European Union Aviation Safety Agency

Notice of Proposed Amendment 2025-105 (C)

in accordance with Article 6 of Management Board Decision 01-2022

Proposed annexes to the Medical Regulation and associated AMC & GM

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ANNEX I (PART-MED)

SUBPART A – GENERAL REQUIREMENTS

SECTION 1 – GENERAL

MED.A.001 Competent authority

For the purpose of this Regulation, the competent authority shall be:

(a) for aero-medical centres (AeMCs):

(1) the authority designated by the Member State where the AeMC has its principal place of business;

(2) the Agency if the AeMC has its principal place of business outside the territories for which Member States are responsible under the Chicago Convention;

(b) for aero-medical examiners (AMEs):

(1) the authority designated by the Member State where the AME has its principal place of practice;

(2) if the principal place of practice of an AME is located outside the territories for which Member States are responsible under the Chicago Convention, the authority designated by the Member State to which the AME applies for the issue of the AME certificate;

(c) for general medical practitioners (GMPs) and occupational health medical practitioners (OHMPs), the authority designated by the Member State to which the GMP notify their activity.

MED.A.005 Scope

This Annex (Part-MED) establishes the requirements for:

(a) the aero-medical certification of flight crew and air traffic controllers (ATCOs);

(b) the medical fitness of cabin crew;

(c) the certification of AMEs;

(d) the qualification of GMPs and OHMPs.

MED.A.010 Definitions

For the purpose of this Annex (Part-MED), the following definitions apply:

(a) ‘eye specialist’ means an ophthalmologist or a vision care specialist qualified in optometry and trained to recognise pathological conditions;

(b) ‘refractive error’ means the deviation from emmetropia measured in dioptres in the most ametropic meridian, measured by standard methods;

(c) 'colour safe' means the ability of an applicant to readily distinguish the colours used in air navigation and to correctly identify aviation-coloured lights;

(d) 'investigation' means the assessment of a suspected pathological condition of an applicant by means of examinations and tests in order to verify the presence or absence of a medical condition;

(e) 'accredited medical conclusion' means the conclusion reached by one or more medical experts acceptable to the licensing authority, on the basis of objective and non-discriminatory criteria and includes an operational risk assessment, for the purposes of the case concerned, in consultation with flight operations experts or other experts as necessary;

(f) 'psychoactive substances' means substances that affect the central nervous system and may impair performance, with the exception of caffeine and tobacco;

(g) 'misuse of substances' means the use of one or more psychoactive substances by aircrew, ATCOs or students in training to obtain a licence in a way that, alternatively or jointly:

(1) constitutes a direct hazard to the user or endangers the lives, health or welfare of others;

(2) causes or worsens an occupational, social, mental or physical problem or disorder;

(h) 'mental disorder' means a syndrome that significantly affects the individual's behaviour, emotional regulation or cognitive functioning. Small disturbances in these aspects are common, but when they cause significant distress, loss of freedom or disability, they are considered to be a mental disorder.

MED.A.015 Medical confidentiality

All persons involved in aero-medical examinations, assessments and certification shall ensure that medical confidentiality is respected at all times.

AMC1 MED.A.015 Medical confidentiality

To ensure medical confidentiality, all medical reports and records should be securely stored with controlled access restricted only to personnel authorised by the medical assessor or, if applicable, by the head of the aero-medical centre (AeMC), the aero-medical examiner (AME), general medical practitioner (GMP) or occupational health medical practitioner (OHMP).

MED.A.020 Decrease in medical fitness

(a) Pilot and ATCO licence holders shall not exercise the privileges of their licence and related ratings or certificates, and student pilots shall not fly solo, at any time when they:

(1) are aware of any decrease in their medical fitness which might render them unable to safely exercise those privileges;

(2) take or use any prescribed or non-prescribed medication which is likely to interfere with the safe exercise of the privileges of the applicable licence;

(3) receive any medical, surgical or other treatment that is likely to interfere with the safe exercise of the privileges of the applicable licence.

(b) In addition to the cases specified in point (a), holders of a medical certificate shall, without undue delay and before exercising the privileges of their licence, seek aero-medical advice from the AeMC, AME or GMP, as applicable, when they:

(1) have undergone a surgical operation or invasive procedure;

(2) have commenced the regular use of any medication;

(3) have suffered any significant personal injury involving any incapacity to exercise the privileges of their licence;

(4) have been suffering from any significant illness involving any incapacity to exercise the privileges of their licence;

(5) are aware of being pregnant;

(6) have been admitted to hospital or medical clinic;

(7) first require correcting lenses.

(c) In the cases referred to in point (b):

(1) holders of class 1, class 2 or class 3 medical certificates shall seek the aero-medical advice of an AeMC or AME. In that case, the AeMC or AME shall assess their medical fitness and decide whether they are fit to resume the exercise of their privileges;

(2) holders of light aircraft pilot licence (LAPL) medical certificates shall seek the aero-medical advice of an AeMC, an AME or the GMP who signed the medical certificate. In that case, the AeMC, AME or GMP shall assess their medical fitness and decide whether they are fit to resume the exercise of their privileges.

(d) Cabin crew members shall not perform duties on an aircraft and, if applicable, shall not exercise the privileges of their cabin crew attestation when they are aware of any decrease in their medical fitness, to the extent that this medical condition might render them unable to discharge their safety duties and responsibilities.

(e) In addition, if any of the medical conditions specified in points (1) to (6) of point (b) apply, cabin crew members shall, without undue delay, seek the advice of an AME, AeMC or OHMP, as applicable. In that case, the AME, AeMC or OHMP shall assess the medical fitness of the cabin crew members and decide whether they are fit to resume their safety duties.

GM1 MED.A.020 Decrease in medical fitness

MEDICATION — GUIDANCE FOR PILOTS, AIR TRAFFIC CONTROLLERS, STUDENTS IN TRAINING TO OBTAIN A LICENCE AND CABIN CREW MEMBERS

(a) Any medication can cause side effects, some of which may impair the safe exercise of the privileges of the licence or cabin crew attestation. Equally, symptoms of colds, sore throats, diarrhoea and other abdominal upsets may cause little or no problem whilst not exercising the privileges of the licence or cabin crew attestation, but may distract the pilot, ATCO or cabin crew member and degrade their performance whilst on duty. The in-flight environment may also

increase the severity of symptoms which may only be minor whilst on the ground. Therefore, one issue with medication and the safe exercise of the privileges of the licence or cabin crew attestation is the underlying condition and, in addition, the fact that the symptoms may be compounded by the side effects of the medication prescribed or bought over the counter for treatment. This guidance material provides some help to pilots, ATCOs and cabin crew in deciding whether expert aero-medical advice by an AME, AeMC, GMP, OHMP or medical assessor is needed.

(b) Before taking any medication and exercising the privileges of the licence or cabin crew attestation, or undertaking flight training, the following three basic questions should be satisfactorily answered:

(1) Do I feel fit to fly or fit to control?

(2) Do I really need to take medication at all?

(3) Have I given this particular medication a personal trial whilst not exercising the privileges of my licence or cabin crew attestation to ensure that it will not have any adverse effects on my ability to safely exercise the privileges of my licence or to perform my flight training tasks?

(c) Confirming the absence of adverse effects may well need expert aero-medical advice.

(d) The following are some widely used medicines with a description of their compatibility with the safe exercise of the privileges of the licence or cabin crew attestation:

(1) Antibiotics. Antibiotics may have short-term or delayed side effects which can affect pilot, ATCO or cabin crew performance. More significantly, however, their use usually indicates that an infection is present and, thus, the effects of this infection may mean that a pilot, ATCO or cabin crew member is not fit to perform their duties and should obtain expert aero-medical advice.

(2) Anti-malaria drugs. The decision on the need for anti-malaria drugs depends on the geographical areas to be visited, and the risk that the pilot, ATCO or cabin crew member has of being exposed to mosquitoes and of developing malaria. An expert medical opinion should be obtained to establish whether anti-malaria drugs are needed and what kind of drugs should be used. Most of the anti-malaria drugs (atovaquone plus proguanil, chloroquine, doxycycline) are compatible with flying duties. However, adverse effects associated with mefloquine include insomnia, strange dreams, mood changes, nausea, diarrhoea and headaches. In addition, mefloquine may cause spatial disorientation and lack of fine coordination and is, therefore, not compatible with the safe exercise of the privileges of the licence or cabin crew attestation.

(3) Antihistamines. Antihistamines can cause drowsiness. They are widely used in ‘cold cures’ and in treatment of hay fever, asthma and allergic rashes. They may be in tablet form or a constituent of nose drops or sprays. In many cases, the condition itself may preclude the safe exercise of the privileges of the licence or cabin crew attestation, so that, if treatment is necessary, expert aero-medical advice should be sought so that so-called non-sedative antihistamines, which do not degrade human performance, can be prescribed.

(4) Cough medicines. Antitussives often contain codeine, dextromethorfan or pseudo-ephedrine which are not compatible with the safe exercise of the privileges of the licence or cabin crew attestation. However, mucolytic agents (e.g. carbocysteine) are well tolerated and are compatible with the safe exercise of the privileges of the licence or cabin crew attestation.

(5) Decongestants. Nasal decongestants with no effect on alertness may be compatible with the safe exercise of the privileges of the licence or cabin crew attestation. However, as the underlying condition requiring the use of decongestants may be incompatible with flying duties, expert aero-medical advice should be sought. For example, oedema of the mucosal membranes causes difficulties in equalising the pressure in the ears or sinuses.

(6) Nasal corticosteroids are commonly used to treat hay fever, and they are compatible with the safe exercise of the privileges of the licence or cabin crew attestation.

(7) (i) Common pain killers and antifebrile drugs. Non-steroidal anti-inflammatory drugs (NSAIDs) and paracetamol, commonly used to treat pain, fever or headaches, may be compatible with the safe exercise of the privileges of the licence or cabin crew attestation. However, the pilot, ATCO or cabin crew member should give affirmative answers to the three basic questions listed in paragraph (b) before using the medication and safely exercising the privileges of the licence or cabin crew attestation.

(ii) Strong analgesics. The more potent analgesics, including codeine, are opiate derivatives, and may produce a significant decrement in human performance and, therefore, are not compatible with the safe exercise of the privileges of the licence or cabin crew attestation or with the flight training tasks.

(8) Anti-ulcer medicines. Gastric secretion inhibitors such as H2 antagonists (e.g. ranitidine, cimetidine) or proton pump inhibitors (e.g. omeprazole) may be acceptable after diagnosis of the pathological condition. It is important to seek for the medical diagnosis and not to only treat the dyspeptic symptoms.

(9) Anti-diarrhoeal drugs. Loperamide is one of the more common anti-diarrhoeal drugs and is usually safe to take whilst exercising the privileges of the licence or cabin crew attestation. However, the diarrhoea itself often renders the pilot, ATCO and cabin crew member unable to safely exercise the privileges of the licence or cabin crew attestation.

(10) Hormonal contraceptives and hormone replacement therapy usually have no adverse effects and are compatible with the safe exercise of the privileges of the licence or cabin crew attestation.

(11) Erectile dysfunction medication. This medication may cause disturbances in colour vision and dizziness. There should be at least 6 hours between taking sildenafil and exercising the privileges of the licence or cabin crew attestation, and 36 hours between taking vardenafil or tadalafil and exercising the privileges of the licence or cabin crew attestation.

(12) Smoking cessation. Nicotine replacement therapy may be acceptable. However, other medication affecting the central nervous system (buproprion, varenicline) is not acceptable for pilots and ATCOs.

(13) High blood pressure medication. Most anti-hypertensive drugs are compatible with the safe exercise of the privileges of the licence or cabin crew attestation. However, if the level of blood pressure is such that drug therapy is required, the pilot, ATCO or cabin crew member should be monitored for any side effects before exercising the privileges of their licence or cabin crew attestation. Therefore, consultation with the AME, AeMC, GMP, OHMP or medical assessor as applicable, is needed.

(14) Asthma medication. Asthma has to be clinically stable before a pilot, ATCO or cabin crew member can return to exercising the privileges of their licence or cabin crew attestation. The use of respiratory aerosols or powders, such as corticosteroids, beta-2-agonists or chromoglycic acid may be compatible with the safe exercise of the privileges of the licence or cabin crew attestation. However, the use of oral steroids or theophylline derivatives is incompatible with flying duty, and usually incompatible with the safe exercise of the privileges of the ATCO licence and cabin crew attestation. Pilots, ATCOs or cabin crew members using medication for asthma should consult the AME, AeMC, GMP, OHMP or medical assessor, as applicable.

(15) Tranquillisers and sedatives. The inability to react, due to the use of this group of medicines, has been a contributory cause to fatal aircraft accidents. In addition, the underlying condition for which these medications have been prescribed will almost certainly mean that the mental state of a pilot, ATCO or cabin crew member is not compatible with the safe exercise of the privileges of the licence or cabin crew attestation. Medical certificate holders and cabin crew medical report holders using tranquillisers, anti-depressants and sedatives should consult an AME, AeMC or medical assessor, as applicable, before exercising the privileges of their licence or cabin crew attestation.

(16) Sleeping tablets. Sleeping tablets dull the senses, may cause confusion and slow reaction times. The duration of the effects may vary from individual to individual and may be unduly prolonged. AME's, AeMC's or medical assessor's aero-medical advice should be obtained before using sleeping tablets.

(17) Melatonin. Melatonin is a hormone that is involved with the regulation of the circadian rhythm. In some countries it is a prescription medicine, whereas in most other countries it is regarded as a 'dietary supplement' and can be bought without any prescription. The results from the efficiency of melatonin in treatment of jet lag or sleep disorders have been contradictory. AME's, AeMC's or medical assessor's aero-medical advice should be obtained when using melatonin.

(18) Coffee and other caffeinated drinks may be acceptable, but excessive coffee drinking may have harmful effects, including disturbance of the heart's rhythm. Other stimulants including caffeine pills, amphetamines, etc. (often known as 'pep' pills) used to maintain wakefulness or suppress appetite can be habit forming. Susceptibility to different stimulants varies from one individual to another, and all may cause dangerous overconfidence. Overdosage causes headaches, dizziness and mental disturbance. These other stimulants should not be used.

(19) Anaesthetics. Following local, general, dental and other anaesthetics, a period of time should elapse before returning to exercising the privileges of the licence or cabin crew attestation. The period will vary considerably from individual to individual, but a pilot, ATCO or cabin crew member should not exercise the privileges of the licence or cabin crew attestation for at least 12 hours after a local anaesthetic, and for at least 48 hours after a general, spinal or epidural anaesthetic (see point MED.A.020).

(e) Many preparations on the market nowadays contain a combination of medicines. It is, therefore, essential that if there is any new medication or dosage, however slight, the effect should be observed by the pilot, ATCO or the cabin crew member whilst not exercising the privileges of their licence or cabin crew attestation. It should be noted that medication which would not normally affect pilot, ATCO or cabin crew performance may do so in individuals who are 'oversensitive' to a particular preparation. Individuals are, therefore, advised not to take any medicines before or whilst exercising the privileges of their licence unless they are completely familiar with their effects on their own bodies. In cases of doubt, pilots, ATCOs and cabin crew members should consult an AME, AeMC, GMP, OHMP or medical assessor, as applicable.

(f) Other treatments

Alternative or complementary medicine, such as acupuncture, homeopathy, hypnotherapy and several other disciplines, is developing and gaining greater credibility. Such treatments are more acceptable in some States than others. There is a need to ensure that 'other treatments', as well as the underlying condition, are declared and considered by the AME, AeMC, GMP, OHMP or medical assessor, as applicable, for assessing fitness.

MED.A.025 Obligations of the AeMC, AME, GMP and OHMP

(a) When conducting aero-medical examinations and aero-medical assessments as required in this Annex (Part-MED), the AeMC, AME, GMP and OHMP shall:

(1) ensure that communication with the applicant can be established without language barriers;

(2) make the applicant aware of the consequences of providing incomplete, inaccurate or false statements on their medical history;

(3) notify the licensing authority, or, in the case of cabin crew attestation holders, notify the competent authority if the applicant provides incomplete, inaccurate or false statements on their medical history;

(4) notify the licensing authority if an applicant withdraws the application for a medical certificate at any stage of the process.

(b) After completion of the aero-medical examinations and assessments, the AeMC, AME, GMP and OHMP shall:

(1) inform the applicant whether they are fit, unfit or referred to the medical assessor of the licensing authority, AeMC or AME, as applicable;

(2) inform the applicant of any limitation placed on the medical certificate or cabin crew attestation that may restrict the training or the privileges of their licence or cabin crew attestation, as applicable; and

(3) if the applicant has been assessed as unfit, inform them of their right to have the decision reviewed in accordance with the procedures of the competent authority;

(4) submit without delay to the medical assessor of the licensing authority a signed, or electronically authenticated, report containing the detailed results of the aero-medical examinations and assessments as required for the class of medical certificate and a copy of the application form, the examination form, and the medical certificate; and

(5) inform the applicant of their responsibilities in the case of decrease in medical fitness, as specified in point MED.A.020.

(c) If consultation with the medical assessor of the licensing authority is required in accordance with this Annex (Part-MED), the AeMC and AME shall follow the procedure established by the competent authority.

(d) AeMCs, AMEs, GMPs and OHMPs shall maintain records with details of aero-medical examinations and assessments performed in accordance with this Annex (Part-MED) and their results for a minimum of 10 years, or for a longer period if so determined by national legislation.

(e) AeMCs, AMEs, GMPs and OHMPs shall submit to the medical assessor of the competent authority, upon request, all aero-medical records and reports, and any other relevant information, when required for:

(1) medical certification;

(2) oversight functions.

(f) AeMCs and AMEs shall enter or update the data included in the European aero-medical data repository in accordance with point (c) of point ARA.MED.160.

AMC1 MED.A.025 Obligations of the AeMC, AME, GMP and OHMP

(a) If the aero-medical examination is carried out by two or more AMEs or GMPs, only one of them should be responsible for coordinating the results of the examination, evaluating the findings with regard to medical fitness, and signing the report.

(b) The applicant should be made aware that the associated medical certificate or cabin crew report may be suspended or revoked if the applicant provides incomplete, inaccurate or false statements on their medical history to the AeMC, AME, GMP or OHMP.

(c) If the AeMC or AME is required to assess the fitness of an applicant for a class 2 medical certificate in consultation with the medical assessor of the licensing authority, they should document the consultation in accordance with the procedure established by the competent authority.

(d) The AeMC, AME, GMP or OHMP should give advice to the applicant on treatment and preventive measures if, during the course of the examination, medical conditions or risk factors are identified which may endanger the medical fitness of the applicant in the future.

(e) When data is not being properly recorded in the European aero-medical data repository (EAMR due to unserviceability of the system, the AeMCs and AMEs should enter, or correct the existing data, in the EAMR without undue delay when the system recovers.

(f) In the event of denial or referral to the licensing authority, the AeMC, AME, GMP or OHMP should inform the applicant in writing regarding the result of the assessment in a form and manner established by the competent authority.

GM1 MED.A.025 Obligations of the AeMC, AME, GMP and OHMP

GUIDELINES FOR THE AeMC, AME OR GMP CONDUCTING THE MEDICAL EXAMINATIONS AND ASSESSMENTS FOR CLASS 1, 2, 3 AND LAPL MEDICAL CERTIFICATION

(a) Before performing the medical examination, the AeMC, AME or GMP should:

(1) verify the applicant's identity by checking their identity card, passport, driving licence or other official document containing a photograph of the applicant;

(2) obtain details of the applicant's licence from the applicant's licensing authority if they do not have their licence with them;

(3) except for initial applicants, obtain details of the applicant's most recent medical certificate from the medical assessor of the applicant's licensing authority if they do not have their certificate with them;

(4) in the case of a specific medical examination(s) (SEM) limitation to the existing medical certificate, obtain details of the specific medical condition and any associated instructions from the medical assessor of the applicant's licensing authority. This could include, for example, a requirement to undergo a specific examination or test;

(5) except for initial applicants, ascertain, from the previous medical certificate, which routine medical test(s) should be conducted, for example electrocardiography);

(6) provide the applicant with the application form for a medical certificate and the instructions for its completion and ask the applicant to complete the form but not to sign it yet;

(7) go through the form with the applicant and give information to help the applicant understand the significance of the entries and ask any questions which might help the applicant to recall important historical medical data; and

(8) verify that the form is complete and legible, ask the applicant to sign and date the form and then sign it as well. If the applicant declines to complete the application form fully or declines to sign the declaration consent to the release of medical information, inform the applicant that it may not be possible to issue a medical certificate regardless of the outcome of the clinical examination and assessment.

(b) Once all the items in (a) have been addressed, the AeMC, AME or GMP should:

(1) perform the medical examination of the applicant in accordance with the applicable rules;

(2) arrange for additional specialist medical examinations, such as otorhinolaryngology (ENT) or ophthalmology, to be conducted as applicable and obtain the associated report forms or reports;

(3) complete the medical examination report form in accordance with the associated instructions for completion; and

(4) ensure that all of the report forms are complete, accurate and legible. If any additional text or examination results are added to the report forms, they should be in English or in the language of the applicant's licencing authority.

(c) Once all the actions in (b) have been carried out, the AeMC, AME or GMP should review the report forms and:

(1) if satisfied that the applicant meets the applicable medical requirements as set out in Part-MED, issue a medical certificate for the appropriate class, with limitations if necessary. The applicant should sign the certificate once signed by the AeMC, AME or GMP; or

(2) if the applicant does not meet the applicable medical requirements, or if the fitness of the applicant for the class of medical certificate applied for is in doubt:

(i) refer the decision on medical fitness to, or consult the decision on medical fitness with, the medical assessor of the licensing authority or AME in compliance with point MED.B.001; or

(ii) deny issuance of a medical certificate, explain the reason(s) for denial to the applicant and inform them of their right of a review according to the procedures of the competent authority.

(d) The AeMC, AME or GMP should send the documents as required by point MED.A.025(b) to the medical assessor of the applicant's licensing authority within five days from the date of the medical examination. If a medical certificate has been denied or the decision has been referred, the documents should be sent to the medical assessor of the licensing authority on the same day that the denial or referral decision is reached.

SECTION 2 - REQUIREMENTS FOR MEDICAL CERTIFICATES

MED.A.030 Medical certificates

(a) A student pilot shall not commence flight training unless that student pilot holds a medical certificate, as required for the relevant licence.

(b) An applicant for a pilot licence, issued in accordance with Annex I (Part-FCL) to Regulation (EU) No 1178/2011, Annex III (Part-BFCL) to Commission Regulation (EU) 2018/395 or Annex III (Part-SFCL) to Commission Regulation (EU) 2018/1976, as applicable, shall hold a medical certificate issued in accordance with this Annex (Part-MED) and appropriate to the licence privileges applied for.

(c) When exercising the privileges of a:

(1) light aircraft pilot licence (LAPL), balloon pilot licence (BPL) or sailplane pilot licence (SPL), the pilot shall hold at least a valid LAPL medical certificate;

(2) private pilot licence (PPL), the pilot shall hold at least a valid class 2 medical certificate;

(3) BPL for the purpose of:

(i) commercial passenger ballooning, the pilot shall hold at least a valid class 2 medical certificate;

(ii) commercial operation other than commercial passenger ballooning, with more than four persons on board the aircraft, the pilot shall hold at least a valid class 2 medical certificate;

(4) SPL for the purpose of commercial sailplane operations other than those specified in Article 3(2) of Commission Implementing Regulation (EU) 2018/1976, the pilot shall hold at least a valid class 2 medical certificate;

(5) a commercial pilot licence (CPL), a multi-crew pilot licence (MPL) or an airline transport pilot licence (ATPL), the pilot shall hold a valid class 1 medical certificate.

(d) If a night rating is added to a PPL or LAPL, the licence holder shall be colour safe.

(e) If an instrument rating or en route instrument rating is added to a PPL, the licence holder shall undertake pure tone audiometry examinations in accordance with the periodicity and the standard required for class 1 medical certificate holders.

(f) An applicant for, or holder of, an air traffic controller licence or a student air traffic controller licence, issued in accordance with Annex I (Part ATCO) to Regulation (EU) 2015/340, shall hold a class 3 medical certificate, except when the privileges are exercised in a synthetic training device environment.

(g) A licence holder shall not at any time hold more than one medical certificate for the same class of medical certification issued in accordance with this Annex (Part-MED).

AMC1 MED.A.030 Medical certificates

(a) A class 1 medical certificate includes the privileges and validities of class 2 and LAPL medical certificates.

(b) A class 2 medical certificate includes the privileges and validities of a LAPL medical certificate.

MED.A.035 Application for a medical certificate

(a) Applications for a medical certificate shall be made in a form and manner established by the competent authority.

(b) Applicants for a medical certificate shall provide the AeMC, AME or GMP, as applicable, with proof of their identity and the application form for a medical certificate filled and signed, in the format mentioned in point ARA.MED.135.

(c) When applying for a revalidation or renewal of the medical certificate, applicants shall present the most recent medical certificate to the AeMC, AME or GMP, as applicable, prior to the relevant aero-medical examinations.

(d) Pilot or ATCO licence holders may apply for a change of competent authority in accordance with point FCL.015(e) of Annex I (Part-FCL) to Commission Regulation (EU) 1178/2011, point BFCL.015(f) of Annex III (Part-BFCL) to Commission Regulation (EU) 2018/395, point SFCL.015(f) of Annex III (Part-SFCL) to Commission Implementing Regulation (EU) 2018/1976 or point ATCO.A.010 of Annex I (Part ATCO) to Commission Regulation (EU) 2015/340.

(e) Holders of a medical certificate issued in accordance with this Annex (Part-MED) who do not yet hold a pilot or ATCO licence may apply for a change of competent authority relating to all medical records kept by the competent authority except in the following cases:

(i) an applicant whose medical certificate is suspended or revoked shall not be entitled to apply for a change of the competent authority until the suspension is lifted or a valid medical certificate is reissued, as applicable;

(ii) the holder of a medical certificate that is subject to an ongoing investigation in accordance with point ARA.GEN.355(b) of Annex VI (Part-ARA) to Commission Regulation (EU) 1178/2011 may only apply for a change of competent authority once the investigation is concluded and has not led to the suspension or revocation of the medical certificate.

However, applicants for, or holders of, a licence or certificate with privileges to provide instruction in simulation training devices shall be entitled to apply for a change of competent authority in the event of revocation of their medical certificate due to long term unfitness.

AMC1 MED.A.035 Application for a medical certificate

Except for initial applicants, when applicants do not present the most recent medical certificate to the AeMC, AME or GMP prior to the relevant examinations, the AeMC, AME or GMP should not issue the medical certificate unless relevant information is received from the medical assessor of the licensing authority.

GM1 MED.A.035 Application for a medical certificate

When considering applying for a medical certificate or applying for a change of competent authority, applicants should select the competent authority to which they intend to apply for a pilot or ATCO licence, as applicable.

MED.A.040 Issuance, revalidation and renewal of medical certificates

(a) A medical certificate shall only be issued, revalidated or renewed once the required aero-medical examinations and assessments, as applicable, have been completed and the applicant has been assessed as fit.

(b) *Initial issuance*

(1) Class 1 and class 3 medical certificates shall be issued by an AeMC.

(2) Class 2 medical certificates shall be issued by an AeMC or an AME.

(3) LAPL medical certificates shall be issued by an AeMC or an AME. They may also be issued by a GMP if so permitted under the national law of the Member State of the licensing authority to which the application for the medical certificate has been made.

(c) *Revalidation and renewal*

(1) Class 1, class 2 and class 3 medical certificates shall be revalidated and renewed by an AeMC or an AME certified for the applicable class of aero-medical certification. Specifically, class 1 medical certificates for applicants who have reached the age of 60 and are involved in single-pilot HEMS operations shall be revalidated and renewed primarily by an AeMC or, at the discretion of the competent authority, by an experienced AME designated by the competent authority.

(2) LAPL medical certificates shall be revalidated and renewed by an AeMC or an AME. They may also be revalidated or renewed by a GMP if so permitted under the national law of the Member State of the licensing authority to which the application for the medical certificate has been made.

(d) The AeMC, AME or GMP shall only issue, revalidate or renew a medical certificate if both of the following conditions have been met:

(1) the applicant has provided them with a complete medical history and, if required by the AeMC, AME or GMP, with results of medical examinations and tests conducted by the applicant's physician or any medical specialists; and

(2) the AeMC, AME or GMP has conducted the aero-medical assessment based on the aero-medical examinations and tests as required for the relevant medical certificate to verify that the applicant complies with all the relevant requirements of this Annex (Part-MED).

(e) The AME, AeMC or, in the case of referral, the medical assessor of the licensing authority may require the applicant to undergo additional medical examinations and investigations when

there is a clinical or epidemiological indication before the medical certificate is issued, revalidated or renewed.

(f) The medical assessor of the licensing authority may issue or reissue a medical certificate, as applicable, if:

(1) a case is referred;

(2) a case is declared fit following secondary review; or

(3) they have identified that corrections to the information on the certificate are necessary, in which case the incorrect medical certificate shall be revoked.

MED.A.045 Validity, revalidation and renewal of medical certificates

(a) *Validity*

(1) Class 1 medical certificates shall be valid for a period of 12 months.

(2) By derogation from point (a)(1), the period of validity of class 1 medical certificates shall be 6 months for licence holders who:

(i) are engaged in single-pilot commercial air transport operations carrying passengers and have reached the age of 40;

(ii) have reached the age of 60.

(3) Class 2 medical certificates shall be valid for a period of:

(i) 60 months, until the licence holder reaches the age of 40. A medical certificate issued prior to the licence holder reaching the age of 40 shall cease to be valid after the licence holder reaches the age of 42;

(ii) 24 months, for licence holders aged between 40 and 50. A medical certificate issued prior to the licence holder reaching the age of 50 shall cease to be valid after the licence holder reaches the age of 51;

(iii) 12 months, for licence holders aged above 50.

(4) LAPL medical certificates shall be valid for a period of:

(i) 60 months, until the licence holder reaches the age of 40. A medical certificate issued prior to the licence holder reaching the age of 40 shall cease to be valid after the licence holder reaches the age of 42;

(ii) 24 months, for licence holders aged above 40.

(5) The period of validity of class 3 medical certificates:

(i) shall be of 24 months.

(ii) shall be reduced to 12 months for licence holders who have reached the age of 40. A medical certificate issued prior to reaching the age of 40 shall cease to be valid when the licence holder reaches the age of 41.

(6) The validity period of a medical certificate, including any associated examination or special investigation, shall be:

(i) determined by the age of the applicant at the date when the aero-medical examination takes place; and

(ii) calculated from the date of the aero-medical examination in the case of initial issue and renewal, and from the expiry date of the previous medical certificate in the case of revalidation.

(7) When issuing, revalidating or renewing a medical certificate, the AeMC, AME or GMP, as applicable, shall extend the validity period until the end of the relevant month.

(b) *Revalidation*

Aero-medical examinations and assessments, as applicable, for the revalidation of a medical certificate may be undertaken up to forty-five days prior to the expiry date of the medical certificate.

(c) *Renewal*

(1) If the holder of a medical certificate does not comply with point (b), a renewal examination and assessment, as applicable, shall be required.

(2) In the case of class 1, class 2 and class 3 medical certificates:

(i) if the medical certificate has expired for less than two years, a routine revalidation aero-medical examination shall be performed;

(ii) if the medical certificate has expired for more than two years but less than five years, the AeMC or AME shall only conduct the renewal aero-medical examination after assessment of the aero-medical records of the applicant;

(iii) if the medical certificate has expired for more than five years, the aero-medical examination requirements for initial issue shall apply and the assessment shall be based on the revalidation requirements.

(3) In the case of LAPL medical certificates, the AeMC, AME or GMP shall assess the medical history of the applicant and perform the aero-medical examinations and assessments, as applicable, in accordance with points MED.B.005 and MED.B.095.

MED.A.046 Suspension or revocation of medical certificates

(a) A medical certificate may be suspended or revoked by the licensing authority.

(b) Upon suspension of the medical certificate, the holder shall return the medical certificate to the licensing authority on request of that authority.

(c) Upon revocation of the medical certificate, the holder shall immediately return the medical certificate to the licensing authority.

MED.A.050 Referral

(a) If an applicant for a class 1, class 2 or class 3 medical certificate is referred to the medical assessor of the licensing authority in accordance with point MED.B.001, the AeMC or AME shall transfer all medical documentation to the licensing authority.

(b) If an applicant for a LAPL medical certificate is referred to an AeMC or AME in accordance with point MED.B.001, the GMP shall transfer the relevant medical documentation to the AeMC or AME.

SUBPART B – REQUIREMENTS FOR MEDICAL CERTIFICATES

SECTION 1 – GENERAL

MED.B.001 Limitations to medical certificates

(a) *Limitations to class 1, class 2 and class 3 medical certificates*

(1) If the applicant does not fully comply with the requirements for the relevant class of medical certificate but is considered to be not likely to jeopardise the safe exercise of the privileges of the applicable licence, the AeMC or AME shall:

(i) in the case of applicants for a class 1 and class 3 medical certificate, refer the decision on fitness of the applicant to the medical assessor of the licensing authority as indicated in this Subpart;

(ii) if a referral to the medical assessor of the licensing authority is not indicated in this Subpart, evaluate whether the applicant is able to perform their duties safely when complying with one or more limitations endorsed on the medical certificate and issue the medical certificate with limitation(s) as necessary;

(iii) in the case of applicants for a class 2 medical certificate, evaluate, in consultation with the medical assessor of the licensing authority as indicated in this Subpart, whether the applicant is able to perform their duties safely when complying with one or more limitations endorsed on the medical certificate, and issue the medical certificate with limitation(s) as necessary.

(2) The AeMC or AME may revalidate or renew a medical certificate with the same limitation(s) without referring to or consulting with the medical assessor of the licensing authority.

(b) *Limitations to LAPL medical certificates*

(1) If a GMP, after due consideration of the applicant's medical history, concludes that the applicant for a LAPL medical certificate does not fully meet the requirements for medical fitness, the GMP shall refer the applicant to an AeMC or AME, unless the applicant requires only limitation(s) related to the use of corrective lenses or to the period of validity of the medical certificate.

(2) If an applicant for a LAPL medical certificate has been referred in accordance with point (1), the AeMC or AME shall give due consideration to points MED.B.005 and MED.B.095, evaluate whether the applicant is able to perform their duties safely when complying with one or more limitations endorsed on the medical certificate and issue the medical certificate with limitation(s) as necessary. The AeMC or AME shall always consider the need to restrict the applicant from carrying passengers (operational passenger limitation (OPL)).

(3) The GMP may revalidate or renew a LAPL medical certificate with the same limitation without referring the applicant to an AeMC or AME.

(c) When assessing whether a limitation is necessary, particular consideration shall be given to:

(1) whether accredited medical conclusion indicates that in special circumstances the applicant's failure to meet any requirement, whether numerical or otherwise, is such that the exercise of the privileges of the licence applied for is not likely to jeopardise the safe exercise of the privileges of the licence;

(2) the applicant's ability, skill and experience relevant to the operation to be performed.

(d) *Operational limitation codes*

(1) Operational multi-pilot limitation (OML – class 1 only)

(i) When the holder of a CPL, ATPL or MPL does not fully meet the requirements for a class 1 medical certificate and has been referred to a medical assessor of the licensing authority, that medical assessor shall assess whether the medical certificate may be issued with an OML 'valid only as or with qualified co-pilot'.

(ii) The holder of a medical certificate with an OML shall only operate an aircraft in multi-pilot operations when the other pilot is fully qualified on the relevant class and type of aircraft, is not subject to an OML and has not attained the age of 60 years.

(iii) The OML for class 1 medical certificates shall be initially imposed and only removed by the medical assessor of the licensing authority.

(2) Operational safety pilot limitation (OSL – class 2 and LAPL privileges)

(i) The holder of a medical certificate with an OSL shall only operate an aircraft if another pilot fully qualified to act as pilot-in-command on the relevant class and type of aircraft is on board the aircraft, the aircraft is fitted with dual controls and the other pilot occupies a seat at the controls.

(ii) The OSL for class 2 medical certificates may be imposed and removed either by the medical assessor of the licensing authority, or by an AeMC or an AME in consultation with the medical assessor of the licensing authority.

(iii) The OSL for LAPL medical certificates may be imposed and removed by the medical assessor of the licensing authority, an AeMC or an AME.

(3) Operational passenger limitation (OPL – class 2 and LAPL privileges)

(i) The holder of a medical certificate with an OPL shall only operate an aircraft without other persons on board.

(ii) The OPL for class 2 medical certificates may be imposed and removed either by the medical assessor of the licensing authority, or by an AeMC or an AME in consultation with the medical assessor of the licensing authority.

(iii) The OPL for LAPL medical certificates may be imposed and removed by the medical assessor of the licensing authority, an AeMC or an AME.

(4) Operational pilot restriction limitation (ORL – class 2 and LAPL privileges)

(i) The holder of a medical certificate with an ORL shall only operate an aircraft if one of the two following conditions have been met:

(A) another pilot fully qualified to act as pilot-in-command on the relevant class and type of aircraft is on board the aircraft, the aircraft is fitted with dual controls and the other pilot occupies a seat at the controls;

(B) there are no other persons on board the aircraft.

(ii) The ORL for class 2 medical certificates may be imposed and removed either by the medical assessor of the licensing authority or by an AeMC or AME in consultation with the medical assessor of the licensing authority.

(iii) The ORL for LAPL medical certificates may be imposed and removed by the medical assessor of the licensing authority, an AeMC or an AME.

(5) Special restriction as specified (SSL)

The SSL on a medical certificate shall be followed by a description of the limitation.

(6) Operational limitations class 3

(i) The competent authority, in conjunction with the air navigation service provider, shall determine the operational limitations applicable in the specific operational environment concerned.

(ii) Appropriate operational limitations shall only be placed on the medical certificate by the licensing authority.

(e) Any other limitation may be imposed on the holder of a medical certificate by the medical assessor of the licensing authority, AeMC, AME or GMP, as applicable, if required to ensure the safe exercise of the privileges of the licence.

(f) Any limitation imposed on the holder of a medical certificate shall be specified therein.

AMC1 MED.B.001 Limitations to medical certificates

GENERAL

(a) An AeMC or AME may refer the decision on fitness of an applicant to the medical assessor of the licensing authority in borderline cases or if fitness is in doubt.

(b) If a fit assessment may only be considered with a limitation, the AeMC, AME, GMP or the medical assessor of the licensing authority should evaluate the medical condition of the applicant in consultation with flight operations experts and other experts, if necessary.

(c) Initial application of limitations

(1) The limitations TML, CVL, and VCL, as listed in point (a) of AMC2 MED.B.001, may be imposed by an AME or an AeMC for class 1, class 2, LAPL and class 3 medical certificates, or a GMP for LAPL medical certificates.

(2) All other limitations listed in point (a) of AMC2 MED.B.001 should only be imposed:

(i) for class 1 and class 3 medical certificates, by the medical assessor of the licensing authority if a referral is required in accordance with point MED.B.001;

(ii) for class 2 medical certificates, by the AeMC or AME in consultation with the medical assessor of the licensing authority if consultation is required in accordance with point MED.B.001;

(iii) for LAPL medical certificates, by an AeMC or AME.

(d) Removal of limitations

(1) For class 1 and class 3 medical certificates, all limitations should only be removed by the medical assessor of the licensing authority.

(2) For class 2 medical certificates, limitations may be removed by the medical assessor of the licensing authority or by an AeMC or AME in consultation with the medical assessor of the licensing authority.

(3) For LAPL medical certificates, limitations may be removed by an AeMC or AME.

AMC2 MED.B.001 Limitations to medical certificates

LIMITATION CODES

(a) The following abbreviations for limitation codes should be used on the medical certificates as applicable:

Code	Limitation
TML	Limited period of validity of the medical certificate
CVL	Valid only with correction for defective vision by means of spectacles or contact lenses
VCL	Valid by day only
RXO	Specialist ophthalmological examination(s)
SEM	Specific medical examination(s) — contact the medical assessor of the licensing authority
HAL	Valid only when hearing aids are worn
APL	Valid only with approved prosthesis
AHL	Valid only with approved hand controls
OML	Valid only as, or with, a qualified co-pilot
OCL	Valid only as a qualified co-pilot
OSL	Valid only with a safety pilot and in aircraft with dual controls
OPL	Valid only without passengers
ORL	Valid only with a safety pilot if passengers are carried
OAL	Restricted to demonstrated aircraft type
SSL	Special restriction(s) as specified

(b) The abbreviations for the limitation codes should be explained to the holder of a medical certificate as follows:

(1) TML — Time limitation

The period of validity of the medical certificate is limited to the duration as shown on the medical certificate. This period of validity commences on the date of the medical examination. Any period of validity remaining on the previous medical certificate is no longer valid. The holder of the medical certificate should present themselves for re-examination when advised and should follow any medical recommendations.

(2) CVL — Wear corrective lenses and carry a spare set of spectacles

Correction for defective distant, intermediate or near vision: whilst exercising the privileges of the licence, the holder of the medical certificate should wear spectacles or contact lenses that correct for defective distant, intermediate or near vision as examined and approved by the AeMC, AME or GMP. Contact lenses may not be worn until cleared to do so by the AeMC, AME or GMP. A spare set of spectacles, approved by the AeMC, AME or GMP, should be readily available.

(3) VCL — Valid by day only

This limitation allows holders of a class 2 or LAPL medical certificate with varying degrees of colour deficiency, to exercise the privileges of their licence by daytime only.

(4) RXO — Specialist ophthalmological examination(s)

Specialist ophthalmological examination(s), other than the examinations stipulated in Part-MED, are required for a significant reason.

(5) SEM — Specific regular medical examination(s) — contact the medical assessor of the licensing authority

This limitation requires the AeMC or AME to contact the medical assessor of the licensing authority before embarking upon a revalidation or renewal aero-medical assessment. The limitation is likely to concern a medical history or additional examination(s) which the AeMC or AME should be aware of prior to undertaking the assessment.

(6) HAL — Wear hearing aid(s)

Whilst exercising the privileges of the licence, the holder of the medical certificate should use hearing aid(s) that compensate for defective hearing as examined and approved by the AeMC or AME. A spare set of batteries or a spare set of hearing aid(s) should be readily available.

(7) APL — Valid only with approved prosthesis

This limitation applies to holders of a medical certificate with a musculoskeletal condition when a medical flight test or a flight simulator test has shown that the use of a prosthesis is required to safely exercise the privileges of the licence. The prosthesis to be used should be approved.

(8) AHL — Valid only with approved hand controls

This limitation applies to holders of a medical certificate who haves a limb deficiency or other anatomical problem which had been shown by a medical flight test or flight simulator testing to be acceptable but to require the aircraft to be equipped with suitable, approved hand controls.

(9) OML — Valid only as or with a qualified co-pilot

This limitation applies to holders of a class 1 medical certificate who do not fully meet the aero-medical requirements for single-pilot operations but are not likely to jeopardise the safe exercise of the privileges of their licence when performing multi-pilot operations. Refer to point MED.B.001(d)(1).

(10) OCL — Valid only as a qualified co-pilot

This limitation is an extension of the OML and holders are restricted to the role of co-pilot.

(11) OSL — Valid only with a safety pilot and in aircraft with dual controls

This limitation applies to holders of a class 2 or a LAPL medical certificate only. The safety pilot should be made aware of the type(s) of possible incapacity that the pilot whose medical certificate has been issued with this limitation may suffer and should be prepared to take over the aircraft controls during flight. Refer to point MED.B.001(d)(2).

(12) OPL — Valid only without other persons on board

This limitation applies to holders of a class 2 or LAPL medical certificate with a medical condition that may lead to an increased level of risk to flight safety when exercising the privileges of the licence. This limitation is to be applied when this risk is not acceptable for the carriage of passengers. Refer to point MED.B.001(d)(3).

(13) ORL — Valid only with a safety pilot if persons are carried and in aircraft with dual controls

This limitation applies to holders of a class 2 or LAPL medical certificate with a medical condition that may lead to an increased level of risk to flight safety when exercising the privileges of the licence. The safety pilot, if carried, should be made aware of the type(s) of possible incapacity that the pilot whose medical certificate has been issued with this limitation may suffer and should be prepared to take over the aircraft controls during flight. Refer to point MED.B.001(d)(4).

(14) OAL — Restricted to demonstrated aircraft type

This limitation applies to holders of a medical certificate who have a limb deficiency or other medical problem which had been shown by a medical flight test or flight simulator testing to be acceptable but to require a restriction to a specific class and type of aircraft.

(15) SSL — Special restriction(s) as specified

This limitation may be considered when an individually specified limitation, not defined in this AMC, is appropriate to mitigate an increased level of risk to flight safety. The description of the SSL should be entered on the medical certificate or in a separate document to be carried with the medical certificate.

MED.B.005 General medical requirements

Applicants for a medical certificate shall be assessed in accordance with the detailed medical requirements set out in Sections 2, 3 and 4.

They shall, in addition, be assessed as unfit if they have any of the following medical conditions which entail a degree of functional incapacity which is likely to interfere with the safe exercise of the privileges of the licence applied for or could render the applicant likely to become suddenly unable to exercise those privileges:

(a) abnormality, either congenital or acquired;

(b) active, latent, acute or chronic disease or disability;

(c) wound, injury or sequelae from operation;

(d) effect or side effect of any prescribed or non-prescribed therapeutic, diagnostic or preventive medication taken.

In their examination AMEs shall give proper consideration to the degenerative effects of ageing in the body systems.

SECTION 2 – MEDICAL REQUIREMENTS FOR CLASS 1 AND CLASS 2 MEDICAL CERTIFICATES

MED.B.010 Cardiovascular system

(a) *Examination*

(1) A standard 12-lead resting electrocardiogram (ECG) and report shall be completed when clinically indicated and at the following moments:

(i) for a class 1 medical certificate, at the initial examination, then every five years until the age of 30, every two years until the age of 40, annually until the age of 50, and at all revalidation or renewal examinations thereafter;

(ii) for a class 2 medical certificate, at the initial examination, at the first examination after the age of 40 and then at the first examination after the age of 50, and every two years thereafter.

(2) An extended cardiovascular assessment shall be required when clinically indicated.

(3) For a class 1 medical certificate, an extended cardiovascular assessment shall be completed at the first revalidation or renewal examination after the age of 65 and every four years thereafter. For applicants involved in single-pilot HEMS operations, an extended cardiovascular assessment shall be completed at the first revalidation or renewal examination after the age of 60 and subject to a cardiovascular risk factor assessment thereafter.

(4) For a class 1 medical certificate, estimation of serum lipids, including cholesterol fractions, shall be required at the initial examination, and at the first examination after having reached the age of 40.

(b) *Cardiovascular system – General*

(1) Applicants for a class 1 medical certificate with any of the following medical conditions shall be assessed as unfit:

(i) aneurysm of the thoracic or supra-renal abdominal aorta, before surgery;

(ii) significant functional or symptomatic abnormality of any of the heart valves;

(iii) heart or heart/lung transplantation;

(iv) symptomatic hypertrophic cardiomyopathy.

(2) Before further consideration is given to their application, applicants for a class 1 medical certificate with an established history or clinical diagnosis of any of the following medical conditions shall be referred to the medical assessor of the licensing authority:

(i) peripheral arterial disease before or after surgery;

(ii) aneurysm of the thoracic or supra-renal abdominal aorta after surgery;

(iii) aneurysm of the infra-renal abdominal aorta before or after surgery;

(iv) functionally insignificant cardiac valvular abnormalities;

(v) after cardiac valve surgery;

(vi) abnormality of the pericardium, myocardium or endocardium;

(vii) congenital abnormality of the heart, before or after corrective surgery;

(viii) vasovagal syncope of uncertain cause;

(ix) arterial or venous thrombosis;

(x) pulmonary embolism;

(xi) cardiovascular condition requiring systemic anticoagulant therapy.

(3) Applicants for a class 2 medical certificate with an established diagnosis of one of the conditions specified in points (1) and (2) shall be evaluated by a cardiologist before they may be assessed as fit, in consultation with the medical assessor of the licensing authority.

(4) Applicants with cardiac disorders other than those specified in points (1) and (2) may be assessed as fit subject to satisfactory cardiological evaluation.

(5) A cardiovascular risk factor assessment shall form part of the examinations for class 1 and class 2 medical certificates at the first examination after reaching the age of 40 and at regular intervals thereafter.

(c) *Blood Pressure*

(1) Applicants' blood pressure shall be recorded at each examination.

(2) Applicants whose blood pressure is not within normal limits shall be further assessed with regard to their cardiovascular condition and medication with a view to determining whether they are to be assessed as unfit in accordance with points (3) and (4).

(3) Applicants for a class 1 medical certificate with any of the following medical conditions shall be assessed as unfit:

(i) symptomatic hypotension;

(ii) blood pressure at examination consistently exceeding 160 mmHg systolic or 95 mmHg diastolic, with or without treatment.

(4) Applicants who have commenced the use of medication for the control of blood pressure shall be assessed as unfit until the absence of significant side effects has been established.

(d) *Coronary artery disease*

(1) Before further consideration is given to their application, applicants for a class 1 medical certificate with any of the following medical conditions shall be referred to the medical assessor of the licensing authority and undergo cardiological evaluation to exclude myocardial ischaemia:

(i) suspected myocardial ischaemia;

(ii) asymptomatic minor coronary artery disease requiring no anti-anginal treatment.

(2) Before further consideration is given to their application, applicants for a class 2 medical certificate with any of the medical conditions set out in point (1) shall undergo satisfactory cardiological evaluation.

(3) Applicants with any of the following medical conditions shall be assessed as unfit:

(i) myocardial ischaemia;

(ii) symptomatic coronary artery disease;

(iii) symptoms of coronary artery disease controlled by medication.

(4) Applicants for the initial issue of a class 1 medical certificate with an established history or clinical diagnosis of any of the following medical conditions shall be assessed as unfit:

(i) myocardial ischaemia;

(ii) myocardial infarction;

(iii) revascularisation or stenting for coronary artery disease.

