the nasal passages; sinus dysfunction;

1.15.4.5. Significant malformation or significant, acute or chronic infection of the oral cavity or upper respiratory tract;

1.15.4.6. Significant disorder of speech or voice;

1.15.4.7. Significant dysfunction of the Eustachian tubes;

1.15.4.8. Receive any medical, surgical or other treatment that is likely to interfere with flight safety. Recommendation on appendix 5 item 5.16.5

Shall undergo further medical examination and assessment to establish that the condition does not interfere with the safe exercise of the privileges of the license held.

### **1.16. Hearing requirements**

1.16.1. The applicant should understand correctly conversational speech when tested with each ear at a distance of 2 meters from and with the applicant 's back turned towards the AME.

1.16.2. In the case of Class 1 medical certificates and Class 2 medical certificates, when an instrument rating is to be added to the license held, hearing shall be tested with pure tone audiometry at the initial examination and, be undertaken periodically.

1.16.3. When tested on a pure-tone audiometer, initial applicants shall not have a hearing loss of more than 20 dB at any of the frequencies 500, 1,000 or 2,000 Hz, or more than 35 dB at 3,000 Hz, in either ear separately. Hearing loss of more than 5 dB at two frequencies should be unfit.

1.16.4. The applicant, when tested on a pure-tone audiometer, shall not have a hearing loss, in either ear separately, of more than 25 dB at any of the frequencies 500, 1,000 or 2,000 Hz, or more than 50 dB at 3,000 Hz. Applicants for revalidation or renewal, with greater hearing loss shall demonstrate satisfactory functional hearing ability. Recommendation on appendix 5 item 5.17.2.2.

1.16.5. An applicant with hypoacusis may be assessed as fit if a speech discrimination test or functional cockpit hearing test demonstrates satisfactory hearing ability. An applicant for an instrument rating with hypoacusis should be assessed in consultation with the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand.

1.16.6. The use of personal hearing aids is usually not accepted during flight performance of professional flight crews. Recommendation on appendix 5 item 5.17.4

### **1.17. Psychological requirements**

1.17.1. Applicants shall have no established psychological deficiencies, which are likely to interfere with the safe exercise of the privileges of the applicable license(s). A psychological evaluation may be required as part of, or complementary to, a specialist psychiatric or neurological examination. A psychological evaluation shall form part of the initial examination and further tests as clinically indicated. Recommendation on appendix 5 item 5.18

1.17.2. The psychologist and psychiatrist should have suitable knowledge and experienced.

### **1.18. Dermatological requirements**

1.18.1. Applicants shall have no established dermatological condition likely to interfere with the safe exercise of the privileges of the applicable license(s) held.

1.18.2. Applicants with an established history or clinical diagnosis of:

1.18.2.1. Eczema exogenous and endogenous

1.18.2.2. Severe psoriasis

1.18.2.3. Bacterial infections

1.18.2.4. Drug induced eruptions

1.18.2.5. Bullous eruption

1.18.2.6. Malignant condition of the skin.

1.18.2.7. Urticaria

Shall undergo further medical examination and assessment to establish that the condition does not interfere with the safe exercise of the privileges of the license held.

### **1.19. Oncology Requirements**

1.19.1. Applicants shall have no established primary or secondary malignant disease likely to interfere with the safe exercise of the privileges of the applicable license(s).

1.19.2. After treatment for malignant disease, applicants shall undergo satisfactory oncological evaluation before a fit assessment can be made. Class 1 applicants shall be referred to the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand. Fitness of Class 2 applicants shall be assessed in consultation with the Aeromedical Division (MD.) Personnel licensing department of The Civil Aviation Authority of Thailand. Recommendation on appendix 5 item 5.20