(5) Before further consideration is given to their application, applicants for a class 2 medical certificate who are asymptomatic following myocardial infarction or surgery for coronary artery disease shall undergo satisfactory cardiological evaluation, in consultation with the medical assessor of the licensing authority. Such applicants for the revalidation of a class 1 medical certificate shall be referred to the medical assessor of the licensing authority.

(e) *Rhythm/conduction disturbances*

(1) Applicants with any of the following medical conditions shall be assessed as unfit:

(i) symptomatic sinoatrial disease;

(ii) complete atrioventricular block;

(iii) symptomatic QT prolongation;

(iv) an automatic implantable defibrillating system;

(v) a ventricular anti-tachycardia pacemaker.

(2) Before further consideration is given to their application, applicants for a class 1 medical certificate having any significant disturbance of cardiac conduction or rhythm, including any of the following, shall be referred to the medical assessor of the licensing authority:

(i) disturbance of supraventricular rhythm, including intermittent or established sinoatrial dysfunction, atrial fibrillation and/or flutter and asymptomatic sinus pauses;

(ii) complete left bundle branch block;

(iii) Mobitz type 2 atrioventricular block;

(iv) broad and/or narrow complex tachycardia;

(v) ventricular pre-excitation;

(vi) asymptomatic QT prolongation;

(vii) Brugada pattern on ECG.

(3) Before further consideration is given to their application, applicants for a class 2 medical certificate with any of the medical conditions specified in point (2) shall undergo satisfactory cardiological evaluation, in consultation with the medical assessor of the licensing authority.

(4) Applicants with any of the following medical conditions may be assessed as fit subject to satisfactory cardiological evaluation and in the absence of any other abnormality:

(i) incomplete bundle branch block;

(ii) complete right bundle branch block;

(iii) stable left axis deviation;

(iv) asymptomatic sinus bradycardia;

(v) asymptomatic sinus tachycardia;

(vi) asymptomatic isolated uniform supra-ventricular or ventricular ectopic complexes;

(vii) first degree atrioventricular block;

(viii) Mobitz type 1 atrioventricular block.

(5) Applicants with a medical history of any of the following medical conditions shall undergo satisfactory cardiovascular evaluation before they may be assessed as fit:

(i) ablation therapy;

(ii) pacemaker implantation.

Such applicants for a class 1 medical certificate shall be referred to the medical assessor of the licensing authority. Such applicants for a class 2 medical certificate shall be assessed in consultation with the medical assessor of the licensing authority.

AMC1 MED.B.010 Cardiovascular system

(a) Examination

Exercise ECG

An exercise ECG when required as part of a cardiovascular assessment should be symptom limited and completed to a minimum of Bruce stage 4 or equivalent.

(b) General

(1) Cardiovascular risk factor assessment

(i) Serum lipid estimation is case finding, and significant abnormalities should be reviewed, investigated and supervised by the AeMC or AME in consultation with the medical assessor of the licensing authority.

(ii) Applicants with an accumulation of two or more risk factors should undergo a cardiovascular evaluation by the AeMC or AME, if necessary, in consultation with the medical assessor of the licensing authority.

(iii) Cardiovascular risk factor assessment should be performed using risk calculators relevant for the target population and taking into consideration the latest guidelines on cardiovascular disease prevention.

(iv) Cardiovascular risk factor assessment should take place at least once every five years for applicants 40 to 49 years old, once every three years for applicants 50 to 59 years old and once every two years thereafter. A more frequent assessment of the cardiovascular risk factors may be considered when risk factors have been identified.

(2) Cardiovascular assessment

(i) Reporting of resting and exercise electrocardiograms should be carried out by the AME or an accredited specialist.

(ii) The extended cardiovascular assessment should be undertaken at an AeMC or may be delegated to a cardiologist.

(iii) For applicants involved in single-pilot HEMS operations who have reached the age of 60, the extended cardiovascular assessment should include at least the following elements:

(A) resting ECG;

(B) exercise ECG;

(C) serum lipids;

(D) glycosylated haemoglobin test (HbA1c);

(E) echocardiography;

(F) arterial doppler ultrasound carotid arteries, and at clinical indication thoracic or abdominal aorta could be considered.

(c) Peripheral arterial disease

If there is no significant functional impairment, a fit assessment may be considered provided:

(1) applicants without symptoms of coronary artery disease have reduced any vascular risk factors to an appropriate level;

(2) applicants should be on appropriate secondary prevention treatment;

(3) exercise ECG is satisfactory. Further tests may be required which should show no evidence of myocardial ischaemia or significant coronary artery stenosis.

(d) Aortic aneurysm

(1) Applicants with an aneurysm of the infra-renal abdominal aorta of less than 5 cm in diameter may be assessed as fit before surgery, with an OML subject to satisfactory evaluation by a cardiologist. Follow-up by ultra-sound scans or other imaging techniques, as necessary, should be determined by the medical assessor of the licensing authority.

(2) Applicants may be assessed as fit with an OML after surgery for an aneurysm of the thoracic or abdominal aorta if the blood pressure and cardiovascular evaluation is satisfactory. Regular evaluations by a cardiologist should be carried out.

(e) Cardiac valvular abnormalities

(1) Applicants with previously unrecognised cardiac murmurs should undergo evaluation by a cardiologist and assessment by the medical assessor of the licensing authority. If considered significant, further investigation should include at least 2D Doppler echocardiography or equivalent imaging.

(2) Applicants with minor cardiac valvular abnormalities may be assessed as fit. Applicants with significant abnormality of any of the heart valves should be assessed as unfit.

(3) Aortic valve disease

(i) Applicants with a bicuspid aortic valve may be assessed as fit if no other cardiac or aortic abnormality is demonstrated. Follow-up with echocardiography, as necessary, should be determined by the medical assessor of the licensing authority.

(ii) Applicants with aortic stenosis may be assessed as fit provided the left ventricular function is intact and the mean pressure gradient is less than 20 mmHg. Applicants with an aortic valve orifice with indexation on the body surface of more than 0.6 cm^2/m^2 and a mean pressure gradient above 20 mmHg, but not greater than 50 mmHg, may be assessed as fit with an OML. Follow-up with 2D Doppler echocardiography, as necessary, should be determined by the medical assessor of the licensing authority in all cases. Alternative measurement techniques with equivalent ranges may be used. Regular evaluation by a cardiologist should be considered. Applicants with a history of systemic embolism or significant dilatation of the thoracic aorta should be assessed as unfit.

(iii) Applicants with trivial aortic regurgitation may be assessed as fit. A greater degree of aortic regurgitation should require an OML. There should be no demonstrable abnormality of the ascending aorta on 2D Doppler echocardiography. Follow-up, as necessary, should be determined by the medical assessor of the licensing authority.

(4) Mitral valve disease

(i) Asymptomatic applicants with an isolated mid-systolic click due to mitral leaflet prolapse may be assessed as fit.

(ii) Applicants with rheumatic mitral stenosis should normally be assessed as unfit.

(iii) Applicants with minor regurgitation may be assessed as fit. Periodic cardiological review should be determined by the medical assessor of the licensing authority.

(iv) Applicants with moderate mitral regurgitation may be considered as fit with an OML if the 2D Doppler echocardiogram demonstrates satisfactory left ventricular dimensions and satisfactory myocardial function is confirmed by exercise ECG.

Periodic cardiological review should be required, as determined by the medical assessor of the licensing authority.

(v) Applicants with evidence of volume overloading of the left ventricle demonstrated by increased left ventricular end-diastolic diameter or evidence of systolic impairment should be assessed as unfit.

(f) Valvular surgery

Applicants who have undergone cardiac valve replacement or repair should be assessed as unfit. A fit assessment may be considered in the following cases:

(1) Mitral leaflet repair for prolapse is compatible with a fit assessment, provided post-operative investigations reveal satisfactory left ventricular function without systolic or diastolic dilation and no more than minor mitral regurgitation.

(2) Asymptomatic applicants with a tissue valve or with a mechanical valve who, at least six months following surgery, are taking no cardioactive medication may be considered for a fit assessment with an OML. Investigations which demonstrate normal valvular and ventricular configuration and function should have been completed as demonstrated by:

(i) a satisfactory symptom-limited exercise ECG. Myocardial perfusion imaging/stress echocardiography should be required if the exercise ECG is abnormal or any coronary artery disease is suspected;

(ii) a 2D Doppler echocardiogram showing no significant selective chamber enlargement, a tissue valve with minimal structural alteration and a normal Doppler blood flow, and no structural or functional abnormality of the other heart valves. Left ventricular fractional shortening should be normal.

Follow-up with exercise ECG and 2D echocardiography, as necessary, should be determined by the medical assessor of the licensing authority.

(3) If anticoagulation is needed after valvular surgery, a fit assessment with an OML may be considered if the haemorrhagic risk is acceptable and the anticoagulation is stable. Anticoagulation should be considered stable if, within the last six months, at least five international normalised ratio (INR) values are documented, of which at least four are within the INR target range. The INR target range should be determined by the type of surgery performed.

(g) Thromboembolic disorders

Applicants with arterial or venous thrombosis or pulmonary embolism should be assessed as unfit. A fit assessment with an OML may be considered after a period of stable anticoagulation as prophylaxis, after review by the medical assessor of the licensing authority. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range and the haemorrhagic risk is acceptable. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment with an OML may be considered after review by the medical assessor of the licensing authority after a stabilisation period of three months. Applicants with pulmonary embolism should also be evaluated by a cardiologist. Following cessation of anticoagulant

therapy, for any indication, applicants should undergo a re-assessment by the medical assessor of the licensing authority.

(h) Other cardiac disorders

(1) Applicants with a primary or secondary abnormality of the pericardium, myocardium or endocardium should be assessed as unfit. A fit assessment may be considered following complete resolution and satisfactory cardiological evaluation which may include 2D Doppler echocardiography, exercise ECG and/or myocardial perfusion imaging/stress echocardiography and 24-hour ambulatory ECG. Coronary angiography may be indicated. Frequent review and an OML may be required after fit assessment.

(2) Applicants with a congenital abnormality of the heart should be assessed as unfit. Applicants following surgical correction or with minor abnormalities that are functionally unimportant may be assessed as fit following cardiological evaluation. No cardioactive medication is acceptable. Investigations may include 2D Doppler echocardiography, exercise ECG and 24-hour ambulatory ECG. The potential hazard of any medication should be considered as part of the assessment. Particular attention should be paid to the potential for the medication to mask the effects of the congenital abnormality before or after surgery. Regular cardiological evaluations should be carried out.

(i) Syncope

(1) In the case of a single episode of vasovagal syncope which can be explained and is compatible with flight safety, a fit assessment may be considered.

(2) Applicants with a history of recurrent vasovagal syncope should be assessed as unfit. A fit assessment may be considered after a six-month period without recurrence, provided cardiological evaluation is satisfactory. Such evaluation should include:

(i) a satisfactory symptom-limited 12 lead exercise ECG to Bruce stage 4, or equivalent. If the exercise ECG is abnormal, myocardial perfusion imaging/stress echocardiography or equivalent test should be carried out;

(ii) a 2D Doppler echocardiogram showing neither significant selective chamber enlargement nor structural or functional abnormality of the heart, valves or myocardium;

(iii) a 24-hour ambulatory ECG recording showing no conduction disturbance, complex or sustained rhythm disturbance or evidence of myocardial ischaemia.

(3) A tilt test, or equivalent, carried out to a standard protocol showing no evidence of vasomotor instability may be required.

(4) Neurological review should be required.

(5) An OML should be required until a period of five years has elapsed without recurrence. The medical assessor of the licensing authority may determine a shorter or longer period of OML according to the individual circumstances of the case.

(6) Applicants who experienced loss of consciousness without significant warning should be assessed as unfit.

(j) Blood pressure

(1) The diagnosis of hypertension should require cardiovascular evaluation to include potential vascular risk factors.

(2) Anti-hypertensive treatment should be agreed by the medical assessor of the licensing authority. Acceptable medication may include:

(i) non-loop diuretic agents;

(ii) ACE inhibitors;

(iii) angiotensin II receptor blocking agents (sartans);

(iv) channel calcium blocking agents;

(v) certain (generally hydrophilic) beta-blocking agents.

(3) Following initiation of medication for the control of blood pressure, applicants should be re-assessed to verify that satisfactory control has been achieved and the treatment is compatible with the safe exercise of the privileges of the applicable licence(s).

(k) Coronary artery disease

(1) Chest pain of uncertain cause should require full investigation. Applicants with angina pectoris should be assessed as unfit, whether or not it is alleviated by medication.

(2) In suspected asymptomatic coronary artery disease, exercise ECG should be required. Further tests may be required, which should show no evidence of myocardial ischaemia or significant coronary artery stenosis.

(3) Applicants with evidence of exercise-induced myocardial ischaemia should be assessed as unfit.

(4) After an ischaemic cardiac event or revascularisation procedure, applicants should have reduced cardiovascular risk factors to an appropriate level. Medication, when used to control cardiac symptoms, is not acceptable. All applicants should be on appropriate secondary prevention treatment.

(i) A coronary angiogram obtained around the time of, or during, the ischaemic myocardial event or revascularisation procedure and a complete, detailed clinical report of the ischaemic event and of any operative procedures should be made available to the medical assessor of the licensing authority:

(A) there should be no stenosis more than 50 % in any major untreated vessel, in any vein or artery graft or at the site of an angioplasty/stent, except in a vessel subtending a myocardial infarction;

(B) the whole coronary vascular tree should be assessed as satisfactory by a cardiologist, and particular attention should be paid to multiple stenoses and/or multiple revascularisations;

(C) Applicants with an untreated stenosis greater than 30 % in the left main or proximal left anterior descending coronary artery should be assessed as unfit.

(ii) At least six months from the ischaemic myocardial event or revascularisation procedure, the following investigations should be completed (equivalent tests may be substituted):

(A) an exercise ECG showing neither evidence of myocardial ischaemia nor rhythm or conduction disturbance;

(B) an echocardiogram showing satisfactory left ventricular function with no important abnormality of wall motion (such as dyskinesia or akinesia) and a left ventricular ejection fraction of 50 % or more;

(C) in cases of angioplasty/stenting, a myocardial perfusion scan or stress echocardiogram, or equivalent test, which should show no evidence of reversible myocardial ischaemia. If there is any doubt about myocardial perfusion in other cases (infarction or bypass grafting), a perfusion scan, or equivalent test, should also be carried out;

(D) further investigations, such as a 24-hour ECG, may be necessary to assess the risk of any significant rhythm disturbance.

(iii) Follow-up should be annual (or more frequent, if necessary) to ensure that there is no deterioration of the cardiovascular status. It should include a review by a cardiologist, exercise ECG and cardiovascular risk assessment. Additional investigations may be required by the medical assessor of the licensing authority.

(A) After coronary artery bypass grafting, a myocardial perfusion scan, or equivalent test, should be performed if there is any indication, and in all cases within five years from the procedure.

(B) In all cases, coronary angiography should be considered at any time if symptoms, signs or non-invasive tests indicate myocardial ischaemia.

(iv) Successful completion of the six-month or subsequent review will allow a fit assessment with an OML.

(l) Rhythm and conduction disturbances

(1) Applicants with significant rhythm or conduction disturbance should undergo evaluation by a cardiologist before a fit assessment with an OML, as necessary, may be considered. Appropriate follow-up should be carried out at regular intervals. Such evaluation should include:

(i) exercise ECG to the Bruce protocol or equivalent. Bruce stage 4 should be achieved and no significant abnormality of rhythm or conduction, or evidence of myocardial ischaemia should be demonstrated. Withdrawal of cardioactive medication prior to the test should normally be required;

(ii) 24-hour ambulatory ECG which should demonstrate no significant rhythm or conduction disturbance;

(iii) 2D Doppler echocardiogram which should show no significant selective chamber enlargement or significant structural or functional abnormality, and a left ventricular ejection fraction of at least 50 %.

Further evaluation may include (equivalent tests may be substituted):

(iv) 24-hour ECG recording repeated as necessary;

(v) electrophysiological study;

(vi) myocardial perfusion imaging;

(vii) cardiac magnetic resonance imaging (MRI);

(viii) coronary angiogram.

(2) Applicants with frequent or complex forms of supra ventricular or ventricular ectopic complexes require full cardiological evaluation.

(3) If anticoagulation is needed for a rhythm disturbance, a fit assessment with an OML may be considered if the haemorrhagic risk is acceptable and the anticoagulation is stable. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment with an OML may be considered after review by the medical assessor of the licensing authority after a stabilisation period of three months.

(4) Ablation

Applicants who have undergone ablation therapy should be assessed as unfit. A fit assessment may be considered following successful catheter ablation and should require an OML for at least one year, unless an electrophysiological study, undertaken at a minimum of two months after the ablation, demonstrates satisfactory results. For those whose long-term outcome cannot be assured by invasive or non-invasive testing, an additional period with an OML and/or observation may be necessary.

(5) Supraventricular arrhythmias

Applicants with significant disturbance of supraventricular rhythm, including sinoatrial dysfunction, whether intermittent or established, should be assessed as unfit. A fit assessment may be considered if cardiological evaluation is satisfactory.

(i) Atrial fibrillation/flutter

(A) For initial applicants, a fit assessment should be limited to those with a single episode of arrhythmia which is considered by the medical assessor of the licensing authority to be unlikely to recur.

(B) For revalidation, applicants may be assessed as fit if cardiological evaluation is satisfactory and the stroke risk is sufficiently low. A fit assessment with an OML may be considered after a period of stable anticoagulation as prophylaxis, after review by the medical assessor of the licensing authority. Anticoagulation should be considered stable if, within the last six months, at

least five INR values are documented, of which at least four are within the INR target range. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment with an OML may be considered after review by the medical assessor of the licensing authority after a stabilisation period of three months.

(ii) Applicants with asymptomatic sinus pauses up to 2.5 seconds on resting ECG may be assessed as fit if exercise ECG, echocardiography and 24-hour ambulatory ECG are satisfactory.

(iii) Applicants with symptomatic sino-atrial disease should be assessed as unfit.

(6) Mobitz type 2 atrio-ventricular block

Applicants with Mobitz type 2 AV block should require full cardiological evaluation and may be assessed as fit in the absence of distal conducting tissue disease.

(7) Complete right bundle branch block

(i) Applicants with complete right bundle branch block should undergo a cardiological evaluation on first presentation. A fit assessment may be considered if there is no underlying pathology.

(ii) Applicants with bifascicular block may be assessed as fit with an OML after a satisfactory cardiological evaluation. The OML may be considered for removal if an electrophysiological study demonstrates no infra-Hissian block, or a three-year period of satisfactory surveillance has been completed.

(8) Complete left bundle branch block

(i) A fit assessment may be considered subject to satisfactory cardiological evaluation and a three-year period with an OML, and without an OML after three years of surveillance and satisfactory cardiological evaluation.

(ii) Investigation of the coronary arteries is necessary for applicants over the age of 40.

(9) Ventricular pre-excitation

(i) Asymptomatic initial applicants with pre-excitation may be assessed as fit if an electrophysiological study, including adequate drug-induced autonomic stimulation reveals no inducible re-entry tachycardia and the existence of multiple pathways is excluded.

(ii) Asymptomatic applicants with pre-excitation may be assessed as fit at revalidation with limitation(s) as appropriate. Limitations may not be necessary if an electrophysiological study, including adequate drug-induced autonomic stimulation, reveals no inducible re-entry tachycardia and the existence of multiple accessory pathways is excluded.

(10) Pacemaker

Applicants with a subendocardial pacemaker should be assessed as unfit. A fit assessment with an OML may be considered at revalidation no sooner than three months after insertion provided:

(i) there is no other disqualifying condition;

(ii) a bipolar lead system, programmed in bipolar mode without automatic mode change has been used;

(iii) the applicant is not pacemaker dependent; and

(iv) the applicant has a follow-up at least every 12 months, including a pacemaker check.

(11) QT prolongation

Applicants with asymptomatic QT prolongation may be assessed as fit with an OML subject to satisfactory cardiological evaluation.

(12) Brugada pattern on ECG

Applicants with a Brugada pattern Type 1 should be assessed as unfit. Applicants with Type 2 or Type 3 may be assessed as fit, with limitations as appropriate, subject to satisfactory cardiological evaluation.

AMC2 MED.B.010 Cardiovascular system

(a) Examination

Exercise ECG

An exercise ECG when required as part of a cardiovascular assessment should be symptom limited and completed to a minimum of Bruce stage 4 or equivalent.

(b) General

(1) Cardiovascular risk factor assessment

Cardiovascular risk factor assessment should take place at least once every five years for applicants 40 to 59 years old, and once every two years thereafter. A more frequent assessment of the cardiovascular risk factors may be considered when risk factors have been identified.

Applicants with an accumulation of two or more risk factors should undergo a cardiovascular evaluation by the AeMC or AME.

(2) Cardiovascular assessment

Reporting of resting and exercise ECGs should be carried out by the AME or an accredited specialist.

(c) Peripheral arterial disease

A fit assessment may be considered for an applicant with peripheral arterial disease, or after surgery for peripheral arterial disease, provided there is no significant functional impairment,

any vascular risk factors have been reduced to an appropriate level, the applicant is receiving acceptable secondary prevention treatment, and there is no evidence of myocardial ischaemia.

(d) Aortic aneurysm

(1) Applicants with an aneurysm of the infra-renal abdominal aorta of less than 5 cm in diameter may be assessed as fit, subject to satisfactory cardiological evaluation. Regular cardiological evaluations should be carried out.

(2) Applicants with an aneurysm of the thoracic or supra-renal abdominal aorta of less than 5 cm in diameter may be assessed as fit with an ORL or OSL, subject to satisfactory cardiological evaluation. Regular follow-up should be carried out.

(3) Applicants may be assessed as fit after surgery for an infra-renal abdominal aortic aneurysm, subject to satisfactory cardiological evaluation. Regular cardiological evaluations should be carried out.

(4) Applicants may be assessed as fit with an ORL or OSL after surgery for a thoracic or supra-renal abdominal aortic aneurysm, subject to satisfactory cardiological evaluation. Regular cardiological evaluations should be carried out.

(e) Cardiac valvular abnormalities

(1) Applicants with previously unrecognised cardiac murmurs should undergo further cardiological evaluation.

(2) Applicants with minor cardiac valvular abnormalities may be assessed as fit.

(3) Aortic valve disease

(i) Applicants with a bicuspid aortic valve may be assessed as fit if no other cardiac or aortic abnormality is demonstrated. Follow-up with echocardiography, as necessary, should be determined in consultation with the medical assessor of the licensing authority.

(ii) Applicants with aortic stenosis may be assessed as fit provided the left ventricular function is intact and the mean pressure gradient is less than 20 mmHg. Applicants with an aortic valve orifice of more than 1 cm^2 and a mean pressure gradient above 20 mmHg, but not greater than 50 mmHg, may be assessed as fit with an ORL or OSL. Follow-up with 2D Doppler echocardiography, as necessary, should be determined in consultation with the medical assessor of the licensing authority in all cases. Alternative measurement techniques with equivalent ranges may be used. Regular cardiological evaluation should be considered. Applicants with a history of systemic embolism or significant dilatation of the thoracic aorta should be assessed as unfit.

(iii) Applicants with trivial aortic regurgitation may be assessed as fit. Applicants with a greater degree of aortic regurgitation may be assessed as fit with an OSL. There should be no demonstrable abnormality of the ascending aorta on 2D Doppler echocardiography. Follow-up, as necessary, should be determined in consultation with the medical assessor of the licensing authority.

(4) Mitral valve disease

(i) Asymptomatic applicants with an isolated mid-systolic click due to mitral leaflet prolapse may be assessed as fit.

(ii) Applicants with rheumatic mitral stenosis should be assessed as unfit.

(iii) Applicants with minor regurgitation may be assessed as fit. Periodic cardiological review should be determined in consultation with the medical assessor of the licensing authority.

(iv) Applicants with moderate mitral regurgitation may be considered as fit with an ORL or OSL if the 2D Doppler echocardiogram demonstrates satisfactory left ventricular dimensions and satisfactory myocardial function is confirmed by exercise ECG. Periodic cardiological review should be determined in consultation with the medical assessor of the licensing authority.

(v) Applicants with evidence of volume overloading of the left ventricle demonstrated by increased left ventricular end-diastolic diameter or evidence of systolic impairment should be assessed as unfit.

(f) Valvular surgery

(1) Applicants who have undergone cardiac valve replacement or repair may be assessed as fit without limitations subject to satisfactory post-operative cardiological evaluation and if no anticoagulants are needed.

(2) If anticoagulation is needed after valvular surgery, a fit assessment with an ORL or OSL may be considered after cardiological evaluation if the haemorrhagic risk is acceptable. The review should show that the anticoagulation is stable. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range. The INR target range should be determined by the type of surgery performed. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence(s) if the INR is within the target range, may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of three months.

(g) Thromboembolic disorders

Applicants with arterial or venous thrombosis or pulmonary embolism should be assessed as unfit. A fit assessment with an ORL or OSL may be considered after a period of stable anticoagulation as prophylaxis in consultation with the medical assessor of the licensing authority. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range and the haemorrhagic risk is acceptable. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence(s) if the

INR is within the target range may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of three months. Applicants with pulmonary embolism should also undergo a cardiological evaluation. Following cessation of anticoagulant therapy for any indication, applicants should undergo a re-assessment in consultation with the medical assessor of the licensing authority.

(h) Other cardiac disorders

(1) Applicants with a primary or secondary abnormality of the pericardium, myocardium or endocardium may be assessed as fit subject to satisfactory cardiological evaluation.

(2) Applicants with a congenital abnormality of the heart, including those who have undergone surgical correction, may be assessed as fit subject to satisfactory cardiological evaluation. Cardiological follow-up may be necessary and should be determined in consultation with the medical assessor of the licensing authority.

(i) Syncope

(1) In the case of a single episode of vasovagal syncope which can be explained and is compatible with flight safety, a fit assessment may be considered.

(2) Applicants with a history of recurrent vasovagal syncope should be assessed as unfit. A fit assessment may be considered after a six-month period without recurrence, providing cardiological evaluation is satisfactory. Neurological review may be indicated.

(j) Blood pressure

(1) When the blood pressure at examination consistently exceeds 160 mmHg systolic and/or 95 mmHg diastolic, with or without treatment, the applicant should be assessed as unfit.

(2) The diagnosis of hypertension requires review of other potential vascular risk factors.

(3) Applicants with symptomatic hypotension should be assessed as unfit.

(4) Anti-hypertensive treatment should be compatible with flight safety.

(5) Following initiation of medication for the control of blood pressure, applicants should be re-assessed to verify that satisfactory control has been achieved and that the treatment is compatible with the safe exercise of the privileges of the applicable licence(s).

(k) Coronary artery disease

(1) Chest pain of uncertain cause requires full investigation.

(2) Applicants with suspected asymptomatic coronary artery disease should undergo cardiological evaluation which should show no evidence of myocardial ischaemia or significant coronary artery stenosis.

(3) Applicants with evidence of exercise-induced myocardial ischaemia should be assessed as unfit.

(4) After an ischaemic cardiac event, or revascularisation, applicants without symptoms should have reduced cardiovascular risk factors to an appropriate level. Medication, when used to control angina pectoris, is not acceptable. All applicants should be on appropriate secondary prevention treatment.

(i) A coronary angiogram obtained around the time of, or during, the ischaemic myocardial event and a complete, detailed clinical report of the ischaemic event and of any operative procedures should be available to the AME.

(A) There should be no stenosis more than 50 % in any major untreated vessel, in any vein or artery graft or at the site of an angioplasty/stent, except in a vessel subtending a myocardial infarction.

(B) The whole coronary vascular tree should be assessed as satisfactory by a cardiologist and particular attention should be paid to multiple stenoses and/or multiple revascularisations.

(C) Applicants with an untreated stenosis greater than 30 % in the left main or proximal left anterior descending coronary artery should be assessed as unfit.

(ii) At least six months from the ischaemic myocardial event, including revascularisation, the following investigations should be completed (equivalent tests may be used):

(A) an exercise ECG showing neither evidence of myocardial ischaemia nor rhythm disturbance;

(B) an echocardiogram showing satisfactory left ventricular function with no important abnormality of wall motion and a satisfactory left ventricular ejection fraction of 50 % or more;

(C) in cases of angioplasty/stenting, a myocardial perfusion scan or stress echocardiogram, or equivalent test, which should show no evidence of reversible myocardial ischaemia. If there is doubt about revascularisation in myocardial infarction or bypass grafting, a perfusion scan, or equivalent test, should also be carried out;

(D) further investigations, such as a 24-hour ECG, may be necessary to assess the risk of any significant rhythm disturbance.

(iii) Periodic follow-up should include a cardiological evaluation.

(A) After coronary artery bypass grafting, a myocardial perfusion scan (or equivalent test) should be performed if there is any indication, and in all cases within five years from the procedure for a fit assessment without an OSL, OPL or ORL.

(B) In all cases, coronary angiography should be considered at any time if symptoms, signs or non-invasive tests indicate myocardial ischaemia.

(iv) Successful completion of the six-month or subsequent review will allow a fit assessment. Applicants may be assessed as fit with an ORL or OSL having successfully completed only an exercise ECG.

(5) Applicants with angina pectoris should be assessed as unfit, whether or not it is alleviated by medication.

(l) Rhythm and conduction disturbances

(1) Applicants with significant rhythm or conduction disturbance should undergo cardiological evaluation before a fit assessment may be considered with an ORL or OSL, as appropriate. Such evaluation should include:

(i) exercise ECG to the Bruce protocol or equivalent. Bruce stage 4 should be achieved and no significant abnormality of rhythm or conduction, or evidence of myocardial ischaemia should be demonstrated. Withdrawal of cardioactive medication prior to the test should normally be required;

(ii) 24-hour ambulatory ECG which should demonstrate no significant rhythm or conduction disturbance;

(iii) 2D Doppler echocardiogram which should show no significant selective chamber enlargement or significant structural or functional abnormality, and a left ventricular ejection fraction of at least 50 %.

Further evaluation may include (equivalent tests may be used):

(iv) 24-hour ECG recording repeated as necessary;

(v) electrophysiological study;

(vi) myocardial perfusion imaging;

(vii) cardiac magnetic resonance imaging (MRI);

(viii) coronary angiogram.

(2) If anticoagulation is needed for a rhythm disturbance, a fit assessment with an ORL or OSL may be considered, if the haemorrhagic risk is acceptable and the anticoagulation is stable. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence(s) if the INR is within the target range may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of three months.

(3) Ablation

A fit assessment may be considered following successful catheter ablation subject to satisfactory cardiological review undertaken at a minimum of two months after the ablation.

(4) Supraventricular arrhythmias

(i) Applicants with significant disturbance of supraventricular rhythm, including sinoatrial dysfunction, whether intermittent or established, may be assessed as fit if cardiological evaluation is satisfactory.

(ii) Applicants with atrial fibrillation/flutter may be assessed as fit if cardiological evaluation is satisfactory and the stroke risk is sufficiently low. If anticoagulation is needed, a fit assessment with an ORL or OSL may be considered after a period of stable anticoagulation as prophylaxis, in consultation with the medical assessor of the licensing authority. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence(s) if the INR is within the target range may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of three months.

(iii) Applicants with asymptomatic sinus pauses up to 2.5 seconds on resting ECG may be assessed as fit if cardiological evaluation is satisfactory.

(5) Heart block

(i) Applicants with first degree and Mobitz type 1 AV block may be assessed as fit.

(ii) Applicants with Mobitz type 2 AV block may be assessed as fit in the absence of distal conducting tissue disease.

(6) Complete right bundle branch block

Applicants with complete right bundle branch block should undergo a cardiological evaluation on first presentation. A fit assessment may be considered if there is no underlying pathology.

(7) Complete left bundle branch block

Applicants with complete left bundle branch block may be assessed as fit with appropriate limitations, such as an ORL, and subject to satisfactory cardiological evaluation.

(8) Ventricular pre-excitation

Asymptomatic applicants with ventricular pre-excitation may be assessed as fit with limitation(s) as appropriate, subject to satisfactory cardiological evaluation. Limitations

may not be necessary if an electrophysiological study is conducted and the results are satisfactory.

(9) Pacemaker

Applicants with a subendocardial pacemaker should be assessed as unfit. A fit assessment may be considered no sooner than three months after insertion, providing:

(i) there is no other disqualifying condition;

(ii) a bipolar lead system, programmed in bipolar mode without automatic mode change, has been used;

(iii) the applicant is not pacemaker dependent; and

(iv) the applicant has a follow-up at least every 12 months, including a pacemaker check.

(10) QT prolongation

Applicants with asymptomatic QT prolongation may be assessed as fit with an ORL or OSL subject to satisfactory cardiological evaluation.

(11) Brugada pattern on ECG

Applicants with a Brugada pattern Type 1 should be assessed as unfit. Applicants with Type 2 or Type 3 may be assessed as fit, with limitation(s) as appropriate, subject to satisfactory cardiological evaluation.

(m) Heart or heart/lung transplantation

(1) Applicants who have undergone heart or heart/lung transplantation may be assessed as fit, with appropriate limitation(s) such as an ORL, no sooner than 12 months after transplantation, provided that cardiological evaluation is satisfactory with:

(i) no rejection in the first year following transplantation;

(ii) no significant arrhythmias;

(iii) a left ventricular ejection fraction ≥ 50%;

(iv) a symptom-limited exercise ECG; and

(v) a coronary angiogram if indicated.

(2) Regular cardiological evaluations should be carried out.

GM1 MED.B.010 Cardiovascular system

MITRAL VALVE DISEASE

(a) Minor regurgitation should have evidence of no thickened leaflets or flail chordae and left atrial internal diameter of less than or equal to 4.0 cm.

(b) The following may indicate severe regurgitation:

(1) LV internal diameter (diastole) > 6.0 cm; or

(2) LV internal diameter (systole) > 4.1 cm; or

(3) Left atrial internal diameter > 4.5 cm.

(c) Doppler indices, such as width of jet, backwards extension and whether there is flow reversal in the pulmonary veins may be helpful in assessing the severity of regurgitation.

GM2 MED.B.010 Cardiovascular system

VENTRICULAR PRE-EXCITATION

Asymptomatic applicants with pre-excitation may be assessed as fit if they meet the following criteria:

(a) no inducible re-entry tachycardia;

(b) refractory period > 300 ms;

(c) no induced atrial fibrillation;

(d) no evidence of multiple accessory pathways.

GM3 MED.B.010 Cardiovascular system

ANTICOAGULATION

Applicants taking anticoagulant medication which requires monitoring with INR testing, should measure their INR on a 'near patient' testing system within 12 hours prior to flight and the privileges of the applicable licence(s) should only be exercised if the INR is within the target range. The INR result should be recorded and the results should be reviewed at each aero-medical assessment.

GM1 MED.B.010(b) Cardiovascular system

(a) Cardiovascular risk factor assessment

A risk calculator is constructed as an equation with regression coefficients for each included risk factor, based on a statistical analysis of data from a population of a certain region to provide a crude risk estimate. A risk calculator to be used for screening of CAT pilots should be relevant for the ethnicity of the pilots being screened and should predict the 5–10-year risk for non-fatal events such as acute coronary syndromes or stroke, as well as fatal cardiac events, as both may lead to total in-flight incapacitation.

It is recommended to use a risk estimation tool that is based on populations similar to your most common target population. No risk calculator is perfect, and an assessment of advantages and disadvantages should be made when deciding on which tools should be used. For example, the most common tools that are based on European population are SCORE 2, PROCAM, AGLA and QRISK 3.

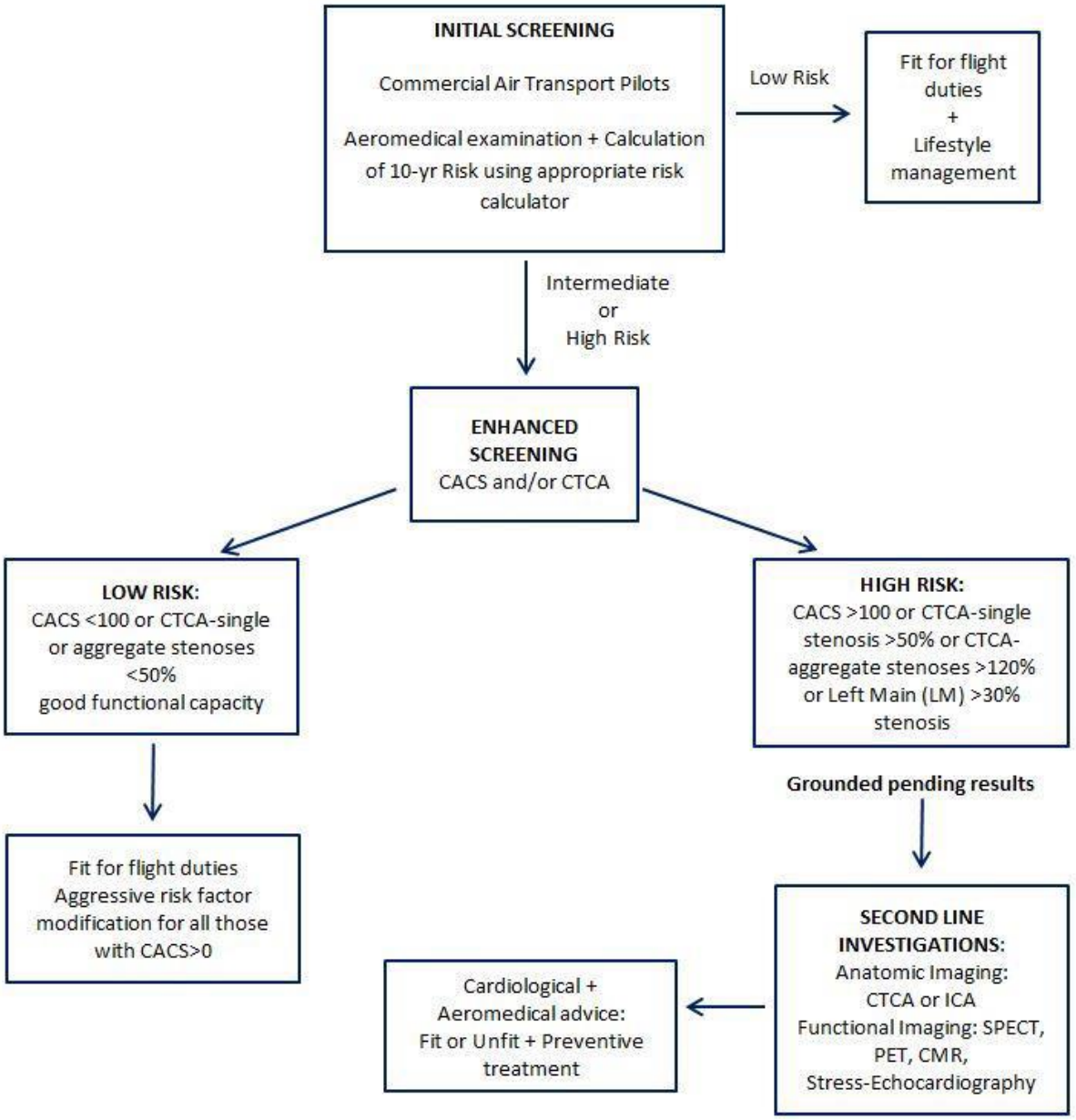
In the risk assessment AMEs should give proper consideration to the latest published guidance of the European Society of Cardiology. At the time of the drafting, the most recent guidelines are '2021 ESC Guidelines on cardiovascular disease prevention in clinical practice'.

(b) Cardiovascular assessment

It is recommended that for applicants involved in single-pilot HEMS operations who have reached the age of 60, the cardiovascular assessment considers the risk level when deciding on enhanced screening investigations.

In this regard the following flow chart algorithm adapted by Simons et al. (2019) from Gray et al.(2019) is aimed at supporting AMEs and medical assessors. The classification of low, intermediate or high risk is given by the cardiovascular score being used. The enhanced screening investigations are in the realm of the consultant cardiologist.

Abbreviations used in the flowchart: CACS=Coronary Artery Calcium Score; CTCA=Computed Tomography Coronary Angiography; SPECT=Single-Positron Emission Tomography; PET=Positron Emission Tomography; CMR=Cardiac Magnetic Resonance; ICA= Invasive Coronary Angiography. [Simons et al. (2019]



MED.B.015 Respiratory system

(a) Applicants with significant impairment of pulmonary function shall be assessed as unfit. However, they may be assessed as fit once pulmonary function has recovered and is satisfactory.

(b) Applicants for a class 1 medical certificate shall undertake pulmonary functional tests at the initial examination and when clinically indicated.

(c) Applicants for a class 2 medical certificate shall undertake pulmonary morphological and functional tests when clinically or epidemiologically indicated.

(d) Applicants with an established history or clinical diagnosis of any of the following medical conditions shall undertake respiratory evaluation with a satisfactory result before they may be assessed as fit:

(1) asthma requiring medication;

(2) active inflammatory disease of the respiratory system;

(3) active sarcoidosis;

(4) pneumothorax;

(5) sleep apnoea syndrome;

(6) major thoracic surgery;

(7) pneumonectomy;

(8) chronic obstructive pulmonary disease.

Before further consideration is given to their application, applicants with an established diagnosis of any of the medical conditions specified in points (3) and (5) shall undergo satisfactory cardiological evaluation.

(e) Aero-medical assessment

(1) Applicants for a class 1 medical certificate with any of the medical conditions specified in point (d) shall be referred to the medical assessor of the licensing authority.

(2) Applicants for a class 2 medical certificate with any of the medical conditions specified in point (d) shall be assessed in consultation with the medical assessor of the licensing authority.

(f) Applicants for a class 1 medical certificate who have undergone a pneumonectomy shall be assessed as unfit.

(g) For class 1 medical certificate holders involved in single-pilot HEMS operations, pulmonary functional tests and obstructive sleep apnoea (OSA) screening shall be completed at the first revalidation or renewal examination after the age of 60.

AMC1 MED.B.015 Respiratory system

(a) Examination

(1) Spirometry

A spirometric examination is required by point MED.B.015(b) for applicants for a class 1 medical certificate in specific situations. Applicants with an FEV1/FVC ratio of less than 70 % should be evaluated by a specialist in respiratory disease.

(2) Chest radiography

Posterior/anterior chest radiography may be required at initial, revalidation or renewal examinations if clinically or epidemiologically indicated.

(b) Chronic obstructive pulmonary disease

Applicants with chronic obstructive pulmonary disease should be assessed as unfit. Applicants with only minor impairment of pulmonary function may be assessed as fit.

(c) Asthma

Applicants with asthma requiring medication or experiencing recurrent attacks of asthma may be assessed as fit if the asthma is considered stable with satisfactory pulmonary functional tests and medication is compatible with flight safety. Applicants requiring systemic steroids should be assessed as unfit.

(d) Inflammatory disease

For applicants with active inflammatory disease of the respiratory system, a fit assessment may be considered when the condition has resolved without sequelae and no medication is required.

(e) Sarcoidosis

(1) Applicants with active sarcoidosis should be assessed as unfit. Investigation should be undertaken with respect to the possibility of systemic, particularly cardiac, involvement. A fit assessment may be considered if no medication is required, and the disease is investigated and shown to be limited to hilar lymphadenopathy and inactive.

(2) Applicants with cardiac or neurological sarcoid should be assessed as unfit.

(f) Pneumothorax

(1) Applicants with a spontaneous pneumothorax should be assessed as unfit. A fit assessment may be considered if respiratory evaluation is satisfactory:

(i) one year following full recovery from a single spontaneous pneumothorax;

(ii) at revalidation, six weeks following full recovery from a single spontaneous pneumothorax, with an OML for at least one year after full recovery;

(iii) following surgical intervention in the case of a recurrent pneumothorax provided there is satisfactory recovery.

(2) Applicants with a recurrent spontaneous pneumothorax that has not been surgically should be assessed as unfit.

(3) A fit assessment following full recovery from a traumatic pneumothorax as a result of an accident or injury may be acceptable once full absorption of the pneumothorax is demonstrated.

(g) Thoracic surgery

(1) Applicants requiring major thoracic surgery should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.

(2) A fit assessment following lesser chest surgery may be considered after satisfactory recovery and full respiratory evaluation.

(h) Sleep apnoea syndrome

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

Obstructive sleep apnoea (OSA) screening should include an anamnestic interview and assessment of OSA risk factors such as increased BMI, and a history of cardiovascular, cerebrovascular, metabolic and ENT pathology.

AMC2 MED.B.015 Respiratory system

(a) Examination

(1) A spirometric examination should be performed on clinical indication. Applicants with a forced expiratory volume in the first one second (FEV1)/forced vital capacity(FVC) ratio of less than 70 % should be evaluated by a specialist in respiratory disease.

(2) Posterior/anterior chest radiography may be required if clinically or epidemiologically indicated.

(b) Chronic obstructive pulmonary disease

Applicants with only minor impairment of pulmonary function may be assessed as fit.

(c) Asthma

Applicants with asthma may be assessed as fit if the asthma is considered stable with satisfactory pulmonary functional tests and medication is compatible with flight safety. Applicants requiring systemic steroids should be assessed as unfit.

(d) Inflammatory disease

Applicants with active inflammatory disease of the respiratory system should be assessed as unfit pending resolution of the condition.

(e) Sarcoidosis

(1) Applicants with active sarcoidosis should be assessed as unfit. Investigation should be undertaken with respect to the possibility of systemic involvement. A fit assessment may be considered once the disease is inactive.

(2) Applicants with cardiac sarcoid should be assessed as unfit.

(f) Pneumothorax

(1) Applicants with spontaneous pneumothorax should be assessed as unfit. A fit assessment may be considered if respiratory evaluation is satisfactory:

(i) six weeks following full recovery from a single spontaneous pneumothorax;

(ii) following surgical intervention in the case of a recurrent pneumothorax, provided there is satisfactory recovery.

(2) A fit assessment following full recovery from a traumatic pneumothorax as a result of an accident or injury may be acceptable once full absorption of the pneumothorax is demonstrated.

(g) Thoracic surgery

Applicants requiring major thoracic surgery should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.

(h) Sleep apnoea syndrome

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

GM1 MED.B.015 Respiratory system

SCREENING OF THE OBSTRUCTIVE SLEEP APNOEA (OSA) SYNDROME

(a) AMEs may consider the following algorithm when screening their applicants regarding the OSA syndrome:

Assessment of OSA risk may be considered at every medical examination of pilots through scores that combine history questions with physical findings such as the STOP-BANG score.

(b) AME guidance

Indicators to initiate OSA evaluation

— History interview including at least the following:

— daytime sleepiness (i.e. Epworth Sleepiness Scale)?

— snoring (what does the spouse/partner say?)

— psychosocial issues due to sleepiness, heavy snoring

— observable apnoea episodes

— Contributing factors:

— BMI >30

— previous bariatric history

— neck circumference: ≥ 40 cm

— diagnosed arterial hypertension

— heart troubles

— arrhythmia

- congestive heart failure
- CHD

— previous TIA, stroke

— diabetes Type 2

— ENT

— nasal obstruction

— orthodontic/retrognathia

— oropharyngeal examination –e.g. modified Mallampati Score or Friedman tongue position

Methodology (if indicated):

— nocturnal oximetry

— respiratory polygraphy

— polysomnography in certified sleep laboratories

— evaluation of vigilance:

- maintenance of wakefulness test (MWT)
- multiple sleep latency test (MSLT)

MED.B.020 Digestive system

(a) 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.

(b) Applicants who have herniae that might give rise to incapacitating symptoms shall be assessed as unfit.

(c) Applicants with any of the following disorders of the gastrointestinal system may be assessed as fit subject to satisfactory gastrointestinal evaluation after successful treatment or full recovery after surgery:

(1) recurrent dyspeptic disorder requiring medication;

(2) pancreatitis;

(3) symptomatic gallstones;

(4) an established history or clinical diagnosis of chronic inflammatory bowel disease;

(5) after surgical operation on the digestive tract or its adnexa, including surgery involving total or partial excision or a diversion of any of these organs.

(d) Aero-medical assessment

(1) Applicants for a class 1 medical certificate with the diagnosis of any of the medical conditions specified in points (2), (4) and (5) of point (c) shall be referred to the medical assessor of the licensing authority.

(2) The fitness of applicants for a class 2 medical certificate with the diagnosis of the medical condition specified in point (2) of point (c) shall be assessed in consultation with the medical assessor of the licensing authority.

AMC1 MED.B.020 Digestive system

(a) Oesophageal varices

Applicants with oesophageal varices should be assessed as unfit.

(b) Pancreatitis

Applicants with pancreatitis should be assessed as unfit pending assessment. A fit assessment may be considered if the cause is removed.

(c) Gallstones

(1) Applicants with a single asymptomatic large gallstone discovered incidentally may be assessed as fit if not likely to cause incapacitation in flight.

(2) Applicants with asymptomatic multiple gallstones may be assessed as fit with an OML.

(d) Inflammatory bowel disease

Applicants with an established history or clinical diagnosis of chronic inflammatory bowel disease should be assessed as fit if the inflammatory bowel disease is in established remission and stable and if systemic steroids are not required for its control.

(e) Peptic ulceration

Applicants with peptic ulceration should be assessed as unfit pending full recovery and demonstrated healing.

(f) Digestive tract and abdominal surgery

Applicants who have undergone a surgical operation for medical conditions of the digestive tract or its adnexa, including a total or partial excision or a diversion of any of these organs or herniae should be assessed as unfit. A fit assessment may be considered if recovery is complete, the applicant is asymptomatic, and there is only a minimal risk of secondary complication or recurrence.

(g) Liver disease

Applicants with morphological or functional liver disease, or after surgery, including liver transplantation, may be assessed as fit subject to satisfactory gastroenterological evaluation.

AMC2 MED.B.020 Digestive system

(a) Oesophageal varices

Applicants with oesophageal varices should be assessed as unfit.

(b) Pancreatitis

Applicants with pancreatitis should be assessed as unfit pending satisfactory recovery.

(c) Gallstones

(1) Applicants with a single asymptomatic large gallstone or asymptomatic multiple gallstones may be assessed as fit.

(2) Applicants with symptomatic single or multiple gallstones should be assessed as unfit. A fit assessment may be considered following gallstone removal.

(d) Inflammatory bowel disease

Applicants with an established history or clinical diagnosis of chronic inflammatory bowel disease may be assessed as fit provided that the disease is stable and not likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(e) Peptic ulceration

Applicants with peptic ulceration should be assessed as unfit pending full recovery.

(f) Digestive tract and abdominal surgery

Applicants who have undergone a surgical operation:

(1) for herniae; or

(2) on the digestive tract or its adnexa, including a total or partial excision or diversion of any of these organs,

should be assessed as unfit. A fit assessment may be considered if recovery is complete, the applicant is asymptomatic, and there is only a minimal risk of secondary complication or recurrence.

(g) Liver disease

Applicants with morphological or functional liver disease, or after surgery, including liver transplantation, may be assessed as fit subject to satisfactory gastroenterological evaluation.

MED.B.025 Metabolic and endocrine systems

(a) Applicants with metabolic, nutritional or endocrine dysfunction may be assessed as fit subject to demonstrated stability of the medical condition and satisfactory aero-medical evaluation.

(b) *Diabetes mellitus*

(1) Applicants with diabetes mellitus requiring insulin shall be assessed as unfit.

(2) Applicants with diabetes mellitus not requiring insulin shall be assessed as unfit unless it can be demonstrated that blood sugar control has been achieved and is stable.

(c) Aero-medical assessment

(1) Applicants for a class 1 medical certificate requiring medication other than insulin for blood sugar control shall be referred to the medical assessor of the licensing authority.

(2) The fitness of applicants for a class 2 medical certificate requiring medication other than insulin for blood sugar control shall be assessed in consultation with the medical assessor of the licensing authority.

AMC1 MED.B.025 Metabolic and endocrine systems

(a) Metabolic, nutritional or endocrine dysfunction

Applicants with metabolic, nutritional or endocrine dysfunction may be assessed as fit if the condition is asymptomatic, clinically compensated and stable with or without replacement therapy, and regularly reviewed by an appropriate specialist.

(b) Obesity

Applicants with a Body Mass Index ≥ 35 may be assessed as fit only if the excess weight is not likely to interfere with the safe exercise of the applicable licence(s) and the results of a risk assessment, including evaluation of the cardiovascular system and evaluation of the possibility of sleep apnoea, are satisfactory.

(c) Addison's disease

Applicants with Addison's disease should be assessed as unfit. A fit assessment with an OML may be considered, provided that cortisone is carried and available for use whilst exercising the privileges of the applicable licence(s).

(d) Gout

Applicants with acute gout should be assessed as unfit. A fit assessment may be considered once asymptomatic, after cessation of treatment or if the condition is stabilised on anti-hyperuricaemic therapy.

(e) Thyroid dysfunction

Applicants with hyperthyroidism or hypothyroidism should be assessed as unfit. A fit assessment may be considered when a stable euthyroid state is attained.

(f) Abnormal glucose metabolism

Glycosuria and abnormal blood glucose levels require investigation. A fit assessment may be considered if normal glucose tolerance is demonstrated (low renal threshold) or impaired glucose tolerance without diabetic pathology is fully controlled by diet and regularly reviewed.

(g) Diabetes mellitus

Subject to good control of blood sugar with no hypoglycaemic episodes:

(1) applicants with diabetes mellitus not requiring medication may be assessed as fit;

(2) the use of antidiabetic medications that are not likely to cause hypoglycaemia may be acceptable for a fit assessment with an OML.

AMC2 MED.B.025 Metabolic and endocrine systems

(a) Metabolic, nutritional or endocrine dysfunction

Applicants with metabolic, nutritional or endocrine dysfunction should be assessed as unfit. A fit assessment may be considered if the condition is asymptomatic, clinically compensated and stable.

(b) Obesity

Applicants with a Body Mass Index ≥ 35 may be assessed as fit only if the excess weight is not likely to interfere with the safe exercise of the applicable licence(s) and the results of a risk assessment, including evaluation of the cardiovascular system and evaluation of the possibility of sleep apnoea, are satisfactory.

(c) Addison's disease

Applicants with Addison's disease may be assessed as fit provided that cortisone is carried and available for use whilst exercising the privileges of the applicable licence(s).

(d) Gout

Applicants with acute gout should be assessed as unfit until asymptomatic.

(e) Thyroid dysfunction

Applicants with thyroid disease may be assessed as fit once a stable euthyroid state is attained.

(f) Abnormal glucose metabolism

Glycosuria and abnormal blood glucose levels require investigation. A fit assessment may be considered if normal glucose tolerance is demonstrated (low renal threshold) or impaired glucose tolerance is fully controlled by diet and regularly reviewed.

(g) Diabetes mellitus

Applicants with diabetes mellitus may be assessed as fit. The use of antidiabetic medications that are not likely to cause hypoglycaemia may be acceptable.

MED.B.030 Haematology

(a) Applicants for a class 1 medical certificate shall be subjected to a haemoglobin test at each aero-medical examination.

(b) Applicants with a haematological condition may be assessed as fit subject to satisfactory aero-medical evaluation.

(c) Applicants for a class 1 medical certificate with any of the following haematological conditions shall be referred to the medical assessor of the licensing authority:

(1) abnormal haemoglobin, including, but not limited to anaemia, erythrocytosis or haemoglobinopathy;

(2) significant lymphatic enlargement;

(3) enlargement of the spleen;

(4) coagulation, haemorrhagic or thrombotic disorder;

(5) leukaemia.

(d) The fitness of applicants for a class 2 medical certificate with any of the haematological conditions specified in points (4) and (5) of point (c) shall be assessed in consultation with the medical assessor of the licensing authority.

AMC1 MED.B.030 Haematology

(a) Abnormal haemoglobin

Applicants with abnormal haemoglobin should be investigated.

(b) Anaemia

(1) Applicants with anaemia demonstrated by a reduced haemoglobin level require investigation. Applicants with a haematocrit of less than 32 % should be assessed as unfit. A fit assessment may be considered if the primary cause, such as iron or B12 deficiency, has been treated and the haemoglobin or haematocrit has stabilised at a satisfactory level.

(2) Applicants with anaemia which is unamenable to treatment should be assessed as unfit.

(c) Erythrocytosis

Applicants with erythrocytosis should be assessed as unfit. A fit assessment with an OML may be considered if investigation establishes that the condition is stable and no associated pathology is demonstrated.

(d) Haemoglobinopathy

(1) Applicants with haemoglobinopathy should be assessed as unfit. A fit assessment may be considered if minor thalassaemia or other haemoglobinopathy is diagnosed without a history of crises and if full functional capability is demonstrated. The haemoglobin level should be satisfactory.

(2) Applicants with sickle cell disease (homozygote) should be assessed as unfit.

(e) Coagulation disorders

(1) Applicants with a coagulation disorder should be assessed as unfit. A fit assessment may be considered if there is no history of significant bleeding episodes.

(2) Applicants with thrombocytopenia with a platelet count less than 75x109/L should be assessed as unfit. A fit assessment may be considered once the platelet count is above $75x10^9$/L and stable.

(f) Haemorrhagic disorders

Applicants with a haemorrhagic disorder require investigation. A fit assessment with an OML may be considered if there is no history of significant bleeding.

(g) Thromboembolic disorders

(1) Applicants with a thrombotic disorder require investigation. A fit assessment may be considered when the applicant is asymptomatic and there is only minimal risk of secondary complication or recurrence.

(2) If anticoagulation is used as treatment, refer to point (g) of AMC1 MED.B.010.

(3) Applicants with arterial embolus should be assessed as unfit. A fit assessment may be considered once recovery is complete, the applicant is asymptomatic, and there is only minimal risk of secondary complication or recurrence.

(h) Disorders of the lymphatic system

Applicants with significant localised and generalised enlargement of the lymphatic glands or haematological disease should be assessed as unfit and require investigation. A fit assessment may be considered in cases of an acute infectious process which is fully recovered or Hodgkin's lymphoma or other lymphoid malignancy which has been treated and is in full remission.

(i) Leukaemia

(1) Applicants with acute leukaemia should be assessed as unfit. Once in established remission, applicants may be assessed as fit.

(2) Applicants with chronic leukaemia should be assessed as unfit. After a period of demonstrated stability a fit assessment may be considered.

(3) Applicants with a history of leukaemia should have no history of central nervous system involvement and no continuing side effects from treatment of flight safety importance. Haemoglobin and platelet levels should be satisfactory. Regular follow-up is required.

(j) Splenomegaly

Applicants with splenomegaly should be assessed as unfit and require investigation. A fit assessment may be considered when the enlargement is minimal, stable and no associated pathology is demonstrated, or if the enlargement is minimal and associated with another acceptable condition.

AMC2 MED.B.030 Haematology

(a) Abnormal haemoglobin

Haemoglobin should be tested when clinically indicated.

(b) Anaemia

Applicants with anaemia demonstrated by a reduced haemoglobin level or low haematocrit may be assessed as fit once the primary cause has been treated and the haemoglobin or haematocrit has stabilised at a satisfactory level.

(c) Erythrocytosis

Applicants with erythrocytosis may be assessed as fit if the condition is stable and no associated pathology is demonstrated.

(d) Haemoglobinopathy

Applicants with a haemoglobinopathy may be assessed as fit if minor thalassaemia or other haemoglobinopathy is diagnosed without a history of crises and if full functional capability is demonstrated.

(e) Coagulation and haemorrhagic disorders

Applicants with a coagulation or haemorrhagic disorder may be assessed as fit if there is no likelihood of significant bleeding.

(f) Thromboembolic disorders

Applicants with a thrombotic disorder may be assessed as fit if there is minimal likelihood of significant clotting episodes. If anticoagulation is used as treatment, refer to point (g) of AMC2 MED.B.010.

(g) Disorders of the lymphatic system

Applicants with significant enlargement of the lymphatic glands or haematological disease may be assessed as fit if the condition is unlikely to interfere with the safe exercise of the privileges of the applicable licence(s). Applicants may be assessed as fit in cases of acute infectious process which is fully recovered or Hodgkin's lymphoma or other lymphoid malignancy which has been treated and is in full remission.

(h) Leukaemia

(1) Applicants with acute leukaemia may be assessed as fit once in established remission.

(2) Applicants with chronic leukaemia may be assessed as fit after a period of demonstrated stability.

(3) For the applicants referred to in points (1) and (2), there should be no history of central nervous system involvement and no continuing side effects from treatment of flight safety importance. Haemoglobin and platelet levels should be satisfactory. Regular follow-up is required.

(i) Splenomegaly

Applicants with splenomegaly may be assessed as fit if the enlargement is minimal, stable and no associated pathology is demonstrated, or if the enlargement is minimal and associated with another acceptable condition.

MED.B.035 Genitourinary system

(a) Urinalysis shall form part of each aero-medical examination. Applicants shall be assessed as unfit if their urine contains abnormal elements considered to be of pathological significance that could entail a degree of functional incapacity which is likely to jeopardise the safe exercise of the privileges of the licence or could render the applicant likely to become suddenly unable to exercise those privileges.

(b) Applicants with any sequelae of disease or surgical procedures on the genitourinary system or its adnexa likely to cause incapacitation, in particular any obstruction due to stricture or compression, shall be assessed as unfit.

(c) Applicants with an established history or clinical diagnosis of the following may be assessed as fit subject to satisfactory genitourinary evaluation, as applicable:

(1) renal disease;

(2) one or more urinary calculi, or a medical history of renal colic.

(d) Applicants who have undergone a major surgical operation in the genitourinary system or its adnexa involving a total or partial excision or a diversion of their organs shall be assessed as unfit. However, after full recovery, they may be assessed as fit.

(e) The applicants for a class 1 medical certificate referred to in points (c) and (d) shall be referred to the medical assessor of the licensing authority.

AMC1 MED.B.035 Genitourinary system

(a) Abnormal urinalysis

Investigation is required if there is any abnormal finding on urinalysis.

(b) Renal disease

(1) Applicants presenting with any signs of renal disease should be assessed as unfit. A fit assessment may be considered if blood pressure is satisfactory and renal function is acceptable.

(2) Applicants requiring dialysis should be assessed as unfit.

(c) Urinary calculi

(1) Applicants with an asymptomatic calculus or a history of renal colic require investigation.

(2) Applicants presenting with one or more urinary calculi should be assessed as unfit and require investigation.

(3) Whilst awaiting assessment or treatment, a fit assessment with an OML may be considered.

(4) After successful treatment for a calculus, a fit assessment without an OML may be considered.

(5) Applicants with parenchymal residual calculi may be considered for a fit assessment with an OML.

(d) Renal and urological surgery

(1) Applicants who have undergone a major surgical operation on the genitourinary system or its adnexa involving a total or partial excision or a diversion of any of its organs, should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.

(2) After other urological surgery, a fit assessment may be considered when the applicant is completely asymptomatic and there is only minimal risk of secondary complication or recurrence.

(3) Applicants with compensated nephrectomy without hypertension or uraemia may be considered for a fit assessment.

(4) Applicants who have undergone renal transplantation may be considered for a fit assessment with an OML if it is fully compensated and tolerated with only minimal immuno-suppressive therapy after at least 12 months.

(5) Applicants who have undergone total cystectomy may be considered for a fit assessment with an OML if there is satisfactory urinary function, no infection and no recurrence of primary pathology.

AMC2 MED.B.035 Genitourinary system

(a) Renal disease

Applicants presenting with renal disease may be assessed as fit if blood pressure is satisfactory and renal function is acceptable. Applicants requiring dialysis should be assessed as unfit.

(b) Urinary calculi

(1) Applicants presenting with one or more urinary calculi should be assessed as unfit.

(2) Applicants with an asymptomatic calculus or a history of renal colic require investigation.

(3) While awaiting assessment or treatment, a fit assessment with an OSL may be considered.

(4) After successful treatment, the applicant may be assessed as fit.

(5) Applicants with parenchymal residual calculi may be assessed as fit.

(c) Renal and urological surgery

(1) Applicants who have undergone a major surgical operation on the genitourinary system or its adnexa involving a total or partial excision or a diversion of any of its organs, should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.

(2) After other urological surgery, a fit assessment may be considered when the applicant is completely asymptomatic and there is only minimal risk of secondary complication or recurrence.

(3) Applicants with compensated nephrectomy without hypertension or uraemia may be assessed as fit.

(4) Applicants who have undergone renal transplantation may be considered for a fit assessment if it is fully compensated and with only minimal immuno-suppressive therapy.

(5) Applicants who have undergone total cystectomy may be considered for a fit assessment if there is satisfactory urinary function, no infection and no recurrence of primary pathology.

MED.B.040 Infectious disease

(a) Applicants shall be assessed as unfit if they have an established history or clinical diagnosis of any infectious disease which is likely to jeopardise the safe exercise of the privileges of the licence.

(b) Applicants who are HIV positive may be assessed as fit subject to satisfactory aero-medical evaluation. Such applicants for a class 1 medical certificate shall be referred to the medical assessor of the licensing authority.

AMC1 MED.B.040 Infectious disease

(a) Infectious disease — General

In cases of infectious disease, consideration should be given to a history of, or clinical signs indicating, underlying impairment of the immune system.

(b) Tuberculosis

(1) Applicants with active tuberculosis should be assessed as unfit. A fit assessment may be considered following completion of therapy.

(2) Applicants with quiescent or healed lesions may be assessed as fit. Specialist evaluation should consider the extent of the disease, the treatment required and possible side effects of medication.

(c) Syphilis

Applicants with acute syphilis should be assessed as unfit. A fit assessment may be considered in the case of those fully treated and recovered from the primary and secondary stages.

(d) HIV positivity

(1) Applicants who are HIV positive may be assessed as fit with an OML if a full investigation provides no evidence of HIV-associated diseases that might give rise to incapacitating symptoms. Frequent review of the immunological status and neurological evaluation by an appropriate specialist should be carried out. A cardiological evaluation may also be required, depending on the medication.

(2) Applicants with signs or symptoms of an AIDS-defining condition should be assessed as unfit.

(e) Infectious hepatitis

Applicants with infectious hepatitis should be assessed as unfit. A fit assessment may be considered once the applicant has become asymptomatic. Regular review of the liver function should be carried out.

AMC2 MED.B.040 Infectious disease

(a) Tuberculosis

(1) Applicants with active tuberculosis should be assessed as unfit. A fit assessment may be considered following completion of therapy.

(2) Applicants with quiescent or healed lesions may be assessed as fit. Specialist evaluation should consider the extent of the disease, the treatment required and possible side effects of medication.

(b) HIV positivity

(1) Applicants who are HIV positive may be assessed as fit if a full investigation provides no evidence of HIV-associated diseases that might give rise to incapacitating symptoms. Frequent review of the immunological status and neurological evaluation by an appropriate specialist should be carried out. A cardiological evaluation may be required, depending on the medication.

(2) Applicants with signs or symptoms of an AIDS-defining condition should be assessed as unfit.

MED.B.045 Obstetrics and gynaecology

(a) Applicants who have undergone a major gynaecological operation shall be assessed as unfit. However, they may be assessed as fit after full recovery.

(b) *Pregnancy*

(1) In the event of pregnancy, an applicant may continue to exercise her privileges until the end of the 26th week of gestation only if the AeMC or AME considers that she is fit to do so.

(2) For holders of a class 1 medical certificate who are pregnant, an OML shall apply. Notwithstanding point MED.B.001, in that case, the OML may be imposed and removed by the AeMC or AME.

(3) An applicant may resume exercising her privileges after recovery following the end of the pregnancy.

AMC1 MED.B.045 Obstetrics and gynaecology

(a) Gynaecological surgery

Applicants who have undergone a major gynaecological operation should be assessed as unfit. A fit assessment may be considered if recovery is complete, the applicant is asymptomatic, and the risk of secondary complication or recurrence is minimal.

(b) Pregnancy

(1) A pregnant licence holder may be assessed as fit with an OML during the first 26 weeks of gestation following review of the obstetric evaluation by the AeMC or AME who should inform the medical assessor of the licensing authority.

(2) The AeMC or AME should provide written advice to the applicant and the supervising physician regarding potentially significant complications of pregnancy.

AMC2 MED.B.045 Obstetrics and gynaecology

(a) Gynaecological surgery

Applicants who have undergone a major gynaecological operation should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication or recurrence is minimal.

(b) Pregnancy

(1) A pregnant licence holder may be assessed as fit during the first 26 weeks of gestation following satisfactory obstetric evaluation.

(2) Licence privileges may be resumed upon satisfactory confirmation of full recovery following confinement or termination of pregnancy.

MED.B.050 Musculoskeletal system

(a) Applicants who do not have sufficient sitting height, arm and leg length and muscular strength for the safe exercise of the privileges of the licence shall be assessed as unfit. However, if their sitting height, arm and leg length and muscular strength is sufficient for the safe exercise of the privileges in respect of a certain aircraft type, which can be demonstrated if necessary through a medical flight or a simulator flight test, the applicant may be assessed as fit and their privileges shall be limited accordingly.

(b) Applicants who do not have satisfactory functional use of the musculoskeletal system to enable them to safely exercise the privileges of the licence shall be assessed as unfit. However, if their functional use of the musculoskeletal system is satisfactory for the safe exercise the privileges in respect of a certain aircraft type, which may be demonstrated if necessary through a medical flight or a simulator flight test, the applicant may be assessed as fit and their privileges shall be limited accordingly.

(c) In the event of doubt arising in the context of the assessments referred to in points (a) and (b), applicants for a class 1 medical certificate shall be referred to the medical assessor of the licensing authority and applicants for a class 2 medical certificate shall be assessed in consultation with the medical assessor of the licensing authority.

AMC1 MED.B.050 Musculoskeletal system

(a) Applicants with any significant sequelae from disease, injury or congenital abnormality affecting the bones, joints, muscles or tendons with or without surgery require full evaluation prior to a fit assessment.

(b) Applicants with inflammatory, infiltrative, traumatic or degenerative disease of the musculoskeletal system may be assessed as fit, provided the condition is in remission or is stable and the applicant is taking no disqualifying medication and has satisfactorily completed a medical flight or simulator flight test. Appropriate limitation(s) apply.

(c) Applicants with abnormal musculoskeletal system, including obesity, undertaking medical fight or flight simulator testing should satisfactorily perform all tasks required for the type of flight intended, including the emergency and evacuation procedures.

AMC2 MED.B.050 Musculoskeletal system

(a) Applicants with any significant sequelae from disease, injury or congenital abnormality affecting the bones, joints, muscles or tendons with or without surgery should require full evaluation prior to a fit assessment.

(b) Applicants with inflammatory, infiltrative, traumatic or degenerative disease of the musculoskeletal system may be assessed as fit provided the condition is in remission or is stable and the applicant is taking no disqualifying medication and has satisfactorily completed a medical flight test. Appropriate limitation(s) may apply.

(c) Applicants with abnormal musculoskeletal system, including obesity, undertaking a medical flight test should satisfactorily perform all tasks required for the type of flight intended, including the emergency and evacuation procedures.

MED.B.055 Mental health

(a) Comprehensive mental health assessment shall form part of the initial class 1 aero-medical examination.

(b) Drugs and alcohol screening shall form part of the initial class 1 and class 2 aero-medical examinations.

(c) Applicants with a mental or behavioural disorder due to use or misuse of alcohol or other psychoactive substances shall be assessed as unfit pending recovery and freedom from psychoactive substance use or misuse and subject to satisfactory psychiatric evaluation after successful treatment.

(d) Applicants with an established history or clinical diagnosis of any of the following psychiatric conditions shall undergo satisfactory psychiatric evaluation before they may be assessed as fit:

(1) mood disorder;

(2) neurotic disorder;

(3) personality disorder;

(4) mental or behavioural disorder;

(5) misuse of a psychoactive substance.

(e) Applicants with a documented medical history of a single or repeated acts of deliberate self-harm or suicide attempt shall be assessed as unfit. However, they may be assessed as fit after satisfactory psychiatric evaluation.

(f) Aero-medical assessment

(1) Applicants for a class 1 medical certificate with any of the conditions specified in points (c), (d) or (e) shall be referred to the medical assessor of the licensing authority.

(2) The fitness of applicants for a class 2 medical certificate with any of the conditions specified in points (c), (d) or (e) shall be assessed in consultation with the medical assessor of the licensing authority.

(g) Applicants with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder shall be assessed as unfit.

AMC1 MED.B.055 Mental health

(a) Mental health assessment as part of the initial class 1 aero-medical examination

(1) A comprehensive mental health assessment should be conducted and recorded taking into account social, environmental and cultural contexts.

(2) The applicant's history and symptoms of disorders that might pose a threat to flight safety should be identified and recorded.

(3) The mental health assessment should include assessment and documentation of:

(i) general attitudes to mental health, including understanding possible indications of reduced mental health in themselves and others;

(ii) coping strategies under periods of psychological stress or pressure in the past, including seeking advice from others;

(iii) childhood behavioural problems;

(iv) interpersonal and relationship issues;

(v) current work and life stressors; and

(vi) overt personality disorders.

(4) If there are signs or is established evidence that an applicant may have a psychiatric or psychological disorder, the applicant should be referred for specialist opinion and advice.

(b) Mental health assessment as part of revalidation or renewal class 1 medical examination

(1) The assessment should include review and documentation of:

(i) current work and life stressors;

(ii) coping strategies under periods of psychological stress or pressure in the past, including seeking advice from others;

(iii) any difficulties with operational crew resource management (CRM);

(iv) any difficulties with employer and/or other colleagues and managers; and

(v) interpersonal and relationship issues, including difficulties with relatives, friends, and work colleagues.

(2) If there are signs or is established evidence that an applicant may have a psychiatric or psychological disorder, the applicant should be referred for specialist opinion and advice.

(3) Established evidence should be verifiable information from an identifiable source related to the mental fitness or personality of a particular individual. Sources for this information

can be accidents or incidents, problems in training or proficiency checks, behaviour or knowledge relevant to the safe exercise of the privileges of the applicable licence(s).

(c) Assessment of holders of a class 1 medical certificate referenced in point MED.B.055(d)

The assessment of holders of a class 1 medical certificate referenced in point MED.B.055(d) may require psychiatric and psychological evaluation as determined by the medical assessor of the licensing authority. A SEM limitation should be imposed in the event of a fit assessment. Follow-up and removal of SEM limitation, as necessary, should be determined by the medical assessor of the licensing authority.

(d) Psychoactive substance testing

(1) Drug tests should screen for opioids, cannabinoids, amphetamines, cocaine, hallucinogens and sedative hypnotics. Following a risk assessment performed by the competent authority on the target population, screening tests may include additional drugs.

(2) For renewal/revalidation, random psychoactive substance screening test may be performed based on the risk assessment by the competent authority on the target population. If random psychoactive substance screening test is considered, it should be performed and reported in accordance with the procedures developed by the competent authority.

(3) In the case of a positive psychoactive substance screening result, confirmation should be required in accordance with national standards and procedures for psychoactive substance testing.

(4) In the case of a positive confirmation test, a psychiatric evaluation should be undertaken before a fit assessment may be considered by the medical assessor of the licensing authority.

(e) Assessment and referral decisions

(1) Psychotic disorder

Applicants with a history, or the occurrence, of a functional psychotic disorder should be assessed as unfit. A fit assessment may be considered if a cause can be unequivocally identified as one which is transient, has ceased and the risk of recurrence is minimal.

(2) Organic mental disorder

Applicants with an organic mental disorder should be assessed as unfit. Once the cause has been treated, an applicant may be assessed as fit following satisfactory psychiatric evaluation.

(3) Psychoactive medication

Applicants who use psychoactive medication likely to affect flight safety should be assessed as unfit. If stability on maintenance psychoactive medication is confirmed, a fit assessment with an OML may be considered. If the dosage or type of medication is changed, a further period of unfit assessment should be required until stability is confirmed.

(4) Schizophrenia, schizotypal or delusional disorder

Applicants with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder may only be considered for a fit assessment if the medical assessor of the licensing authority concludes that the original diagnosis was inappropriate or inaccurate as confirmed by psychiatric evaluation, or, in the case of a single episode of delirium of which the cause was clear, provided that the applicant has suffered no permanent mental impairment.

(5) Mood disorder

Applicants with an established mood disorder should be assessed as unfit. After full recovery and after full consideration of the individual case, a fit assessment may be considered, depending on the characteristics and severity of the mood disorder.

(6) Neurotic, stress-related or somatoform disorder

If there are signs or is established evidence that an applicant may have a neurotic, stress-related or somatoform disorder, the applicant should be referred for psychiatric or psychological opinion and advice.

(7) Personality or behavioural disorders

If there are signs or is established evidence that an applicant may have a personality or behavioural disorder, the applicant should be referred for psychiatric or psychological opinion and advice.

(8) Disorders due to alcohol or other psychoactive substance(s) use or misuse

(i) Applicants with mental or behavioural disorders due to alcohol or other psychoactive substance(s) use or misuse, with or without dependency, should be assessed as unfit.

(ii) A fit assessment may be considered after a period of two years of documented sobriety or freedom from psychoactive substance use or misuse. At revalidation or renewal, a fit assessment may be considered earlier with an OML. Depending on the individual case, treatment and evaluation may include in-patient treatment of some weeks and inclusion into a support programme followed by ongoing checks, including drug and alcohol testing and reports resulting from the support programme, which may be required indefinitely.

(9) Deliberate self-harm and suicide attempt

Applicants who have carried out a single self-destructive action or repeated acts of deliberate self-harm or suicide attempt should be assessed as unfit. A fit assessment may be considered after full consideration of an individual case and may require psychiatric or psychological evaluation. Neuropsychological evaluation may also be required.

(10) Cognitive disorders

(i) Applicants who exhibit signs of cognitive disorders should undergo a satisfactory neuropsychiatric evaluation to assess the severity of the cognitive impairment before a fit assessment may be considered. Applicants with mild cognitive

impairment may be assessed as fit with an OML limitation and regular monitoring of the cognitive decline.

(ii) For applicants above the age of 60 performing single-pilot HEMS operations, AMEs should pay particular attention to early signs of cognitive decline. A comprehensive specialist evaluation should be considered if the medical assessors received information from the personnel performing regular training and checking of these applicants in accordance with point ORO.FC.230 of Regulation (EU) No 965/2012 or AMEs performing the recurrent aero-medical examination documenting a potential cognitive decline of such pilots.

(11) Assessment

The assessment should take into consideration whether the indication for the treatment, side effects and addiction risks of such treatment and the characteristics of the psychiatric disorder are compatible with flight safety.

(f) Specialist opinion and advice

(1) In case a specialist evaluation is needed, following the evaluation, the specialist should submit a written report to the AME, AeMC or medical assessor of the licensing authority as appropriate, detailing their opinion and recommendation.

(2) Psychiatric evaluations should be conducted by a qualified psychiatrist having adequate knowledge and experience in aviation medicine.

(3) The psychological opinion and advice should be based on a clinical psychological assessment conducted by a suitably qualified and accredited clinical psychologist with expertise and experience in aviation psychology.

(4) The psychological evaluation may include a collection of biographical data, the administration of aptitude as well as personality tests and clinical interview.

AMC2 MED.B.055 Mental health

(a) Mental health assessment as part of class 2 aero-medical examination

(1) A mental health assessment should be conducted and recorded taking into account social, environmental and cultural contexts.

(2) The applicant's history and symptoms of disorders that might pose a threat to flight safety should be identified and recorded.

(3) If there are signs or is established evidence that an applicant may have a psychiatric or psychological disorder, the applicant should be referred for specialist opinion and advice.

(4) Established evidence should be verifiable information from an identifiable source related to the mental fitness or personality of a particular individual. Sources for this information can be accidents or incidents, problems in training or proficiency checks, behaviour or knowledge relevant to the safe exercise of the privileges of the applicable licence(s).

(b) Assessment of holders of a class 2medical certificate referenced in point MED.B.055(d)

The assessment of holders of a class 2 medical certificate referenced in point MED.B.055(d) may require psychiatric and psychological evaluation as determined by the AME, AeMC or medical assessor of the licensing authority. Follow-up, as necessary, should be determined in consultation with the medical assessor of the licensing authority.

(c) Assessment and referral decisions

(1) Psychotic disorder

Applicants with a history, or the occurrence, of a functional psychotic disorder should be assessed as unfit. A fit assessment may be considered if a cause can be unequivocally identified as one which is transient, has ceased and the risk of recurrence is minimal.

(2) Organic mental disorder

Applicants with an organic mental disorder should be assessed as unfit. Once the cause has been treated, an applicant may be assessed as fit following satisfactory psychiatric evaluation.

(3) Schizophrenia, schizotypal or delusional disorder

Applicants with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder may only be considered for a fit assessment in consultation with the medical assessor of the licensing authority if the original diagnosis was inappropriate or inaccurate as confirmed by psychiatric evaluation, or, in the case of a single episode of delirium of which the cause was clear, provided that the applicant has suffered no permanent mental impairment.

(4) Mood disorder

Applicants with an established mood disorder should be assessed as unfit. After full recovery and after full consideration of the individual case, a fit assessment may be considered, depending on the characteristics and severity of the mood disorder.

(5) Neurotic, stress-related or somatoform disorder

If there are signs or is established evidence that an applicant may have a neurotic, stress-related or somatoform disorder, the applicant should be referred for psychiatric opinion and advice.

(6) Personality or behavioural disorders

If there are signs or is established evidence that an applicant may have a personality or behavioural disorder, the applicant should be referred for psychiatric opinion and advice.

(7) Psychoactive medication

Applicants who use psychoactive medication likely to affect flight safety should be assessed as unfit. If stability on maintenance psychoactive medication is confirmed, a fit assessment with an OSL or OPL may be considered. If the dosage or type of medication is changed, a further period of unfit assessment should be required until stability is confirmed.

(8) Disorders due to alcohol or other psychoactive substance(s) use or misuse

(i) Applicants with mental or behavioural disorders due to alcohol or other psychoactive substance(s) use or misuse, with or without dependency, should be assessed as unfit.

(ii) Drug and alcohol tests

(A) In the case of a positive drug or alcohol result, confirmation should be required in accordance with national procedures for drugs and alcohol testing.

(B) In the case of a positive confirmation test, a psychiatric evaluation should be undertaken before a fit assessment may be considered.

(iii) A fit assessment may be considered after a period of two years of documented sobriety or freedom from psychoactive substance use or misuse. At revalidation or renewal, a fit assessment may be considered earlier with an OSL or OPL. Depending on the individual case, treatment and evaluation may include in-patient treatment of some weeks and inclusion into a support programme followed by ongoing checks, including drug and alcohol testing and reports resulting from the support programme, which may be required indefinitely.

(9) Deliberate self-harm

Applicants who have carried out a single self-destructive action or repeated acts of deliberate self-harm or suicide attempt should be assessed as unfit. A fit assessment may be considered after full consideration of an individual case and may require psychiatric or psychological evaluation. Neuropsychological evaluation may also be required.

(e) Specialist opinion and advice

(1) In case a specialist evaluation is needed, following the evaluation, the specialist should submit a written report to the AME, AeMC or medical assessor of the licensing authority as appropriate, detailing their opinion and recommendation.

(2) Psychiatric evaluations should be conducted by a qualified psychiatrist having adequate knowledge and experience in aviation medicine.

(3) The psychological opinion and advice should be based on a clinical psychological assessment conducted by a suitably qualified and accredited clinical psychologist with expertise and experience in aviation psychology.

(4) The psychological evaluation may include a collection of biographical data, the administration of aptitude as well as personality tests and clinical interview.

GM1 MED.B.055 Mental health

(a) Symptoms of concern may include but are not limited to:

(1) use of alcohol or other psychoactive substances;

(2) loss of interest/energy;

(3) eating and weight changes;

(4) sleeping problems;

(5) low mood and, if present, any suicidal thoughts;

(6) family history of psychiatric disorders, particularly suicide;

(7) anger, agitation or high mood; and

(8) depersonalisation or loss of control.

(b) The following aspects should be taken into consideration when conducting the mental health examination:

(1) appearance;

(2) attitude;

(3) behaviour;

(4) mood;

(5) speech;

(6) thought process and content;

(7) perception;

(8) cognition;

(9) insight; and

(10) judgement.

GM2 MED.B.055 Mental health

(a) Drugs and alcohol screening tests used should:

(1) provide information regarding medium-term consumption;

(2) be accepted on national level by the competent authority based on the availability and suitability for the scope mentioned in point(1).

(b) Statistical data of the screening referred to mentioned in point (d)(1) of AMC1 MED.B.055 should be made available to the Agency on a yearly basis.

GM3 MED.B.055 Mental health

(a) The mental health assessment for class 2 applicants should include assessment and documentation of:

(1) general attitudes to mental health, including understanding possible indications of reduced mental health in themselves and others;

(2) coping strategies under periods of psychological stress or pressure in the past, including seeking advice from others;

(3) childhood behavioural problems;

(4) interpersonal and relationship issues, including difficulties with relatives, friends, and work colleagues;

(5) current work and life stressors, including difficulties with aviation operational environment; and

(6) overt personality disorders.

(b) In regard to symptoms of concern and aspects to be taken into consideration when conducting mental health examination for class 2 applicants, guidance presented in GM1 MED.B.055 should be used.

GM4 MED.B.055 Mental health

Drugs and alcohol screening tests used should:

(a) provide information regarding medium-term consumption;

(b) be accepted on national level by the competent authority based on the availability and suitability with the scope mentioned in GM2 MED.B.055(a).

MED.B.060 Neurology

(a) Applicants with an established history or clinical diagnosis of any of the following medical conditions shall be assessed as unfit:

(1) epilepsy, except in the cases referred to in points (1) and (2) of point (b);

(2) recurring episodes of disturbance of consciousness of uncertain cause.

(b) Applicants with an established history or clinical diagnosis of any of the following medical conditions shall undergo further evaluation before they may be assessed as fit:

(1) epilepsy without recurrence after age 5;

(2) epilepsy without recurrence and off all treatment for more than 10 years;

(3) epileptiform EEG abnormalities and focal slow waves;

(4) progressive or non-progressive disease of the nervous system;

(5) inflammatory disease of the central or peripheral nervous system;

(6) migraine;

(7) a single episode of disturbance of consciousness of uncertain cause;

(8) loss of consciousness after head injury;

(9) penetrating brain injury;

(10) spinal or peripheral nerve injury;

(11) disorders of the nervous system due to vascular deficiencies including haemorrhagic and ischaemic events.

Applicants for a class 1 medical certificate shall be referred to the medical assessor of the licensing authority. The fitness of applicants for a class 2 medical certificate shall be assessed in consultation with the medical assessor of the licensing authority.

AMC1 MED.B.060 Neurology

(a) Epilepsy

(1) Applicants with a diagnosis of epilepsy should be assessed as unfit unless there is unequivocal evidence of a syndrome of benign childhood epilepsy associated with a very low risk of recurrence, and unless the applicant has been free of recurrence and off treatment for more than 10 years. One or more convulsive episode after the age of 5 should lead to unfitness. In the case of an acute symptomatic seizure, which is considered to have a very low risk of recurrence, a fit assessment may be considered after neurological evaluation.

(2) Applicants may be assessed as fit with an OML if:

(i) there is a history of a single afebrile epileptiform seizure;

(ii) there has been no recurrence after at least 10 years off treatment;

(iii) there is no evidence of continuing predisposition to epilepsy.

(b) EEG

(1) Electroencephalography is required when indicated by the applicant's history or on clinical grounds.

(2) Applicants with epileptiform paroxysmal EEG abnormalities and focal slow waves should be assessed as unfit.

(c) Neurological disease

Applicants with any disease of the nervous system which is likely to cause a hazard to flight safety should be assessed as unfit. However, in certain cases, including cases of minor functional losses associated with stable disease, a fit assessment may be considered after full evaluation which should include a medical flight test which may be conducted in a flight simulation training device.

(d) Migraine

Applicants with an established diagnosis of migraine or other severe periodic headaches likely to cause a hazard to flight safety should be assessed as unfit. A fit assessment may be considered after full evaluation. The evaluation should take into account at least the following: auras, visual field loss, frequency, severity, therapy. Appropriate limitation(s) may apply.

(e) Episode of disturbance of consciousness

In the case of a single episode of disturbance of consciousness, which can be satisfactorily explained, a fit assessment may be considered, but applicants experiencing a recurrence should be assessed as unfit.

(f) Head injury

Applicants with a head injury which was severe enough to cause loss of consciousness or is associated with penetrating brain injury should be evaluated by a neurologist. A fit assessment may be considered if there has been a full recovery and the risk of epilepsy is sufficiently low.

(g) Spinal or peripheral nerve injury

Applicants with an established history or clinical diagnosis of spinal or peripheral nerve injury or a disorder of the nervous system due to a traumatic injury should be assessed as unfit. A fit assessment may be considered if neurological evaluation is satisfactory and the conditions of AMC1 MED.B.050 are satisfied.

(h) Vascular deficiencies

Applicants with a disorder of the nervous system due to vascular deficiencies including haemorrhagic and ischaemic events should be assessed as unfit. A fit assessment may be considered if neurological evaluation is satisfactory and the conditions of AMC1 MED.B.050 are satisfied. A cardiological evaluation and medical flight test should be undertaken for applicants with residual deficiencies.

AMC2 MED.B.060 Neurology

(a) Epilepsy

Applicants may be assessed as fit if:

(1) there is a history of a single afebrile epileptiform seizure, considered to have a very low risk of recurrence;

(2) there has been no recurrence after at least 10 years off treatment; and

(3) there is no evidence of continuing predisposition to epilepsy.

(b) Neurological disease

Applicants with any disease of the nervous system which is likely to cause a hazard to flight safety should be assessed as unfit. However, in certain cases, including cases of functional loss associated with stable disease, a fit assessment may be considered after full evaluation which should include a medical flight test which may be conducted in a flight simulation training device.

(c) Migraine

Applicants with an established diagnosis of migraine or other severe periodic headaches likely to cause a hazard to flight safety should be assessed as unfit. A fit assessment may be considered after full evaluation. The evaluation should take into account at least the following: auras, visual field loss, frequency, severity, and therapy. Appropriate limitation(s) may apply.

(d) Head injury

Applicants with a head injury which was severe enough to cause loss of consciousness or is associated with penetrating brain injury may be assessed as fit if there has been a full recovery and the risk of epilepsy is sufficiently low. An evaluation by a neurologist may be required depending on the staging of the original injury.

(e) Spinal or peripheral nerve injury

Applicants with an established history or clinical diagnosis of spinal or peripheral nerve injury or a disorder of the nervous system due to a traumatic injury should be assessed as unfit. A fit assessment may be considered if neurological evaluation is satisfactory and the conditions of AMC2 MED.B.050 are satisfied.

(f) Vascular deficiencies

Applicants with a disorder of the nervous system due to vascular deficiencies including haemorrhagic and ischaemic events should be assessed as unfit. A fit assessment may be considered if neurological evaluation is satisfactory and the conditions of AMC2 MED.B.050 are met. A cardiological evaluation and medical flight test should be undertaken for applicants with residual deficiencies.

MED.B.065 Visual system

(a) Examination

(1) For a class 1 medical certificate:

(i) a comprehensive eye examination shall form part of the initial examination and shall be undertaken when clinically indicated and periodically, depending on the refraction and the functional performance of the eye;

(ii) a routine eye examination shall form part of all revalidation and renewal examinations;

(iii) when holders are involved in single-pilot HEMS operations, a comprehensive eye examination shall be completed at the first revalidation or renewal examination after the age of 60 and every year thereafter.

(2) For a class 2 medical certificate:

(i) a routine eye examination shall form part of the initial and all revalidation and renewal examinations;

(ii) a comprehensive eye examination shall be undertaken when clinically indicated.

(b) Visual acuity

(1) For a class 1 medical certificate:

(i) Distant visual acuity, with or without correction, shall be 6/9 (0,7) or better in each eye separately and visual acuity with both eyes shall be 6/6 (1,0) or better.

(ii) At the initial examination, applicants with substandard vision in one eye shall be assessed as unfit.

(iii) At revalidation and renewal examinations, notwithstanding point (b)(1)(i), applicants with acquired substandard vision in one eye or acquired monocularity shall be referred to the medical assessor of the licensing authority and may be assessed as fit subject to a satisfactory ophthalmological evaluation.

(2) For a class 2 medical certificate:

(i) Distant visual acuity, with or without correction, shall be 6/12 (0,5) or better in each eye separately and visual acuity with both eyes shall be 6/9 (0,7) or better.

(ii) Notwithstanding point (b)(2)(i), applicants with substandard vision in one eye or monocularity may be assessed as fit, in consultation with the medical assessor of the licensing authority and subject to a satisfactory ophthalmological evaluation.

(3) Applicants shall be able to read an N5 chart or equivalent at 30-50 cm and an N14 chart or equivalent at 100 cm, if necessary with correction.

(c) Refractive error and anisometropia

(1) Applicants with refractive errors or anisometropia may be assessed as fit subject to satisfactory ophthalmological evaluation.

(2) Notwithstanding point (c)(1), applicants for a class 1 medical certificate with any of the following medical conditions shall be referred to the medical assessor of the licensing authority and may be assessed as fit subject to a satisfactory ophthalmological evaluation:

(i) myopia exceeding –6.0 dioptres;

(ii) astigmatism exceeding 2.0 dioptres;

(iii) anisometropia exceeding 2.0 dioptres.

(3) Notwithstanding point (c)(1), applicants for a class 1 medical certificate with hypermetropia exceeding +5.0 dioptres shall be referred to the medical assessor of the licensing authority and may be assessed as fit subject to a satisfactory ophthalmological evaluation, provided that there are adequate fusional reserves, normal intraocular pressures and anterior angles and no significant pathology has been demonstrated. Notwithstanding point (b)(1)(i), corrected visual acuity in each eye shall be 6/6 or better.

(4) Applicants with a clinical diagnosis of keratoconus may be assessed as fit subject to a satisfactory examination by an ophthalmologist. Such applicants for a class 1 medical certificate shall be referred to the medical assessor of the licensing authority.

(d) Binocular function

(1) Applicants for a class 1 medical certificate shall be assessed as unfit if they do not have normal binocular function and that medical condition is likely to jeopardise the safe exercise of the privileges of the licence, taking account of any appropriate corrective measures if relevant.

(2) Applicants with diplopia shall be assessed as unfit.

(e) Visual fields

Applicants for a class 1 medical certificate shall be assessed as unfit if they do not have normal fields of vision and that medical condition is likely to jeopardise the safe exercise of the privileges of the licence, taking account of any appropriate corrective measures if relevant.

(f) Eye surgery

Applicants who have undergone eye surgery shall be assessed as unfit. However, they may be assessed as fit after full recovery of their visual function and subject to satisfactory ophthalmological evaluation.

(g) Spectacles and contact lenses

(1) If satisfactory visual function is achieved only with the use of correction, the spectacles or contact lenses shall provide optimal visual function, be well tolerated and suitable for aviation purposes.

(2) No more than one pair of spectacles shall be used to meet the visual requirements when exercising the privileges of the applicable licence(s).

(3) For distant vision, spectacles or contact lenses shall be worn when exercising the privileges of the applicable licence(s).

(4) For near vision, a pair of spectacles shall be kept available when exercising the privileges of the applicable licence(s).

(5) A spare set of similarly correcting spectacles, for distant or near vision as applicable, shall be readily available for immediate use when exercising the privileges of the applicable licence(s).

(6) If contact lenses are worn when exercising the privileges of the applicable licence(s), they shall be for distant vision, monofocal, and non-tinted and well tolerated.

(7) Applicants with a large refractive error shall use contact lenses or high-index spectacle lenses.

(8) Orthokeratological lenses shall not be used.

AMC1 MED.B.065 Visual system

(a) Eye examination

(1) At each aero-medical examination, an assessment of the visual fitness should be undertaken and the eyes should be examined with regard to possible pathology.

(2) All abnormal and doubtful cases should be referred to an ophthalmologist. Conditions which necessitate ophthalmological examination include but are not limited to a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity and/or the occurrence of eye disease, eye injury, or eye surgery.

(3) If specialist ophthalmological examinations are required for any significant reason, this should be imposed as a limitation on the medical certificate.

(4) The possible cumulative effect of more than one eye condition should be evaluated by an ophthalmologist.

(5) In their examination AMEs should give proper consideration to the degenerative effects of ageing on the visual system.

(b) Comprehensive eye examination

A comprehensive eye examination by an eye specialist is required at the initial examination. All abnormal and doubtful cases should be referred to an ophthalmologist. The examination should include:

(1) history;

(2) visual acuities — near, intermediate and distant vision (uncorrected and with best optical correction if needed). If a degeneration of the visual acuity is observed, additional specialised examinations could be considered, subject to the suspected pathology;

(3) examination of the external eye, anatomy, media (slit lamp) and fundoscopy;

(4) ocular motility;

(5) binocular vision;

(6) visual fields;

(7) tonometry on clinical indication and for all cases if a comprehensive eye examination is required for applicants over the age of 45;

(8) objective refraction: hyperopic initial applicants with a hyperopia of more than +2 dioptres and under the age of 25 should undergo objective refraction in cycloplegia;

(9) assessment of mesopic contrast sensitivity; and

(10) colour vision.

(c) Routine eye examination

A routine eye examination may be performed by an AME and should include:

(1) history;

(2) visual acuities — near, intermediate and distant vision (uncorrected and with best optical correction if needed);

(3) examination of the external eye, anatomy, media and fundoscopy;

(4) contrast sensitivity assessment test for applicants above the age of 60; and

(5) further examination on clinical indication.

(d) Refractive error and anisometropia

(1) Applicants with the following conditions may be assessed as fit subject to satisfactory ophthalmological evaluation and provided that optimal correction has been considered and no significant pathology is demonstrated:

(i) hypermetropia not exceeding +5.0 dioptres;

(ii) myopia not exceeding –6.0 dioptres;

(iii) astigmatism not exceeding 2.0 dioptres;

(iv) anisometropia not exceeding 2.0 dioptres.

(2) Applicants should wear contact lenses if:

(i) hypermetropia exceeds +5.0 dioptres;

(ii) anisometropia exceeds 3.0 dioptres.

(3) An evaluation by an eye specialist should be undertaken every five years if:

(i) the refractive error is between –3.0 and –6.0 dioptres or +3 and +5 dioptres;

(ii) astigmatism or anisometropia is between 2.0 and 3.0 dioptres.

(4) An evaluation by an eye specialist should be undertaken every two years if:

(i) the refractive error is greater than –6.0 dioptres or +5.0 dioptres;

(ii) astigmatism or anisometropia exceeds 3.0 dioptres.

(e) Uncorrected visual acuity

No limits apply to uncorrected visual acuity.

(f) Visual acuity

(1) Reduced vision in one eye or monocularity: Applicants for revalidation or renewal with reduced central vision or acquired loss of vision in one eye may be assessed as fit with an OML if:

(i) the binocular visual field or, in the case of monocularity, the monocular visual field is acceptable;

(ii) in the case of monocularity, a period of adaptation time has passed from the known point of visual loss, during which the applicant should be assessed as unfit;

(iii) the unaffected eye achieves distant visual acuity of 6/6 (1,0) corrected or uncorrected;

(iv) the unaffected eye achieves intermediate visual acuity of N14 and N5 for near;

(v) the underlying pathology is acceptable according to ophthalmological assessment and there is no significant ocular pathology in the unaffected eye; and

(vi) a medical flight test is satisfactory.

(2) Visual fields

Applicants with a visual field defect, who do not have reduced central vision or acquired loss of vision in one eye, may be assessed as fit if the binocular visual field is normal.

(g) Keratoconus

Applicants with keratoconus may be assessed as fit if the visual requirements are met with the use of corrective lenses and periodic evaluation is undertaken by an ophthalmologist.

(h) Binocular function

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

(1) at 6 metres:

2.0 prism dioptres in hyperphoria,

10.0 prism dioptres in esophoria,

8.0 prism dioptres in exophoria, and

(2) at 33 centimetres:

1.0 prism dioptre in hyperphoria,

8.0 prism dioptres in esophoria, and

12.0 prism dioptres in exophoria,

should be assessed as unfit. A fit assessment may be considered if an orthoptic evaluation demonstrates that the fusional reserves are sufficient to prevent asthenopia and diplopia.

(i) Eye surgery

The assessment after eye surgery should include an ophthalmological examination.

(1) After refractive surgery, a fit assessment may be considered, provided that:

(i) stability of refraction of less than 0.75 dioptres variation diurnally has been achieved;

(ii) examination of the eye shows no post-operative complications;

(iii) glare sensitivity is within normal standards;

(iv) mesopic contrast sensitivity is not impaired;

(v) an evaluation is undertaken by an eye specialist.

(2) Following intraocular lens surgery, including cataract surgery, a fit assessment may be considered once recovery is complete and the visual requirements are met with or without correction. Intraocular lenses should be monofocal and should not impair colour vision and night vision.

(3) Retinal surgery entails unfitness. A fit assessment may be considered six months after surgery, or earlier if recovery is complete. A fit assessment may also be considered earlier after retinal laser therapy. Regular follow-up by an ophthalmologist should be carried out.

(4) Glaucoma surgery entails unfitness. A fit assessment may be considered six months after surgery or earlier if recovery is complete. Regular follow-up by an ophthalmologist should be carried out.

(j) Visual correction

Correcting lenses should permit the licence holder to meet the visual requirements at all distances.

AMC2 MED.B.065 Visual system

(a) Eye examination

(1) At each aero-medical revalidation examination, an assessment of the visual fitness of the applicant should be undertaken and the eyes should be examined with regard to possible pathology. Conditions which should undergo further ophthalmological examination include but are not limited to a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity and/or the occurrence of eye disease, eye injury, or eye surgery.

(2) At the initial assessment, the examination should include:

(i) history;

(ii) visual acuities — near, intermediate and distant vision (uncorrected and with best optical correction if needed);

(iii) examination of the external eye, anatomy, media and fundoscopy;

(iv) ocular motility;

(v) binocular vision;

(vi) visual fields;

(vii) colour vision;

(viii) further examination on clinical indication.

(3) At the initial assessment the applicant should submit a copy of the recent spectacle prescription if visual correction is required to meet the visual requirements.

(4) In their examination AMEs should give proper consideration to the degenerative effects of ageing on the visual system.

(b) Routine eye examination

A routine eye examination should include:

(1) history;

(2) visual acuities — near, intermediate and distant vision (uncorrected and with best optical correction if needed);

(3) examination of the external eye, anatomy, media and fundoscopy;

(4) contrast sensitivity assessment test for applicants above the age of 60; and

(5) further examination on clinical indication.

(c) Visual acuity

Reduced vision in one eye or monocularity: Applicants with reduced vision or loss of vision in one eye may be assessed as fit if:

(1) the binocular visual field or, in the case of monocularity, the monocular visual field is acceptable;

(2) in the case of monocularity, a period of adaptation time has passed from the known point of visual loss, during which the applicant should be assessed as unfit;

(3) the unaffected eye achieves distant visual acuity of 6/6 (1,0), corrected or uncorrected;

(4) the unaffected eye achieves intermediate visual acuity of N14 or equivalent and N5 or equivalent for near (Refer to GM1 MED.B.070);

(5) there is no significant ocular pathology in the unaffected eye; and

(6) a medical flight test is satisfactory.

(d) Binocular function

Reduced stereopsis, abnormal convergence not interfering with near vision and ocular misalignment if the fusional reserves are sufficient to prevent asthenopia and diplopia may be acceptable.

(e) Eye surgery

(1) The assessment after eye surgery should include an ophthalmological examination.

(2) After refractive surgery, a fit assessment may be considered provided that there is satisfactory stability of refraction, there are no post-operative complications and no increase in glare sensitivity.

(3) After cataract, retinal or glaucoma surgery, a fit assessment may be considered once recovery is complete and the visual requirements are met with or without correction.

(f) Visual correction

Correcting lenses should permit the licence holder to meet the visual requirements at all distances.

GM1 MED.B.065 Visual system

COMPARISON OF DIFFERENT READING CHARTS (APPROXIMATE FIGURES)

(a) Test distance: 40 cm

Decimal	Nieden	Jäger	Snellen	N	Parinaud
1,0	1	2	1,5	3	2
0,8	2	3	2	4	3
0,7	3	4	2,5		
0,6	4	5	3	5	4
0,5	5	5		6	5
0,4	7	9	4	8	6
0,35	8	10	4,5		8

0,32	9	12	5,5	10	10
0,3	9	12		12	
0,25	9	12		14	
0,2	10	14	7,5	16	14
0,16	11	14	12	20	

(b) Test distance: 80 cm

Decimal	Nieden	Jäger	Snellen	N	Parinaud
1,2	4	5	3	5	4
1,0	5	5		6	5
0,8	7	9	4	8	6
0,7	8	10	4,5		8
0,63	9	12	5,5	10	10
0,6	9	12		12	10
0,5	9	12		14	10
0,4	10	14	7,5	16	14
0,32	11	14	12	20	14

GM2 MED.B.065 Visual system

EYE SPECIALIST

The term ‘eye specialist’ refers to an ophthalmologist or a vision care specialist qualified in optometry and trained to recognise pathological conditions.

GM3 MED.B.065 Visual system

CONTRAST SENSITIVITY TESTING

Contrast sensitivity testing for screening purposes may be performed using Pelli-Robson Contrast Sensitivity Chart or Mars Contrast Sensitivity Tests. If screening tests are positive, applicants should be referred for comprehensive specialist evaluation.

MED.B.070 Colour vision

(a) Applicants shall be assessed as unfit if they cannot demonstrate their ability to readily perceive the colours that are necessary for the safe exercise of the privileges of the licence.

(b) *Examination and assessment*

(1) Applicants shall be subjected to the Ishihara test for the initial issue of a medical certificate. For class 1 medical certificate holders involved in single-pilot HEMS operations, a colour vision assessment shall be completed at the first revalidation or renewal examination after the age of 60 and every year thereafter. Applicants who pass that test may be assessed as fit.

(2) For a class 1 medical certificate:

(i) Applicants who do not pass the Ishihara test shall be referred to the medical assessor of the licensing authority and shall undergo further colour perception testing to establish whether they are colour safe.

(ii) Applicants shall be normal trichromats or shall be colour safe.

(iii) Applicants who fail further colour perception testing shall be assessed as unfit.

(3) For a class 2 medical certificate:

(i) Applicants who do not pass the Ishihara test shall undergo further colour perception testing to establish whether they are colour safe.

(ii) Applicants who do not have satisfactory perception of colours shall be limited to exercising the privileges of the applicable licence in daytime only.

AMC1 MED.B.070 Colour vision

(a) At revalidation and renewal examinations, colour vision should be tested on clinical indication.

(b) The Ishihara test (24-plate version) is considered passed if the first 15 plates, presented in a random order, are identified without error.

(c) Those failing the Ishihara test should be examined either by:

(1) anomaloscopy (Nagel or equivalent). This test is considered passed if the colour match is trichromatic and the matching range is 4 scale units or less, or if the anomalous quotient is acceptable; or by

(2) Colour Assessment and Diagnosis (CAD) test. This test is considered passed if the threshold is less than 6 standard normal (SN) units for deutan deficiency, or less than 12 SN units for protan deficiency. A threshold greater than 2 SN units for tritan deficiency indicates an acquired cause which should be investigated.

AMC2 MED.B.070 Colour vision

(a) Colour vision should be tested on clinical indication at revalidation and renewal examinations.

(b) The Ishihara test (24 plate version) is considered passed if the first 15 plates, presented in a random order, are identified without error.

(c) Those failing the Ishihara test should be examined either by:

(1) anomaloscopy (Nagel or equivalent). This test is considered passed if the colour match is trichromatic and the matching range is 4 scale units or less, or if the anomalous quotient is acceptable; or by

(2) Colour Assessment and Diagnosis (CAD) test. This test is considered passed if the threshold is less than 6 standard normal (SN) units for deutan deficiency, or less than 12 SN units for protan deficiency. A threshold greater than 2 SN units for tritan deficiency indicates an acquired cause which should be investigated.

MED.B.075 Otorhinolaryngology (ENT)

(a) Examination

(1) Applicants' hearing shall be tested at all examinations.

(i) For a class 1 medical certificate, and for a class 2 medical certificate when an instrument rating or a basic instrument rating is to be added to the licence, hearing shall be tested with pure-tone audiometry at the initial examination, then every five years until the licence holder reaches the age of 40, and then every two years until the licence holder reaches the age of 60 and every year thereafter.

(ii) When tested on a pure-tone audiometer, initial applicants shall not have a hearing loss 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, in either ear separately. Applicants for revalidation or renewal with greater hearing loss shall demonstrate satisfactory functional hearing ability.

(2) A comprehensive ear, nose and throat examination shall be undertaken for the initial issue of a class 1 medical certificate and periodically thereafter when clinically indicated.

(3) For class 1 medical certificate holders involved in single-pilot HEMS operations, a comprehensive ear, nose and throat examination shall be completed at the first revalidation or renewal examination after the age of 60.

(b) Applicants with any of the following medical conditions shall undergo further examination to establish that the medical condition does not interfere with the safe exercise of the privileges of the applicable licence(s):

(1) hypoacusis;

(2) an active pathological process of the internal or middle ear;

(3) unhealed perforation or dysfunction of the tympanic membrane(s);

(4) dysfunction of the Eustachian tube(s);

(5) disturbance of vestibular function;

(6) significant restriction of the nasal passages;

(7) sinus dysfunction;

(8) significant malformation or significant infection of the oral cavity or upper respiratory tract;

(9) significant disorder of speech or voice;

(10) any sequelae of surgery of the internal or middle ear.

(c) Aero-medical assessment

(1) Applicants for a class 1 medical certificate with any of the medical conditions specified in points (1), (4) and (5) of point (b) shall be referred to the medical assessor of the licensing authority.

(2) The fitness of applicants for a class 2 medical certificate with any of the medical conditions specified in point (4) and (5) of point (b) shall be assessed in consultation with the medical assessor of the licensing authority.

(3) The fitness of applicants for a class 2 medical certificate for an instrument rating or en route instrument rating to be added to the licence with the medical condition specified in point (1) of point (b) shall be assessed in consultation with the medical assessor of the licensing authority.

AMC1 MED.B.075 Otorhinolaryngology (ENT)

(a) Hearing

(1) Applicants should understand correctly conversational speech when tested with each ear at a distance of 2 metres from and with the applicant's back turned towards the AME.

(2) Applicants with hypoacusis may be assessed as fit if a speech discrimination test or functional flight deck hearing test demonstrates satisfactory hearing ability. A vestibular function test may be appropriate.

(3) If the hearing requirements can only be met with the use of hearing aids, the hearing aids should provide optimal hearing function, be well tolerated and suitable for aviation purposes.

(b) Comprehensive ENT examination

A comprehensive ENT examination should include:

(1) history;

(2) clinical examination including otoscopy, rhinoscopy, and examination of the mouth and throat;

(3) tympanometry or equivalent;

(4) clinical examination of the vestibular system.

(c) Ear conditions

(1) Applicants with an active pathological process of the internal or middle ear should be assessed as unfit. A fit assessment may be considered once the condition has stabilised or there has been a full recovery.

(2) Applicants with an unhealed perforation or dysfunction of the tympanic membranes should be assessed as unfit. An applicant with a single dry perforation of non-infectious origin and which does not interfere with the normal function of the ear may be considered for a fit assessment.

(d) Vestibular disturbance

Applicants with disturbance of vestibular function should be assessed as unfit. A fit assessment may be considered after full recovery. The presence of spontaneous or positional nystagmus requires complete vestibular evaluation by specialist. Applicants with significant abnormal

caloric or rotational vestibular responses should be assessed as unfit. Abnormal vestibular responses should be assessed in their clinical context.

(e) Sinus dysfunction

Applicants with any dysfunction of the sinuses should be assessed as unfit until there has been full recovery.

(f) Oral/upper respiratory tract infections

Applicants with a significant infection of the oral cavity or upper respiratory tract should be assessed as unfit. A fit assessment may be considered after full recovery.

(g) Speech disorder

Applicants with a significant disorder of speech or voice should be assessed as unfit.

(h) Air passage restrictions

Applicants with significant restriction of the nasal air passage on either side, or significant malformation of the oral cavity or upper respiratory tract may be assessed as fit if ENT evaluation is satisfactory.

(i) Eustachian tube(s)

Applicants with permanent dysfunction of the Eustachian tube(s) may be assessed as fit if ENT evaluation is satisfactory.

(j) Sequelae of surgery of the internal or middle ear

Applicants with sequelae of surgery of the internal or middle ear should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.

AMC2 MED.B.075 Otorhinolaryngology (ENT)

(a) Hearing

(1) Applicants should understand correctly conversational speech when tested with each ear at a distance of 2 metres from and with the applicant's back turned towards the AME.

(2) Applicants with hypoacusis may be assessed as fit if a speech discrimination test or functional cockpit hearing test demonstrates satisfactory hearing ability.

(3) If the hearing requirements can be met only with the use of hearing aids, the hearing aids should provide optimal hearing function, be well tolerated and suitable for aviation purposes.

(4) Applicants with profound deafness or major disorder of speech, or both, may be assessed as fit with an SSL, such as 'limited to areas and operations where the use of radio is not mandatory'. The aircraft should be equipped with appropriate alternative warning devices in lieu of sound warnings.

(b) Examination

An ENT examination should form part of all initial, revalidation and renewal examinations.

(c) Ear conditions

(1) Applicants with an active pathological process of the internal or middle ear should be assessed as unfit until the condition has stabilised or there has been a full recovery.

(2) Applicants with an unhealed perforation or dysfunction of the tympanic membranes should be assessed as unfit. An applicant with a single dry perforation of non-infectious origin which does not interfere with the normal function of the ear may be considered for a fit assessment.

(d) Vestibular disturbance

Applicants with disturbance of vestibular function should be assessed as unfit pending full recovery.

(e) Sinus dysfunction

Applicants with any dysfunction of the sinuses should be assessed as unfit pending full recovery.

(f) Oral/upper respiratory tract infections

Applicants with a significant infection of the oral cavity or upper respiratory tract should be assessed as unfit. A fit assessment may be considered after full recovery.

(g) Speech disorder

Applicants with a significant disorder of speech or voice should be assessed as unfit.

(h) Air passage restrictions

Applicants with significant restriction of the nasal air passage on either side, or significant malformation of the oral cavity or upper respiratory tract may be assessed as fit if ENT evaluation is satisfactory.

(i) Eustachian tube dysfunction

Applicants with permanent dysfunction of the Eustachian tube(s) may be assessed as fit if ENT evaluation is satisfactory.

(j) Sequelae of surgery of the internal or middle ear

Applicants with sequelae of surgery of the internal or middle ear should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.

GM1 MED.B.075 Otorhinolaryngology (ENT)

PURE TONE AUDIOGRAM

The pure tone audiogram may also cover the 4 000 Hz frequency for early detection of decrease in hearing.

GM2 MED.B.075 Otorhinolaryngology (ENT)

PURE TONE AUDIOGRAM

The pure tone audiogram should record the actual values found.

MED.B.080 Dermatology

Applicants shall be assessed as unfit if they have an established dermatological condition which is likely to jeopardise the safe exercise of the privileges of the licence.

AMC1 MED.B.080 Dermatology

(a) If doubt exists about the fitness of applicants with eczema (exogenous and endogenous), severe psoriasis, bacterial infections, drug-induced or bullous eruptions or urticaria, the AME should refer the case to the medical assessor of the licensing authority.

(b) Systemic effects of radiant or pharmacological treatment for a dermatological condition should be reviewed before a fit assessment may be considered.

(c) If a dermatological condition is associated with a systemic illness, full consideration should be given to the underlying illness before a fit assessment may be considered.

AMC2 MED.B.080 Dermatology

If a dermatological condition is associated with a systemic illness, full consideration should be given to the underlying illness before a fit assessment may be considered.

MED.B.085 Oncology

(a) Before further consideration is given to their application, applicants with primary or secondary malignant disease shall undergo satisfactory oncological evaluation. Such applicants for a class 1 medical certificate shall be referred to the medical assessor of the licensing authority. Such applicants for a class 2 medical certificate shall be assessed in consultation with the medical assessor of the licensing authority.

(b) Applicants with an established history or clinical diagnosis of an intracerebral malignant tumour shall be assessed as unfit.

AMC1 MED.B.085 Oncology

(a) Applicants who have been diagnosed with a malignant disease may be assessed as fit provided that:

(1) after primary treatment, there is no evidence of residual malignant disease likely to jeopardise flight safety;

(2) time appropriate to the type of tumour and primary treatment has elapsed;

(3) the risk of inflight incapacitation from a recurrence or metastasis is sufficiently low;

(4) there is no evidence of short- or long-term sequelae from treatment. Special attention should be paid to applicants who have received anthracycline chemotherapy;

(5) satisfactory oncology follow-up reports are provided to the medical assessor of the licensing authority.

(b) An OML should be applied as appropriate.

(c) Applicants receiving ongoing chemotherapy or radiation treatment should be assessed as unfit.

(d) Applicants with pre-malignant conditions of the skin may be assessed as fit if treated or excised as necessary and there is regular follow-up.

AMC2 MED.B.085 Oncology

(a) Applicants who have been diagnosed with a malignant disease may be considered for a fit assessment provided that:

(1) after primary treatment, there is no evidence of residual malignant disease likely to jeopardise flight safety;

(2) time appropriate to the type of tumour and primary treatment has elapsed;

(3) the risk of in-flight incapacitation from a recurrence or metastasis is sufficiently low;

(4) there is no evidence of short- or long-term sequelae from treatment that may jeopardise flight safety;

(5) arrangements for an oncological follow-up have been made for an appropriate period of time.

(b) Applicants receiving ongoing chemotherapy or radiation treatment should be assessed as unfit.

(c) Applicants with pre-malignant conditions of the skin may be assessed as fit if treated or excised as necessary and there is a regular follow-up.

SECTION 3 – SPECIFIC REQUIREMENTS FOR LAPL MEDICAL CERTIFICATES

MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

(a) An applicant for a LAPL medical certificate shall be assessed based on aero-medical best practice.

(b) Special attention shall be given to the applicant's complete medical history.

(c) The initial assessment, all subsequent re-assessments after the licence holder reaches the age of 50 and any assessments if the medical history of the applicant is not available to the examiner shall include at least all of the following:

(1) clinical examination;

(2) blood pressure;

(3) urine test;

(4) vision;

(5) hearing ability.

(d) After the initial assessment, subsequent re-assessments until the licence holder reaches the age of 50 shall include at least both of the following:

(1) an assessment of the LAPL holder's medical history;

(2) the items specified in point(c) as deemed necessary by the AeMC, AME or GMP in accordance with aero-medical best practice.

AMC1 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

When a specialist evaluation is required under this section, the aero-medical assessment of the applicant should be performed by an AeMC, an AME or, in the case of point (d) of AMC5 MED.B.095, by the medical assessor of the licensing authority.

AMC2 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

CARDIOVASCULAR SYSTEM

(a) Examination

Pulse and blood pressure should be recorded at each examination.

(b) General

(1) Cardiovascular risk factor assessment

An accumulation of risk factors (smoking, family history, lipid abnormalities, hypertension, etc.) requires cardiovascular evaluation.

(2) Aortic aneurysm

Applicants with an aortic aneurysm may be assessed as fit subject to satisfactory cardiological evaluation and a regular follow-up.

(3) Cardiac valvular abnormalities

(i) Applicants with a cardiac murmur may be assessed as fit if the murmur is assessed as being of no pathological significance.

(ii) Applicants with a cardiac valvular abnormality may be assessed as fit subject to satisfactory cardiological evaluation.

(4) Valvular surgery

After cardiac valve replacement or repair, a fit assessment may be considered, with an ORL if anticoagulation is needed, subject to satisfactory post-operative cardiological evaluation. Anticoagulation should be stable and the haemorrhagic risk should be acceptable. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range. The INR target range should be determined by the type of surgery performed. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence if the INR is within the target range, may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of three months.

(5) Other cardiac disorders

(i) Applicants with other cardiac disorders may be assessed as fit subject to satisfactory cardiological evaluation. A fit assessment may be considered, with an ORL if anticoagulation is needed. Anticoagulation should be stable and the haemorrhagic risk should be acceptable. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range. The INR target range should be determined by the type of surgery performed. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence if the INR is within the target range, may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of three months.

(ii) Applicants with symptomatic hypertrophic cardiomyopathy should be assessed as unfit.

(c) Blood pressure

(1) When the blood pressure consistently exceeds 160 mmHg systolic and/or 95 mmHg diastolic, with or without treatment, the applicant should be assessed as unfit.

(2) Applicants initiating medication for the control of blood pressure should be assessed as unfit until the absence of significant side effects has been established.

(d) Coronary artery disease

(1) Applicants with suspected myocardial ischaemia should undergo a cardiological evaluation before a fit assessment may be considered.

(2) Applicants with angina pectoris requiring medication for cardiac symptoms should be assessed as unfit.

(3) After an ischaemic cardiac event, including myocardial infarction or revascularisation, applicants without symptoms should have reduced cardiovascular risk factors to an appropriate level. Medication, when used to control cardiac symptoms, is not acceptable. All applicants should be on appropriate secondary prevention treatment.

(4) In cases (d)(1), (d)(2) and (d)(3), applicants who have had a satisfactory cardiological evaluation to include an exercise test or equivalent that is negative for ischaemia may be assessed as fit.

(e) Rhythm and conduction disturbances

(1) Applicants with a significant disturbance of cardiac rhythm or conduction should be assessed as unfit unless a cardiological evaluation concludes that the disturbance is not likely to interfere with the safe exercise of the privileges of the licence. A fit assessment may be considered, with an ORL if anticoagulation is needed. Anticoagulation should be stable and the haemorrhagic risk should be acceptable. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range. The INR target range should be determined by the type of surgery performed. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence if the INR is within the target range, may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of three months.

(2) Pre-excitation

Applicants with ventricular pre-excitation may be assessed as fit subject to satisfactory cardiological evaluation. Applicants with ventricular pre-excitation associated with a significant arrhythmia should be assessed as unfit.

(3) Automatic implantable defibrillating system

Applicants with an automatic implantable defibrillating system should be assessed as unfit.

(4) Pacemaker

A fit assessment may be considered subject to satisfactory cardiological evaluation.

AMC3 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

RESPIRATORY SYSTEM

(a) Applicants should undergo pulmonary morphological or functional tests when clinically indicated.

(b) Asthma and chronic obstructive pulmonary disease

Applicants with asthma or impairment of pulmonary function may be assessed as fit provided that the condition is considered stable with satisfactory pulmonary function and medication is compatible with flight safety. Systemic steroids may be acceptable provided that the dosage required is acceptable and there are no adverse side effects.

(c) Sarcoidosis

(1) Applicants with active sarcoidosis should be assessed as unfit. Investigation should be undertaken with respect to the possibility of systemic involvement. A fit assessment may be considered once the disease is inactive.

(2) Applicants with cardiac sarcoidosis should be assessed as unfit.

(d) Pneumothorax

(1) Applicants with spontaneous pneumothorax may be assessed as fit subject to satisfactory respiratory evaluation following recovery from a single spontaneous pneumothorax or following recovery from surgical intervention for a recurrent pneumothorax.

(2) Applicants with traumatic pneumothorax may be assessed as fit following recovery.

(e) Thoracic surgery

Applicants who have undergone thoracic surgery may be assessed as fit following recovery.

(f) Sleep apnoea syndrome/sleep disorder

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

AMC4 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

DIGESTIVE SYSTEM

(a) Gallstones

Applicants with symptomatic gallstones should be assessed as unfit. A fit assessment may be considered following gallstone removal.

(b) Inflammatory bowel disease

Applicants with an established history or clinical diagnosis of chronic inflammatory bowel disease may be assessed as fit provided that the disease is stable and not likely to interfere with the safe exercise of the privileges of the licence.

(c) Peptic ulceration

Applicants with peptic ulceration may be assessed as fit subject to satisfactory gastroenterological evaluation.

(d) Digestive tract and abdominal surgery

Applicants who have undergone a surgical operation:

(1) for herniae; or

(2) on the digestive tract or its adnexa, including a total or partial excision or diversion of any of these organs,

should be assessed as unfit. A fit assessment may be considered if recovery is complete, the applicant is asymptomatic, and there is only a minimal risk of secondary complication or recurrence.

(e) Pancreatitis

Applicants with pancreatitis may be assessed as fit after satisfactory recovery.

(f) Liver disease

Applicants with morphological or functional liver disease or after surgery, including liver transplantation, may be assessed as fit subject to satisfactory gastroenterological evaluation.

AMC5 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

METABOLIC AND ENDOCRINE SYSTEMS

(a) Metabolic, nutritional or endocrine dysfunction

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

(b) Obesity

Obese applicants may be assessed as fit if the excess weight is not likely to interfere with the safe exercise of the licence.

(c) Thyroid dysfunction

Applicants with thyroid disease may be assessed as fit once a stable euthyroid state is attained.

(d) Diabetes mellitus

(1) Applicants using antidiabetic medications that are not likely to cause hypoglycaemia may be assessed as fit.

(2) Applicants with diabetes mellitus Type 1 should be assessed as unfit.

(3) Applicants with diabetes mellitus Type 2 treated with insulin may be assessed as fit with limitations for revalidation if blood sugar control has been achieved and the process under (e) and (f) is followed. An ORL is required. A TML for 12 months may be needed to ensure compliance with the follow-up requirements below. Licence privileges should not include rotary aircraft flying.

(e) Aero-medical assessment by, or under the guidance of, the medical assessor of the licensing authority:

(1) A diabetology review at yearly intervals, including:

(i) symptom review;

(ii) review of data logging of blood sugar;

(iii) cardiovascular status. Exercise ECG at age 40, at five-yearly intervals thereafter and on clinical indication, including an accumulation of risk factors;

(iv) nephropathy status.

(2) Ophthalmological review at yearly intervals, including:

(i) visual fields — Humphrey-perimeter;

(ii) retinae — full dilatation slit lamp examination;

(iii) cataract — clinical screening.

The development of retinopathy requires a full ophthalmological review.

(3) Blood testing at six-monthly intervals:

(i) HbA1c;

(ii) renal profile;

(iii) liver profile;

(iv) lipid profile.

(4) Applicants should be assessed as temporarily unfit after:

(i) changes of medication/insulin leading to a change to the testing regime until stable blood sugar control can be demonstrated;

(ii) a single unexplained episode of severe hypoglycaemia until stable blood sugar control can be demonstrated.

(5) Applicants should be assessed as unfit in the following cases:

(i) loss of hypoglycaemic awareness;

(ii) development of retinopathy with any visual field loss;

(iii) significant nephropathy;

(iv) any other complication of the disease if flight safety may be jeopardised.

(f) Pilot responsibility

Blood sugar testing is carried out during both non-operational and operational periods. A whole blood glucose measuring device with memory should be carried and used. Equipment for continuous glucose monitoring (CGMS) should not be used. Pilots should prove to the AeMC or AME or medical assessor of the licensing authority that testing has been performed as indicated below and with which results.

(1) Testing during non-operational periods: normally 3–4 times/day or as recommended by the treating physician, and on any awareness of hypoglycaemia.

(2) Testing frequency during operational periods:

(i) 120 minutes before departure;

(ii) <30 minutes before departure;

(iii) 60 minutes during flight;

(iv) 30 minutes before landing.

(3) Actions following glucose testing:

(i) 120 minutes before departure: if the test result is >15 mmol/l, piloting should not be commenced.

(ii) 10–15g of carbohydrate should be ingested and a re-test performed within 30 minutes if:

(A) any test result is <4,5 mmol/l;

(B) the pre-landing test measurement is missed or a subsequent go-around/diversion is performed.

AMC6 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

HAEMATOLOGY

Applicants with a haematological condition, such as:

(a) abnormal haemoglobin including, but not limited to, anaemia, erythrocytosis or haemoglobinopathy;

(b) coagulation, haemorrhagic or thrombotic disorder;

(c) significant lymphatic enlargement;

(d) acute or chronic leukaemia;

(e) splenomegaly,

may be assessed as fit subject to satisfactory aero-medical evaluation. If anticoagulation is being used as treatment, refer to point (b)(4) of AMC2 MED.B.095.

AMC7 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

GENITOURINARY SYSTEM

(a) Applicants with a genitourinary disorder, such as:

(1) renal disease; or

(2) one or more urinary calculi, or a history of renal colic,

may be assessed as fit subject to satisfactory renal and urological evaluation, as applicable.

(b) Applicants who have undergone a major surgical operation on the genitourinary system or its adnexa may be assessed as fit following recovery.

(c) Applicants who have undergone renal transplantation may be assessed as fit subject to satisfactory renal evaluation.

AMC8 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

INFECTIOUS DISEASE

(a) Applicants who are HIV positive may be assessed as fit subject to satisfactory aero-medical evaluation.

(b) Applicants with other chronic infections may be assessed as fit provided the infections are not likely to interfere with the safe exercise of the privileges of the licence.

AMC9 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

OBSTETRICS AND GYNAECOLOGY

(a) Pregnancy

Holders of a LAPL medical certificate should only exercise the privileges of their licences until the end of the 26th week of gestation under routine antenatal care.

(b) Applicants who have undergone a major gynaecological operation may be assessed as fit after recovery.

AMC10 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

MUSCULOSKELETAL SYSTEM

Applicants should have satisfactory functional use of the musculoskeletal system to enable the safe exercise of the privileges of the licence.

AMC11 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

MENTAL HEALTH

(a) Applicants with a mental or behavioural disorder due to use or misuse of alcohol or other psychoactive substances, with or without dependency, should be assessed as unfit. A fit assessment may be considered after a period of two years of documented sobriety or freedom from psychoactive substance use or misuse, subject to satisfactory psychiatric evaluation after successful treatment. At revalidation or renewal, a fit assessment may be considered earlier. Depending on the individual case, treatment and evaluation may include in-patient treatment of some weeks followed by ongoing checks, including drug and alcohol testing and peer reports, which may be required indefinitely.

(b) Applicants with a history of, or the occurrence of, a functional psychotic disorder should be assessed as unfit. A fit assessment may be considered if a cause can be unequivocally identified as one which is transient, has ceased, and the risk of recurrence is minimal.

(c) Applicants with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder should be assessed as unfit. A fit assessment may only be considered if the original diagnosis was inappropriate or inaccurate as confirmed by psychiatric evaluation or, in the case of a single episode of delirium, provided that the applicant has suffered no permanent impairment.

(d) Psychoactive substances

(1) Drugs and alcohol screening should form part of the initial aero-medical examination.

(2) Applicants who use or misuse psychoactive substances or psychoactive medication likely to affect flight safety should be assessed as unfit. If stability on maintenance psychoactive

medication is confirmed, a fit assessment with appropriate limitation(s) may be considered. If the dosage or type of medication is changed, a further period of unfit assessment should be required until stability is confirmed.

(e) Applicants with a psychiatric condition, such as:

(1) mood disorder;

(2) neurotic disorder;

(3) personality disorder;

(4) mental or behavioural disorder,

should undergo satisfactory psychiatric evaluation before a fit assessment may be considered.

(f) Applicants with a history of significant or repeated acts of deliberate self-harm should undergo satisfactory psychiatric or psychological evaluation or both before a fit assessment may be considered.

(g) Psychiatric evaluations and reviews may include reports from the applicant's flight instructor.

(h) Applicants with a psychological disorder may need to be referred for psychological opinion and advice.

(i) In case a specialist evaluation is needed, following the evaluation, the specialist should submit a written report to the AME, AeMC, GMP or medical assessor of the licensing authority as appropriate, detailing their opinion and recommendation.

AMC12 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

NEUROLOGY

(a) Epilepsy and seizures

(1) Applicants with an established diagnosis of and under treatment for epilepsy should be assessed as unfit. A re-assessment after all treatment has been stopped for at least five years should include a review of neurological reports.

(2) Applicants may be assessed as fit if:

(i) there is a history of a single afebrile epileptiform seizure considered to have a very low risk of recurrence;

(ii) there has been no recurrence after at least five years off treatment;

(iii) a cause has been identified and treated and there is no evidence of continuing predisposition to epilepsy.

(b) Neurological disease

Applicants with any disease of the nervous system which is likely to cause a hazard to flight safety should be assessed as unfit. However, in certain cases, including cases of functional loss

associated with stable disease, a fit assessment may be considered after full evaluation including, if necessary, a medical flight test.

(c) Migraine

Applicants with an established diagnosis of migraine or other severe periodic headaches likely to cause a hazard to flight safety should be assessed as unfit. A fit assessment may be considered after full evaluation. The evaluation should take into account at least the following: auras, visual field loss, frequency, severity, therapy. Appropriate limitation(s) may apply.

(d) Head injury

Applicants with a head injury which was severe enough to cause loss of consciousness or is associated with penetrating brain injury may be assessed as fit if there has been a full recovery and the risk of epilepsy is sufficiently low. An evaluation by a neurologist may be required depending on the staging of the original injury.

(e) Spinal or peripheral nerve injury

Applicants with an established history or clinical diagnosis of spinal or peripheral nerve injury or a disorder of the nervous system due to a traumatic injury may be assessed as fit if neurological evaluation is satisfactory and the conditions of AMC10 MED.B.095 are satisfied.

(f) Vascular deficiencies

Applicants with a disorder of the nervous system due to vascular deficiencies including haemorrhagic and ischaemic events should be assessed as unfit. A fit assessment may be considered if neurological evaluation is satisfactory and the conditions of AMC10 MED.B.095 are satisfied. A cardiological evaluation and medical flight test should be undertaken for applicants with residual deficiencies.

AMC13 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

VISUAL SYSTEM

(a) Applicants should 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 licence.

(b) Eye examination

The examination should include visual acuities (near, intermediate and distant vision) and visual field.

(c) Visual acuity

(1) Visual acuity with or without corrective lenses should be 6/9 (0,7) binocularly and 6/12 (0,5) in each eye.

(2) Applicants who do not meet the required visual acuity should be assessed by an AeMC or AME, taking into account the privileges of the licence held and the risk involved.

(3) Applicants should be able to read, binocularly, an N5 chart (or equivalent) at 30-50 cm and an N14 chart (or equivalent) at 100 cm, with correction if prescribed (refer to GM1 MED.B.070).

(d) Visual acuity

Applicants with substandard vision in one eye may be assessed as fit if the better eye:

(1) achieves distant visual acuity of 6/6 (1,0), corrected or uncorrected;

(2) achieves distant visual acuity less than 6/6 (1,0) but not less than 6/9 (0,7), after ophthalmological evaluation.

(e) Visual field defects

Applicants with a visual field defect may be assessed as fit if the binocular visual field or, in the case of monocularity, the monocular visual field is acceptable.

(f) Eye surgery

(1) After refractive surgery, a fit assessment may be considered, provided that there is satisfactory stability of refraction, there are no post-operative complications and no significant increase in glare sensitivity.

(2) After cataract, retinal or glaucoma surgery, a fit assessment may be considered once recovery is complete.

(g) Visual correction

Correcting lenses should permit the licence holder to meet the visual requirements at all distances.

AMC14 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

COLOUR VISION

Applicants for a night rating should correctly identify 9 of the first 15 plates of the 24-plate edition of Ishihara pseudoisochromatic plates or should be colour safe.

AMC15 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

OTORHINOLARYNGOLOGY (ENT)

(a) Hearing

(1) Applicants should understand correctly conversational speech when tested with or without hearing aids at a distance of 2 metres from and with the applicant's back turned towards the examiner.

(2) If the hearing requirements can only be met with the use of hearing aid(s), the hearing aid(s) should provide optimal hearing function, be well tolerated, and be suitable for aviation purposes.

(3) Applicants with hypoacusis should demonstrate satisfactory functional hearing ability.

(4) Applicants with profound deafness or major disorder of speech, or both, may be assessed as fit with an SSL such as 'limited to areas and operations where the use of radio is not mandatory'. The aircraft should be equipped with appropriate alternative warning devices in lieu of sound warnings.

(b) Ear conditions

Applicants with:

(1) an active pathological process of the internal or middle ear;

(2) unhealed perforation or dysfunction of the tympanic membrane(s);

(3) disturbance of vestibular function;

(4) significant restriction of the nasal passages;

(5) sinus dysfunction;

(6) significant malformation or significant infection of the oral cavity or upper respiratory tract; or

(7) significant disorder of speech or voice

should undergo further examination to establish that the condition does not interfere with the safe exercise of the privileges of the licence.

AMC16 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

DERMATOLOGY

If a dermatological condition is associated with a systemic illness, full consideration should be given to the underlying illness before a fit assessment may be considered.

AMC17 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

ONCOLOGY

(a) In the case of malignant disease, applicants may be considered for a fit assessment if:

(1) there is no evidence of residual malignant disease likely to jeopardise flight safety;

(2) time appropriate to the type of tumour has elapsed since the end of primary treatment;

(3) the risk of in-flight incapacitation from a recurrence or metastasis is sufficiently low;

(4) there is no evidence of short- or long-term sequelae from treatment that may jeopardise flight safety.

(b) Arrangements for an oncological follow-up should be made for an appropriate period of time.

(c) Applicants with an established history or clinical diagnosis of intracerebral malignant tumour should be assessed as unfit.

GM1 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

DIABETES MELLITUS TYPE 2 TREATED WITH INSULIN – GENERAL

(a) Pilots and their treating physician should be aware that if the HbA1c target level was set to normal (non-diabetic) levels, this will significantly increase the chance of hypoglycaemia. For safety reasons, the target level of HbA1c is therefore set to 7,5–8,5 % even though there is evidence that lower HbA1c levels are correlated with fewer diabetic complications.

(b) The safety pilot should be briefed pre-flight on the potential condition of the pilot. The results of blood sugar testing before and during flight should be shared with the safety pilot for the acceptability of the values obtained.

GM2 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

DIABETES MELLITUS TYPE 2 TREATED WITH INSULIN – CONVERSION TABLE FOR HbA1c IN % AND MMOL/MOL

HbA1c in %	HbA1c in mmol/mol
4,7	28
5,0	31
5,3	34
5,6	38
5,9	41
6,2	44
6,5	48
6,8	51
7,4	57
8,0	64
8,6	70
9,2	77
9,8	84
10,4	90
11,6	103

GM3 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

MOOD DISORDER

After full recovery from a mood disorder and after full consideration of the individual case, a fit assessment may be considered, depending on the characteristics and gravity of the mood disorder. If stability on maintenance psychoactive medication is confirmed, a fit assessment may be considered.

If the dosage or type of medication is changed, a further evaluation may be required until stability is confirmed.

SECTION 4 – SPECIFIC REQUIREMENTS FOR CLASS 3 MEDICAL CERTIFICATES

MED.B.110 Cardiovascular system

(a) Examination:

(1) A standard 12-lead resting ECG and report shall be completed at the examination for the initial issue of a medical certificate and then:

(i) every four years until the age of 30;

(ii) at all revalidation or renewal examinations thereafter; and

(iii) when clinically indicated.

(2) An extended cardiovascular assessment shall be completed:

(i) at the first revalidation or renewal examination after the age of 65;

(ii) every four years thereafter; and

(iii) when clinically indicated.

(3) Estimation of serum lipids, including cholesterol, shall be required at the examination for the initial issue of a medical certificate, at the first examination after having reached the age of 40, and when clinically indicated.

(b) Cardiovascular system – General:

(1) Applicants with any of the following conditions shall be assessed as unfit:

(i) aneurysm of the thoracic or supra-renal abdominal aorta before surgery;

(ii) significant functional or symptomatic abnormality of any of the heart valves;

(iii) heart or heart/lung transplantation.

(2) Applicants with an established history or clinical diagnosis of any of the following conditions shall be referred to the medical assessor of licensing authority before a fit assessment may be considered:

(i) peripheral arterial disease before or after surgery;

(ii) aneurysm of the thoracic or supra-renal abdominal aorta after surgery;

(iii) aneurysm of the infra-renal abdominal aorta before or after surgery;

(iv) functionally insignificant cardiac valvular abnormalities;

(v) after cardiac valve surgery;

(vi) abnormality of the pericardium, myocardium or endocardium;

(vii) congenital abnormality of the heart, before or after corrective surgery;

(viii) recurrent vasovagal syncope;

(ix) arterial or venous thrombosis;

(x) pulmonary embolism;

(xi) cardiovascular condition requiring systemic anticoagulant therapy.

(c) Blood pressure:

(1) Blood pressure shall be recorded at each examination.

(2) The applicant's blood pressure shall be within normal limits.

(3) Applicants shall be assessed as unfit when:

(i) they have symptomatic hypotension; or

(ii) when their blood pressure at examination consistently exceeds 160 mmHg systolic and/or 95 mmHg diastolic, with or without treatment.

(4) The initiation of medication for the control of blood pressure shall require a period of temporary unfit assessment to establish the absence of significant side effects.

(d) Coronary artery disease:

(1) Applicants with any of the following conditions shall be assessed as unfit:

(i) symptomatic coronary artery disease;

(ii) symptoms of coronary artery disease controlled by medication.

(2) Applicants with any of the following conditions shall be referred to the medical assessor of the licensing authority and undergo cardiological evaluation to exclude myocardial ischaemia before a fit assessment may be considered:

(i) suspected myocardial ischaemia;

(ii) asymptomatic minor coronary artery disease requiring no anti-anginal treatment.

(3) Applicants with an established history or clinical diagnosis of any of the following conditions shall be referred to the medical assessor of the licensing authority and undergo a cardiological evaluation before a fit assessment may be considered:

(i) myocardial ischaemia;

(ii) myocardial infarction;

(iii) revascularisation and stenting for coronary artery disease.

(e) Rhythm/conduction disturbances:

(1) Applicants for a class 3 medical certificate with any significant disturbance of cardiac conduction or rhythm, intermittent or established shall be referred to the medical assessor of the licensing authority and undergo cardiological evaluation with satisfactory results before a fit assessment may be considered. These disturbances shall include any of the following:

(i) disturbance of supraventricular rhythm, including intermittent or established sinoatrial dysfunction, atrial fibrillation and/or flutter and asymptomatic sinus

pauses;

(ii) complete left bundle branch block;

(iii) Mobitz type 2 atrioventricular block;

(iv) broad and/or narrow complex tachycardia;

(v) ventricular pre-excitation;

(vi) asymptomatic QT prolongation;

(vii) Brugada pattern on ECG.

(2) Applicants with any of the following conditions may be assessed as fit in the absence of any other abnormality and subject to satisfactory cardiological evaluation:

(i) incomplete bundle branch block;

(ii) complete right bundle branch block;

(iii) stable left axis deviation;

(iv) asymptomatic sinus bradycardia;

(v) asymptomatic sinus tachycardia;

(vi) asymptomatic isolated uniform supra-ventricular or ventricular ectopic complexes;

(vii) first degree atrioventricular block;

(viii) Mobitz type 1 atrioventricular block.

(3) Applicants with a history of any of the following conditions shall be referred to the medical assessor of the licensing authority and undergo cardiological evaluation with satisfactory results before a fit assessment may be considered:

(i) ablation therapy;

(ii) pacemaker implantation.

(4) Applicants with any of the following conditions shall be assessed as unfit:

(i) symptomatic sinoatrial disease;

(ii) complete atrioventricular block;

(iii) symptomatic QT prolongation;

(iv) an automatic implantable defibrillating system;

(v) a ventricular anti-tachycardia pacemaker.

AMC1 MED.B.110 Cardiovascular system

(a) ECG

(1) An exercise ECG when required as part of a cardiovascular assessment should be symptom limited and completed to a minimum of Bruce stage 4 or equivalent.

(2) Reporting of resting and exercise ECGs should be carried out by the AME or an appropriate specialist.

(b) General

(1) Cardiovascular risk factor assessment

(i) Serum/plasma lipid estimation is case finding and significant abnormalities should require investigation and management under the supervision of the AeMC or AME in consultation with the licensing authority if necessary.

(ii) An accumulation of risk factors (smoking, family history, lipid abnormalities, hypertension, etc.) should require cardiovascular evaluation by the AeMC or AME in consultation with the licensing authority if necessary.

(2) Extended cardiovascular assessment

(i) The extended cardiovascular assessment should be undertaken at an AeMC or by a cardiologist.

(ii) The extended cardiovascular assessment should include an exercise ECG or other test that will provide equivalent information.

(c) Peripheral arterial disease

Applicants with peripheral arterial disease, before or after surgery, should undergo satisfactory cardiological evaluation including an exercise ECG and 2D echocardiography. Further tests may be required which should show no evidence of myocardial ischaemia or significant coronary artery stenosis. A fit assessment may be considered provided:

(1) the exercise ECG is satisfactory; and

(2) there is no sign of significant coronary artery disease or evidence of significant atheroma elsewhere, and no functional impairment of the end organ supplied.

(d) Aortic aneurysm

(1) Applicants with an aneurysm of the infra-renal abdominal aorta may be assessed as fit following a satisfactory cardiological evaluation.

(2) Applicants may be assessed as fit after surgery for an aneurysm of the thoracic or abdominal aorta if the blood pressure and cardiovascular evaluation are satisfactory. Regular evaluations by a cardiologist should be carried out.

(e) Cardiac valvular abnormalities

(1) Applicants with previously unrecognised cardiac murmurs should require cardiological evaluation. If considered significant, further investigation should include at least 2D Doppler echocardiography.

(2) Applicants with minor cardiac valvular abnormalities may be assessed as fit by the licensing authority. Applicants with significant abnormality of any of the heart valves should be assessed as unfit.

(3) Aortic valve disease

(i) Applicants with bicuspid aortic valve may be assessed as fit if no other cardiac or aortic abnormality is demonstrated. Regular cardiological follow-up, including 2D Doppler echocardiography, may be required.

(ii) Applicants with mild aortic stenosis may be assessed as fit. Annual cardiological follow-up may be required and should include 2D Doppler echocardiography.

(iii) Applicants with aortic regurgitation may be assessed as fit only if regurgitation is minor and there is no evidence of volume overload. There should be no demonstrable abnormality of the ascending aorta on 2D Doppler echocardiography. Cardiological follow-up including 2D Doppler echocardiography may be required.

(4) Mitral valve disease

(i) Applicants with rheumatic mitral stenosis may only be assessed as fit in favourable cases after cardiological evaluation including 2D echocardiography.

(ii) Applicants with uncomplicated minor regurgitation may be assessed as fit. Regular cardiological follow-up including 2D echocardiography may be required.

(iii) Applicants with mitral valve prolapse and mild mitral regurgitation may be assessed as fit.

(iv) Applicants with evidence of volume overloading of the left ventricle demonstrated by increased left ventricular end-diastolic diameter should be assessed as unfit.

(f) Valvular surgery

Applicants with cardiac valve replacement/repair should be assessed as unfit. After a satisfactory cardiological evaluation, fit assessment may be considered.

(1) Asymptomatic applicants may be assessed as fit by the licensing authority six months after valvular surgery subject to:

(i) normal valvular and ventricular function as judged by 2D Doppler echocardiography;

(ii) satisfactory symptom-limited exercise ECG or equivalent;

(iii) demonstrated absence of coronary artery disease unless this has been satisfactorily treated by re-vascularisation;

(iv) no cardioactive medication is required;

(v) annual cardiological follow-up to include an exercise ECG and 2D Doppler echocardiography. Longer periods may be acceptable once a stable condition has been confirmed by cardiological evaluations.

(2) Applicants with implanted mechanical valves may be assessed as fit subject to

documented exemplary control of their anti-coagulant therapy. Age factors should form part of the risk assessment.

(g) Thromboembolic disorders

Applicants with arterial or venous thrombosis or pulmonary embolism should be assessed as unfit during the first six months of anticoagulation. A fit assessment, with a limitation if necessary, may be considered by the licensing authority after six months of stable anticoagulation. Anticoagulation should be considered stable if, within the last six months, at least five international normalised ratio (INR) values are documented, of which at least four are within the INR target range and the haemorrhagic risk is acceptable. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment may be considered after review by the licensing authority after a period of three months. Applicants with pulmonary embolism should also be evaluated by a cardiologist. Following cessation of anticoagulant therapy, for any indication, applicants should undergo a reassessment by the licensing authority.

(h) Other cardiac disorders

(1) Applicants with a primary or secondary abnormality of the pericardium, myocardium or endocardium should be assessed as unfit. A fit assessment may be considered following complete resolution and satisfactory cardiological evaluation which may include 2D Doppler echocardiography, exercise ECG, 24-hour ambulatory ECG, and/or myocardial perfusion scan or equivalent test. Coronary angiography may be indicated. Regular cardiological follow-up may be required.

(2) Applicants with a congenital abnormality of the heart should be assessed as unfit. Applicants following surgical correction or with minor abnormalities that are functionally unimportant may be assessed as fit following cardiological assessment. No cardioactive medication is acceptable. Investigations may include 2D Doppler echocardiography, exercise ECG and 24-hour ambulatory ECG. Regular cardiological follow-up may be required.

(i) Syncope

(1) Applicants with a history of recurrent episodes of syncope should be assessed as unfit. A fit assessment may be considered after a sufficient period of time without recurrence provided cardiological evaluation is satisfactory.

(2) A cardiological evaluation should include:

(i) a satisfactory symptom exercise ECG. If the exercise ECG is abnormal, a myocardial perfusion scan or equivalent test should be required;

(ii) a 2D Doppler echocardiogram showing neither significant selective chamber enlargement nor structural or functional abnormality of the heart, valves or myocardium;

(iii) a 24-hour ambulatory ECG recording showing no conduction disturbance, complex or sustained rhythm disturbance or evidence of myocardial ischaemia;

(iv) a tilt test carried out to a standard protocol showing no evidence of vasomotor instability.

(3) Neurological review should be required.

(j) Blood pressure

(1) Anti-hypertensive treatment should be agreed by the licensing authority. Medication may include:

(i) non-loop diuretic agents;

(ii) Angiotensin Converting Enzyme (ACE) inhibitors;

(iii) angiotensin II receptor blocking agents;

(iv) long-acting slow channel calcium blocking agents;

(v) certain (generally hydrophilic) beta-blocking agents.

(2) Following initiation of medication for the control of blood pressure, applicants should be re-assessed to verify that the treatment is compatible with the safe exercise of the privileges of the licence.

(k) Coronary artery disease

(1) Applicants with chest pain of an uncertain cause should undergo a full investigation before a fit assessment may be considered. Applicants with angina pectoris should be assessed as unfit, whether or not it is abolished by medication.

(2) Applicants with suspected asymptomatic coronary artery disease should undergo a cardiological evaluation including exercise ECG. Further tests (myocardial perfusion scanning, stress echocardiography, coronary angiography or equivalent) may be required, which should show no evidence of myocardial ischaemia or significant coronary artery stenosis.

(3) After an ischaemic cardiac event, including revascularisation, applicants without symptoms should have reduced any vascular risk factors to an appropriate level. Medication, when used to control cardiac symptoms, is not acceptable. All applicants should be on acceptable secondary prevention treatment.

(i) A coronary angiogram obtained around the time of, or during, the ischaemic myocardial event and a complete, detailed clinical report of the ischaemic event and of any operative procedures should be available.

(A) there should be no stenosis more than 50 % in any major untreated vessel, in any vein or artery graft or at the site of an angioplasty/stent, except in a vessel subtending a myocardial infarction;

(B) the whole coronary vascular tree should be assessed as satisfactory by a cardiologist, and particular attention should be paid to multiple stenoses and/or multiple revascularisations;

(C) an untreated stenosis greater than 30 % in the left main or proximal left anterior descending coronary artery should not be acceptable.

(ii) At least six months from the ischaemic myocardial event, including revascularisation, the following investigations should be completed:

(A) an exercise ECG showing neither evidence of myocardial ischaemia nor rhythm or conduction disturbance;

(B) an echocardiogram or equivalent test showing satisfactory left ventricular function with no important abnormality of wall motion (such as dyskinesia or akinesia) and a left ventricular ejection fraction of 50 % or more;

(C) in cases of angioplasty/stenting, a myocardial perfusion scan or equivalent test, which should show no evidence of reversible myocardial ischaemia. If there is any doubt about myocardial perfusion, in other cases (infarction or bypass grafting), a perfusion scan should also be required;

(D) further investigations, such as a 24-hour ECG, may be necessary to assess the risk of any significant rhythm disturbance.

(iii) Follow-up should be conducted annually (or more frequently, if necessary) to ensure that there is no deterioration of the cardiovascular status. It should include a cardiological evaluation, exercise ECG and cardiovascular risk assessment. Additional investigations may be required.

(iv) After coronary artery vein bypass grafting, a myocardial perfusion scan or equivalent test should be performed on clinical indication, and in all cases within five years from the procedure.

(v) In all cases, coronary angiography, or an equivalent test, should be considered at any time if symptoms, signs or non-invasive tests indicate myocardial ischaemia.

(vi) Applicants may be assessed as fit after successful completion of the three-month or subsequent review.

(l) Rhythm and conduction disturbances

(1) Applicants with any significant rhythm or conduction disturbance may be assessed as fit after cardiological evaluation and with appropriate follow-up. Such evaluation should include:

(i) exercise ECG which should show no significant abnormality of rhythm or conduction, and no evidence of myocardial ischaemia. Withdrawal of cardioactive medication prior to the test should be required;

(ii) 24-hour ambulatory ECG which should demonstrate no significant rhythm or conduction disturbance;

(iii) 2D Doppler echocardiogram which should show no significant selective chamber enlargement or significant structural or functional abnormality, and a left ventricular ejection fraction of at least 50 %.

Further evaluation may include:

(iv) 24-hour ECG recording repeated as necessary;

(v) electrophysiological study;

(vi) myocardial perfusion imaging or equivalent test;

(vii) cardiac magnetic resonance imaging (MRI) or equivalent test;

(viii) coronary angiogram or equivalent test.

(2) Applicants with supraventricular or ventricular ectopic complexes on a resting ECG may require no further evaluation, provided the frequency can be shown to be no greater than one per minute, for example on an extended ECG strip.

Applicants with asymptomatic isolated uniform ventricular ectopic complexes may be assessed as fit, but frequent or complex forms require full cardiological evaluation.

(3) If anticoagulation is needed for a rhythm disturbance, a fit assessment may be considered if the haemorrhagic risk is acceptable and the anticoagulation is stable. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment with an appropriate limitation may be considered after review by the licensing authority after a period of three months.

(4) Ablation

(i) Applicants who have undergone ablation therapy should be assessed as unfit for a minimum period of two months.

(ii) A fit assessment may be considered following successful catheter ablation provided an electrophysiological study (EPS) demonstrates satisfactory control has been achieved.

(iii) If EPS is not performed, longer periods of unfitness and cardiological follow- up should be considered.

(iv) Follow-up should include a cardiological review.

(5) Supraventricular arrhythmias

Applicants with significant disturbance of supraventricular rhythm, including sinoatrial dysfunction, whether intermittent or established, should be assessed as unfit. A fit assessment may be considered if cardiological evaluation is satisfactory.

(i) For initial applicants with atrial fibrillation/flutter, a fit assessment should be limited to those with a single episode of arrhythmia which is considered to be unlikely to recur.

(ii) For revalidation, applicants may be assessed as fit if cardiological evaluation is satisfactory and the stroke risk is sufficiently low. A fit assessment may be considered after a period of stable anticoagulation as prophylaxis, after review by the licensing authority. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment may be considered after review by the licensing authority after a period of three months.

(iii) Applicants with asymptomatic sinus pauses up to 2.5 seconds on a resting ECG may

be assessed as fit if exercise ECG, 2D echocardiography and 24-hour ambulatory ECG are satisfactory.

(iv) Applicants with symptomatic sino-atrial disease should be assessed as unfit.

(6) Mobitz type 2 atrio-ventricular block

Applicants with Mobitz type 2 AV block may be assessed as fit after a full cardiological evaluation confirms the absence of distal conducting tissue disease.

(7) Complete right bundle branch block

Applicants with complete right bundle branch block should require cardiological evaluation on first presentation.

(8) Complete left bundle branch block

A fit assessment may be considered as follows:

(i) Initial applicants may be assessed as fit after full cardiological evaluation showing no pathology. Depending on the clinical situation, a period of stability may be required.

(ii) Applicants for revalidation or renewal of a medical certificate with a de-novo left bundle branch block may be assessed as fit after cardiological evaluation showing no pathology. A period of stability may be required.

(iii) A cardiological evaluation should be required after 12 months in all cases.

(9) Ventricular pre-excitation

Applicants with pre-excitation may be assessed as fit if they are asymptomatic, and an electrophysiological study, including an adequate drug-induced autonomic stimulation protocol, reveals no inducible re-entry tachycardia and the existence of multiple pathways is excluded. Cardiological follow-up should be required including a 24-hour ambulatory ECG recording showing no tendency to symptomatic or asymptomatic tachy-arrhythmia.

(10) Pacemaker

Applicants with a subendocardial pacemaker may be assessed as fit three months after insertion provided:

(i) there is no other disqualifying condition;

(ii) bipolar lead systems programmed in bipolar mode without automatic mode change have been used;

(iii) that the applicant is not pacemaker dependent;

(iv) regular cardiological follow-up should include a symptom-limited exercise ECG that shows no abnormality or evidence of myocardial ischaemia.

(11) QT prolongation

Applicants with asymptomatic QT-prolongation may be assessed as fit subject to a

satisfactory cardiological evaluation.

(12) Brugada pattern on ECG

Applicants with a Brugada pattern Type 1 should be assessed as unfit. Applicants with Type 2 or Type 3 may be assessed as fit, with limitations as appropriate, subject to satisfactory cardiological evaluation.

GM1 MED.B.110 Cardiovascular system

MITRAL VALVE DISEASE

(a) Minor regurgitation should have evidence of no thickened leaflets or flail chordae and left atrial internal diameter of less than or equal to 4.0 cm.

(b) The following may indicate severe regurgitation:

(1) LV internal diameter (diastole) > 6.0 cm; or

(2) LV internal diameter (systole) > 4.1 cm; or

(3) Left atrial internal diameter > 4.5 cm.

(c) Doppler indices, such as width of jet, backwards extension and whether there is flow reversal in the pulmonary veins may be helpful in assessing the severity of regurgitation.

GM2 MED.B.110 Cardiovascular system

VENTRICULAR PRE-EXCITATION

(a) Asymptomatic applicants with pre-excitation may be assessed as fit at revalidation if they meet the following criteria:

(1) no inducible re-entry;

(2) refractory period > 300 ms;

(3) no induced atrial fibrillation.

(b) There should be no evidence of multiple accessory pathways.

GM3 MED.B.110 Cardiovascular system

COMPLETE LEFT BUNDLE BRANCH BLOCK

Left bundle branch block is commonly associated with coronary artery disease and, thus, requires more in-depth investigation, which may be invasive.

GM4 MED.B.110 Cardiovascular system

PACEMAKER

(a) Scintigraphy may be helpful in the presence of conduction disturbance/paced complexes in the resting ECG.

(b) Experience has shown that any failures of pacemakers are most likely to occur in the first three

months after being fitted. Therefore, a fit assessment should not be considered before this period has elapsed.

(c) It is known that certain operational equipment may interfere with the performance of the pacemaker. The type of pacemaker used, therefore, should have been tested to ensure that it does not suffer from interference in the operational environment. Supporting data and a performance statement to this effect should be available from the supplier.

GM5 MED.B.110 Cardiovascular system

ANTICOAGULATION

Applicants and licence holders taking anticoagulant medication which requires monitoring with INR testing, should measure their INR on a 'near patient' testing system within 12 hours prior to starting a shift pattern and then at least every three days during the shift pattern. The privileges of the licence should only be exercised if the INR is within the target range. The INR result should be recorded and the results should be reviewed at each aero-medical assessment.

MED.B.115 Respiratory system

(a) Applicants with significant impairment of pulmonary function shall be referred to the medical assessor of the licensing authority for the aero-medical assessment. A fit assessment may be considered once pulmonary function has recovered and is satisfactory.

(b) Examination:

Pulmonary functional tests are required at the initial examination and on clinical indication.

(c) Applicants with an established history or clinical diagnosis of asthma requiring medication shall undergo a satisfactory respiratory evaluation. A fit assessment may be considered if the applicant is asymptomatic and treatment does not affect safety.

(d) Applicants with an established history or clinical diagnosis of any of the following conditions shall be referred to the medical assessor of the licensing authority and undergo respiratory evaluation with a satisfactory result before a fit assessment may be considered:

(1) active inflammatory disease of the respiratory system;

(2) active sarcoidosis;

(3) pneumothorax;

(4) sleep apnoea syndrome;

(5) major thoracic surgery;

(6) chronic obstructive pulmonary disease;

(7) lung transplantation.

AMC1 MED.B.115 Respiratory system

(a) Examination

(1) Spirometric examination is required for initial examination. An FEV1/FVC ratio less than 70 % should require evaluation by a specialist in respiratory disease before a fit assessment can be considered.

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

(b) Chronic obstructive airways disease

Applicants with chronic obstructive airways disease should be assessed as unfit. Applicants with only minor impairment of their pulmonary function may be assessed as fit after specialist respiratory evaluation. Applicants with pulmonary emphysema may be assessed as fit following specialist evaluation showing that the condition is stable and not causing significant symptoms.

(c) Asthma

Applicants with asthma requiring medication or experiencing recurrent attacks of asthma may be assessed as fit if the asthma is considered stable with satisfactory pulmonary functional tests and medication is compatible with the safe execution of the privileges of the licence. Use of low dose systemic steroids may be acceptable.

(d) Inflammatory disease

(1) For applicants with active inflammatory disease of the respiratory system, a fit assessment may be considered when the condition has resolved without sequelae and no medication is required.

(2) Applicants with chronic inflammatory diseases may be assessed as fit following specialist evaluation showing mild disease with acceptable pulmonary functional test and medication compatible with the safe execution of the privileges of the licence.

(e) Sarcoidosis

(1) Applicants with active sarcoidosis should be assessed as unfit. Specialist evaluation should be undertaken with respect to the possibility of systemic, particularly cardiac, involvement. A fit assessment may be considered if no medication is required, and the disease is limited to hilar lymphadenopathy and inactive. Use of low dose systemic steroids may be acceptable.

(2) Applicants with cardiac or neurological sarcoid should be assessed as unfit.

(f) Pneumothorax

Applicants with a spontaneous pneumothorax should be assessed as unfit. A fit assessment may be considered:

(1) six weeks after the event provided full recovery from a single event has been confirmed in a full respiratory evaluation including a CT scan or equivalent;

(2) following surgical intervention in the case of a recurrent pneumothorax provided there is

satisfactory recovery.

(g) Thoracic surgery

(1) Applicants requiring thoracic surgery should be assessed as unfit until such time as the effects of the operation are no longer likely to interfere with the safe exercise of the privileges of the licence.

(2) A fit assessment may be considered after satisfactory recovery and full respiratory evaluation including a CT scan or equivalent. The underlying pathology which necessitated the surgery should be considered in the aero-medical assessment.

(h) Sleep apnoea syndrome/sleep disorder

(1) Applicants with unsatisfactorily treated sleep apnoea syndrome and suffering from excessive daytime sleepiness should be assessed as unfit.

(2) A fit assessment may be considered subject to the extent of symptoms, including vigilance, and satisfactory treatment. ATCO operational experience, sleep apnoea syndrome/sleep disorder education and workplace considerations are essential components of the aero-medical assessment.

MED.B.120 Digestive system

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

(b) Applicants shall be free from herniae that might give rise to incapacitating symptoms.

(c) Applicants with disorders of the gastrointestinal system, including those in points (1) to (5) may be assessed as fit subject to a satisfactory gastroenterological evaluation after successful treatment or full recovery after surgery:

(1) recurrent dyspeptic disorder requiring medication;

(2) pancreatitis;

(3) symptomatic gallstones;

(4) an established history or clinical diagnosis of chronic inflammatory bowel disease;

(5) after surgical operation on the digestive tract or its adnexa, including surgery involving total or partial excision or a diversion of any of these organs.

AMC1 MED.B.120 Digestive system

(a) Oesophageal varices

Applicants with oesophageal varices should be assessed as unfit.

(b) Pancreatitis

(1) Applicants with pancreatitis should be assessed as unfit. A fit assessment may be considered if the primary cause (e.g. gallstone, other obstruction, medication) has been treated.

(2) Alcohol may be a cause of dyspepsia and pancreatitis. If considered appropriate, a full evaluation of its use or misuse should be undertaken.

(c) Gallstones

(1) Applicants with a single large gallstone may be assessed as fit after evaluation.

(2) Applicants with multiple gallstones may be assessed as fit while awaiting treatment provided the symptoms are unlikely to interfere with the safe exercise of the privileges of the licence.

(d) Inflammatory bowel disease

Applicants with an established history or clinical diagnosis of chronic inflammatory bowel disease may be assessed as fit if the disease is in established stable remission, and only minimal, if any, medication is being taken. Regular follow-up should be required.

(e) Dyspepsia

Applicants with recurrent dyspepsia requiring medication should be investigated by internal examination including radiologic or endoscopic examination. Laboratory testing should include haemoglobin assessment and faecal examination. Any demonstrated ulceration or significant inflammation requires evidence of recovery before a fit assessment may be considered.

(f) Digestive tract and abdominal surgery

Applicants who have undergone a surgical operation on the digestive tract or its adnexa, including a total or partial excision or a diversion of any of these organs, should be assessed as unfit. A fit assessment may be considered if recovery is complete, the applicant is asymptomatic and the risk of secondary complication or recurrence is minimal.

MED.B.125 Metabolic and endocrine systems

(a) Applicants with metabolic, nutritional or endocrine dysfunction may be assessed as fit subject to demonstrated stability of the condition and satisfactory aero-medical evaluation.

(b) Diabetes mellitus:

(1) Applicants with diabetes mellitus requiring insulin shall be assessed as unfit.

(2) Applicants with diabetes mellitus requiring medication other than insulin for blood sugar control shall be referred to the medical assessor of the licensing authority. A fit assessment may be considered if it can be demonstrated that blood sugar control has been achieved and is stable.

AMC1 MED.B.125 Metabolic and endocrine systems

(a) Metabolic, nutritional or endocrine dysfunction

Applicants with metabolic, nutritional or endocrine dysfunction may be assessed as fit if the condition is asymptomatic, clinically compensated and stable with or without replacement therapy, and regularly reviewed by an appropriate specialist.

(b) Obesity

(1) Applicants with a Body Mass Index $\geq$ 35 may be assessed as fit only if the excess weight is not likely to interfere with the safe exercise of the privileges of the licence and a satisfactory cardiovascular risk review and evaluation of the possibility of sleep apnoea syndrome has been undertaken.

(2) Functional testing in the working environment may be necessary before a fit assessment may be considered.

(c) Thyroid dysfunction

Applicants with hyperthyroidism or hypothyroidism should attain a stable euthyroid state before a fit assessment may be considered.

(d) Abnormal glucose metabolism

Glycosuria and abnormal blood glucose levels require investigation. A fit assessment may be considered if normal glucose tolerance is demonstrated (low renal threshold) or impaired glucose tolerance without diabetic pathology is fully controlled by diet and regularly reviewed.

(e) Diabetes mellitus

(1) The following medication, alone and in combination, may be acceptable for control of type 2 diabetes:

(i) alpha-glucosidase inhibitors;

(ii) medication that acts on the incretin pathway;

(iii) biguanides.

(2) A fit assessment may be considered after evaluation of the operational environment,

including means of glucose monitoring/management whilst performing rated duties, and with demonstrated exemplary glycaemic control.

(3) Annual follow-up by a specialist should be required including demonstration of absence of complications, good glycaemic control demonstrated by six-monthly HbA1c measurements, and a normal glucose exercise tolerance test.

MED.B.130 Haematology

(a) Blood testing, if any, shall be determined by the AeMC or AME taking into account the medical history and following the physical examination.

(b) Applicants with a haematological condition, such as:

(1) coagulation, haemorrhagic or thrombotic disorder;

(2) chronic leukaemia;

(3) abnormal haemoglobin, including, but not limited to, anaemia, erythrocytosis or haemoglobinopathy;

(4) significant lymphatic enlargement;

(5) enlargement of the spleen;

shall be referred to the medical assessor of the licensing authority. A fit assessment may be considered subject to satisfactory aero-medical evaluation.

(c) Applicants suffering from acute leukaemia shall be assessed as unfit.

AMC1 MED.B.130 Haematology

(a) Anaemia

(1) Anaemia demonstrated by a reduced haemoglobin level should require investigation. A fit assessment may be considered if the primary cause has been treated (e.g. iron or B12 deficiency) and the haemoglobin or haematocrit has stabilised at a satisfactory level. The recommended range of the haemoglobin level is 11–17 g/dl.

(2) Anaemia which is unamenable to treatment should be disqualifying.

(b) Haemoglobinopathy

Applicants with a haemoglobinopathy should be assessed as unfit. A fit assessment may be considered if minor thalassaemia, sickle cell disease or other haemoglobinopathy is diagnosed without a history of crises and if full functional capability is demonstrated.

(c) Coagulation disorders

(1) Significant coagulation disorders require investigation. A fit assessment may be considered if there is no history of significant bleeding or clotting episodes and the haematological data indicate that it is safe to do so.

(2) If anticoagulant therapy is prescribed, AMC1 MED.BA.010(g) should be followed.

(d) Disorders of the lymphatic system

Lymphatic enlargement requires investigation. A fit assessment may be considered in cases of an acute infectious process which is fully recovered, or Hodgkin's lymphoma, or other lymphoid malignancy which has been treated and is in full remission, or that requires minimal or no treatment.

(e) Leukaemia

(1) Applicants with acute leukaemia should be assessed as unfit. Once in established remission, applicants may be assessed as fit.

(2) Applicants with chronic leukaemia should be assessed as unfit. A fit assessment may be considered after remission and a period of demonstrated stability.

(3) Applicants with a history of leukaemia should have no history of central nervous system involvement and no continuing side effects from treatment which are likely to interfere with the safe exercise of the privileges of the licence. Haemoglobin and platelet levels should be satisfactory.

(4) Regular follow-up is required in all cases of leukaemia.

(f) Splenomegaly

Splenomegaly requires investigation. A fit assessment may be considered if the enlargement is minimal, stable and no associated pathology is demonstrated, or if the enlargement is minimal and associated with another acceptable condition.

GM1 MED.B.130 Haematology

HODGKIN'S LYMPHOMA

Due to potential side effects of specific chemotherapeutic agents, the precise regime utilised should be taken into account.

GM2 MED.B.130 Haematology

CHRONIC LEUKAEMIA

A fit assessment may be considered if the chronic leukaemia has been diagnosed as:

(a) lymphatic at stages 0, I, and possibly II without anaemia and minimal treatment; or

(b) stable 'hairy cell' leukaemia with normal haemoglobin and platelets.

GM3 MED.B.130 Haematology

SPLENOMEGALY

(a) Splenomegaly should not preclude a fit assessment, but should be assessed on an individual basis.

(b) Associated pathology of splenomegaly is e.g. treated chronic malaria.

(c) An acceptable condition associated with splenomegaly is e.g. Hodgkin's lymphoma in remission.

MED.B.135 Genitourinary system

(a) Urinalysis shall form part of every aero-medical examination. The urine shall contain no abnormal element considered to be of pathological significance.

(b) Applicants with any sequelae of disease or surgical procedures on the genitourinary system or its adnexa likely to cause incapacitation, in particular any obstruction due to stricture or compression, shall be assessed as unfit.

(c) Applicants with a genitourinary disorder, such as:

(1) renal disease;

(2) one or more urinary calculi;

may be assessed as fit subject to satisfactory renal/urological evaluation.

(d) Applicants who have undergone:

(1) a major surgical operation in the genitourinary system or its adnexa involving a total or partial excision or a diversion of its organs; or

(2) major urological surgery;

shall be referred to the medical assessor of the licensing authority for an aero-medical assessment after full recovery before a fit assessment may be considered.

AMC1 MED.B.135 Genitourinary system

(a) Abnormal urinalysis

Any abnormal finding on urinalysis requires investigation. This investigation should include proteinuria, haematuria and glycosuria.

(b) Renal disease

(1) Applicants presenting with any signs of renal disease should be assessed as unfit. A fit assessment may be considered if blood pressure is satisfactory and renal function is acceptable.

(2) Applicants requiring dialysis should be assessed as unfit.

(c) Urinary calculi

(1) Applicants with an asymptomatic calculus or a history of renal colic require investigation. A fit assessment may be considered after successful treatment for a calculus and with appropriate follow-up.

(2) Residual calculi should be disqualifying unless they are in a location where they are unlikely to move and give rise to symptoms.

(d) Renal and urological surgery

(1) Applicants who have undergone a major surgical operation on the genitourinary system or its adnexa involving a total or partial excision or a diversion of any of its organs should be assessed as unfit until recovery is complete, the applicant is asymptomatic and the

risk of secondary complications is minimal.

(2) Applicants with compensated nephrectomy without hypertension or uraemia may be assessed as fit.

(3) Applicants who have undergone renal transplantation may be considered for a fit assessment if it is fully compensated and tolerated with only minimal immuno-suppressive therapy after at least 12 months.

Applicants who have undergone total cystectomy may be considered for a fit assessment if there is satisfactory urinary function, no infection and no recurrence of primary pathology.

MED.B.140 Infectious disease

(a) Applicants who are HIV positive shall be referred to the medical assessor of the licensing authority and may be assessed as fit subject to satisfactory specialist evaluation and provided the licensing authority has sufficient evidence that the therapy does not compromise the safe exercise of the privileges of the licence.

(b) Applicants diagnosed with or presenting symptoms of infectious disease such as:

(1) acute syphilis;

(2) active tuberculosis;

(3) infectious hepatitis;

(4) tropical diseases;

shall be referred to the medical assessor of the licensing authority for an aero-medical assessment. A fit assessment may be considered after full recovery and specialist evaluation provided the licensing authority has sufficient evidence that the therapy does not compromise the safe exercise of the privileges of the licence.

AMC1 MED.B.140 Infectious disease

(a) Infectious disease — General

In cases of infectious disease, consideration should be given to a history of, or clinical signs indicating, underlying impairment of the immune system.

(b) Tuberculosis

(1) Applicants with active tuberculosis should be assessed as unfit. A fit assessment may be considered following completion of therapy.

(2) Applicants with quiescent or healed lesions may be assessed as fit. Specialist evaluation should consider the extent of the disease, the treatment required and possible side effects of medication.

(c) Syphilis

Applicants with acute syphilis should be assessed as unfit. A fit assessment may be considered

in the case of those fully treated and recovered from the primary and secondary stages.

(d) HIV positivity

(1) Applicants who are HIV positive may be assessed as fit if a full investigation provides no evidence of HIV associated diseases that might give rise to incapacitating symptoms. Frequent review of the immunological status and neurological evaluation by an appropriate specialist should be carried out. A cardiological review may also be required depending on medication.

(2) Applicants with an AIDS defining condition should be assessed as unfit except in individual cases for revalidation of a medical certificate after complete recovery and dependent on the review.

(3) The aero-medical assessment of individual cases under (1) and (2) should be dependent on the absence of symptoms or signs of the disease and the acceptability of serological markers. Treatment should be evaluated by a specialist on an individual basis for its appropriateness and any side effects.

(e) Infectious hepatitis

Applicants with infectious hepatitis should be assessed as unfit. A fit assessment may be considered once the applicant has become asymptomatic after treatment and specialist evaluation. Regular review of the liver function should be carried out.

GM1 MED.B.140 Infectious disease

HIV INFECTION

(a) There is no requirement for routine testing of HIV status, but testing may be carried out on clinical indication.

(b) If HIV positivity has been confirmed, a process of rigorous aero-medical assessment and follow-up should be introduced to enable individuals to continue working provided their ability to exercise their licenced privileges to the required level of safety is not impaired. The operational environment should be considered in the decision-making.

MED.B.145 Obstetrics and gynaecology

(a) Applicants who have undergone a major gynaecological operation shall be assessed as unfit until full recovery.

(b) Pregnancy:

In the case of pregnancy, if the AeMC or AME considers that the licence holder is fit to exercise her privileges, he/she shall limit the validity period of the medical certificate to the end of the 34th week of gestation. The licence holder shall undergo a revalidation aero-medical examination and assessment after full recovery following the end of the pregnancy.

AMC1 MED.B.145 Obstetrics and gynaecology

(a) Gynaecological surgery

Applicants who have undergone a major gynaecological operation should be assessed as unfit until recovery is complete, the applicant is asymptomatic and the risk of secondary complications or recurrence is minimal.

(b) Pregnancy

(1) A pregnant licence holder may be assessed as fit during the first 34 weeks of gestation provided obstetric evaluation continuously indicates a normal pregnancy.

(2) The AeMC or AME or the licensing authority should provide written advice to the applicant and the supervising physician regarding potentially significant complications of pregnancy which may negatively influence the safe exercise of the privileges of the licence.

MED.B.150 Musculoskeletal system

(a) Applicants shall have satisfactory functional use of the musculoskeletal system to enable them to safely exercise the privileges of the licence.

(b) Applicants with static or progressive musculoskeletal or rheumatologic conditions likely to interfere with the safe exercise of the licence privileges shall be referred to the medical assessor of the licensing authority. A fit assessment may be considered after satisfactory specialist evaluation.

AMC1 MED.B.150 Musculoskeletal system

(a) Applicants with any significant sequelae from disease, injury or congenital abnormality affecting the bones, joints, muscles or tendons with or without surgery require full evaluation prior to a fit assessment.

(b) Abnormal physique, including obesity, or muscular weakness may require aero-medical assessment and particular attention should be paid to an aero-medical assessment in the working environment.

(c) Locomotor dysfunction, amputations, malformations, loss of function and progressive osteoarthritic disorders should be assessed on an individual basis in conjunction with the appropriate operational expert with a knowledge of the complexity of the tasks of the applicant.

(d) Applicants with inflammatory, infiltrative or degenerative disease of the musculoskeletal system may be assessed as fit provided the condition is in remission and the medication is acceptable.

MED.B.155 Mental health

(a) Comprehensive mental health assessment shall form part of the initial class 3 aero-medical examination.

(b) Applicants with a mental or behavioural disorder due to use or misuse of alcohol or other psychoactive substances shall be assessed as unfit pending recovery and freedom from psychoactive substance use or misuse and subject to satisfactory psychiatric evaluation after successful treatment.

(c) Applicants with an established history or clinical diagnosis of any of the following psychiatric conditions shall undergo satisfactory psychiatric evaluation before they may be assessed as fit:

(1) mood disorder;

(2) neurotic disorder;

(3) personality disorder;

(4) mental or behavioural disorder;

(5) misuse of a psychoactive substance.

(d) Applicants with a documented medical history of a single or repeated acts of deliberate self-harm or suicide attempt shall be assessed as unfit. However, they may be assessed as fit after satisfactory psychiatric evaluation.

(e) Aero-medical assessment

Applicants for a class 3 medical certificate with any of the conditions specified in point (b), (c) or (d) shall be referred to the medical assessor of the licensing authority.

(f) Applicants with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder shall be assessed as unfit.

AMC1 MED.B.155 Mental health

(a) Mental health assessment as part of the initial class 3 aero-medical examination

(1) A comprehensive mental health assessment should be conducted and recorded taking into account social, environmental and cultural contexts.

(2) The applicant's history and symptoms of disorders that might pose a safety threat should be identified and recorded.

(3) The mental health assessment should include assessment and documentation of:

(i) general attitudes to mental health, including understanding possible indications of reduced mental health in themselves and others;

(ii) coping strategies under periods of psychological stress or pressure in the past, including seeking advice from others;

(iii) childhood behavioural problems;

(iv) interpersonal and relationship issues;

(v) current work and life stressors; and

(vi) overt personality disorders.

(4) If there are signs or is established evidence that an applicant may have a psychiatric or psychological disorder, the applicant should be referred for specialist opinion and advice.

(b) Mental health assessment as part of revalidation or renewal class 3 medical examination

(1) The assessment should include review and documentation of:

(i) current work and life stressors;

(ii) coping strategies under periods of psychological stress or pressure in the past, including seeking advice from others;

(iii) any difficulties with operational team resource management (TRM);

(iv) any difficulties with employer and/or other colleagues and managers; and

(v) interpersonal and relationship issues, including difficulties with relatives, friends, and work colleagues.

(2) If there are signs or is established evidence that an applicant may have a psychiatric or psychological disorder, the applicant should be referred for specialist opinion and advice.

(3) Established evidence should be verifiable information from an identifiable source related to the mental fitness or personality of a particular individual. Sources for this information can be accidents or incidents, problems in training or proficiency checks, behaviour or knowledge relevant to the safe exercise of the privileges of the applicable licence(s).

(c) Assessment of holders of a class 3 medical certificate referenced in MED.B.155(c)

Assessment of holders of a class 3 medical certificate referenced in MED.B.155(c) may require psychiatric and psychological evaluation as determined by the medical assessor of the licensing authority. A SEM limitation should be imposed in the event of a fit assessment. Follow-up and removal of SEM limitation, as necessary, should be determined by the medical assessor of the licensing authority.

(d) Assessment and referral decisions

(1) Psychotic disorder

Applicants with a history, or the occurrence, of a functional psychotic disorder should be assessed as unfit. A fit assessment may be considered if a cause can be unequivocally identified as one which is transient, has ceased and the risk of recurrence is minimal.

(2) Organic mental disorder

Applicants with an organic mental disorder should be assessed as unfit. Once the cause has been treated, an applicant may be assessed as fit following satisfactory psychiatric evaluation.

(3) Psychoactive medication

Applicants who use psychoactive medication likely to affect flight safety should be assessed as unfit. If stability on maintenance psychoactive medication is confirmed, a fit assessment with an OML may be considered. If the dosage or type of medication is changed, a further period of unfit assessment should be required until stability is confirmed.

(4) Schizophrenia, schizotypal or delusional disorder

Applicants with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder may only be considered for a fit assessment if the medical assessor of the licensing authority concludes that the original diagnosis was inappropriate or inaccurate as confirmed by psychiatric evaluation, or, in the case of a single episode of delirium of which the cause was clear, provided that the applicant has suffered no permanent mental impairment.

(5) Mood disorder

Applicants with an established mood disorder should be assessed as unfit. After full recovery and after full consideration of the individual case, a fit assessment may be considered, depending on the characteristics and severity of the mood disorder.

(6) Neurotic, stress-related or somatoform disorder

If there are signs or is established evidence that an applicant may have a neurotic, stress-related or somatoform disorder, the applicant should be referred for psychiatric or psychological opinion and advice.

(7) Personality or behavioural disorders

If there are signs or is established evidence that an applicant may have a personality or behavioural disorder, the applicant should be referred for psychiatric or psychological opinion and advice.

(8) Disorders due to alcohol or other psychoactive substance(s) use or misuse

(i) Applicants with mental or behavioural disorders due to alcohol or other psychoactive substance(s) use or misuse, with or without dependency, should be assessed as unfit.

(ii) A fit assessment may be considered after a period of two years of documented sobriety or freedom from psychoactive substance use or misuse. At revalidation or renewal, a fit assessment may be considered earlier with an OML. Depending on the individual case, treatment and evaluation may include in-patient treatment of some weeks and inclusion into a support programme followed by ongoing checks, including drug and alcohol testing and reports resulting from the support programme, which may be required indefinitely.

(iii) Psychoactive substance testing

(A) If drug tests are considered, these should screen for the most common illicit drugs such as opioids, cannabinoids, amphetamines, cocaine, hallucinogens and sedative hypnotics. Following a risk assessment performed by the

competent authority on the target population, screening tests may include additional drugs.

(B) In the event of a positive psychoactive substance screening result, confirmation should be required in accordance with national standards and procedures for psychoactive substance testing.

(C) In the event of a positive confirmation test, a psychiatric evaluation should be undertaken before a fit assessment may be considered by the medical assessor of the licensing authority.

(9) Deliberate self-harm and suicide attempt

Applicants who have carried out a single self-destructive action or repeated acts of deliberate self-harm or suicide attempt should be assessed as unfit. A fit assessment may be considered after full consideration of an individual case and may require psychiatric or psychological evaluation. Neuropsychological evaluation may also be required.

(10) Assessment

The assessment should take into consideration if the indication for the treatment, side effects and addiction risks of such treatment and the characteristics of the psychiatric disorder are compatible with flight safety.

(e) Specialist opinion and advice

(1) In case a specialist evaluation is needed, following the evaluation, the specialist should submit a written report to the AME, AeMC or medical assessor of the licensing authority as appropriate, detailing their opinion and recommendation.

(2) Psychiatric evaluations should be conducted by a qualified psychiatrist having adequate knowledge and experience in aviation medicine.

(3) The psychological opinion and advice should be based on a clinical psychological assessment conducted by a suitably qualified and accredited clinical psychologist with expertise and experience in aviation psychology.

(4) The psychological evaluation may include a collection of biographical data, the administration of aptitude as well as personality tests and clinical interview.

GM1 MED.B.155 Mental health

(a) Symptoms of concern may include but are not limited to:

(1) use of alcohol or other psychoactive substances;

(2) loss of interest/energy;

(3) eating and weight changes;

(4) sleeping problems;

(5) low mood and, if present, any suicidal thoughts;

(6) family history of psychiatric disorders, particularly suicide;

(7) anger, agitation or high mood; and

(8) depersonalisation or loss of control.

(b) The following aspects should be taken into consideration when conducting the mental health examination:

(1) appearance;

(2) attitude;

(3) behaviour;

(4) mood;

(5) speech;

(6) thought process and content;

(7) perception;

(8) cognition;

(9) insight; and

(10) judgement.

MED.B.160 Neurology

(a) Applicants with an established history or clinical diagnosis of the following shall be assessed as unfit:

(1) epilepsy except in cases in point (b)(1) and (2);

(2) recurring episodes of disturbance of consciousness of uncertain cause;

(3) conditions with a high propensity for cerebral dysfunction.

(b) Applicants with an established history or clinical diagnosis of the following conditions shall be referred to the medical assessor of the licensing authority and undergo further evaluation before a fit assessment may be considered:

(1) epilepsy without recurrence after the age of 5;

(2) epilepsy without recurrence and off all treatment for more than 10 years;

(3) epileptiform EEG abnormalities and focal slow waves;

(4) progressive or non-progressive disease of the nervous system;

(5) a single episode of disturbances or loss of consciousness;

(6) brain injury;

(7) spinal or peripheral nerve injury;

(8) disorders of the nervous system due to vascular deficiencies including haemorrhagic and ischaemic events.

AMC1 MED.B.160 Neurology

(a) Electroencephalography (EEG)

(1) EEG should be carried out when indicated by the applicant's history or on clinical grounds.

(2) Epileptiform paroxysmal EEG abnormalities and focal slow waves should be disqualifying. A fit assessment may be considered after further evaluation.

(b) Epilepsy

(1) Applicants who have experienced one or more convulsive episodes after the age of 5 should be assessed as unfit.

(2) A fit assessment may be considered if:

(i) the applicant is seizure free and off medication for a period of at least 10 years;

(ii) full neurological evaluation shows that a seizure was caused by a specific non-recurrent cause, such as trauma or toxin.

(3) Applicants who have experienced an episode of benign Rolandic seizure may be assessed as fit provided the seizure has been clearly diagnosed including a properly documented history and typical EEG result and the applicant has been free of symptoms and off treatment for at least 10 years.

(c) Neurological disease

Applicants with any stationary or progressive disease of the nervous system which has caused or is likely to cause a significant disability should be assessed as unfit. A fit assessment may be considered after full neurological evaluation in cases of minor functional losses associated with stationary disease.

(d) Disturbance of consciousness

Applicants with a history of one or more episodes of disturbed consciousness may be assessed as fit if the condition can be satisfactorily explained by a non-recurrent cause. A full neurological evaluation is required.

(e) Head injury

Applicants with a head injury which was severe enough to cause loss of consciousness or is associated with penetrating brain injury should be evaluated by a consultant neurologist. A fit assessment may be considered if there has been a full recovery and the risk of epilepsy is sufficiently low. Behavioural and cognitive aspects should be taken into account.

MED.B.165 Visual system

(a) Examination:

(1) 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.

(2) A routine eye examination shall form part of all revalidation and renewal examinations.

(3) Applicants shall undergo tonometry at the first revalidation examination after the age of 40, on clinical indication and if indicated considering the family history.

(4) Applicants shall supply the AeMC or AME with an ophthalmological examination report if:

(i) the functional performance shows significant changes;

(ii) the distant visual standards can only be reached with corrective lenses.

(5) Applicants with a high refractive error shall be referred to the medical assessor of the licensing authority.

(b) Distant visual acuity, with or without optimal correction, shall be 6/9 (0,7) or better in each eye separately, and visual acuity with both eyes shall be 6/6 (1,0) or better.

(c) Initial applicants having monocular or functional monocular vision, including eye muscle balance problems, shall be assessed as unfit. At revalidation or renewal examinations the applicant may be assessed as fit provided that an ophthalmological examination is satisfactory. The applicant shall be referred to the medical assessor of the licensing authority.

(d) Initial applicants with acquired substandard vision in one eye shall be assessed as unfit. At revalidation or renewal examinations the applicant shall be referred to the medical assessor of the licensing authority and may be assessed as fit provided that an ophthalmological examination is satisfactory.

(e) Applicants shall be able to read an N5 chart or equivalent at 30 – 50 cm and an N14 chart or equivalent at 60 – 100 cm distance, if necessary with the aid of correction.

(f) Applicants shall have normal fields of vision and normal binocular function.

(g) Applicants who have undergone eye surgery shall be assessed as unfit until full recovery of the visual function. A fit assessment may be considered by the licensing authority subject to satisfactory ophthalmological evaluation.

(h) Applicants with a clinical diagnosis of keratoconus shall be referred to the medical assessor of the licensing authority and may be assessed as fit subject to a satisfactory examination by an ophthalmologist.

(i) Applicants with diplopia shall be assessed as unfit.

(j) Spectacles and contact lenses

(1) If satisfactory visual function for the rated duties is achieved only with the use of correction, the spectacles or contact lenses must provide optimal visual function, be well tolerated, and suitable for air traffic control purposes.

(2) No more than one pair of spectacles, when worn during the exercise of licensed privileges, shall be used to meet the visual requirements at all distances.

(3) A spare set of similarly correcting spectacles shall be readily available when exercising the privileges of the licence(s).

(4) Contact lenses, when worn during the exercise of licensed privileges, shall be mono-focal, non-tinted and not orthokeratological. Monovision contact lenses shall not be used.

(5) Applicants with a large refractive error shall use contact lenses or high index spectacle lenses.

AMC1 MED.B.165 Visual system

(a) Eye examination

(1) At each aero-medical revalidation examination, the visual fitness should be assessed and the eyes should be examined with regard to possible pathology.

(2) All abnormal and doubtful cases should be referred to an ophthalmologist. Conditions which should undergo ophthalmological examination include but are not limited to a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity and/or the occurrence of eye disease, eye injury or eye surgery.

(3) If ophthalmological examinations are required for any significant reason, this should be imposed as a limitation on the medical certificate.

(4) The effect of multiple eye conditions should be evaluated by an ophthalmologist with regard to possible cumulative effects. Functional testing in the working environment may be necessary to consider a fit assessment.

(5) Visual acuity should be tested using Snellen charts, or equivalent, under appropriate illumination. If clinical evidence suggests that Snellen may not be appropriate, Landolt 'C' may be used.

(b) Comprehensive eye examination

A comprehensive eye examination by an eye specialist is required at the initial examination. All abnormal and doubtful cases should be referred to an ophthalmologist. The examination should include:

(1) history;

(2) visual acuities — near, intermediate and distant vision; uncorrected and with best optical correction if needed;

(3) objective refraction — hyperopic initial applicants with a hyperopia of more than +2 dioptres and under the age of 25 in cycloplegia;

(4) ocular motility and binocular vision;

(5) colour vision;

(6) visual fields;

(7) tonometry;

(8) examination of the external eye, anatomy, media (slit lamp) and fundoscopy;

(9) assessment of contrast and glare sensitivity.

(c) Routine eye examination

At each revalidation or renewal examination, the visual fitness should be assessed and the eyes

should be examined with regard to possible pathology. All abnormal and doubtful cases should be referred to an ophthalmologist. This routine eye examination should include:

(1) history;

(2) visual acuities — near, intermediate and distant vision; uncorrected and with best optical correction if needed;

(3) morphology by ophthalmoscopy;

(4) further examination on clinical indication.

(d) Refractive error

(1) Applicants with a refractive error between +5.0/-6.0 dioptres may be assessed as fit provided optimal correction has been considered and no significant pathology is demonstrated. If the refractive error exceeds +3.0/-3.0 dioptres, a four-yearly follow-up by an eye specialist should be required.

(2) Applicants with:

(i) a refractive error exceeding -6 dioptres;

(ii) an astigmatic component exceeding 3 dioptres; or

(iii) anisometropia exceeding 3 dioptres; may be considered for a fit assessment if:

(A) no significant pathology can be demonstrated;

(B) optimal correction has been considered;

(C) visual acuity is at least 6/6 (1.0) in each eye separately with normal visual fields while wearing the optimal spectacle correction;

(D) two-yearly follow-up is undertaken by an eye specialist.

(3) Applicants with hypermetropia exceeding +5.0 dioptres may be assessed as fit subject to a satisfactory ophthalmological evaluation provided there are adequate fusional reserves, normal intraocular pressures and anterior angles and no significant pathology has been demonstrated. Corrected visual acuity in each eye shall be 6/6 or better.

(4) Applicants with a large refractive error shall use contact lenses or high-index spectacle lenses.

(e) Convergence

Applicants with convergence outside the normal range may be assessed as fit provided it does not interfere with near vision (30–50 cm) or intermediate vision (100 cm) with or without correction.

(f) Substandard vision

(1) Applicants with reduced central vision in one eye may be assessed as fit for a revalidation or renewal of a medical certificate if the binocular visual field is normal and the underlying pathology is acceptable according to ophthalmological evaluation. Testing should include functional testing in the appropriate working environment.

(2) Applicants with acquired substandard vision in one eye (monocularity, functional monocular vision including eye muscle imbalance) may be assessed as fit for revalidation or renewal if the ophthalmological examination confirms that:

(i) the better eye achieves distant visual acuity of 1.0 (6/6), corrected or uncorrected;

(ii) the better eye achieves intermediate and near visual acuity of 0.7 (6/9), corrected or uncorrected;

(iii) there is no significant ocular pathology;

(iv) a functional test in the working environment is satisfactory; and

(v) in the case of acute loss of vision in one eye, a period of adaptation time has passed from the known point of visual loss, during which the applicant is assessed as unfit.

(3) An applicant with a monocular visual field defect may be assessed as fit if the binocular visual fields are normal.

(g) Keratoconus

Applicants with keratoconus may be considered for a fit assessment if the visual requirements are met with the use of corrective lenses and periodic review is undertaken by an ophthalmologist.

(h) Heterophoria

Applicants with heterophoria (imbalance of the ocular muscles) exceeding when measured with optimal correction, if prescribed:

(1) at 6 metres:

— 2.0 prism dioptres in hyperphoria,

— 10.0 prism dioptres in esophoria,

— 8.0 prism dioptres in exophoria

and

(2) at 33 centimetres:

— 1.0 prism dioptre in hyperphoria,

— 8.0 prism dioptres in esophoria,

— 12.0 prism dioptres in exophoria

may be assessed as fit provided that orthoptic evaluation demonstrates that the fusional reserves are sufficient to prevent asthenopia and diplopia. The Netherlands Optical Society (TNO) testing or equivalent should be carried out to demonstrate fusion.

(i) Eye surgery

(1) After refractive surgery or surgery of the cornea including cross linking, a fit assessment may be considered, provided:

(i) satisfactory stability of refraction has been achieved (less than 0.75 dioptres

variation diurnally);

(ii) examination of the eye shows no post-operative complications;

(iii) glare sensitivity is normal;

(iv) mesopic contrast sensitivity is not impaired;

(v) evaluation is undertaken by an ophthalmologist.

(2) Cataract surgery

Following intraocular lens surgery, including cataract surgery, a fit assessment may be considered once recovery is complete and the visual requirements are met with or without correction. Intraocular lenses should be monofocal and should not impair colour vision.

(3) Retinal surgery/retinal laser therapy

(i) After successful retinal surgery, applicants may be assessed as fit once the recovery is complete. Annual ophthalmological follow-up may be necessary. Longer periods may be acceptable after two years on recommendation of the ophthalmologist.

(ii) After successful retinal laser therapy, applicants may be assessed as fit provided an ophthalmological evaluation shows stability.

(4) Glaucoma surgery

A fit assessment may be considered six months after successful glaucoma surgery, or earlier if recovery is complete. Six-monthly ophthalmological examinations to follow up secondary complications caused by the glaucoma may be necessary.

(5) Extraocular muscle surgery

A fit assessment may be considered not less than six months after surgery and after a satisfactory ophthalmological evaluation.

(j) Visual correction

Spectacles should permit the licence holder to meet the visual requirements at all distances.

GM1 MED.B.165 Visual system

COMPARISON OF DIFFERENT READING CHARTS (APPROXIMATE FIGURES)

(a) Test distance: 40 cm

Decimal	Nieden	Jäger	Snellen	N	Parinaud
1,0	1	2	1,5	3	2
0,8	2	3	2	4	3
0,7	3	4	2,5		
0,6	4	5	3	5	4
0,5	5	5		6	5
0,4	7	9	4	8	6

0,35	8	10	4,5		8
0,32	9	12	5,5	10	10
0,3	9	12		12	
0,25	9	12		14	
0,2	10	14	7,5	16	14
0,16	11	14	12	20	

(b) Test distance: 80 cm

Decimal	Nieden	Jäger	Snellen	N	Parinaud
1,2	4	5	3	5	4
1,0	5	5		6	5
0,8	7	9	4	8.0	6
0,7	8	10	4,5		8
0,63	9	12	5,5	10	10
0,6	9	12		12	10
0,5	9	12		14	10
0,4	10	14	7,5	16	14
0,32	11	14	12	20	14

MED.B.170 Colour vision

Applicants shall be normal trichromates.

AMC1 MED.B.170 Colour vision

(a) Pseudoisochromatic plate testing alone is not sufficient.

(b) Colour vision should be assessed using means to demonstrate normal trichromacy.

GM1 MED.B.170 Colour vision

The means to demonstrate normal trichromacy include:

(a) anomaloscopy (Nagel or equivalent). This test is considered passed if the colour match is trichromatic and the matching range is four scale units or less;

(b) Colour Assessment and Diagnosis (CAD) test.

GM2 MED.B.170 Colour vision

Experienced licence holders who were previously assessed as fit under earlier requirements for colour safety, and who have demonstrated safe performance in their current role, may continue to be assessed as fit by the medical assessor of their licensing authority. This is subject to their colour deficiency remaining stable and a limitation being imposed to limit the licence holder to work only on the specific equipment on which they have already demonstrated safe performance.

MED.B.175 Otorhinolaryngology

(a) Examination:

(1) A routine otorhinolaryngological examination shall form part of all initial, revalidation and renewal examinations.

(2) Hearing shall be tested at all examinations. The applicant shall understand correctly conversational speech when tested with each ear at a distance of 2 metres from and with the applicant's back turned towards the AME.

(3) Hearing shall be tested with pure tone audiometry at the initial examination and at subsequent revalidation or renewal examinations every four years until the age of 40 and every two years thereafter.

(4) Pure-tone audiometry:

(i) Applicants for a class 3 medical certificate shall not have a hearing loss 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, in either ear separately.

(ii) Applicants who do not meet the hearing criteria above shall be referred to the medical assessor of the licensing authority and undergo a specialist assessment before a fit assessment may be considered. Initial applicants shall undergo a speech discrimination test. Applicants for a revalidation or renewal of a class 3 medical certificate shall undergo a functional hearing test in the operational environment.

(5) Hearing aids:

(i) Initial examination: the need of hearing aids to comply with the hearing requirements entails unfitness.

(ii) Revalidation and renewal examinations: a fit assessment may be considered if the use of hearing aid(s) or of an appropriate prosthetic aid improves the hearing to achieve a normal standard as assessed by fully functional testing in the operational environment.

(iii) If a prosthetic aid is needed to achieve the normal hearing standard, a spare set of the equipment and accessories, such as batteries, shall be available when exercising the privileges of the licence.

(b) Applicants with:

(1) an active chronic pathological process of the internal or middle ear;

(2) unhealed perforation or dysfunction of the tympanic membrane(s);

(3) disturbance of vestibular function;

(4) significant malformation or significant chronic infection of the oral cavity or upper respiratory tract;

(5) significant disorder of speech or voice reducing intelligibility

shall be referred to the medical assessor of the licensing authority and undergo further ORL

examination and assessment to establish that the condition does not interfere with the safe exercise of the privileges of the licence.

AMC1 MED.B.175 Otorhinolaryngology

(a) Examination

(1) An otorhinolaryngological examination should include:

(i) history;

(ii) clinical examination including otoscopy, rhinoscopy and examination of the mouth and throat;

(iii) clinical examination of the vestibular system.

(2) Ear, nose and throat (ENT) specialists involved in the aero-medical assessment of air traffic controllers should have an understanding of the functionality required by air traffic controllers whilst exercising the privileges of their licence(s).

(3) If a full aero-medical assessment and functional check are needed, due regard should be paid to the operational environment in which the operational functions are undertaken.

(b) Hearing

(1) The follow-up of an applicant with hypoacusis should be decided by the licensing authority. If at the next annual test there is no indication of further deterioration, the normal frequency of testing may be resumed.

(2) An appropriate prosthetic aid may be a special headset with individual earpiece volume controls. Full functional and environmental assessments should be carried out with the chosen prosthetic equipment in use.

(c) Ear conditions

An applicant with a single dry perforation of non-infectious origin and which does not interfere with the normal function of the ear may be considered for a fit assessment.

(d) Vestibular disturbance

The presence of vestibular disturbance and spontaneous or positional nystagmus requires complete vestibular evaluation by a specialist. Significant abnormal caloric or rotational vestibular responses are disqualifying. At revalidation and renewal aero-medical examinations, abnormal vestibular responses should be assessed in their clinical context.

(e) Speech disorder

Applicants with a speech disorder should be assessed with due regard to the operational environment in which the operational functions are undertaken. Applicants with significant disorder of speech or voice should be assessed as unfit.

GM1 MED.B.175 Otorhinolaryngology

HEARING

(a) Speech discrimination test: discriminating speech against other noise including other sources of verbal communication and ambient noise in the working environment, but not against engine noise.

(b) Functional hearing test: the objective of this test is to evaluate the controller's ability to hear the full range of communications that occur in an operational environment and not just through a headset or speaker.

(c) Prosthetic aid: the functional hearing test to be carried out with the prosthetic aid in use is to ensure that the individual is able to perform the functions of their licence and that the equipment is not adversely affected by interference from headsets or other factors.

(d) Pure-tone audiometry: testing at frequencies at or above 4 000 Hz will aid the early diagnosis of acoustic neuroma, noise-induced hearing loss (NIH) and other disorders of hearing. Particular attention should be paid in cases if there is a significant difference between thresholds of the left and right ear. The pure tone audiogram should record the actual values found.

MED.B.180 Dermatology

Applicants shall have no established dermatological condition likely to interfere with the safe exercise of the privileges of the licence held.

AMC1 MED.B.180 Dermatology

(a) Referral to the licensing authority should be made if doubt exists about the fitness of an applicant with eczema (exogenous and endogenous), severe psoriasis, chronic infections, drug-induced or bullous eruptions or urticaria.

(b) Systemic effects of radiation or pharmacological treatment for a dermatological condition should be evaluated before a fit assessment may be considered.

(c) An applicant with a skin condition that causes pain, discomfort, irritation or itching may only be assessed as fit if the condition can be controlled and does not interfere with the safe exercise of the privileges of the licence.

(d) If a dermatological condition is associated with a systemic illness, full consideration should be given to the underlying illness before a fit assessment may be considered.

MED.B.185 Oncology

(a) After diagnosis of primary or secondary malignant disease, applicants shall be referred to the medical assessor of the licensing authority and shall undergo satisfactory oncological evaluation before a fit assessment may be considered.

(b) Applicants with an established history or clinical diagnosis of an intracerebral malignant tumour shall be assessed as unfit.

AMC1 MED.B.185 Oncology

(a) Applicants who have been diagnosed with a malignant disease may be assessed as fit provided:

(1) after primary treatment there is no evidence of residual malignant disease likely to interfere with the safe exercise of the privileges of the licence;

(2) time appropriate to the type of tumour has elapsed since the end of primary treatment;

(3) the risk of incapacitation from a recurrence or metastasis is sufficiently low;

(4) there is no evidence of short- or long-term sequelae from treatment. Special attention should be paid to applicants who have received anthracycline chemotherapy;

(5) satisfactory oncology follow-up reports are provided to the licensing authority.

(b) Applicants receiving ongoing chemotherapy or radiation treatment should be assessed as unfit.

(c) Applicants with a benign intracerebral tumour may be assessed as fit after satisfactory specialist and neurological evaluation and if the condition does not compromise the safe exercise of the privileges of the licence.

(d) Applicants with pre-malignant conditions may be assessed as fit if treated or excised as necessary and there is a regular follow-up.

SUBPART C – REQUIREMENTS FOR MEDICAL FITNESS OF CABIN CREW

SECTION 1 – GENERAL REQUIREMENTS

MED.C.001 General

Cabin crew members shall only perform the duties and responsibilities required by aviation safety rules on an aircraft if they comply with the applicable requirements of this Part.

MED.C.005 Aero-medical assessments

(a) Cabin crew members shall undergo aero-medical assessments to verify that they are free from any physical or mental illness which might lead to incapacitation or an inability to perform their assigned safety duties and responsibilities.

(b) Each cabin crew member shall undergo an aero-medical assessment before being first assigned to duties on an aircraft, and after that at intervals of maximum 60 months.

(c) Aero-medical assessments shall be conducted by an AME, AeMC, or by an OHMP if the requirements of point MED.D.040 are complied with.

AMC1 MED.C.005 Aero-medical assessments

(a) When conducting aero-medical examinations and assessments of cabin crew members, as applicable, their medical fitness should be assessed with particular regard to their physical and mental ability to:

(1) undergo the training required for cabin crew to acquire and maintain competence, e.g. actual firefighting, slide descending, using protective breathing equipment (PBE) in a simulated smoke-filled environment, providing first aid;

(2) manipulate the aircraft systems and emergency equipment to be used by cabin crew, e.g. cabin management systems, doors/exits, escape devices, fire extinguishers, taking also into account the class and type of aircraft operated, e.g. narrow-bodied or wide-bodied, single/multi-deck, single/multi-cabin crew operation;

(3) continuously tolerate the aircraft environment whilst performing duties, e.g. altitude, pressure, re-circulated air, noise; and the type of operations such as short/medium/long/ultra long haul; and

(4) perform the required duties and responsibilities efficiently during normal and abnormal operations, and in emergency situations and psychologically demanding circumstances, e.g. assistance to crew members and passengers in the event of decompression; stress management, decision-making, crowd control and effective crew coordination, management of disruptive passengers and of security threats. When relevant, operating

as single cabin crew should also be taken into account when assessing the medical fitness of cabin crew.

(b) Intervals

(1) The interval between aero-medical assessments should be determined by the competent authority. The intervals established by the competent authority apply to cabin crew members who:

(i) undergo aero-medical assessments by an AME, AeMC or OHMP under the oversight of that competent authority; or

(ii) are employed by an operator under the oversight of that competent authority.

(2) The interval between aero-medical assessments may be reduced by the AME, AeMC or OHMP for medical reasons and in accordance with point MED.C.035.

(3) Aero-medical assessments for the revalidation of a cabin crew medical report may be undertaken up to 45 days prior to the expiry date of the previous medical report. The validity period of the aero-medical assessment should be calculated from the expiry date of the previous aero-medical assessment.

SECTION 2 – REQUIREMENTS FOR AERO-MEDICAL ASSESSMENT OF CABIN CREW

MED.C.020 General

Cabin crew members shall be free from any:

(a) abnormality, congenital or acquired;

(b) active, latent, acute or chronic disease or disability;

(c) wound, injury or sequelae from operation; and

(d) effect or side effect of any prescribed or non-prescribed therapeutic, diagnostic or preventive medication taken that would entail a degree of functional incapacity which might lead to incapacitation or an inability to discharge their safety duties and responsibilities.

MED.C.025 Content of aero-medical assessments

(a) An initial aero-medical assessment shall include at least:

(1) an assessment of the applicant cabin crew member's medical history; and

(2) a clinical examination of the following:

(i) cardiovascular system;

(ii) respiratory system;

(iii) musculoskeletal system;

(iv) otorhinolaryngology;

(v) visual system; and

(vi) colour vision.

(b) Each subsequent aero-medical re-assessment shall include:

(1) an assessment of the cabin crew member's medical history; and

(2) a clinical examination if deemed necessary in accordance with aero-medical best practice.

(c) For the purpose of points (a) and (b), in the event of any doubt or if clinically indicated, a cabin crew member's aero-medical assessment shall also include any additional medical examination, test or investigation that are considered necessary by the AME, AeMC or OHMP.

AMC1 MED.C.025 Content of aero-medical assessments

Aero-medical examinations and assessments of cabin crew members should be conducted in accordance with AMC2 to AMC18 MED.C.025.

AMC2 MED.C.025 Content of aero-medical assessments

CARDIOVASCULAR SYSTEM

(a) Examination

(1) A standard 12-lead resting ECG and report should be completed on clinical indication, at the first examination after the age of 40 and then at least every five years after the age of 50. If cardiovascular risk factors such as smoking, abnormal cholesterol levels or obesity are present, the intervals of resting ECGs should be reduced to two years.

(2) Extended cardiovascular assessment should be required when clinically indicated.

(b) Cardiovascular system — general

(1) Cabin crew members with any of the following conditions:

(i) aneurysm of the thoracic or supra-renal abdominal aorta, before surgery;

(ii) significant functional abnormality of any of the heart valves; or

(iii) heart or heart/lung transplantation

should be assessed as unfit.

(2) Cabin crew members with an established diagnosis of one of the following conditions:

(i) peripheral arterial disease before or after surgery;

(ii) aneurysm of the abdominal aorta, before or after surgery;

(iii) minor cardiac valvular abnormalities;

(iv) after cardiac valve surgery;

(v) abnormality of the pericardium, myocardium or endocardium;

(vi) congenital abnormality of the heart, before or after corrective surgery;

(vii) a cardiovascular condition requiring systemic anticoagulation;

(viii) vasovagal syncope of uncertain cause;

(ix) arterial or venous thrombosis; or

(x) pulmonary embolism

should be evaluated by a cardiologist before a fit assessment may be considered.

(c) Thromboembolic disorders

Whilst anticoagulation therapy is initiated, cabin crew members should be assessed as unfit. After a period of stable anticoagulation, a fit assessment may be considered with limitation(s), as appropriate. Anticoagulation should be considered stable if, within the last six months, at least five INR values are documented, of which at least four are within the INR target range and the haemorrhagic risk is acceptable. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment may be considered after a stabilisation period of three months. Cabin crew members with pulmonary embolism should also be evaluated by a cardiologist.

Following cessation of anticoagulant therapy, for any indication, cabin crew members should undergo a re-assessment.

(d) Syncope

(1) In the case of a single episode of vasovagal syncope which can be satisfactorily explained, a fit assessment may be considered.

(2) Cabin crew members with a history of recurrent vasovagal syncope should be assessed as unfit. A fit assessment may be considered after a six-month period without recurrence, provided cardiological evaluation is satisfactory. Neurological review may be indicated.

(e) Blood pressure

Blood pressure should be recorded at each examination.

(1) The blood pressure should be within normal limits and should not consistently exceed 160 mmHg systolic and/or 95 mmHg diastolic, with or without treatment, taking into account other risk factors.

(2) Cabin crew members initiating medication for the control of blood pressure should be assessed as unfit until the absence of any significant side effects has been established and verification that the treatment is compatible with the safe exercise of cabin crew duties has been achieved.

(f) Coronary artery disease

(1) Cabin crew members with:

(i) cardiac ischaemia;

(ii) symptomatic coronary artery disease; or

(iii) symptoms of coronary artery disease controlled by medication

should be assessed as unfit.

(2) Cabin crew members who are asymptomatic after myocardial infarction or surgery for coronary artery disease should have fully recovered before a fit assessment may be considered. The affected cabin crew members should be on appropriate secondary prevention treatment.

(g) Rhythm/conduction disturbances

(1) Cabin crew members with any significant disturbance of cardiac conduction or rhythm should undergo cardiological evaluation before a fit assessment may be considered.

(2) Cabin crew members with a history of:

(i) ablation therapy; or

(ii) pacemaker implantation

should undergo satisfactory cardiovascular evaluation before a fit assessment may be made.

(3) Cabin crew members with:

(i) symptomatic sinoatrial disease;

(ii) symptomatic hypertrophic cardiomyopathy

(iii) complete atrioventricular block;

(iv) symptomatic QT prolongation;

(v) an automatic implantable defibrillating system; or

(vi) a ventricular anti-tachycardia pacemaker

should be assessed as unfit.

AMC3 MED.C.025 Content of aero-medical assessments

RESPIRATORY SYSTEM

(a) Cabin crew members with significant impairment of pulmonary function should be assessed as unfit. A fit assessment may be considered once pulmonary function has recovered and is satisfactory.

(b) Cabin crew members should undergo pulmonary morphological or functional tests on when clinically indicated.

(c) Cabin crew members with a history or established diagnosis of:

(1) asthma;

(2) active inflammatory disease of the respiratory system;

(3) active sarcoidosis;

(4) pneumothorax;

(5) sleep apnoea syndrome/sleep disorder; or

(6) major thoracic surgery

should undergo respiratory evaluation with a satisfactory result before a fit assessment may be considered.

(d) Cabin crew members who have undergone a pneumonectomy should be assessed as unfit.

AMC4 MED.C.025 Content of aero-medical assessments

DIGESTIVE SYSTEM

(a) Cabin crew members with any disease or sequelae of 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, should be assessed as unfit.

(b) Cabin crew members should be free from herniae that might give rise to incapacitating symptoms.

(c) Cabin crew members with disorders of the gastro-intestinal system, including:

(1) recurrent severe dyspeptic disorder requiring medication;

(2) peptic ulceration;

(3) pancreatitis;

(4) symptomatic gallstones;

(5) an established diagnosis or history of chronic inflammatory bowel disease;

(6) after surgical operation on the digestive tract or its adnexa, including surgery involving total or partial excision or a diversion of any of these organs;

(7) morphological or functional liver disease; or

(8) after surgery, including liver transplantation

may be assessed as fit subject to satisfactory gastroenterological evaluation.

AMC5 MED.C.025 Content of aero-medical assessments

METABOLIC AND ENDOCRINE SYSTEMS

(a) Cabin crew members should not possess any functional or structural metabolic, nutritional or endocrine disorder which is likely to interfere with the safe exercise of their duties and responsibilities.

(b) Cabin crew members with metabolic, nutritional or endocrine dysfunction may be assessed as fit, subject to demonstrated stability of the condition and satisfactory aero-medical evaluation.

(c) Diabetes mellitus

(1) Cabin crew members with diabetes mellitus requiring insulin may be assessed as fit:

(i) if it can be demonstrated that adequate blood sugar control has been achieved and hypoglycaemia awareness is established and maintained; and

(ii) in the absence, within the preceding 12 months, of any;

(A) hospitalisation related to diabetes; or

(B) hypoglycaemia that resulted in a seizure, loss of consciousness, impaired cognitive function or that required the intervention by another party; or

(C) episode of hypoglycaemia unawareness.

(2) Limitations should be imposed as appropriate. A limitation to undergo specific medical examinations (SEM) and a restriction to operate only in multi-cabin crew operations (MCL) should be placed as a minimum.

(3) Cabin crew members with diabetes mellitus not requiring insulin may be assessed as fit if it can be demonstrated that adequate blood sugar control has been achieved and hypoglycaemia awareness, if applicable considering the medication, is achieved.

AMC6 MED.C.025 Content of aero-medical assessments

HAEMATOLOGY

Cabin crew members with a haematological condition, such as:

(a) abnormal haemoglobin including, but not limited to, anaemia, erythrocytosis or haemoglobinopathy;

(b) coagulation, haemorrhagic or thrombotic disorder;

(c) significant lymphatic enlargement;

(d) acute or chronic leukaemia; or

(e) splenomegaly

may be assessed as fit subject to satisfactory aero-medical evaluation. If anticoagulation is being used as treatment, refer to point (c) of AMC2 MED.C.025.

AMC7 MED.C.025 Content of aero-medical assessments

GENITOURINARY SYSTEM

(a) Urine analysis should form part of every aero-medical examination and assessment. The urine should not contain any abnormal element(s) considered to be of pathological significance.

(b) Cabin crew members with any disease or sequelae of surgical procedures on the kidneys or the urinary tract, in particular any obstruction due to stricture or compression likely to cause incapacitation, should be assessed as unfit.

(c) Cabin crew members with a genitourinary disorder, such as:

(1) renal disease; or

(2) a history of renal colic due to one or more urinary calculi

may be assessed as fit subject to satisfactory renal/urological evaluation.

(d) Cabin crew members who have undergone a major surgical operation in the genitourinary apparatus involving a total or partial excision or a diversion of its organs should be assessed as unfit and be re-assessed after recovery before a fit assessment may be made.

(e) Cabin crew members who have undergone renal transplantation may be considered for a fit assessment if it is fully compensated and tolerated with only minimal immuno-suppressive therapy after at least 12 months. A requirement to undergo specific medical examinations (SEM) and a restriction to operate only in multi-cabin crew operations (MCL) should be considered.

(f) Cabin crew members requiring dialysis should be assessed as unfit.

AMC8 MED.C.025 Content of aero-medical assessments

INFECTIOUS DISEASE

Cabin crew members who are HIV positive may be assessed as fit if investigation provides no evidence of clinical disease and subject to satisfactory aero-medical evaluation.

AMC9 MED.C.025 Content of aero-medical assessments

OBSTETRICS AND GYNAECOLOGY

(a) Cabin crew members who have undergone a major gynaecological operation should be assessed as unfit until after recovery.

(b) Pregnancy

(1) A pregnant cabin crew member may be assessed as fit only during the first 16 weeks of gestation following review of the obstetric evaluation by the AME or OHMP.

(2) A limitation not to perform duties as single cabin crew member should be considered.

(3) The AME or OHMP should provide written advice to the cabin crew member and supervising physician regarding potentially significant complications of pregnancy resulting from flying duties.

AMC10 MED.C.025 Content of aero-medical assessments

MUSCULOSKELETAL SYSTEM

(a) Cabin crew members should have sufficient standing height, arm and leg length and muscular strength for the safe exercise of their duties and responsibilities.

(b) Cabin crew members should have satisfactory functional use of the musculoskeletal system. Particular attention should be paid to emergency procedures and evacuation, and related training.

(c) Cabin crew members with any significant sequelae from disease, injury or congenital abnormality affecting the bones, joints, muscles or tendons with or without surgery require full evaluation prior to a fit assessment.

(d) Cabin crew members with inflammatory, infiltrative, traumatic or degenerative disease of the musculoskeletal system may be assessed as fit provided the condition is in remission or is stable and the affected cabin crew member is not taking any medication that may lead to unfitness.

AMC11 MED.C.025 Content of aero-medical assessments

MENTAL HEALTH

(a) Cabin crew members with a mental or behavioural disorder due to use or misuse of alcohol or other psychoactive substances should be assessed as unfit pending recovery and freedom from psychoactive substance use or misuse and subject to satisfactory psychiatric evaluation after successful treatment.

(b) Cabin crew members with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder should be assessed as unfit.

(c) Cabin crew members with a psychiatric condition such as:

(1) mood disorder;

(2) neurotic disorder;

(3) personality disorder; or

(4) mental or behavioural disorder

should undergo satisfactory psychiatric evaluation before a fit assessment may be considered.

(d) Cabin crew members with a history of a single or repeated acts of deliberate self-harm should be assessed as unfit. Cabin crew members should undergo satisfactory psychiatric evaluation before a fit assessment may be considered.

(e) If there is established evidence that a cabin crew member has a psychological disorder, the cabin crew member should be referred for psychological opinion and advice.

(f) The psychological evaluation may include a collection of biographical data, the review of aptitudes, and personality tests and psychological interview.

(g) The psychologist should submit a report to the AME or OHMP, detailing the results and recommendation.

AMC12 MED.C.025 Content of aero-medical assessments

NEUROLOGY

(a) Cabin crew members with an established history or clinical diagnosis of:

(1) epilepsy; or

(2) recurring episodes of disturbance of consciousness of uncertain cause

should be assessed as unfit.

(b) Cabin crew members with an established history or clinical diagnosis of:

(1) epilepsy without recurrence after five years of age and without treatment for more than 10 years;

(2) epileptiform EEG abnormalities and focal slow waves;

(3) progressive or non-progressive disease of the nervous system;

(4) inflammatory disease of the central or peripheral nervous system;

(5) migraine;

(6) a single episode of disturbance of consciousness of uncertain cause;

(7) loss of consciousness after head injury;

(8) penetrating brain injury; or

(9) spinal or peripheral nerve injury

should undergo further evaluation before a fit assessment may be considered.

(c) Cabin crew members with a disorder of the nervous system due to vascular deficiencies including haemorrhagic and ischaemic events should be assessed as unfit. A fit assessment may be considered if neurological review and musculoskeletal assessments are satisfactory.

AMC13 MED.C.025 Content of aero-medical assessments

VISUAL SYSTEM

(a) Examination

(1) A routine eye examination should form part of the initial and all further examinations and assessments; and

(2) An extended eye examination should be undertaken by an eye specialist when clinically indicated (refer to GM2 MED.B.070).

(b) Distant visual acuity, with or without correction, should be with both eyes 6/9 (0,7) or better.

(c) Cabin crew members should be able to read an N5 chart (or equivalent) at 30–50 cm, with correction if prescribed (refer to GM1 MED.B.070).

(d) The binocular visual field or, in the case of monocularity, the monocular visual field should be acceptable.

(e) Cabin crew members who have undergone refractive surgery may be assessed as fit subject to satisfactory ophthalmological evaluation.

(f) Cabin crew members with diplopia should be assessed as unfit.

(g) Spectacles and contact lenses

If satisfactory visual function is achieved only with the use of correction:

(1) in the case of myopia or hyperopia or both, spectacles or contact lenses should be worn whilst on duty;

(2) in the case of presbyopia, spectacles should be readily available for immediate use;

(3) the correction should provide optimal visual function and be well tolerated;

(4) a spare set of similarly correcting spectacles should be readily available for immediate use whilst on duty;

(5) orthokeratologic lenses should not be used.

AMC14 MED.C.025 Content of aero-medical assessments

COLOUR VISION

Cabin crew members should be able to correctly identify 9 of the first 15 plates of the 24-plate edition of Ishihara pseudoisochromatic plates. Alternatively, cabin crew members should demonstrate the

ability to readily perceive those colours of which the perception is required for the safe performance of their duties.

AMC15 MED.C.025 Content of aero-medical assessments

OTORHINOLARYNGOLOGY (ENT)

(a) Hearing should be satisfactory for the safe exercise of cabin crew duties and responsibilities. Cabin crew with hypoacusis should demonstrate satisfactory functional hearing abilities.

(b) Examination

(1) An ear, nose and throat (ENT) examination should form part of all examinations and assessments. A tympanometry or equivalent should be performed at the initial examination and when clinically indicated.

(2) Hearing should be tested at all examinations and assessments:

(i) The cabin crew member should understand correctly conversational speech when tested with each ear at a distance of 2 metres from and with the cabin crew member's back turned towards the examiner.

(ii) Notwithstanding point (b)(2)(i), hearing should be tested with pure tone audiometry at the initial examination and when clinically indicated.

(iii) At initial examination the cabin crew member should not have a hearing loss of more than 35 dB at any of the frequencies 500 Hz, 1 000 Hz or 2 000 Hz, or more than 50 dB at 3 000 Hz, in either ear separately.

(3) If the hearing requirements can be met only with the use of hearing aid(s), the hearing aid(s) should provide optimal hearing function, be well tolerated, and suitable for aviation purposes.

(c) Cabin crew members with:

(1) an active pathological process of the internal or middle ear;

(2) unhealed perforation or dysfunction of the tympanic membrane(s);

(3) disturbance of vestibular function;

(4) significant restriction of the nasal passages;

(5) sinus dysfunction;

(6) significant malformation or significant infection of the oral cavity or upper respiratory tract;

(7) significant disorder of speech or voice

should undergo further examination to establish that the condition does not interfere with the safe exercise of their duties and responsibilities.

AMC16 MED.C.025 Content of aero-medical assessments

DERMATOLOGY

If a dermatological condition is associated with a systemic illness, full consideration should be given to the underlying illness before a fit assessment may be made.

AMC17 MED.C.025 Content of aero-medical assessments

ONCOLOGY

(a) After treatment for malignant disease, cabin crew members should undergo satisfactory oncological and aero-medical evaluation before a fit assessment may be considered.

(b) Cabin crew members with an established history or clinical diagnosis of intracerebral malignant tumour should be assessed as unfit. Considering the histology of the tumour, a fit assessment may be considered after successful treatment and recovery.

GM1 MED.C.025 Content of aero-medical assessments

(a) When conducting aero-medical examinations and assessments, typical cabin crew duties as listed in points (b) and (c), particularly those to be performed during abnormal operations and emergency situations, and cabin crew responsibilities to the travelling public should be considered in order to identify:

(1) any physical and/or mental conditions that could be detrimental to the performance of the duties required from cabin crew; and

(2) which examination(s), test(s) or investigation(s) should be undergone to complete an appropriate aero-medical assessment.

(b) Main cabin crew duties and responsibilities during day-to-day normal operations

(1) During pre-/post-flight ground operations with/without passengers on board:

(i) monitoring of the situation inside the aircraft cabin and awareness of conditions outside the aircraft including observation of visible aircraft surfaces and information to flight crew of any surface contamination such as ice or snow;

(ii) assistance to special categories of passengers (SCPs) such as infants and children (accompanied or unaccompanied), persons with disabilities or reduced mobility, medical cases with or without medical escort, and inadmissible persons, deportees and passengers in custody;

(iii) observation of passengers (any suspicious behaviour, passengers under the influence of alcohol and/or drugs, mentally disturbed), observation of potential able-bodied persons, crowd control during boarding and disembarkation;

(iv) safe stowage of cabin luggage, safety demonstrations and cabin secure checks, management of passengers and ground services during re-fuelling, observation of use of portable electronic devices;

(v) preparedness to carry out safety and emergency duties at any time, and security alertness.

(2) During flight:

(i) operation and monitoring of aircraft systems, surveillance of the cabin, lavatories, galleys, crew areas and flight crew compartment;

(ii) coordination with flight crew on the situation in the cabin and turbulence events/effects;

(iii) management and observation of passengers (consumption of alcohol, behaviour, potential medical issues), observation of use of portable electronic devices;

(iv) safety and security awareness and preparedness to carry out safety and emergency duties at any time, and cabin secure checks prior to landing.

(c) Main cabin crew duties and responsibilities during abnormal and emergency operations

(1) In the event of planned or unplanned emergency evacuation: briefing and/or commands to passengers including SCPs and selection of and briefing to able-bodied persons; crowd control monitoring and evacuation conduct including in the absence of command from the flight crew; post-evacuation duties including assistance, first aid and management of survivors and survival in particular environments; activation of applicable communication means towards search and rescue services.

(2) In the event of decompression: checking of crew members, passengers, cabin, lavatories, galleys, crew rest areas and flight crew compartment, and administering oxygen to crew members and passengers as necessary.

(3) In the event of pilot incapacitation: secure pilot in their seat or remove from flight crew compartment; administer first aid and assist operating pilot as required.

(4) In the event of fire or smoke: identify source/cause/type of fire/smoke to perform the necessary required actions; coordinate with other cabin crew members and flight crew; select appropriate extinguisher/agent and fight the fire using portable breathing equipment (PBE), gloves, and protective clothing as required; management of necessary passengers' movement if possible; instructions to passengers to prevent smoke inhalation/suffocation; provide first aid as necessary; monitor the affected area until landing; preparation for possible emergency landing.

(5) In the event of first aid and medical emergencies: assistance to crew members and/or passengers; correct assessment and correct use of therapeutic oxygen, defibrillator, and contents of first aid kits/emergency medical kit contents as required; management of events, of incapacitated person(s) and of other passengers; coordination and effective communication with other crew members, in particular when medical advice is transmitted by frequency to flight crew or by a telecommunication connection.

(6) In the event of disruptive passenger behaviour: passenger management as appropriate including use of restraint technique as considered required.

(7) In the event of security threats (bomb threat on ground or in-flight and/or hijack): control of cabin areas and passengers' management as required by the type of threat, management of suspicious device, protection of flight crew compartment door.

(8) In the event of handling of dangerous goods: observing safety procedures when handling the affected device, in particular when handling chemical substances that are leaking; protection and management of self and passengers and effective coordination and communication with other crew members.

GM2 MED.C.025 Content of aero-medical assessments

DIABETES MELLITUS TREATED WITH INSULIN

When considering a fit assessment for cabin crew with diabetes mellitus requiring insulin, account should be taken of the IATA Guidelines on Insulin-Treated Diabetes (Cabin Crew), as last amended.

GM3 MED.C.025 Content of aero-medical assessments

COLOUR VISION – GENERAL

Examples of colours of which the perception is required for the safe performance of cabin crew members' duties are cabin crew indication panels, pressure gauges of emergency equipment (e.g. fire extinguishers) and cabin door status.

GM4 MED.C.025 Content of aero-medical assessments

OTORHINOLARYNGOLOGY (ENT) – PURE TONE AUDIOGRAM

The pure tone audiogram may also cover the 4 000 Hz frequency for early detection of decrease in hearing.

SECTION 3 – ADDITIONAL REQUIREMENTS FOR APPLICANTS FOR, OR HOLDERS OF, A CABIN CREW ATTESTATION

MED.C.030 Cabin crew medical report

(a) After completion of each aero-medical assessment, applicants for, and holders of, a cabin crew attestation:

(1) shall be provided with a cabin crew medical report by the AME, AeMC or OHMP; and

(2) shall provide the related information or a copy of their cabin crew medical report to the operator(s) employing their services.

(b) Cabin crew medical report

A cabin crew medical report shall indicate the date of the aero-medical assessment, whether the cabin crew member has been assessed fit or unfit, the date of the next required aero-medical assessment and, if applicable, any limitation(s). Any other elements shall be subject to medical confidentiality in accordance with point MED.A.015.

AMC1 MED.C.030 Cabin crew medical report

The cabin crew medical report to be provided in writing to the applicants for, and holders of, a cabin crew attestation:

(a) should be issued in the national language(s) and/or in English; and

(b) should include the following elements:

(1) the State where the aero-medical assessment of the Cabin Crew Attestation (CCA) applicant/holder was conducted (I);

(2) last and first name of the CCA applicant/holder (IV);

(3) date of birth of the CCA applicant/holder (*dd/mm/yyyy*) (XIV);

(4) nationality of the CCA applicant/holder (VI);

(5) signature of the CCA applicant/holder (VII);

(6) aero-medical assessment result (fit or unfit) (II);

(7) Expiry date of the previous cabin crew medical report (*dd/mm/yyyy*);

(8) Date of issue (*dd/mm/yyyy*) and signature of the AeMC, AME, or OHMP (X);

(9) Date of the aero-medical assessment (*dd/mm/yyyy*);

(10) Seal or stamp of the AeMC, AME or OHMP (XI);

(11) Limitation(s), if applicable (XII);

(12) Expiry date of the medical report (*dd/mm/yyyy*) (IX).

GM1 MED.C.030(b) Cabin crew medical report

GENERAL

The format of the cabin crew medical report may be as shown in the example below, with the size of each sheet being 1/8 of A4.

State of issue CABIN CREW MEDICAL REPORT FOR CABIN CREW ATTESTATION (CCA) APPLICANT OR HOLDER		

I The State where the aero-medical assessment is conducted: III Cabin crew attestation reference number: IV Last and first name: XIV Date of birth (dd/mm/yyyy): VI Nationality: VII Signature of CCA applicant/holder:	II Aero-medical assessment result (fit/unfit): Expiry date of the previous cabin crew medical report (dd/mm/yyyy): Date of aero-medical assessment (dd/mm/yyyy): X Date of issue* (dd/mm/yyyy): X Signature of the AeMC, AME or OHMP: XI Seal or stamp of the AeMC, AME or OHMP:
2	3

* Date of issue is the date the Cabin Crew Medical Report is issued and signed.

XII	Limitation(s), if applicable: Code: Description: Code: Description: Code: Description:	IX Expiry date of this medical report (dd/mm/yyyy):
4		5

MED.C.035 Limitations

(a) If holders of a cabin crew attestation do not fully comply with the medical requirements specified in Section 2, the AME, AeMC or OHMP shall consider whether they may be able to perform cabin crew duties safely if complying with one or more limitations.

(b) Any limitation(s) to the exercise of the privileges granted by the cabin crew attestation shall be specified on the cabin crew medical report and shall only be removed by an AME, AeMC or by an OHMP in consultation with an AME.

AMC1 MED.C.035 Limitations

When assessing whether the holder of a cabin crew attestation may be able to perform cabin crew duties safely if complying with one or more limitations, the following possible limitations should be considered:

(a) a restriction to operate only in multi-cabin crew operations (MCL);

(b) a restriction to specified aircraft type(s) (OAL) or to a specified type of operation (OOL);

(c) a requirement to undergo the next aero-medical examination and assessment at an earlier date than that required by point MED.C.005(b) (TML);

(d) a requirement to undergo specific medical examination(s) (SEM);

(e) a requirement for visual correction for defective vision by means of spectacles or contact lenses (CVL);

(f) a requirement to use hearing aids (HAL); and

(g) special restriction as specified (SSL).

SUBPART D – AERO-MEDICAL EXAMINERS (AME), GENERAL MEDICAL PRACTITIONERS (GMP), OCCUPATIONAL HEALTH MEDICAL PRACTITIONERS (OHMP)

SECTION 1 – AERO-MEDICAL EXAMINERS

MED.D.001 Privileges

(a) The privileges of holders of an aero-medical examiner (AME) certificate are to issue, revalidate and renew class 2 medical certificates and LAPL medical certificates and to conduct the relevant medical examinations and assessments.

(b) Holders of an AME certificate may apply for an extension of their privileges to include medical examinations for the revalidation and renewal of class 1 medical certificates or of class 3 medical certificates or both if they comply with the requirements set out in point MED.D.015.

(c) The privileges of a holder of an AME certificate referred to in points (a) and (b) shall include the privileges to conduct cabin crew members' aero-medical examinations and assessments and to provide the related cabin crew members' medical reports, as applicable, in accordance with this Annex (Part-MED).

(d) The scope of the privileges of the holder of an AME certificate, and any condition thereof, shall be specified in that certificate.

(e) A holder of an AME certificate shall not at any time hold more than one AME certificate issued in accordance with this Regulation.

(f) Holders of an AME certificate shall not undertake aero-medical examinations and assessments in a Member State other than the Member State that issued their AME certificate, unless they have completed all the following steps:

(1) they have been granted access by the other Member State concerned to exercise their professional activities as a specialised doctor;

(2) they have informed the competent authority of the host Member State of their intention to conduct aero-medical examinations and assessments and to issue medical certificates within the scope of their privileges as AME; and

(3) they have received a briefing from the competent authority of the host Member State.

MED.D.005 Application

(a) The application for an AME certificate or for an extension of the privileges of an AME certificate shall be submitted in accordance with the procedure established by the competent authority.

(b) Applicants for an AME certificate shall provide the competent authority with:

(1) their personal details and professional address;

(2) documentation demonstrating that they comply with the requirements of point MED.D.010, including evidence of successful completion of the training course in aviation medicine appropriate to the privileges they apply for;

(3) a written declaration that, once the AME certificate has been issued, the AME will issue medical certificates on the basis of the requirements of this Regulation.

(c) When AMEs undertake aero-medical examinations in more than one location, they shall provide the competent authority with relevant information regarding all practice locations and practice facilities.

MED.D.010 Requirements for the issue of an AME certificate

Applicants shall be issued an AME certificate if they meet all of the following conditions:

(a) they are fully qualified and licensed for the practice of medicine and have evidence of completion of specialist medical training;

(b) they have successfully completed a basic training course in aviation medicine, including practical training in the examination methods and aero-medical assessments;

(c) they have demonstrated to the competent authority that they:

(1) have adequate facilities, procedures, documentation and functioning equipment suitable for aero-medical examinations; and

(2) have in place the necessary procedures and conditions to ensure medical confidentiality.

MED.D.011 Privileges of an AME certificate holder

Through the issuance of an AME certificate, the holder shall be granted the privileges to initially issue, revalidate and renew all of the following:

(c) class 2 medical certificates;

(d) LAPL medical certificates;

(e) cabin crew members' medical reports.

MED.D.015 Requirements for the extension of privileges

Applicants shall be issued an AME certificate extending their privileges to the revalidation and renewal of class 1 and class 3 medical certificates if they meet all of the following conditions:

(a) they hold a valid AME certificate;

(b) they conducted at least 30 examinations for the issue, revalidation or renewal of class 2 medical certificates or equivalent over a period of no more than 3 years preceding the application;

(c) they successfully completed an advanced training course in aviation medicine, including practical training in the examination methods and aero-medical assessments; for AMEs that have performed the advanced course before [applicability date of this Regulation], if specific information regarding the ATCO working environment was not included, an additional specific

module for the aero-medical assessment of ATCOs and the specific environment in ATC shall be performed;

(d) they have successfully completed practical training of a duration of at least two days, either at an AeMC or under the supervision of the competent authority.

MED.D.020 Training courses in aviation medicine

(a) Training courses in aviation medicine referred to in points MED.D.010(b) and MED.D.015(c) shall only be provided after the prior approval of the course by the competent authority of the Member State where the training provider has its principal place of business. In order to obtain such approval, the training provider shall demonstrate that the course syllabus contains the learning objectives to acquire the necessary competencies and that the persons in charge of providing the training have adequate knowledge and experience.

(b) For demonstrating compliance with points MED.D.010(b) and MED.D.015(c), an aviation medicine training course completed by an applicant outside the territories for which Member States are responsible under the Chicago Convention may be accepted by the competent authority, provided that the following conditions are met:

(i) the competent authority has assessed and verified the course syllabus in accordance with point ARA.MED.200(c)(1) of Annex II (Part-ARA.MED);

(ii) the applicant has completed a specific training module on the aero-medical requirements detailed in this Annex (Part-MED) as provided by the competent authority.

(c) Except in the case of refresher training, the courses shall be concluded by a written examination on the subjects included in the course content.

(d) The training organisation shall issue a certificate of successful completion to participants when they have obtained a pass in the examination.

AMC1 MED.D.020 Training courses in aviation medicine

BASIC TRAINING COURSE

(a) Basic training course for AMEs

The basic training course for AMEs should consist of 60 hours of theoretical and practical training, including specific examination techniques.

(b) The learning objectives to acquire the necessary competencies should include theoretical knowledge, risk management, and decision-making principles in the following subjects. Demonstrations and practical skills should also be included, if appropriate.

(1) Introduction to aviation medicine;

(2) Basic aeronautical knowledge;

(3) Aviation physiology;

(4) Cardiovascular system;

(5) Respiratory system;

(6) Digestive system;

(7) Metabolic and endocrine systems;

(8) Haematology;

(9) Genitourinary system;

(10) Obstetrics and gynaecology;

(11) Musculoskeletal system;

(12) Psychiatry;

(13) Psychology;

(14) Neurology;

(15) Visual system and colour vision;

(16) Otorhinolaryngology;

(17) Oncology;

(18) Incidents and accidents, escape and survival;

(19) Medication and safe performance of duty;

(20) Legislation, rules and regulations;

(21) Cabin crew working environment;

(22) In-flight environment; and

(23) Space medicine.

AMC2 MED.D.020 Training courses in aviation medicine

ADVANCED TRAINING COURSE

(a) Advanced training course for AMEs for extension of their privileges to the revalidation and renewal of class 1 and class 3 medical certificates

The advanced training course for AMEs should consist of 80 hours of theoretical and practical training, including specific examination techniques.

(b) The learning objectives to acquire the necessary competencies should include theoretical knowledge, risk management, and decision-making principles in the following subjects. Demonstrations and practical skills should also be included, if appropriate.

(1) Pilot working environment;

(2) Aerospace physiology;

(3) Clinical medicine;

(4) Cardiovascular system;

(5) Neurology;

(6) Psychiatry/psychology;

(7) Visual system and colour vision;

(8) Otorhinolaryngology;

(9) Dentistry;

(10) Human factors in aviation;

(11) Incidents and accidents, escape and survival; and

(12) Tropical medicine.

(c) Practical training in an AeMC should be under the guidance and supervision of the head of the AeMC.

(d) After the successful completion of the practical training, a report of demonstrated competence should be issued.

GM1 MED.D.020 Training courses in aviation medicine

BASIC TRAINING COURSE

(a) Basic training course in aviation medicine — 60 hours

(1) Introduction to aviation medicine — 2 hours

(i) history of aviation medicine

(ii) specific aspects of civil aviation medicine

(iii) different types of recreational flying

(iv) AME and applicant relationship

(v) responsibility of the AME in aviation safety

(vi) communication and interview techniques

(2) Basic aeronautical knowledge — 2 hours

(i) flight mechanisms

(ii) man-machine interface, informational processing

(iii) propulsion

(iv) conventional instruments, ‘glass cockpit’

(v) recreational flying

(vi) simulator/aircraft experience

(3) Aviation physiology — 9 hours

(i) atmosphere

(A) functional limits for humans in flight

(B) divisions of the atmosphere

(C) gas laws — physiological significance

(D) physiological effects of decompression

(ii) respiration

(A) blood gas exchange

(B) oxygen saturation

(iii) hypoxia signs and symptoms

(A) average time of useful consciousness (TUC)

(B) hyperventilation signs and symptoms

(C) barotrauma

(D) decompression sickness

(iv) acceleration

(A) G-Vector orientation

(B) effects and limits of G-load

(C) methods to increase Gz-tolerance

(D) positive/negative acceleration

(E) acceleration and the vestibular system

(v) visual disorientation

(A) sloping cloud deck

(B) ground lights and stars confusion

(C) visual autokinesis

(vi) vestibular disorientation

(A) anatomy of the inner ear

(B) function of the semicircular canals

(C) function of the otolith organs

(D) the oculogyral and coriolis illusion

(E) 'leans'

(F) forward acceleration illusion of 'nose up'

(G) deceleration illusion of 'nose down'

(H) motion sickness — causes and management

(vii) noise and vibration

(A) preventive measures

(4) Cardiovascular system 3 hours

(i) relation to aviation; risk of incapacitation

(ii) examination procedures: ECG, laboratory testing and other special examinations

(iii) cardiovascular diseases:

(A) hypertension, treatment and assessment

(B) ischaemic heart disease

(C) ECG findings

(D) assessment of satisfactory recovery from myocardial infarction, interventional procedures and surgery

(E) cardiomyopathies; pericarditis; rheumatic heart disease; valvular diseases

(F) rhythm and conduction disturbances, treatment and assessment

(G) congenital heart disease: surgical treatment, assessment

(H) cardiovascular syncope: single and repeated episodes

Topics (5) to (11) inclusive, and (17) 10 hours

(5) Respiratory system

(i) relation to aviation, risk of incapacitation

(ii) examination procedures: spirometry, peak flow, x-ray, other examinations

(iii) pulmonary diseases: asthma, chronic obstructive pulmonary diseases

(iv) infections, tuberculosis

(v) bullae, pneumothorax

(vi) obstructive sleep apnoea

(vii) treatment and assessment

(6) Digestive system

(i) relation to aviation, risk of incapacitation

(ii) examination of the system

(iii) gastro-intestinal disorders: gastritis, ulcer disease

(iv) biliary tract disorders

(v) hepatitis and pancreatitis

(vi) inflammatory bowel disease, irritable colon / irritable bowel disease

(vii) herniae

(viii) treatment and assessment including post-abdominal surgery

(7) Metabolic and endocrine systems

(i) relation to aviation, risk of incapacitation

(ii) endocrine disorders

(iii) diabetes mellitus Type 1 & 2

(A) diagnostic tests and criteria

(B) anti-diabetic therapy

(C) operational aspects in aviation

(D) satisfactory control criteria for aviation

(iv) hyper/hypothyroidism

(v) pituitary and adrenal glands disorders

(vi) treatment and assessment

(8) Haematology

(i) relation to aviation, risk of incapacitation

(ii) blood donation aspects

(iii) erythrocytosis; anaemia; leukaemia; lymphoma

(iv) sickle cell disorders

(v) platelet disorders

(vi) haemoglobinopathies; geographical distribution; classification

(vii) treatment and assessment

(9) Genitourinary system

(i) relation to aviation, risk of incapacitation

(ii) action to be taken after discovery of abnormalities in routine dipstick urinalysis, e.g. haematuria; albuminuria

(iii) urinary system disorders:

(A) nephritis; pyelonephritis; obstructive uropathies

(B) tuberculosis

(C) lithiasis: single episode; recurrence

(D) nephrectomy, transplantation, other treatment and assessment

(10) Obstetrics and gynaecology

(i) relation to aviation, risk of incapacitation

(ii) pregnancy and aviation

(iii) disorders, treatment and assessment

(11) Musculoskeletal system

(i) vertebral column diseases

(ii) arthropathies and arthroprosthesis

(iii) pilots with a physical impairment

(iv) treatment of musculoskeletal system, assessment for flying

(12) Psychiatry 2 hours

(i) relation to aviation, risk of incapacitation

(ii) psychiatric examination

(iii) psychiatric disorders: neurosis; personality disorders; psychosis; organic mental illness

(iv) alcohol and other psychoactive substance(s) use

(v) treatment, rehabilitation and assessment

(13) Psychology 2 hours

(i) introduction to psychology in aviation as a supplement to psychiatric assessment

(ii) methods of psychological examination

(iii) behaviour and personality

(iv) workload management and situational awareness

(v) flight motivation and suitability

(vi) group social factors

(vii) psychological stress, stress coping, fatigue

(viii) psychomotor functions and age

(ix) mental fitness and training

(14) Neurology 3 hours

(i) relation to aviation, risk of incapacitation

(ii) examination procedures

(iii) 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

(iv) degenerative diseases

(v) sleep disorders

(vi) treatment and assessment

(15) Visual system and colour vision 4 hours

(i) anatomy of the eye

(ii) relation to aviation duties

(iii) 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

(iv) monocularity and medical flight tests

(v) colour vision

(vi) methods of testing: pseudoisochromatic plates, lantern tests, anomaloscopy

(vii) importance of standardisation of tests and of test protocols

(viii) assessment after eye surgery

(16) Otorhinolaryngology 3 hours

(i) anatomy of the systems

(ii) clinical examination in ORL

(iii) functional hearing tests

(iv) vestibular system; vertigo, examination techniques

(v) assessment after ENT surgery

(vi) barotrauma ears and sinuses

(vii) aeronautical ENT pathology

(viii) ENT requirements

(17) Oncology

(i) relation to aviation, risk of metastasis and incapacitation

(ii) risk management

(iii) different methods of treatment and assessment

(18) Incidents and accidents, escape and survival 1 hour

(i) accident statistics

(ii) injuries

(iii) aviation pathology, post-mortem examination, identification

(iv) aircraft evacuation

(A) fire

(B) ditching

(C) by parachute

(19) Medication and flying 2 hours

(i) hazards of medications

(ii) common side effects; prescription medications; over-the-counter medications; herbal medications; 'alternative' therapies

(iii) medication for sleep disturbance

(20) Legislation, rules and regulations 4 hours

(i) ICAO Standards and Recommended Practices, European provisions (e.g. implementing rules, AMC and GM)

(ii) incapacitation: acceptable aero-medical risk of incapacitation; types of incapacitation; operational aspects

(iii) basic principles in assessment of fitness for aviation

(iv) operational and environmental conditions

(v) use of medical literature in assessing medical fitness; differences between scientific study populations and licensed populations

(vi) flexibility

(vii) Annex 1 to the Chicago Convention, paragraph 1.2.4.9

(viii) accredited medical conclusion; consideration of knowledge, skill and experience

(ix) trained versus untrained crews; incapacitation training

(x) medical flight tests

(21) Cabin crew working environment 1 hour

(i) cabin environment, workload, duty and rest time, fatigue risk management

(ii) cabin crew safety duties and associated training

(iii) types of aircraft and types of operations

(iv) single-cabin crew and multi-cabin crew operations

(22) In-flight environment 1 hour

(i) hygiene aboard aircraft: water supply, oxygen supply, disposal of waste, cleaning, disinfection and disinsection

(ii) catering

(iii) crew nutrition

(iv) aircraft and transmission of diseases

(23) Space medicine 1 hour

(i) microgravity and metabolism, life sciences

(24) Practical demonstrations of basic aeronautical knowledge 8 hours

(25) Concluding items 2 hours

(i) final examination

(ii) de-briefing and critique

GM2 MED.D.020 Training courses in aviation medicine

ADVANCED TRAINING COURSE

(a) Advanced training course in aviation medicine 80 hours

(1) Pilot working environment 6 hours

(i) commercial aircraft flight crew compartment

(ii) business jets, commuter flights, cargo flights

(iii) professional airline operations

(iv) fixed wing and helicopter, specialised operations including aerial work

(v) air traffic control

(vi) single-pilot/multi-pilot

(vii) exposure to radiation and other harmful agents

(2) Air traffic control working environment 4 hours

(i) organisation of air traffic control - flow control, en route air traffic control centres, approach ATC, tower ATC, ATC organisation

(ii) single-ATC/multi-ATC positions

(iii) ATC of international traffic

(iv) ATC of civil and military aviation

(iv) selection and training of ATCOs

(v) exposure to environmental factors of ATC

(3) Aerospace physiology 4 hours

(i) brief review of basics in physiology (hypoxia, rapid/slow decompression, hyperventilation, acceleration, ejection, spatial disorientation)

(ii) simulator sickness

(4) Clinical medicine 7 hours

(i) complete physical examination

(ii) review of basics in relation to CAT operations and ATCO duties

(iii) class 1 and class 3 requirements

(iv) early health risk factors management and preventive advice

(v) communication and interview techniques

(vi) clinical cases

(5) Cardiovascular system 4,5 hours

(i) cardiovascular examination and review of basics

(ii) class 1 and Class 3 requirements

(iii) diagnostic steps in cardiovascular system

(iv) clinical cases

(6) Neurology 4 hours

(i) brief review of basics (neurological and psychiatric examination)

(ii) alcohol and other psychoactive substance(s) use

(iii) class 1 and Class 3 requirements

(iv) clinical cases

(7) Mental health 6 hours

(i) brief review of basics (psychiatric/psychological evaluation techniques)

(ii) alcohol and other psychoactive substance(s) use

(iii) class 1 and class 3 requirements

(iv) particularities of psychological criteria for operational environment both in ATC and CAT operations

(v) support programmes and preventive advice

(vi) clinical cases

(8) Visual system and colour vision 5,5 hours

(i) brief review of basics (visual acuity, refraction, colour vision, visual fields, night vision, stereopsis, monocularity)

(ii) class 1 and Class 3 visual requirements

(iii) implications of refractive and other eye surgery

(iv) clinical cases

(9) Otorhinolaryngology 4 hours

(i) brief review of basics (barotrauma — ears and sinuses, functional hearing tests)

(ii) noise and its prevention

(iii) vibration, kinetosis

(iv) class 1 and Class 3 hearing requirements

(v) clinical cases

(10) Dentistry 1 hours

(i) oral examination including dental formula

(ii) oral cavity, dental disorders and treatment, including implants, fillings, prosthesis, etc.

(iii) barodontalgia

(iv) clinical cases

(11) Human factors in aviation 26 hours

(i) long-haul flight operations

(A) flight time limitations

(B) sleep disturbance

(C) extended/expanded crew

(D) jet lag/time zones

(ii) human information processing and system design

(A) flight management system (FMS), primary flight display (PFD), datalink, fly by wire, ATC management systems

(B) Adaptation to the glass cockpit and new displays in ATC

(C) crew coordination concept (CCC), crew resource management (CRM), line oriented flight training (LOFT) etc.

(D) sectors coordination, team resource management (TRM) in ATC environment

(E) ergonomics

(iii) operational commonality

(A) flying under the same type rating, e.g. A-318, A-319, A-320, A-321

(B) ATCO working with several ratings and different tasks

(iv) human factors in aircraft incidents and accidents

(v) flight safety strategies in commercial aviation

(vi) fear and refusal of flying

(vii) psychological selection criteria

(viii) operational requirements (flight time limitation, working time limitation, shift work, fatigue risk management, etc.)

(ix) demonstration and practical experience – should count for 10 hours of the total of 26 hours for this section.

(A) practical flight simulator training

(B) practical ATC simulator training, visit to ATC tower and ACC control room

(12) Incidents and accidents, escape and survival 2 hours

(i) accident statistics

(ii) types of injuries

(iii) aviation pathology, post-mortem examination related to aircraft accidents, identification

(iv) rescue and emergency evacuation

(v) posttraumatic stress disorder (PTSD)

(13) Tropical medicine 2 hours

(i) endemicity of tropical disease

(ii) infectious diseases (communicable diseases, sexually transmitted diseases, HIV, etc.)

(iii) vaccination of crew members and passengers

(iv) diseases transmitted by vectors

(v) food and water-borne diseases

(vi) parasitic diseases

(vii) international health regulations

(viii) personal hygiene of aviation personnel

(14) Occupational medicine in the ATC environment 2 hours

(i) shift rosters

(ii) lighting conditions

(iii) auditive environment

(iv) air-conditioning

(v) furniture and workplace hygiene

(vi) different screens

(vii) psychological factors

(15) Concluding items 2 hours

(i) final examination

(ii) de-briefing and critique

GM3 MED.D.020 Training courses in aviation medicine

GENERAL

(a) Principles of training

To acquire knowledge and skills for the aero-medical examination and assessment, the training should be:

(1) based on regulations;

(2) based on general clinical skills and knowledge necessary to conduct relevant examinations for the different medical certificates;

(3) based on knowledge of the different risk assessments required for various types of medical certification;

(4) based on an understanding of the limits of the decision-making competence of an AME in assessing safety-critical medical conditions for when to defer and when to deny;

(5) based on knowledge of the aviation environment; and

(6) exemplified by clinical cases and practical demonstrations.

(b) Training outcomes

The trainee should demonstrate a thorough understanding of:

(1) the aero-medical examination and assessment process:

(i) principles, requirements and methods;

(ii) ability to investigate all clinical aspects that present aero-medical risks, the reasonable use of additional investigations;

(iii) the role in the assessment of the ability of the pilot, air traffic controllers or cabin crew member to safely perform their duties in special cases, such as the medical flight test;

(iv) aero-medical decision-making based on risk management;

(v) medical confidentiality; and

(vi) correct use of appropriate forms, and the reporting and storing of information;

(2) the conditions under which the pilots, air traffic controllers and cabin crew carry out their duties; and

(3) principles of preventive medicine, including aero-medical advice in order to help prevent future limitations.

(c) The principles and training outcomes specified in points (a) and (b) should also be taken into consideration for refresher training programmes.

MED.D.025 Changes to the AME certificate

(a) Holders of an AME certificate shall, without undue delay, notify the competent authority of the following circumstances which could affect their AME certificate:

(1) the AME is subject to disciplinary proceedings or investigation by a medical regulatory body;

(2) there are changes to the conditions under which the certificate was granted, including the content of the statements provided with the application;

(3) the requirements for the issuance of the AME certificate are no longer met;

(4) there is a change to the aero-medical examiner's practice location(s) or correspondence address.

(b) Failure to notify the competent authority in accordance with point (a) shall result in the suspension or revocation of the AME certificate, subject to the decision of the competent authority of the AME in accordance with point ARA.MED.250 of Annex II (Part-ARA).

MED.D.030 Validity of AME certificates

An AME certificate shall be valid for a period of three years, unless the competent authority decides to reduce that period for duly justified reasons related to the individual case.

Upon application by the holder, the certificate shall be:

(a) revalidated, provided that the holder:

(1) continues to fulfil the general conditions required for medical practice and maintains their licence for the practice of medicine as a specialist medical doctor;

(2) has undertaken refresher training in aviation medicine relevant for the scope of their AME certificate within the last three years;

(3) has performed at least 10 aero-medical examinations or equivalent every year;

(4) remains in compliance with the terms of their AME certificate;

(5) exercises the privileges in accordance with the requirements of this Annex (Part-MED);

(6) has demonstrated that they maintain their aero-medical competence in accordance with the procedure established by the competent authority.

(b) renewed, provided that the holder complies with either the requirements for revalidation set out in point (a) or with all of the following requirements:

(1) continues to fulfil the general conditions required for medical practice and maintains their licence for the practice of medicine as a specialist medical doctor;

(2) has undertaken refresher training in aviation medicine within the previous year;

(3) has successfully completed practical training within the previous year, either at an AeMC or under the supervision of the competent authority;

(4) remains in compliance with the requirements of point MED.D.010;

(5) has demonstrated that they maintain their aero-medical competence in accordance with the procedure established by the competent authority.

AMC1 MED.D.030 Validity of AME certificates

REFRESHER TRAINING

(a) It is the responsibility of the AME to continuously maintain and improve their competencies.

(b) During the period of validity of the AME certificate, an AME should attend a minimum of 20 hours of refresher training relevant for the scope of their AME certificate.

(c) An AME exercising class 1 or class 3 privileges should attend at least 10 hours of refresher training per year.

(d) A proportionate number of refresher training hours should be provided by, or conducted under the direct supervision of, the competent authority or the medical assessor.

(e) The curricula of refresher training hours referred to in point (c) should be decided by the competent authority following a risk-based assessment.

(f) Attendance at scientific meetings and congresses, flight deck experience or air traffic control observation may be credited by the competent authority for a specified number of hours against the training obligations of the AME, provided the medical assessor of the competent authority has assessed them in advance as being relevant for crediting purposes.

(g) In the event of renewal of an AME certificate, the practical training should include at least 10 aero-medical assessments, in accordance with the type of the requested AME certificate.

GM1 MED.D.030 Validity of AME certificates

REFRESHER TRAINING

(a) The curricula for the refresher training hours that should be provided by, or conducted under the direct supervision of, the competent authority or the medical assessor may include but are not limited to subjects such as:

(1) Psychiatry

(i) Relation to aviation, risk of incapacitation;

(ii) Psychiatric examination;

(iii) Psychiatric disorders: neurosis, personality disorders, psychosis, organic mental illness;

(iv) Alcohol and other psychoactive substance(s) use; and

(v) Treatment, rehabilitation and assessment.

(2) Psychology

(i) Introduction to psychology in aviation as a supplement to psychiatric assessment;

(ii) Methods of psychological examination;

(iii) Behaviour and personality;

(iv) Workload management and situational awareness;

(v) Work motivation and suitability;

(vi) Group social factors;

(vii) Psychological stress, stress coping, fatigue;

(viii) Psychomotor functions and age; and

(ix) Mental fitness and training.

(3) Communication and interview techniques

(b) Scientific meetings, congresses or flight deck experience that may be credited by the competent authority:

International Academy of Aviation and Space Medicine Annual Congresses (ICASM)	10 hours credit
International Conference in Aerospace Medicine (ICAM)	10 hours credit
European Conference of Aerospace Medicine (ECAM)	10 hours credit
Aerospace Medical Association Annual Scientific Meetings (AsMA)	10 hours credit
Other scientific meetings (a minimum of 6 hours to be under the direct supervision of the medical assessor of the competent authority)	10 hours credit

Flight crew compartment experience (a maximum of five hours credit per three years):

(i)	Jump seat	5 sectors — 1 hour credit
(ii)	Simulator	4 hours — 1 hour credit
(iii)	Aircraft piloting	4 hours — 1 hour credit
(iv)	Air traffic control observation	4 hours – 1 hour credit

(c) An AME exercising class 1 or class 3 revalidation/renewal privileges should attend international aviation medicine scientific meetings or congresses at regular intervals.

(d) Aero-medical examinations of military pilots may be considered as equivalent in accordance with point MED.D.030(a)(3), subject to approval by the medical assessor of the competent authority.

GM2 MED.D.030 Validity of AME certificates

AME PEER SUPPORT GROUPS

(a) The competent authority should promote better performance of AMEs by supporting the establishment of AME peer support groups that could provide both professional support and educational enhancement.

(b) Attendance to AME peer support group meetings may be credited by the competent authority as refresher training. The competent authority should determine a maximum number of hours that may be credited as refresher training during the period of authorisation.

(c) AME peer support groups may be established as part of, or complementary to, national associations of aerospace medicine.

SECTION 2 – GENERAL MEDICAL PRACTITIONERS

MED.D.035 Requirements for general medical practitioners

General medical practitioners (GMPs) may act as AMEs for issuing LAPL medical certificates if they meet all of the following conditions:

(a) they exercise their activity in a Member State where GMPs have access to the full medical records of applicants;

(b) they exercise their activity in accordance with any additional requirements established in the national law of the Member State of their competent authority;

(c) they are fully qualified and licensed for the practice of medicine in accordance with the national law of the Member State of their competent authority;

(d) they have notified the competent authority before starting such activity.

SECTION 3 – OCCUPATIONAL HEALTH MEDICAL PRACTITIONERS

MED.D.040 Requirements for occupational health medical practitioners

In Member States where the competent authority is satisfied that the requirements of the national health system applicable to occupational health medical practitioners (OHMPs) are such as to ensure compliance with the requirements of this Annex (Part-MED) applicable to OHMPs, OHMPs may conduct aero-medical assessments of cabin crew, provided that:

(a) they are fully qualified and licensed in the practice of medicine and qualified in occupational medicine;

(b) the in-flight working environment and safety duties of the cabin crew were included in their occupational medicine qualification syllabus or other training or operational experience;

(c) they have notified the competent authority before starting such activity.

ANNEX II (PART-ARA.MED)

SECTION I – GENERAL

ARA.MED.120 Medical assessors

The competent authority shall appoint one or more medical assessor(s) to undertake the aero-medical tasks described in this Regulation. The medical assessor shall be licensed and qualified in medicine and have the following:

(a) postgraduate work experience in clinical medicine;

(b) specific knowledge and experience in aviation medicine and aero-medical practice; and

(c) specific training in aero-medical certification.

AMC1 ARA.MED.120 Medical assessors

EXPERIENCE AND KNOWLEDGE

Medical assessors should:

(a) have considerable experience of aero-medical practice, having held AME privileges and having undertaken a minimum of 200 class 1 or class 3 medical examinations, or equivalent;

(b) undergo specific training on the regulatory processes and aero-medical certification of referred cases; and

(c) maintain their medical professional competence in aviation medicine. The following should count towards maintaining medical professional competence:

(1) undertaking regular refresher training;

(2) participating in international aviation medicine conferences;

(3) undertaking research activities, including publication of results of the research.

AMC2 ARA.MED.120 Medical assessors

TASKS

Medical assessors' tasks should include:

(a) approving and overseeing lectures in basic, advanced and refresher training courses for aero-medical examiners (AMEs) and aero-medical centres (AeMCs). Medical assessors may also deliver lectures during those training courses provided that a procedure is in place to avoid conflict of interest;

(b) carrying out supervision and audits of AeMCs, AMEs and AME training facilities;

(c) performing the aero-medical assessment of applicants for, or holders of, medical certificates in the event of consultation, referral or secondary review, or when medical certificates have been issued by non-compliant AMEs;

(d) certifying and overseeing AeMCs and AMEs, including review of medical files submitted by them to the competent authority;

(e) managing medical files including transfers of medical files in the event of a change of State of licence issue;

(f) assisting AMEs and AeMCs, on their request, regarding aero-medical fitness assessments in borderline and difficult cases or cases not regulated in Part-MED; and

(g) issuing a medical certificate if a case is referred or if corrections to the information of a medical certificate are necessary.

AMC3 ARA.MED.120 Medical assessors

DELEGATION OF MEDICAL ASSESSOR TASKS

The medical assessor may delegate certain tasks to other staff designated by the competent authority or other persons contracted by the competent authority. The competent authority should ensure that such person(s) has (have) relevant training and experience for the delegated task and that the entire process is properly documented.

GM1 ARA.MED.120 Medical assessors

DELEGATION OF MEDICAL ASSESSOR TASKS

Properly qualified medical assessors are essential for maintaining flight safety and an efficient and functional aero-medical system. Medical assessors, similarly to any inspector of the competent authority, should, by their qualifications and competencies, command the professional respect of the personnel and organisations they inspect, authorise or oversee. These guidelines aim to establish possible solutions to optimise the use of qualified medical assessors as well as temporary solutions until properly qualified medical assessors are readily available. These guidelines should be interpreted and implemented only to the extent that they provide for sound and effective oversight in accordance with the principles of safety risk management.

For all of the medical assessor tasks, the support staff may provide administrative support with regard to the paperwork and preparation work. Furthermore, some tasks may be partially delegated to other staff members of the competent authority or other persons contracted by the competent authority. The medical assessor should select to whom the tasks are delegated based on their qualifications in order to ensure that the entire performance is in line with the applicable provision both in the field of aviation and in the medical field, and is properly documented. The compliance monitoring system of the competent authority should ensure that delegation of certain tasks has no negative impact on flight safety and data protection.

In order to maintain their medical proficiency, medical assessors may act as an AME subject to a proper procedure being in place to avoid conflict of interest.

The following steps may be considered when required:

(a) Employment of a not fully qualified medical assessor

When recruiting a fully qualified medical assessor is not possible, the competent authority may employ a medical doctor to be trained and nominated as a medical assessor once the training is finalised. The performance of these doctors should be supervised by a qualified medical assessor from the pool of experts.

(b) Assignment of the role of a team member to qualified inspectors (e.g. assessing the SMS system of an AeMC)

In this context, the qualified inspectors performing duties within the inspection/oversight team are expected to document their work and to report to the medical assessor as the accountable person for the process.

(c) Use of appropriately qualified medical assessors or AMEs from a pool of experts

The use of AMEs or medical assessors from a pool of experts should be limited to the sharing of experts to cover unplanned activity or temporary/transitional shortage of expertise rather than a consistent long-term use.

The following types of pools of experts may be considered:

— qualified AMEs;

— medical assessors from the NCAs of other Member States or from EASA;

— medical assessors / AMEs from military aviation.

The following issues should be assessed and the associated risks mitigated in the event of using a pool of experts:

— assessment and oversight of the expert's performance as well as enforcement in the event of non-compliance;

— authorisation of the expert to access medical practices, investigate, conduct interviews and collect evidence;

— financial, contracting and administrative aspects;

— recurrent training on administrative procedures;

— ability of the nominated expert to write reports and findings;

— avoidance of conflict of interest;

— sustainability (i.e. to avoid relying permanently on the pool of experts);

— commercial sensitivity of AMEs/AeMCs;

— cultural issues;

— data protection issues;

— language barriers;

— recognition between Member States, including the right to practice medicine in a different State and medical indemnity / liability insurance.

Bilateral sharing of experts is convenient when:

— the requesting authority is aware of the resources available in the resource provider;

— the agreement between the NCAs exists or is easy to establish;

— the planning for the availability of the resources can easily be managed.

Whether the sharing of medical assessors is concluded directly between two NCAs or through a sharing platform, sustainability can only be ensured if all stakeholders are willing to consider global optimisation as a priority. The challenge is that the management system of each NCA may systematically reduce its resources so that all qualified medical assessors are occupied at all times. Such planning strategy does not provide any extra margin for contingencies and may easily drift towards understaffing. It is always difficult to swiftly adjust the number of permanently employed experts to the short-term oversight needs. Therefore, while attempting to 'optimise' its own resources, each NCA may rely more and more on the experts from other NCAs and further reduce its staff. While this may work for a limited period of time, in the long run the sharing of experts may simply become impossible as all NCAs will be requesting qualified medical assessors while no NCA would be able to provide any. A similar reasoning applies when experts from the industry are shared.

The concept of sharing implies availability of resources. Availability means extra capacity. Therefore all stakeholders involved in the sharing are expected to coordinate their staffing strategies globally. This ensures global optimisation by reallocating resources so that no expert is underused and that the costs are shared based on the level of support obtained. Additionally, it is expected that activity planning is coordinated among all involved stakeholders.

ARA.MED.125 Referral to the licensing authority

When an AeMC or aero-medical examiner (AME) has referred the decision on the fitness of an applicant to the medical assessor of the licensing authority, the following steps shall be taken:

(a) the medical assessor or medical staff designated by the medical assessor shall evaluate the relevant medical documentation and request further medical documentation, examinations and tests if necessary;

(b) the medical assessor shall determine the applicant's fitness for the issuance of a medical certificate with one or more limitation(s) if necessary;

(c) the medical assessor shall inform the AeMC or AME of the decision;

(d) if the applicant is assessed as fit, the medical assessor shall issue, if appropriate, the medical certificate or delegate the issuance to the AeMC or AME that referred the respective applicant.

AMC1 ARA.MED.125 Referral to the licensing authority

(a) The aero-medical section of the licensing authority should supply the AeMC or AME with all necessary information that led to the decision on aero-medical fitness.

(b) The aero-medical section of the licensing authority should ensure that borderline and difficult cases or those not regulated in Part-MED, as applicable, are evaluated on a common basis.

(c) Each competent authority should define the time limit for the assessment of referred cases in their procedure regarding the management of referrals.

ARA.MED.126 Limitation, suspension or revocation of medical certificates

(a) The licensing authority shall establish a procedure to limit, suspend or revoke a medical certificate.

(b) The licensing authority shall limit, suspend or revoke a medical certificate if there is evidence that:

(1) a medical certificate is falsified or obtained by a false declaration or false evidence;

(2) a medical certificate is used in violation of the provisions of point MED.A.020 of Annex I (Part-MED);

(3) the holder of a medical certificate is no longer compliant with Annex I (Part-MED);

(c) The licensing authority may also suspend or revoke a medical certificate upon the written request of the holder of a medical certificate.

(d) In the event of limitation, suspension or revocation of a medical certificate, the licensing authority shall inform the issuing AeMC or AME about the reason for limitation, suspension or revocation.

(e) In the event of suspension or revocation of a medical certificate, the licensing authority shall ensure that the provisions of point MED.A.046 of Annex I (Part-MED) are complied with.

(f) The licensing authority shall establish a procedure for reinstating a medical certificate.

ARA.MED.128 Consultation procedure

The competent authority shall establish a consultation procedure for the AeMCs and AMEs in accordance with Annex I (Part-MED).

AMC1 ARA.MED.128 Consultation procedure

This procedure should include at least a summary of the consultation process and related documentation.

ARA.MED.130 Medical certificate format

The medical certificate shall conform to the following specifications:

(a) Content of flight crew medical certificate

(1) State where the pilot licence has been issued or applied for (I),

(2) Class of medical certificate (II),

(3) Medical certificate number commencing with the UN country code of the State where the pilot licence has been issued or applied for and followed by a code of numbers and/or letters in Arabic numerals and Latin script (III),

(4) Name of holder (IV),

(5) Nationality of holder (VI),

(6) Date of birth of holder: (dd/mm/yyyy) (IVa),

(7) Signature of holder (VII),

(8) Limitation(s) (XIII),

(9) Expiry date of the medical certificate (IX) for:

(i) Class 1,

(ii) Class 1 single-pilot commercial operations carrying passengers,

(iii) Class 2,

(iv) LAPL, or

Expiry date of the class 3 medical certificate

(10) Date of medical examination

(11) Date of last and next ECG

(12) Date of last and next audiogram

(12a) Date of last and next ophthalmological examination

(13) Date of issue and signature of the AME or medical assessor that issued the medical certificate. GMP may be added to this field if they have the competence to issue medical certificates under the national law of the Member State where the licence is issued.

(14) Seal or stamp (XI)

(15) Other information

(b) Content of class 3 medical certificate

(1) State where the ATCO licence has been issued or applied for (I),

(2) Class of medical certificate (II),

(3) Medical certificate number commencing with the UN country code of the State where the ATCO licence has been issued or applied for and followed by a code of numbers and/or letters in Arabic numerals and Latin script (III),

(4) Name of holder (IV),

(5) Nationality of holder (VI),

(6) Date of birth of holder: (dd/mm/yyyy) (IVa),

(7) Signature of holder (VII),

(8) Limitation(s) (XIII),

(9) Expiry date of the class 3 medical certificate (IX)

(10) Date of medical examination

(11) Date of last and next ECG

(12) Date of last and next audiogram

(12a) Date of last and next ophthalmological examination

(13) Date of issue and signature of the AME or medical assessor that issued the medical certificate.

(14) Seal or stamp (XI)

(15) Other information

(c) The paper or other material used shall prevent or readily show any alterations or erasures. Any entries or deletions to the form shall be clearly authorised by the licensing authority.

(d) Language: Medical certificates shall be written in the national language(s) and in English and such other languages as the competent authority deems appropriate.

(e) All dates on the medical certificate shall be written in a dd/mm/yyyy format.

ARA.MED.135 Aero-medical forms

The competent authority shall provide AMEs and AeMCs with the format for the following documents:

(a) the application form for a medical certificate;

(b) the examination report form for class 1,class 2 and class 3 applicants; and

(c) the examination report form for light aircraft pilot licence (LAPL) applicants.

AMC1 ARA.MED.135(a) Aero-medical forms

APPLICATION FORM FOR A MEDICAL CERTIFICATE

The form referred to in point ARA.MED.135(a) should reflect the information indicated in the following form and provide corresponding instructions for completion.

LOGO

CIVIL AVIATION ADMINISTRATION/MEMBER STATE

APPLICATION FORM FOR A MEDICAL CERTIFICATE

MEDICAL IN CONFIDENCE

Complete this page fully and in block capitals - Refer to the instructions for completion.

(1) State of licence issue:	(2) Medical certificate applied for: class 1 ☐ class 2 ☐ LAPL ☐ class 3 ☐		
(3) Surname:	(4) Previous surname(s):		(12) Application for: initial ☐ revalidation/renewal ☐
(5) Forename(s):	(6) Date of birth(dd/mm/yyyy):	(7) Sex: Male ☐ Female ☐	(13) Medical certificate—/ EAMR ID number:
(8) Place and country of birth:	(9) Nationality:		(14) Type of licence applied for:
(10) Permanent address: Country: Telephone No: Mobile No: Email:	(11) Postal address (if different): Country: Telephone No:		(15) Occupation (principal): (16) Employer: (17) Last medical examination: Date: Place: Completed: No ☐ Yes ☐

(18) Licence(s) held (type): Licence number: State of issue:	(19) Any limitations on licence(s) / medical certificate held No ☐ Yes ☐ Details:	
(20) Have you ever had a medical certificate denied, suspended or revoked by any licensing authority? No ☐ Yes ☐ Date: Country: Details:	(21) Flight time total:	(22) Flight time since last medical:
	(23) Aircraft class/type(s) presently flown:	
(24) Any aviation accident or medical event whilst exercising the privileges of the licence since the last medical examination? No ☐ Yes ☐ Date: Place: Details:	(25) Current/intended pilot activity: Commercial ☐ Non-commercial ☐ Other …….. Single-pilot ☐ Multi-pilot ☐	
	(26) Current/intended ATC activity: ADI ☐ APS ☐ ACS ☐ ADV ☐ APP ☐ ACP ☐	
(27) Do you drink alcohol? ☐ No ☐ Yes, state the average weekly amount: Do you use drugs? ☐ No ☐ Yes, state the type:	(28) Do you currently use any medication? No ☐ Yes ☐ State the medication, dose, date started and reason:	
(29) Do you smoke tobacco? ☐ No, never ☐ No, date stopped: ☐ Yes, state the type and amount:		

General and medical history: Do you have, or have you ever had, any of the following? (Please tick a response for each question**). If yes, give details in the remarks section (30).**

	Yes	No		Yes	No		Yes	No	**Family history of:** Yes No

101 Eye trouble / eye operation			112 Nose, throat or speech disorder			123 Malaria or other tropical disease			170 Heart or vascular disease				
102 Spectacles and/or contact lenses ever worn			113 Head injury or concussion			124 A positive HIV test			171 High blood pressure				
			114 Frequent or severe headaches			125 Sexually transmitted disease			172 High cholesterol level				
103 Spectacle / contact lens prescriptions change since last medical exam			115 Dizziness or fainting spells			126 Sleep disorder/apnoea syndrome			173 Epilepsy				
			116 Unconsciousness for any reason			127 Musculoskeletal illness/impairment			174 Mental illness or suicide				
104 Hay fever, other allergy			117 Neurological disorders; stroke, epilepsy, seizure, paralysis, etc.			128 Any other illness or injury			175 Diabetes				
105 Asthma, lung disease						129 Admission to hospital			176 Tuberculosis				
106 Heart or vascular trouble			118 Psychological/psychiatric trouble of any sort			130 Visit to medical practitioner or mental health specialist since last medical examination			177 Allergy/asthma/eczema				
107 High or low blood pressure									178 Inherited disorders				
108 Kidney stone or blood in urine			119 Misuse of psychoactive substances			131 Refusal of life insurance			179 Glaucoma				
109 Diabetes, hormone disorder			120 Attempted suicide or self-harm			132 Refusal of aviation licence							
110 Stomach, liver or intestinal trouble			121 Motion sickness requiring medication			133 Medical rejection from or for military service			**Females only:**				
									150 Gynaecological, menstrual problems				
111 Deafness, ear disorder			122 Anaemia /sickle cell trait /other blood disorders			134 Award of pension or compensation for injury or illness			151 Are you pregnant?				

(30) **Remarks:**

(31) **Declaration:** I hereby declare that I have carefully considered the statements made above and to the best of my belief they are complete and correct and that I have not withheld any relevant information or made any misleading statements. I understand that, if I have made any false or misleading statements in connection with this application, or fail to release the supporting medical information, the licensing authority may refuse to grant me a medical certificate or may withdraw any medical certificate granted, without prejudice to any other action applicable under national law.

I hereby declare that I have been informed and I understand that all information provided to my AME contained in this report, its attachments and all information which is provided to my licensing authority and that relates to me, may be released to the medical assessor of my licensing authority, other health professionals and medical administration staff as part of the aero-medical assessment process and to the medical assessor of the competent authority of my AME, recognising that these documents or electronically stored data are to be used for the completion of an aero-medical assessment and-for oversight purposes, providing that I or my physician may have access to them in accordance with national law. Medical confidentiality will be respected at all times.

NOTIFICATION OF DISCLOSURE OF PERSONAL DATA: I hereby declare that I have been informed and I understand that the data contained in my medical certificate issued in accordance with point ARA.MED.130, may be electronically stored and made available to my AME in order to provide historical data required , and to the medical assessors of the competent authorities of the Member States in accordance with point ARA.MED.150(c)(4).

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Date Signature of applicant Signature of AME/(GMP)/(medical assessor)

INSTRUCTIONS FOR COMPLETION OF THE APPLICATION FORM FOR A MEDICAL CERTIFICATE

This application form and all attached report forms will be transmitted to the medical assessor of the licensing authority. Medical confidentiality shall be respected at all times.

The applicant should personally complete, in full, all questions (sections) on the application form. Writing should be legible and in block capitals, using a ballpoint pen. Completion of this form by typing/printing is also acceptable. If more space is required to answer any questions, a plain sheet of paper should be used, bearing the applicant's name and signature, and the date of signing. The following numbered instructions apply to the numbered headings on the application form for a medical certificate.

Failure to complete the application form in full, or to write legibly, may result in non-acceptance of the application form. The making of false or misleading statements or the withholding of relevant information in respect of this application may result in criminal prosecution, denial of this application and/or withdrawal of any medical certificate(s) granted.

1. LICENSING AUTHORITY: State the name of country that has issued the pilot or ATCO licence or if a licence has not been issued, the country where the applicant intends to apply for a licence.	**17. LAST APPLICATION FOR A MEDICAL CERTIFICATE:** State the date (day, month, year) and place (town or city, country). Initial applicants state 'NONE'.
2. MEDICAL CERTIFICATE APPLIED FOR: Tick the box corresponding to the type of medical certificate applied for e.g. class 1, class 2, class 3 or LAPL.	**18. LICENCE(S) HELD (TYPE):** State the type of licence(s) held. Enter the licence number and State of issue. If no licences are held, state 'NONE'.
3. SURNAME: State your surname/family name.	**19. ANY LIMITATIONS ON THE LICENCE(S) / MEDICAL CERTIFICATE:** Tick the appropriate box and give details of any limitations on your licence(s)/medical certificate, e.g. vision, colour vision, safety pilot, etc.
4. PREVIOUS SURNAME(S):	**20. MEDICAL CERTIFICATE DENIAL, SUSPENSION OR REVOCATION:**

If your surname or family name has changed for any reason, state the previous name(s).	Tick 'YES' box if you have ever had a medical certificate denied, suspended or revoked. If 'YES', state the date (dd/mm/yyyy) and country where it occurred.
5. FORENAME(S): State your first and, if applicable, middle name(s) (maximum three).	**21. FLIGHT TIME TOTAL:** State the total number of hours flown.
6. DATE OF BIRTH: Specify in the order dd/mm/yyyy.	**22. FLIGHT TIME SINCE LAST MEDICAL:** State the number of hours flown since your last medical examination.
7. SEX: Tick the appropriate box.	**23. AIRCRAFT CLASS/TYPE(S) PRESENTLY FLOWN:** State the class/type of the main aircraft flown, e.g. Boeing 737, Cessna 150, etc.
8. PLACE AND COUNTRY OF BIRTH: State the town or city and country of birth.	**24. ANY AVIATION ACCIDENT OR MEDICAL EVENT WHILST EXERCISING THE PRIVILEGES OF THE LICENCE SINCE THE LAST MEDICAL EXAMINATION:** If the 'YES' box is ticked, state the date (dd/mm/yyyy) and country of occurrence and provide details.
9. NATIONALITY: State the name of country of citizenship.	**25. CURRENT/INTENDED PILOT ACTIVITY:** Please-tick the appropriate box regarding the intended activity during the following certification period: • Commercial, non-commercial or other (for other please specify the type of operation) • Single-pilot or multi-pilot
10. PERMANENT ADDRESS: State the permanent postal address and country. Enter the telephone area code as well as the telephone number.	**26. CURRENT/INTENDED ATC ACTIVITY:** Please-tick the appropriate box regarding the intended activity during the following certification period e.g. ADI, APS, ACS
11. POSTAL ADDRESS (IF DIFFERENT): If different from the permanent address, state the full current postal address including the telephone area code as well as the telephone number. If the same, enter 'SAME'.	**27. DO YOU DRINK ALCOHOL OR USE DRUGS?** For alcohol: tick the applicable box. If yes, state the average weekly alcohol consumption (e.g. two litres of beer).). For drugs: tick the applicable box. If yes, state the type.
12. APPLICATION: Tick the appropriate box.	**28. DO YOU CURRENTLY USE ANY MEDICATION?:** If 'YES', give full details — name, how much you take and when, etc. Include any non-prescription medication.
13. MEDICAL CERTIFICATE / EAMR ID NUMBER: State the medical certificate number allocated to you by the licensing authority / EAMR ID unique number Initial applicants enter 'NONE'.	**29. DO YOU SMOKE TOBACCO?** Tick the applicable box. Current smokers state the type (cigarettes, cigars, pipe) and amount (e.g. 2 cigars daily; pipe – 1 oz. weekly)
14. TYPE OF LICENCE APPLIED FOR: State the type of licence applied for from the following list: Airline Transport Pilot Licence* Multi-Pilot Licence* Commercial Pilot Licence/Instrument Rating* Commercial Pilot Licence* Private Pilot Licence/Instrument Rating* Private Pilot Licence* Sailplane Pilot Licence Balloon Pilot Licence Light Aircraft Pilot Licence* Air Traffic Controller Other — Please specify	**30. GENERAL AND MEDICAL HISTORY** All items under this heading from number 101 to 179 inclusive should have the answer 'YES' or 'NO' ticked. You should tick 'YES' if you have ever had the condition in your life and describe the condition and approximate date in the (30) remarks section. All questions asked are medically important even though this may not be readily apparent. Items numbered 170 to 179 relate to immediate family history, whereas items numbered 150 to 151 should be answered by female applicants only. Do not report occasional common illnesses such as colds.

*Please specify whether Fixed Wing / Rotary Wing / Both	
15. OCCUPATION (PRINCIPAL): Indicate your principal employment.	
16. EMPLOYER: If your principal occupation is pilot, then state the employer's name or if self-employed, state 'self'.	**31. DECLARATION AND NOTIFICATION OF DISCLOSURE OF PERSONAL DATA:** Do not sign or date these declarations until indicated to do so by the AME/GMP who will act as witness and sign accordingly.

AMC1 ARA.MED.135(b);(c) Aero-medical forms

MEDICAL EXAMINATION REPORT FORMS

The forms referred to in points ARA.MED.135(b) and (c) should reflect the information indicated in the following forms and provide corresponding instructions for completion.

MEDICAL EXAMINATION REPORT FORM FOR CLASS 1, 2 & 3 APPLICANTS

(201) Examination category	(202) Height	(203) Weight	(204) Colour eye	(205) Colour hair	(206) Blood pressure-seated (mmHg)		(207) Pulse - resting	
Initial ☐ Revalidation ☐ Renewal ☐ Special referral ☐	(cm)	(kg)			Systolic	Diastolic	Rate (bpm)	Rhythm: regular ☐ irregular ☐

Clinical exam: Check each item	Normal	Abnormal		Normal	Abnormal
(208) Head, face, neck, scalp			(218) Abdomen, hernia, liver, spleen		
(209) Mouth, throat, teeth			(219) Anus, rectum		
(210) Nose, sinuses			(220) Genito-urinary system		
(211) Ears, drums, eardrum motility			(221) Endocrine system		
(212) Eyes — orbit & adnexa; visual fields			(222) Upper & lower limbs, joints		
(213) Eyes — pupils and optic fundi			(223) Spine, other musculoskeletal		
(214) Eyes — ocular motility; nystagmus			(224) Neurologic — reflexes, etc.		
(215) Lungs, chest, breasts			(225) Mental health		
(216) Heart			(226) Skin, identifying marks and lymphatics		
(217) Vascular system			(227) General systemic		
(228) **Notes:** Describe every abnormal finding. Enter the applicable item number before each comment.					

Visual acuity

(229) *Distant vision at 5 m/6 m*

	Uncorrected		Spectacles	Contact lenses
Right eye		Corr. to		
Left eye		Corr. to		
Both eyes		Corr. to		

(230) *Intermediate vision* N14 at 100 cm

	Uncorrected		Corrected	
	Yes	No	Yes	No
Right eye				
Left eye				
Both eyes				

(231) *Near vision* N5 at 30-50 cm

	Uncorrected		Corrected	
	Yes	No	Yes	No

(236) **Pulmonary function**

FEV_1/FVC _____ %

Normal ☐ Abnormal ☐

(237) **Haemoglobin**

_____ _____ (***unit)***

Normal ☐ Abnormal ☐

(236a) **OSA screening**

Applicant at risk of OSA: Yes ☐ No ☐

Specify if the applicant undergoes treatment for OSA:

(235) **Urinalysis** Normal ☐ Abnormal ☐

Glucose	Protein	Blood	Other

Accompanying reports

	Not performed	Normal	Abnormal/Comment
(238) ECG			
(239) Audiogram			
(240) Ophthalmology			
(241) ORL (ENT)			

Right eye				
Left eye				
Both eyes				

(232) **Spectacles** **(**233) **Contact lenses**

Yes ☐ No ☐	Yes ☐ No ☐
Type:	Type:

Refraction	Sph	Cyl	Axis	Add
Right eye				
Left eye				

(313) **Colour perception** Normal ☐ Abnormal ☐

Pseudo-isochromatic plates	Type: Ishihara (24 plates)
No of plates:	No of errors:

(234) **Hearing**

(when 239 or 241 are not performed)

	Right ear	Left ear
Conversational voice test (2 m) with the back turned to examiner	Yes ☐ No ☐	Yes ☐ No ☐

Audiometry				
Hz	500	1 000	2 000	3 000
Right				
Left				

(242) Blood lipids			
(243) Pulmonary function			
(244) Other (what?)			

(247) **AME recommendation:**

Name of the applicant: Date of birth: Reference number:

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☐ Fit for class: ----------

☐ Medical certificate issued by undersigned (copy attached) for class: ----------

☐ Unfit for class: ----------

☐ Deferred for further evaluation. If yes, why and to whom?

(248) **Comments, limitations**

(249) **AME declaration:**

I hereby certify that I/my AME group have personally examined the applicant named on this medical examination report and that this report with any attachment embodies my findings completely and correctly.

(250) Place and date:	AME name and address:	AME certificate No:
AME signature:	Email: Telephone No: Telefax No:	

Shaded areas do not require completion

MEDICAL IN CONFIDENCE

MEDICAL EXAMINATION REPORT FORM FOR LAPL APPLICANTS

(201) Examination category	(202) Height	(203) Weight	(204) Colour eyes	(205) Colour hair	(206) Blood pressure-seated (mmHg)		(207) Pulse - resting	
Initial ☐	(cm)	(kg)					Rate (bpm)	Rhythm: regular ☐ irregular ☐
Revalidation ☐								
Renewal ☐								
Special referral ☐					Systolic	Diastolic		

Clinical exam: Check each item Normal Abnormal Normal Abnormal

(208) Head, face, neck, scalp			(218) Abdomen, hernia, liver, spleen		
(209) Mouth, throat, teeth			(219) Anus, rectum		
(210) Nose, sinuses			(220) Genito-urinary system		
(211) Ears, drums, eardrum motility			(221) Endocrine system		
(212) Eyes — orbit & adnexa; visual fields			(222) Upper & lower limbs, joints		
(213) Eyes — pupils and optic fundi			(223) Spine, other musculoskeletal		
(214) Eyes — ocular motility; nystagmus			(224) Neurologic — reflexes, etc.		
(215) Lungs, chest, breasts			(225) Mental health		
(216) Heart			(226) Skin, identifying marks and lymphatics		
(217) Vascular system			(227) General systemic		

(228) **Notes:** Describe every abnormal finding. Enter the applicable item number before each comment.

Visual acuity

(229) *Distant vision at 5 m/6 m*

	Uncorrected		Spectacles	Contact lenses
Right eye		Corr. to		
Left eye		Corr. to		
Both eyes		Corr. to		

(230) *Intermediate vision* N14 at 100 cm

	Uncorrected		Corrected	
	Yes	No	Yes	No
Right eye				
Left eye				
Both eyes				

(236) **Pulmonary function**

FEV_1/FVC _____ %

Normal ☐ Abnormal ☐

(237) **Haemoglobin**

_____ _____ (***unit)***

Normal ☐ Abnormal ☐

(235) **Urinalysis** Normal ☐ Abnormal ☐

Glucose	Protein	Blood	Other

Accompanying reports

	Not performed	Normal	Abnormal/Comment
(238) ECG			
(239) Audiogram			

(231) *Near vision* N5 at 30-50 cm	Uncorrected		Corrected	
	Yes	No	Yes	No
Right eye				
Left eye				
Both eyes				

(232) **Spectacles** (233) **Contact lenses**

Yes ☐ No ☐	Yes ☐ No ☐
Type:	Type:

Refraction	Sph	Cyl	Axis	Add
Right eye				
Left eye				

(313) **Colour perception** Normal ☐ Abnormal ☐

Pseudo-isochromatic plates	Type: Ishihara (24 plates)
No of plates:	No of errors:

(234) **Hearing**

(when 239 or 241 are not performed)

	Right ear	Left ear
Conversational voice test (2 m) with the back turned to examiner	Yes ☐ No ☐	Yes ☐ No ☐

Audiometry				
Hz	500	1 000	2 000	3 000
Right				
Left				

(240) Ophthalmology			
(241) ORL (ENT)			
(242) Blood lipids			
(243) Pulmonary function			
(244) Other (what?)			

(247) **AME/GMP recommendation:**

Name of applicant: Date of birth: Reference number:

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☐ Fit for medical certificate for LAPL

☐ Medical certificate issued by undersigned (copy attached) for LAPL

☐ Unfit for class: ----------

☐ Deferred for further evaluation. If yes, why and to whom?

(248) **Comments, limitations**

(249) **AME/GMP declaration:**

I hereby certify that I have personally examined the applicant named on this medical examination report and that this report with any attachment embodies my findings completely and correctly.

(250) Place and date:	AME/GMP name and address:	AME certificate No / GMP identification No:
AME/GMP signature:	Email: Telephone No: Telefax No:	

INSTRUCTIONS FOR COMPLETION OF THE MEDICAL EXAMINATION REPORT FORMS

The AME performing the examination should verify the identity of the applicant.

All questions (sections) on the medical examination report form should be completed in full. If an otorhinolaryngology examination report form is attached, then questions 209, 210, 211 and 234 may be omitted. If an ophthalmology examination report form is attached, then questions 212, 213, 214, 229, 230, 231, 232 and 233 may be omitted.

Writing should be legible and in block capitals using a ballpoint pen. Completion of this form by typing/printing is also acceptable. If more space is required to answer any question, a plain sheet of paper should be used, bearing the applicant's name, the AME's name and signature, and the date of signing. The following numbered instructions apply to the numbered headings on the medical examination report form.

Failure to complete the medical examination report form in full, as required, or to write legibly, may result in non-acceptance of the application in total and may lead to withdrawal of any medical certificate issued. The making of false or misleading statements or the withholding of relevant information by an AME may result in criminal prosecution, denial of an application or withdrawal of any medical certificate(s) granted.

Shaded areas do not require completion for the medical examination report form for the LAPL.

201 EXAMINATION CATEGORY – Tick the appropriate box.

Initial – Initial examination for either LAPL, class 1, 2 or 3; also initial examination for upgrading from LAPL to class 2, or class 2 to 1 (insert 'upgrading' in section 248).

Renewal/Revalidation – Subsequent ROUTINE examinations.

Extended Renewal/Revalidation – Subsequent ROUTINE examinations, which include comprehensive ophthalmological and otorhinolaryngology examinations.

202 HEIGHT – Measure height, without shoes, in centimetres to the nearest cm.

203 WEIGHT – Measure weight, in indoor clothes, in kilograms to the nearest kg.

204 COLOUR EYE – State the colour of the applicant's eyes from the following list: brown, blue, green, hazel, grey, multi.

205 COLOUR HAIR – State the colour of applicant's hair from the following list: brown, black, red, fair, bald.

206 BLOOD PRESSURE – Blood pressure readings should be recorded as phase 1 for systolic pressure and phase 5 for diastolic pressure. The applicant should be seated and rested. Recordings in mm Hg.

207 PULSE (RESTING) – The pulse rate should be recorded in beats per minute and the rhythm should be recorded as regular or irregular. Further comments if necessary may be written in section 228 or 248 or separately.

208 to 227 inclusive constitute the general clinical examination, and each of the boxes should be marked (with a tick) as normal or abnormal.

208 HEAD, FACE, NECK, SCALP – To include appearance, range of neck and facial movements, symmetry, etc.

209 MOUTH, THROAT, TEETH – To include appearance of buccal cavity, palate motility, tonsillar area, pharynx and also gums, teeth and tongue.

210 NOSE, SINUSES – To include appearance and any evidence of nasal obstruction or sinus tenderness on palpation.

211 EARS, DRUMS, EARDRUM MOTILITY – To include otoscopy of external ear, canal, tympanic membrane. Eardrum motility by Valsalva manoeuvre or by pneumatic otoscopy.

212 EYES – ORBIT AND ADNEXA; VISUAL FIELDS – To include appearance, position and movement of eyes and their surrounding structures in general, including eyelids and conjunctiva. Visual fields check by campimetry, perimetry or confrontation.

213 EYES – PUPILS AND OPTIC FUNDI – To include appearance, size, reflexes, red reflex and fundoscopy. Special note of corneal scars.

214 EYES – OCULAR MOTILITY, NYSTAGMUS – To include range of movement of eyes in all directions; symmetry of movement of both eyes; ocular muscle balance; convergence; accommodation; signs of nystagmus.

215 LUNGS, CHEST, BREASTS – To include inspection of chest for deformities, operation scars, abnormality of respiratory movement, auscultation of breath sounds. Physical examination of female applicant's breasts should only be performed with informed consent.

216 HEART – To include apical heartbeat, position, auscultation for murmurs, carotid bruits, palpation for trills.

217 VASCULAR SYSTEM – To include examination for varicose veins, character and feel of pulse, peripheral pulses, evidence of peripheral circulatory disease.

218 ABDOMEN, HERNIA, LIVER, SPLEEN – To include inspection of abdomen; palpation of internal organs; check for inguinal hernias in particular.

219 ANUS, RECTUM – Examination only on clinical indication following informed consent.

220 GENITO-URINARY SYSTEM – To include renal palpation; inspection palpation male/female reproductive organs only on clinical indication following informed consent.

221 ENDOCRINE SYSTEM – To include inspection, palpation for evidence of hormonal abnormalities/imbalance; thyroid gland.

222 UPPER AND LOWER LIMBS, JOINTS – To include full range of movements of joints and limbs, any deformities, weakness or loss. Evidence of arthritis.

223 SPINE, OTHER MUSCULOSKELETAL – To include range of movements, abnormalities of joints.

224 NEUROLOGIC – REFLEXES ETC. To include reflexes, sensation, power, vestibular system – balance, Romberg test, etc.

225 MENTAL HEALTH– To include appearance, appropriate mood/thought, unusual behaviour.

226 SKIN, IDENTIFYING MARKS AND LYMPHATICS – To include inspection of skin; inspection, palpation for lymphadenopathy, etc. Briefly describe scars, tattoos, birthmarks, etc. which could be used for identification purposes.

227 GENERAL SYSTEMIC – All other areas, systems and nutritional status.

228 NOTES – Any notes, comments or abnormalities to be described – extra notes, if required, on separate sheet of paper, signed and dated.

229 DISTANT VISION AT 5/6 METRES – Each eye to be examined separately and then both together. First without correction, then with spectacles (if used) and lastly with contact lenses, if used. Record visual acuity in appropriate boxes. Visual acuity to be tested at either 5 or 6 metres with the appropriate chart for the distance.

230 INTERMEDIATE VISION AT 100 CM – Each eye to be examined separately and then both together. First without correction, then with spectacles if used, and lastly with contact lenses if used. Record visual acuity in appropriate boxes as ability to read N14 at 100 cm (Yes/No).

231 NEAR VISION AT 30-50 CM. – Each eye to be examined separately and then both together. First without correction, then with spectacles if used, and lastly with contact lenses, if used. Record visual acuity in appropriate boxes as ability to read N5 at 30-50 cm (Yes/No).

Note: Bifocal contact lenses and contact lenses correcting for near vision only are not acceptable.

232 SPECTACLES – Tick the appropriate box signifying whether spectacles are or are not worn by the applicant. If worn, state whether unifocal, bifocal, varifocal or look-over.

233 CONTACT LENSES – Tick the appropriate box signifying whether contact lenses are or are not worn by the applicant. If worn, state the type from the following list; hard, soft, gas-permeable or disposable.

313 COLOUR PERCEPTION – Tick the appropriate box signifying whether colour perception is normal or not. If abnormal; state the number of plates of the first 15 of the pseudo-isochromatic plates (Ishihara 24 plates) which have not been read correctly.

234 HEARING – Tick the appropriate box to indicate hearing level ability as tested separately in each ear at 2 m.

235 URINALYSIS – State whether the result of urinalysis is normal or not by ticking appropriate box. If no abnormal constituents, state NIL in each appropriate box.

236 PULMONARY FUNCTION – When required or on indication, state the actual FEV_1/FVC value obtained in % and state whether normal or not with reference to height, age, sex and race.

236(a) OSA screening – Determine the risk of OSA using the appropriate diagnostic tool.

237 HAEMOGLOBIN – Enter the actual haemoglobin test result and state the units used. Then state whether the value is normal or not, by ticking appropriate box.

238 to 244 inclusive: ACCOMPANYING REPORTS – One box opposite each of these sections must be ticked. If the test is not required and has not been performed, then tick the 'NOT PERFORMED' box. If the test has been performed (either required or on indication), complete the 'normal' or 'abnormal' box as appropriate. Regarding question 244, the number of other accompanying reports must be stated.

247 AME RECOMMENDATION – The applicant's name, date of birth and reference number should be entered here in block capitals. The applicable class of medical certificate should be indicated by a tick in the appropriate box. If a fit assessment is recommended and a medical certificate has been issued, this should be indicated in the appropriate box. An applicant may be recommended as fit for a lower class of medical certificate (e.g. class 2), but also be deferred or recommended as unfit for a higher class of medical certificate (e.g. class 1). If an unfit recommendation is made, the applicable Part-MED provision references should be entered. If an applicant is deferred for further evaluation, the reason and the doctor or licensing authority to whom the applicant is referred should be indicated.

248 COMMENTS, LIMITATIONS, ETC. – The AME's findings and assessment of any abnormality in the history or examination should be entered here. The AME should also state any limitation required.

249 AME DETAILS – The AME should sign the declaration, complete his or her name and address in block capitals, contact details and lastly stamp the relevant section with his or her designated AME stamp incorporating his or her AME number. The GMP identification number is the number provided by the national medical system.

250 PLACE AND DATE – The place (town or city) and the date of examination should be entered here. The date of examination is the date of the general examination and not the date of finalisation of the form. If the medical examination report is finalised on a different date, the date of finalisation should be entered in section 248 as 'Report finalised on .....'.

GM1 ARA.MED.135(b);(c) Aero-medical forms

OPHTHALMOLOGY AND OTORHINOLARYNGOLOGY EXAMINATION REPORT FORMS

The ophthalmology and otorhinolaryngology examination report forms may be used as indicated in the following forms and provide corresponding instructions for completion.

OPHTHALMOLOGY EXAMINATION REPORT FORM

Complete this page fully and in block capitals – Refer to instructions for completion.

MEDICAL IN CONFIDENCE

Applicant's details

(1) State applied to:	(2) Medical certificate applied for: class 1 ☐ class 2 ☐ class 3 ☐		
(3) Surname:	(4) Previous surname(s):		(12) Application: Initial ☐ Revalidation/Renewal ☐
(5) Forename(s):	(6) Date of birth:	(7) Sex: Male ☐ Female ☐	(13) Reference number:

(301) I hereby declare that I have been informed and I understand that all information provided to my AME, contained in this report and its attachments, may be released to the medical assessor of my licensing authority and to the medical assessor of the competent authority of my AME, recognising that these documents or electronically stored data are to be used for completion of a medical assessment and for oversight purposes, providing that I or my physician may have access to them in accordance with national law. Medical confidentiality will be respected at all times.

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Date Signature of applicant

(302) Examination category:

- Initial ☐
- Revalidation ☐
- Renewal ☐
- Referral ☐

(303) Ophthalmological history:

Clinical examination

Check each item		Normal	Abnormal
(304) Eyes, external & eyelids			
(305) Eyes, exterior (slit lamp, ophth.)			
(306) Eye position and movements			
(307) Visual fields (confrontation)			
(308) Pupillary reflexes			
(309) Fundi (ophthalmoscopy)			
(310) Convergence	cm		
(311) Accommodation	D		

Visual acuity

(314) *Distant vision at 5 m /6 m*

	Uncorrected		Spectacles	Contact lenses
Right eye		Corrected to		
Left eye		Corrected to		
Both eyes		Corrected to		

(315) *Intermediate vision at 1 m*

	Uncorrected		Spectacles	Contact lenses
Right eye		Corrected to		
Left eye		Corrected to		
Both eyes		Corrected to		

(316) *Near vision at 30-50 cm*

	Uncorrected		Spectacles	Contact lenses
Right eye		Corrected to		
Left eye		Corrected to		

(312) *Ocular muscle balance* (in prisme dioptres)

Distant at 5 m / 6 m	Near at 30-50 cm
Ortho	Ortho
Eso	Eso
Exo	Exo
Hyper	Hyper
Cyclo	Cyclo
Tropia Yes No	Phoria Yes No
Fusional reserve testing Not performed Normal Abnormal	

(313) *Colour perception*

Pseudo-isochromatic plates	Type: Ishihara (24 plates)
No of plates:	No of errors:
Advanced colour perception testing indicated Yes No Method:	
Class 1&2 Colour SAFE	Colour UNSAFE
For ATCOs Normal trichromat Yes ☐ No ☐	

Both eyes		Corrected to		

(317) *Refraction*	Sph	Cylinder	Axis	Near (add)
Right eye				
Left eye				
Actual refraction examined Spectacles (prescription based)				

(318) *Spectacles*	(319) *Contact lenses*
Yes ☐ No ☐ Type:	Yes ☐ No ☐ Type:

(320) *Intra-ocular pressure*

Right (mmHg)	Left (mmHg)
Method	Normal ☐ Abnormal ☐

(321) **Ophthalmological remarks:**

(322) **Examiner's declaration:**

I hereby certify that I have personally examined or assessed the eye specialist's examination report of the applicant named in this medical examination report and that this report with any attachment embodies the findings completely and correctly.		
(323) Place and date:	Name and address: (block capitals)	AME or eye specialist stamp with No:
AME or eye specialist signature:	Email: Telephone No:	

INSTRUCTIONS FOR COMPLETION OF THE OPHTHALMOLOGY EXAMINATION REPORT FORM

Writing should be legible and in block capitals using a ballpoint pen. Completion of this form by typing or printing is also acceptable. If more space is required to answer any question, a plain sheet of paper should be used, bearing the applicant's name, the name and signature of the AME or ophthalmology specialist performing the examination and the date of signing. The following numbered instructions apply to the numbered headings on the ophthalmology examination report form.

Failure to complete the medical examination report form in full, as required, or to write legibly may result in non-acceptance of the application in total and may lead to withdrawal of any medical certificate issued. The making of false or misleading statements or the withholding of relevant information by an examiner may result in criminal prosecution, denial of an application or withdrawal of any medical certificate granted.

The AME or ophthalmology specialist performing the examination should verify the identity of the applicant. The applicant should then be requested to complete sections 1, 2, 3, 4, 5, 6, 7, 12 and 13 on the form and then sign and date the consent to release of medical information (section 301) with the examiner countersigning as witness.

302 EXAMINATION CATEGORY – Tick the appropriate box.

Initial – Initial examination for either class 1 or 2; also initial examination for upgrading from class 2 to 1 (insert 'upgrading' in section 303).

Renewal/Revalidation – Subsequent comprehensive ophthalmological examinations (due to refractive error).

Special referral – NON-ROUTINE examination for assessment of an ophthalmological symptom or finding.

303 OPHTHALMOLOGICAL HISTORY – Detail here any history of note or reasons for special referral.

304 to 309 inclusive: CLINICAL EXAMINATION – These sections together cover the general clinical examination and each of the sections should be marked (with a tick) as normal or abnormal. Any abnormal findings or comments on findings should be entered in section 321.

310 CONVERGENCE – Enter the near point of convergence in cm, as measured using the RAF near point rule or equivalent. Tick whether normal or abnormal. Any abnormal findings or comments on findings should be entered in section 321.

311 ACCOMMODATION – Enter the measurement recorded in dioptres using the RAF near point rule or equivalent. Tick whether normal or abnormal. Any abnormal findings or comments on findings should be entered in section 321.

312 OCULAR MUSCLE BALANCE – Ocular muscle balance is tested at distant 5 or 6 m and near at 30-50 cm and results recorded. Presence of tropia or phoria must be entered accordingly and also whether fusional reserve testing was NOT performed and if performed whether normal or not.

313 COLOUR PERCEPTION – Enter the type of pseudo-isochromatic plates (Ishihara) as well as the number of plates presented with the number of errors made by the examinee. 15 plates should normally be presented from the 24-plate series, in random order. State whether advanced colour perception testing is indicated and the method to be used (CAD or anomaloscopy), and finally whether judged to be colour safe or unsafe. Advanced colour perception testing is usually only required for initial assessment, unless indicated by a change in the applicant's colour perception. Class 3 applicants are required to demonstrate normal trichromacy which cannot be done by using only pseudo-isochromatic plates; in their case, advanced colour perception testing is needed as default at the initial examination or whenever there is a clinical indication.

314–316 VISUAL ACUITY TESTING AT 5 m / 6 m, 1m and 30-50 cm – Record the actual visual acuity obtained in the appropriate boxes. If correction is neither worn nor required, put a line through the corrected vision boxes. Distant visual acuity to be tested at either 5 m or 6 m with the appropriate chart for that distance.

317 REFRACTION – Record the results of refraction. Indicate also whether, for class 2 applicants, refraction details are based upon spectacle prescription.

318 SPECTACLES – Tick the appropriate box signifying whether spectacles are or are not worn by applicant. If worn, state whether unifocal, bifocal, varifocal or look-over.

319 CONTACT LENSES – Tick the appropriate box signifying whether contact lenses are or are not worn. If worn, state the type from the following list; hard, soft, gas-permeable, disposable.

320 INTRA-OCULAR PRESSURE – Enter the intra-ocular pressure recorded for right and left eyes and indicate whether normal or not. Also indicate the method used – applanation, air etc.

321 OPHTHALMOLOGICAL REMARKS AND RECOMMENDATION – Enter here all the remarks, abnormal findings and assessment results. Also enter any limitations recommended. If there is any doubt about findings or recommendations, the examiner may contact the medical assessor of the licensing authority for advice before finalising the report form.

322 OPHTHALMOLOGY EXAMINER'S DETAILS – The ophthalmology examiner must sign the declaration, complete his or her name and address in block capitals, contact details and lastly stamp the report with his or her designated stamp incorporating his or her AME or specialist number.

323 PLACE AND DATE – Enter the place (town or city) and the date of examination. The date of examination is the date of the clinical examination and not the date of finalisation of the form. If the ophthalmology examination report is finalised on a different date, enter date of finalisation on section 321 as 'Report finalised on .....'.

OTORHINOLARYNGOLOGY (ENT) EXAMINATION REPORT FORM

Complete this page fully and in block capitals – Refer to instructions for completion.

MEDICAL IN CONFIDENCE

Applicant's details

(1) State applied to:	(2) Medical certificate applied for: class 1 ☐ class 2 ☐ class 3 ☐		
(3) Surname:	(4) Previous surname(s):		(12) Application: Initial ☐ Revalidation/Renewal ☐
(5) Forename(s):	(6) Date of birth:	(7) Sex: Male ☐ Female ☐	(13) Reference number:
(401) I hereby declare that I have been informed and I understand that all information provided to my AME, contained in this report and its attachments, may be released to the medical assessor of my licensing authority and to the medical assessor of the competent authority of my AME, recognising that these documents or electronically stored data are to be used for completion of a medical assessment and for oversight purposes, providing that I or my physician may have access to them in accordance with national law. Medical confidentiality will be respected at all times. ---------- Date ---------- Signature of applicant			

(402) Examination category:	(403) Otorhinolaryngological (ENT) history:
Initial ☐	
Revalidation/renewal ☐	
Referral ☐	

Clinical examination

Check each item	Normal	Abnormal
(404) Head, face, neck, scalp		
(405) Buccal cavity, teeth		
(406) Pharynx		
(407) Nasal passages and naso-pharynx (incl. anterior rhinoscopy)		
(408) Vestibular system incl. Romberg test		
(409) Speech		
(410) Sinuses		
(411) Ext acoustic meati, tympanic membranes		
(412) Pneumatic otoscopy		
(413) Tympanometry including Valsalva meanoeuvre (initial or if clinically indicated)		

(419) *Pure tone audiometry*

dB HL (hearing level)

Hz	Right ear	Left ear
250		
500		
1 000		
2 000		
3 000		
4 000		
6 000		
8 000		

(420) *Audiogram*

Additional testing (if indicated)	Not performed	Normal	Abnormal
(414) Speech discrimination test with/without hearing aids, as applicable			
(415) Posterior rhinoscopy			
(416) ENG; spontaneous and positional nystagmus			
(417) Caloric test or vestibular rotation test			
(418) Mirror or fibre laryngoscopy			

o = Right – – – = Air
x = Left ..... = Bone

dB/HL								
–10								
0								
10								
20								
30								
40								
50								
60								
70								
80								
90								
100								
110								
120								
Hz	250	500	1000	2000	3000	4000	6000	8000

(421) **Otorhinolaryngology remarks:**

(422) **Examiner's declaration:**

I hereby certify that I have personally examined or assessed the ENT specialist's examination report of the applicant named in this medical examination report and that this report with any attachment embodies the findings completely and correctly.

(423) Place and date:	Name and address: (block capitals)	AME or ENT specialist stamp with No:
AME or ENT specialist signature:	Email: Telephone No:	

INSTRUCTIONS FOR COMPLETION OF THE OTORHINOLARYNGOLOGY (ENT) EXAMINATION REPORT FORM

Writing should be legible and in block capitals using a ballpoint pen. Completion of this form by typing or printing is also acceptable. If more space is required to answer any question, a plain sheet of paper should be used, bearing the applicant's name, the name and signature of the AME or otorhinolaryngology specialist performing the examination and the date of signing. The following numbered instructions apply to the numbered headings on the otorhinolaryngology examination report form.

Failure to complete the medical examination report form in full, as required, or to write legibly may result in non-acceptance of the application in total and may lead to withdrawal of any medical certificate issued. The making of false or misleading statements or the withholding of relevant information by an examiner may result in criminal prosecution, denial of an application or withdrawal of any medical certificate granted.

The AME or otorhinolaryngology specialist performing the examination should verify the identity of the applicant. The applicant should then be requested to complete sections 1, 2, 3, 4, 5, 6, 7, 12 and 13 on the form and then sign and date the consent to release of medical information (section 401) with the examiner countersigning as witness.

402 EXAMINATION CATEGORY – Tick the appropriate box.

Initial – Initial examination for class 1; also initial examination for upgrading from class 2 to 1 (insert 'upgrading' in section 403)

Special Referral – NON-ROUTINE examination for assessment of an ORL (ENT) symptom or finding

403 OTORHINOLARYNGOLOGICAL (ENT) HISTORY – Detail here any history of note or reasons for special referral.

404-413 inclusive: CLINICAL EXAMINATION – These sections together cover the general clinical examination and each of the sections should be marked (with a tick) as normal or abnormal. Any abnormal findings or comments on findings should be entered in section 421.

414-418 inclusive: ADDITIONAL TESTING – These tests are only required to be performed if indicated by history or clinical findings and are not routinely required. For each test one of the boxes must be completed – if the test is not performed, then tick that box – if the test has been performed, then tick the appropriate box for a normal or abnormal result. All remarks and abnormal findings should be entered in section 421.

419 PURE TONE AUDIOMETRY – Complete figures for dB HL (hearing level) in each ear at all listed frequencies.

420 AUDIOGRAM – Complete audiogram from figures as listed in section 419.

421 OTORHINOLARYNGOLOGY (ENT) REMARKS AND RECOMMENDATION – Enter here all remarks, abnormal findings and assessment results. Also enter any limitations recommended. If there is any doubt about findings or recommendations, the examiner may contact the medical assessor of the licensing authority for advice before finalising the report form.

422 OTORHINOLARYNGOLOGY (ENT) EXAMINER'S DETAILS – The otorhinolaryngology (ENT) examiner must sign the declaration, complete his or her name and address in block capitals, contact details and lastly stamp the report with his or her designated stamp incorporating his or her AME or specialist number.

423 PLACE AND DATE – Enter the place (town or city) and the date of examination. The date of examination is the date of the clinical examination and not the date of finalisation of the form. If the ORL (ENT) examination report is finalised on a different date, enter date of finalisation in section 421 as 'Report finalised on .....'.

ARA.MED.145 GMP notification to the competent authority

The competent authority, when applicable, shall establish a notification process for general medical practitioners (GMPs) to ensure that the GMP is aware of the applicable requirements laid down in this Regulation.

ARA.MED.150 Record-keeping

(a) In addition to the records required in point ARA.GEN.220 of Annex VI (Part-ARA) to Regulation (EU) No 1178/2011, the competent authority shall include in its system of record-keeping details of aero-medical examinations, and assessments submitted by AMEs, AeMCs or GMPs.

(b) All aero-medical records of applicants / licence holders shall be kept for a minimum period of 10 years after the expiry date of their last medical certificate.

(c) For the purpose of aero-medical assessments and standardisation, aero-medical records shall be made available after written consent of the applicant / licence holder to the following entities:

(1) an AeMC, AME or GMP for the purpose of completion of an aero-medical assessment;

(2) a medical review board that may be established by the competent authority for secondary review of borderline cases;

(3) relevant medical specialists for the purpose of completion of an aero-medical assessment;

(4) the medical assessor of the competent authority of another Member State for the purpose of cooperative oversight;

(5) the applicant / licence holder concerned upon their written request;

(6) the Agency for standardisation purposes, in a manner that ensures that medical confidentiality is respected at all times.

(d) The competent authority may make aero-medical records available for other purposes than those mentioned in point (c) in accordance with Regulation (EU) 2016/679.

(e) The competent authority shall maintain a list of:

(1) AeMCs and AMEs that it has certified;

(2) AMEs certified by other competent authorities exercising their privileges in its territory and to whom it has provided a briefing in accordance with point MED.D.001(f)(3) of Annex I (Part-MED);

(3) GMPs exercising their privileges in accordance with point MED.A.040 of Annex I (Part-MED), if applicable;

(4) OHMPs having notified the competent authority of their intention to perform cabin crew aero-medical assessments in accordance with points MED.C.005(c) and MED.D.040 of Annex I (Part-MED), if applicable.

The list shall state the privileges of the persons and organisations specified in points (1) to (4) above and shall be published and kept up to date by the competent authority.

(f) The competent authority shall analyse the health data of pilots above the age of 60, especially of those involved in single-pilot HEMS operations, and report such health data in an anonymised and aggregated manner to EASA on a yearly basis.

AMC1 ARA.MED.150 Record-keeping

RELEASE OF AERO-MEDICAL RECORDS

In accordance with Regulation (EU) 2016/679, aero-medical records may also be released:

(a) upon written request of the applicant, to management of the competent authority, for review in response to a complaint;

(b) to research institutes for the purpose of scientific research, with assurance of de-identification prior to publication;

(c) to any investigation body (accident, security, police), when required under national law; and

(d) for any other circumstances, as required under Union or national law.

AMC1 ARA.MED.150(f) Record-keeping

REPORTING HEALTH DATA OF PILOTS ABOVE THE AGE OF 60

For pilots above the age of 60, the competent authorities performing the analysis of health data should report in an aggregated manner to EASA at least the following data:

(a) number and proportion of pilots above the age of 60 assessed as unfit, as well as the most common medical conditions that triggered unfitness and the age distribution;

(b) proportion of incapacitation (partial and total) events among this category of pilots and the most common medical and, if applicable, operational conditions that triggered incapacitation;

(c) the proportion of pilots above the age of 60 who did not revalidate their medical certificate;

(d) any safety concerns based on the trends identified as a result of the data analysis.

ARA.MED.155 Change of competent authority

(a) Without prejudice to the provisions laid down in point ARA.GEN.360 of Annex VI (Part-ARA) to Regulation (EU) No 1178/2011, upon receiving a medical certificate holder's request for a change of competent authority as specified in points MED.A.035(d) or (e) of Annex I (Part-MED) to this Regulation, point FCL.015(e) of Annex I (Part-FCL) to Commission Regulation (EU) No 1178/2011, point BFCL.015(f) of Annex III (Part-BFCL) to Commission Regulation (EU) 2018/395, point SFCL.015(f) of Annex III (Part-SFCL) to Commission Regulation (EU) 2018/1976 or point ATCO.AR.D.003 of Annex II (Part ATCO.AR) to Commission Regulation (EU) 2015/340, the receiving competent authority shall, without undue delay, request the competent authority of the medical certificate holder to transfer, without undue delay, the copies of the medical records of the medical certificate holder kept by that competent authority.

(b) The copies of the medical records shall be transferred in a confidential manner in accordance with point MED.A.015 of Annex I (Part-MED) to this Regulation and shall include copies of the most recent medical certificate issued and of the medical documents, and a summary of the relevant medical history of the applicant, verified and signed or electronically authenticated by the medical assessor of the transferring competent authority.

(c) The transferring competent authority shall keep the medical certificate holder's original medical records in accordance with point ARA.MED.150.

(d) The receiving competent authority shall, without undue delay, exchange the medical certificate, provided that it has received and processed all documents specified in point (a). Upon the

exchange of the medical certificate, the receiving competent authority shall immediately request the medical certificate holder to surrender to it the medical certificate issued by the transferring competent authority.

(e) The receiving competent authority shall immediately notify the transferring competent authority once it has reissued the medical certificate to the medical certificate holder and the medical certificate holder has surrendered the medical certificate pursuant to point (d). Until such a notification is received, the transferring competent authority remains responsible for the medical certificate originally issued to that medical certificate holder.

AMC1 ARA.MED.155(a) Change of competent authority

When transferring the summary of an applicant's relevant medical history and copies of medical records to the receiving competent authority, the transferring competent authority should include at least all the following:

(a) copies of:

(1) the most recent aero-medical report containing detailed results of aero-medical examinations and assessments that are required for the applicable class of medical certificate;

(2) the most recent medical certificate issued and the corresponding application form and examination form;

(3) the most recent ECG, ophthalmological and ear-nose-throat (ENT), including audiometry, examination reports, as applicable for the class of medical certification;

(4) the initial medical examination or the supporting documents for the last medical-file transfer between licensing authorities; if this is not available, alternatively, a copy of the medical report from the last three aero-medical examinations should be transferred;

(5) the mental health assessment, as applicable for the class of medical certification; and

(6) any other relevant medical documentation; and

(b) the 'Summary of medical history' form of AMC2 ARA.MED.155(a), filled in and signed or electronically authenticated by the medical assessor.

AMC2 ARA.MED.155(a) Change of competent authority

SUMMARY OF MEDICAL HISTORY — FORM FOR THE TRANSFER OF MEDICAL RECORDS

SUMMARY OF MEDICAL HISTORY — FORM FOR THE TRANSFER OF MEDICAL RECORDS MEDICAL DETAILS IN CONFIDENCE		
Item	**Description**	
1	State of licence(s) issue	*Country*
2	Title of licence(s)/certificate(s) and corresponding serial number of licence(s) held (or national medical reference number)	*e. g. PPL(A) — UN country code.FCL.xxx or ATCO — UN country code ATCO.xxx*
3	Full name (Last and first names)	*LAST NAME 1, LAST NAME 2, etc. First name 1, First name 2, etc.*

4	Date of birth (dd/mm/yyyy)	dd/mm/yyyy	
5	Address		
6	Contact details: international phone number; and email.	*Tel:* *Email:*	
7	Nationality/ies	*Country*	
8	Issuing authority	*Country and authority*	
9	Initial medical certificate:	Date of issue	dd/mm/yyyy
		Date of examination	dd/mm/yyyy
		Type of certificate (Joint Aviation Authorities (JAR), Part-MED or national)	
		Class	
10	Dates of last three revalidation/renewal examinations (if any) (dd/mm/yyyy)		
11	Limitations (if any)		
12	Comments on any relevant aspect of the applicant's medical history or examination (if applicable, please enclose reports) Please enclose at least the latest examination report and electrocardiogram (ECG). In addition, if applicable for the class of medical certification, please enclose the latest ophthalmological, ear-nose-throat (ENT), and mental health assessment reports.		
13	Past or pending enforcement action[1]	**Yes** ☐ **No** ☐ (If yes, please give details on a separate page.)	

If there is insufficient space on this form for any information, please use additional pages.

CERTIFICATION		
I, Dr _____, as medical assessor of the [COMPETENT AUTHORITY name] _____, certify that the details given above and on any additional pages included are true, complete, and correct.		
Date	Signature	Competent authority and stamp/seal

[1] Item 13: specify whether there is a current investigation into the medical certificate and licence, or suspension or revocation thereof.

GM1 ARA.MED.155Change of competent authority

APPLICATION FORM FOR CHANGE OF COMPETENT AUTHORITY

In the event of an applicant for a change of competent that only holds a medical certificate without holding an associated licence, the form below should be used. When the applicant already holds a pilot licence, then the form in GM1 ARA.GEN.360 should be used. In this form, 'current competent authority' means the 'transferring competent authority' of point ARA.MED.155, and 'future competent authority' means the 'receiving competent authority' of point ARA.MED.155.

<table>
<tr><th colspan="3">APPLICATION FORM FOR CHANGE OF COMPETENT AUTHORITY FOR MEDICAL CERTIFICATE HOLDERS</th></tr>
<tr><td rowspan="4">Applicant details:</td><td>Full name
(Last and first names)</td><td>LAST NAME 1, LAST NAME 2, etc.
First name 1, First name 2, etc</td></tr>
<tr><td>Class of medical certificate / number of medical certificate</td><td>e.g. Class 3 / UN country code. Xxxxx
e.g. Class 1 / UN country code. Xxxxx</td></tr>
<tr><td>Current competent authority</td><td>Country and authority</td></tr>
<tr><td>Future competent authority</td><td>Country and authority</td></tr>
<tr><td colspan="3">I, _____ (last name(s), first name(s)) hereby apply for a change of competent authority from my current competent authority to the future competent authority. To that end, I consent to a transfer of my medical records, including the transfer of medical records and associated exchange of information between the current and future competent authorities.</td></tr>
<tr><td colspan="3">I will immediately surrender my current medical certificate to the future competent authority upon receiving the 'new' medical certificate.
I understand that the current competent authority remains my competent authority until I have received the 'new' medical certificate, as applicable, issued by the future competent authority.
I hereby declare that I have not submitted any other request to another competent authority than the future competent authority as indicated above.
I have fully reviewed the [please insert reference to the current competent authority's relevant information material] and have submitted all the necessary paperwork for my application to be considered.
I declare that the information provided on this application form is true, complete, and correct.
Any incorrect information on this form or non-compliance with the essential requirements of Annex IV to Regulation (EU) 2018/1139 or with the requirements of Regulations (EU) No 1178/2011, (EU) 2015/340 and (EU) 2026/xxx, could disqualify the applicant from having their records transferred from the current to the future competent authority.</td></tr>
<tr><td colspan="2">Signature:</td><td>Date:</td></tr>
</table>

ARA.MED.160 Exchange of information on medical certificates through a central repository

(a) The Agency shall establish and manage a central repository, the European Aero-Medical Repository (EAMR).

(b) For the purposes of medical certification and oversight of applicants for and holders of class 1 medical certificates and for the oversight of AMEs and AeMCs, the persons referred to in point (c) shall exchange the following information through the EAMR:

(1) basic data of the applicant for or holder of a class 1 medical certificate: licensing authority; surname and forename; date of birth; nationality; email address and the

number of one or more identification documents (national identity card or passport) as provided by the applicant;

(2) class 1 medical certificate data: date of the medical examination or, if the medical examination is not finalised, the date of initiation of the medical examination; dates of issuing and of expiration of the class 1 medical certificate; place of the examination; status of limitations; status of that certificate (new, released, suspended or revoked); unique reference number of the medical assessor of the licensing authority; AeMC or AME issuing that certificate and of its competent authority.

(c) For the purposes of point (b), the following persons shall have access to the EAMR and the information contained therein:

(1) medical assessors of the licensing authority of the applicant for or holder of a class 1 medical certificate, as well as any other duly authorised personnel of that authority in charge of creating or managing the record of that applicant or holder as required by this Regulation;

(2) AMEs and any duly authorised personnel of AeMCs to whom that applicant or holder has submitted an application for a medical certificate in accordance with point MED.A.035 of Annex I (Part-MED);

(3) any duly authorised personnel of the competent authority responsible for the oversight of AMEs or AeMCs conducting aero-medical assessments of those applicants or holders.

In addition, the Agency and national competent authorities may grant access to the EAMR and the information contained therein to other persons, if necessary for the purposes of ensuring the proper functioning of the EAMR, in particular its technical maintenance. In that event, the Agency or the national competent authority concerned shall ensure that those persons are duly authorised and qualified, that their access remains limited to what is necessary for the purposes for which they have been granted access, and that they have received prior training on the applicable personal data protection legislation and related safeguards. Whenever a competent authority grants a person such access, it shall inform the Agency beforehand.

(d) The licensing authorities, AMEs and AeMCs referred to in point (c) shall, each time immediately upon having examined an applicant for or a holder of a class 1 medical certificate, enter the data referred to in point (b) into the EAMR or update that data if necessary.

(e) If the data constitutes personal data as defined in point (1) of Article 3 of Regulation (EU) 2018/1725, they shall, each time when entering or updating that data, inform, ex ante, the applicant for or holder of the class 1 certificate thereof.

(f) The Agency shall ensure the integrity and security of the EAMR and the information contained therein by appropriate information technology infrastructure. It shall establish and apply, in consultation with the national competent authorities, the protocols and technological measures necessary to ensure that any access to the EAMR and the information contained therein is lawful and secure.

(g) The Agency shall ensure that any information contained in the EAMR is deleted after a period of 10 years. That period shall be calculated from the date of expiration of the last class 1

certificate issued in respect of the applicant or holder concerned, or from the date of the last entry or update of data in respect of that applicant or holder, whichever date is later.

(h) The Agency shall ensure that applicants for, or holders of, class 1 medical certificates can access any information relating to them contained in the EAMR and that they are informed that they can request that information to be rectified or deleted. The licensing authorities shall assess such requests and, if they consider that the information concerned is incorrect or not necessary for the purposes specified in point (b), ensure that the information is rectified or deleted.

AMC1 ARA.MED.160(b) Exchange of information on medical certificates

DATA CATEGORIES

For the purpose of the EAMR, the information processed is divided into two categories as follows:

Category 1: Basic applicant data as specified in point ARA.MED.160(b)(1)

Category 2: Medical certificate data as specified in point ARA.MED.160(b)(2)

Typically, the following information should not be recorded:

— Reasons for which a medical certificate has not been issued

Only the fact that no certificate has been issued should be indicated. Any need for further clarification on whether the certificate has not been issued because of medical reasons, administrative matters or interruption of the medical assessment process before reaching the conclusion should be addressed, outside the scope of the EAMR, by the medical assessor of the licensing authority associated with the applicant's class 1 medical certificate.

— Details of the limitations associated with a given medical certificate

Only a 'Yes/No' status on the existence of such a limitation should be recorded. Any need for further clarification on the limitation(s) should be addressed, outside the scope of the EAMR, by the medical assessor of the licensing authority associated with the applicant's class 1 medical certificate.

AMC1 ARA.MED.160(c) Exchange of information on medical certificates

ROLE OF THE COMPETENT AUTHORITIES

Each competent authority should:

(a) designate its EAMR administrator;

(b) ensure control and oversight of all personnel managing or using the EAMR.

AMC2 ARA.MED.160(c) Exchange of information on medical certificates

RESTRICTED ACCESS TO INFORMATION

Each competent authority should restrict access to personal data in the EAMR on a need-to-know basis as follows:

Category as determined by AMC1 ARA.MED.160(b)	Restricted access
Category 1	(a) to relevant authorised administrative personnel of the licensing authority, to the extent needed to create and manage the applicant's record for licensing purposes, as required by Commission Regulation (EU) No 1178/2011.
Category 1 & 2	(b) to the AeMC(s) or the AME(s) to whom the applicant submits an application for a class 1 medical certificate in accordance with point MED.A.035(b), to the extent needed to verify their previous medical certificate history, as required by Commission Regulation (EU) No 1178/2011; (c) to the medical assessor(s) of the licensing authority and the competent authority(ies) exercising oversight on the AeMC(s) or the AME(s) to whom the application for a class 1 medical certificate is submitted, to the extent needed to ensure proper implementation of Commission Regulation (EU) 2026/xxx.

AMC3 ARA.MED.160(c) Exchange of information on medical certificates

USE OF THE EAMR

The competent authority should ensure that:

(a) all personnel accessing the EAMR are trained and proficient in using the system and having the necessary knowledge for implementing the applicable data protection legislation;

(b) the oversight of persons and organisations, subject to Regulation (EU) 2018/1139 and the implementing and delegated acts adopted on the basis thereof, includes the assessment of compliance with the provisions applicable to the use and functioning of the EAMR.

AMC1 ARA.MED.160(d) Exchange of information on medical certificates

APPLICANT'S RECORD

Each competent authority should ensure that:

(a) for each applicant for a class 1 medical certificate, a unique personal record is created in the EAMR, containing the category 1 personal data listed in point ARA.MED.160(b)(1). This record is referred to as the 'applicant's record';

(b) the applicant's record is managed in accordance with the applicable regulation (typically for inserting, updating, viewing, validating data, etc.).

(c) an applicant is granted the right to obtain, without undue delay, the rectification of inaccurate personal data concerning them and, taking into account the purposes of the EAMR, the applicant is granted the right to have incomplete personal data completed. Such corrections should also be mirrored in the associated records kept in accordance with point ARA.MED.150.

(d) the data recorded in the EAMR is complete as relevant for the purpose of the EAMR as described in AMC1 ARA.MED.160(b).

AMC1 ARA.MED.160(d) Exchange of information on medical certificates

RECOVERY FROM UNSERVICEABILITY

The competent authority should ensure that class 1 medical certificates issued or amended without being properly recorded in the EAMR, due to unserviceability of the system, are entered in the EAMR without undue delay when the system recovers.

AMC1 ARA.MED.160(h) Exchange of information on medical certificates

INFORMATION OF APPLICANTS

The competent authority should ensure at least the following:

(a) At the time of the creation of the applicant's record at the latest, the applicants should be informed:

(1) that their personal data as listed in point ARA.MED.160(b)(1) will be lawfully processed in a European central repository, in accordance with Article 72 of Regulation (EU) 2018/1139, point ARA.GEN.200(c) of Annex VI (Part-ARA) to Commission Regulation (EU) No 1178/2011 and point ARA.MED.160;

(2) that the purpose of the processing is to verify that the information, as regards their previous medical certificates, provided in their application for a class 1 medical certificate submitted in accordance with point MED.A.035(b), is consistent with the records available to all competent authorities in accordance with point ARA.MED.150;

(3) of the contact details of the data protection officer as applicable;

(4) that the period for which the personal data will be stored is determined in accordance with point ARA.MED.160(g);

(5) of the existence of their right to request access to, and rectification of personal data;

(6) of the contact details of the data controller;

(7) of their right to lodge a complaint with the competent data protection authority in accordance with the applicable data protection legislation;

(8) that it is ensured that access to personal data contained in the EAMR is restricted to authorised personnel in accordance with Commission Regulation (EU) 2026/xxx.

(b) When applying for a class 1 medical certificate, the applicants should be informed that the category 2 data of their medical certificate, as listed in ARA.MED.160(b)(2), will be processed to verify that the information provided in their declaration, as regards their previous medical certificates, is consistent with the information available in the EAMR.

SECTION II – AERO-MEDICAL EXAMINERS (AMEs)

ARA.MED.200 Procedure for the issue, revalidation, renewal or change of an AME certificate

Without prejudice to the provisions laid down in point ARA.GEN.315, all of the following shall apply:

(a) the competent authority shall ensure that before the issue, revalidation, renewal or extension of privileges of an AME certificate, applicants demonstrate their aero-medical competence in accordance with points MED.D.030 (a)(6) and (b)(5) of Annex I (Part-MED);

(b) the competent authority shall have a procedure in place to ensure that, before issuing the AME certificate, it has the evidence that the AME practice is equipped and the appropriate processes are in place to perform aero-medical examinations within the scope of the AME certificate applied for. If there are multiple AME practice locations, all of them shall be specified on the AME certificate;

(c) for applicants referred to in point MED.D.020(b) of Annex I (Part-MED), the competent authority may accept an aviation medicine training course completed by an applicant outside the territories for which Member States are responsible under the Chicago Convention, provided that the competent authority has done all of the following:

(1) assessed and verified that the course syllabus is equivalent to the aviation medicine training courses available in the Member States;

(2) provided to the applicant a specific training module on the aero-medical requirements detailed in Annex I (Part-MED);

(d) when satisfied that the AME is in compliance with the applicable requirements, the competent authority shall issue, revalidate, renew or change the AME certificate for a period not exceeding three years, using the form established in Appendix IV.

AMC1 ARA.MED.200 Procedure for the issue, revalidation, renewal or change of an AME certificate

INSPECTION OF THE AME PRACTICE

Upon request for issue, revalidation, renewal or change of an AME certificate, the competent authority should conduct an inspection of the AME practice to verify compliance with point ARA.MED.200.

For applicants for an AME certificate with the privileges of class 2 medical certification only, a virtual inspection of the AME premises may be acceptable. In the event of concerns regarding compliance with this Regulation, an on-site inspection should be conducted.

AMC2 ARA.MED.200 Procedure for the issue, revalidation, renewal or change of an AME certificate

The competent authority should implement a procedure to verify:

(a) for the initial issue or extension of an AME certificate, evidence of successful completion of an approved aviation medicine training course in accordance with the privileges of the AME certificate applied for;

(b) for revalidation and renewal of an AME certificate, evidence of refresher training and maintenance of aero-medical competence.

ARA.MED.240 General medical practitioners (GMPs) exercising the privileges in accordance with point MED.A.040 of Annex I (Part-MED)

The competent authority of a Member State shall notify the Agency and competent authorities of other Member States if aero-medical examinations for the LAPL can be carried out on its territory by GMPs.

ARA.MED.245 Continuing oversight of AMEs and GMPs

When developing the continuing oversight programme referred to in point ARA.GEN.305 of Annex VI (Part-ARA) to Commission Regulation (EU) No 1178/2011, the competent authority shall take into account:

(a) the number of AMEs and GMPs exercising their privileges within the territory where the competent authority exercises oversight;

(b) the number of AMEs certified by competent authorities of other Member States exercising their privileges within the territory where the competent authority exercises oversight;

(c) a risk-based assessment of the AMEs' and GMPs' activity.

ARA.MED.246 Cooperative oversight of AMEs and AeMCs

Without prejudice to the provisions laid down in point ARA.GEN.300(e) of Annex VI (Part-ARA) to Commission Regulation (EU) No 1178/2011:

(a) if an AeMC or AME carries out their activity in more than one Member State, the competent authority that certified the AeMC or AME shall have a procedure in place to ensure the exchange of information in accordance with point ARA.GEN.200(c) and points ARA.GEN.300(d) and (e) of Annex VI (Part-ARA) to Commission Regulation (EU) No 1178/2011 with the competent authority of the other Member State(s) where the AeMC or AME carries out their activity. The procedure shall be agreed upon by the competent authorities involved;

(b) in the case mentioned in point (a), the competent authority of the other Member State(s) where the AeMC or AME carries out their activity shall share all information relevant to the oversight of the AeMC or AME with the competent authority certificating the AeMC or AME.

AMC2 ARA.MED.246 Cooperative oversight of AMEs and AeMCs

The cooperative oversight procedure should include details regarding the oversight tasks to be undertaken by the competent authority of the Member State where the AME/AeMC has its secondary place of business.

The results of the oversight should be shared among the competent authorities of the Member States involved.

ARA.MED.250 Limitation, suspension or revocation of an AME certificate

(a) The competent authority shall limit, suspend or revoke an AME certificate in the following circumstances:

(1) the AME does not comply with applicable requirements;

(2) failure to meet the criteria for certification or continuing certification;

(3) deficiency of aero-medical record-keeping or submission of incorrect data or information;

(4) falsification of medical records, certificates or documentation;

(5) concealment of facts appertaining to an application for, or a holder of, a medical certificate or false or fraudulent statements or representations to the competent authority;

(6) failure to correct findings from audit of the AME practice;

(7) at the request of the certified AME;

(8) any operational context of the AME that may have a direct or indirect negative impact on flight safety.

(b) The certificate of an AME shall be considered invalid in either of the following circumstances and the competent authority shall immediately revoke it:

(1) revocation of medical licence to practice; or

(2) removal from the Medical Register.

(c) The competent authority shall have a process in place for retrieval of the revoked AME certificates, shall update the AME list, and inform the competent authorities of the other Member States accordingly.

AMC1 ARA.MED.250(a) Limitation, suspension or revocation of an AME certificate

(a) The competent authority should consider, as part of the assessment of compliance, the compliance with the applicable implementing rules and acceptable means of compliance, as well as the national procedures in place to implement the respective requirements.

(b) The competent authority should consider the level of aero-medical competence as one of the criteria for continuing certification.

ARA.MED.255 Enforcement measures

If, during oversight or by any other means, evidence is found showing non-compliance of an AeMC, an AME or a GMP, the competent authority shall have a process to review the medical certificates issued by that AeMC, AME or GMP and may render them invalid, if required, to ensure flight safety.

For medical certificates issued to applicants who have a licensing authority different from the competent authority that issued the AME certificate, that competent authority shall inform and exchange relevant information with the medical assessor of the licensing authority of the affected medical certificate holder.

SECTION III – MEDICAL CERTIFICATION

ARA.MED.315 Review of examination reports

The licensing authority shall have a process in place for the medical assessor to take the following steps:

(a) review examination and assessment reports received from the AeMCs, AMEs and GMPs and inform them of any inconsistencies, mistakes or errors made in the assessment process;

(b) take the appropriate corrective actions for any inconsistencies, mistakes or errors identified; and

(c) assist AMEs and AeMCs on their request regarding their decision on aero-medical fitness in borderline and complex cases.

AMC1 ARA.MED.315(a) Review of examination reports

(a) The process to review examination and assessment reports received from AeMCs, AMEs and GMPs should aim to check all reports.

(b) The aero-medical section of the licensing authority should implement a performance assessment process for AMEs to take account of the proportion of inconsistencies or errors found, adapt the sample size accordingly and consider corrective action(s).

(c) The aero-medical section of the licensing authority should implement a medical review process of all examination and assessment reports received from AeMCs, AMEs and GMPs certified by the competent authority of another Member State.

ARA.MED.325 Secondary review procedure

The competent authority shall establish a procedure for the review of borderline and complex cases and cases in which an applicant requests a review in accordance with the applicable medical requirements and accredited medical conclusion as defined in Article 2 of this Regulation.

AMC1 ARA.MED.325 Secondary review procedure

(a) The secondary review procedure should specify:

(1) the establishment of a review board and its composition;

(2) how potential conflict of interest should be managed;

(3) how the accredited medical conclusions of the review board will be implemented.

(b) The composition of the review board should be decided by the aero-medical section of the licensing authority. It may be preceded by the advice of the medical assessor and may consist of, but not be limited to:

(1) clinical medical experts according to the case;

(2) other technical experts according to the case;

(3) aviation medicine experts;

(4) AME(s) with privileges according to the class of the medical certificate in question, other than the AME(s) involved in the assessment of the fitness of the applicant.

SECTION IV – AERO-MEDICAL CENTRES (AEMCs)

ARA.MED.410 Initial certification procedure

The certification procedure for an AeMC shall follow the provisions laid down in point ARA.GEN.310 of Annex VI (Part-ARA) to Regulation(EU) 1178/2011.

When satisfied that the AeMC is in compliance with the applicable requirements, the competent authority shall issue the AeMC certificate, using the form established in Appendix III.

ARA.MED.420 Findings and corrective actions

Without prejudice to point ARA.GEN.350 of Annex VI (Part-ARA) to Regulation(EU) 1178/2011, level 1 findings for AeMCs include, but are not limited to, the following:

(a) failure to nominate a head of the AeMC;

(b) failure to ensure medical confidentiality of aero-medical records; and

(c) failure to provide the competent authority with the medical and statistical data for oversight purposes.

APPENDICES TO ANNEX II

Appendix I to ANNEX II (Part-ARA.MED) – Flight crew medical certificate

Competent authority name and logo (English and any language(s) determined by the competent authority) EUROPEAN UNION (English only) MEDICAL CERTIFICATE pertaining to a Part-FCL, Part-SFCL or Part-BFCL licence (English and any language(s) determined by the competent authority) Issued in accordance with Part-MED This medical certificate complies with ICAO standards, except for the LAPL medical certificate (English and any language(s) determined by the competent authority)		Requirements ‘European Union’ to be deleted for non-EU Member States Size of each page shall be one eighth A4

I	National language(s)/*Authority that issued or is to issue the pilot licence:*
III	National language(s)/*Certificate number*
IV	National language(s)/ *Last and first name of holder:*
XIV	National language(s)/*Date of birth: (dd/mm/yyyy):*
VI	National language(s)/*Nationality(ies):*
VII	National language(s)/ *Signature of holder:*
2	

XIII National language(s)/*Limitations:*

Code:

Operational remark:

X National language(s)/**Date of issue:*

(dd/mm/yyyy)

Name and signature of the issuing AME / medical assessor / GMP:

XI National language(s)/*Seal or Stamp:*

3

	IX Nat. lang(s)/ **Expiry date of this certificate**	Class 1 (dd/mm/yyyy or 'N/A')			
		Class 1 single-pilot commercial operations carrying passengers (dd/mm/yyyy or 'N/A')			
		Class 2 (dd/mm/yyyy or 'N/A')			
		LAPL (dd/mm/yyyy)			
	Nat. lang(s)./*Examination date*: (dd/mm/yyyy)				
	Type of examination	Last	Next		
			Class 1	Class 2	LAPL
	ECG				
	Audiogram (For class 1, and for class 2 with IR or en route IR)				
	Ophthalmological examination				
	Other information				

MED.A.020 Decrease in medical fitness

(a) Licence holders shall not exercise the privileges of their licence and related ratings or certificates, and student pilots shall not fly solo, at any time when they:

(1) are aware of any decrease in their medical fitness that might render them unable to safely exercise those privileges;

(2) take or use any prescribed or non-prescribed medication that is likely to interfere with the safe exercise of the privileges of the applicable licence;

(3) receive any medical, surgical or other treatment that is likely to interfere with the safe exercise of the privileges of the applicable licence.

(b) In addition to cases specified in point (a), licence holders shall, without undue delay and before exercising the privileges of their licence, seek aero-medical advice from the AeMC, AME or GMP, as applicable, when they:

(1) have undergone a surgical operation or invasive procedure;

(2) have commenced the regular use of any medication;

(3) have suffered any significant personal injury involving any incapacity to exercise the privileges of their licence;

(4) have been suffering from any significant illness involving any incapacity to exercise the privileges of their licence;

(5) are aware of being pregnant;

(6) have been admitted to hospital or medical clinic;

(7) first require correcting lenses.

* Date of issue is the date the certificate is issued and signed.

Appendix II to ANNEX II (Part-ARA.MED) – Class 3 medical certificate

Competent authority name and logo (English and any language(s) determined by the competent authority) EUROPEAN UNION (English only) MEDICAL CERTIFICATE pertaining to a Part-ATCO licence (English and any language(s) determined by the competent authority) Issued in accordance with Part-MED This medical certificate complies with ICAO standards (English and any language(s) determined by the competent authority)	Requirements ‘European Union’ to be deleted for non-EU Member States Size of each page shall be one eighth A4

I	National language(s)/*Authority that issued or is to issue the ATCO licence:*
III	National language(s)/*Certificate number*
IV	National language(s)/ *Last and first name of holder:*
XIV	National language(s)/*Date of birth: (dd/mm/yyyy):*
VI	National language(s)/*Nationality(ies):*
VII	National language(s)/ *Signature of holder:*
2	

XIII National language(s)/*Limitations:*

Code:

Operational remark:

X National language(s)/**Date of issue:*

(dd/mm/yyyy)

Name and signature of the issuing AME / medical assessor:

XI National language(s)/*Seal or Stamp:*

3

	IX Nat. lang(s)/ **Expiry date of this certificate**	Class 3 (dd/mm/yyyy)	
	Nat. lang(s)/*Examination date*: (dd/mm/yyyy)		

	Type of examination	Last	Next
	ECG		
	Audiogram		
	Ophthalmological examination		
	Other information		

MED.A.020 Decrease in medical fitness

(a) Licence holders shall not exercise the privileges of their licence and related ratings or certificates, and student pilots shall not fly solo, at any time when they:

(1) are aware of any decrease in their medical fitness that might render them unable to safely exercise those privileges;

(2) take or use any prescribed or non-prescribed medication that is likely to interfere with the safe exercise of the privileges of the applicable licence;

(3) receive any medical, surgical or other treatment that is likely to interfere with the safe exercise of the privileges of the applicable licence.

(b) In addition to the cases specified in point (a), licence holders shall, without undue delay and before exercising the privileges of their licence, seek aero-medical advice from the AeMC, AME or GMP, as applicable, when they:

(1) have undergone a surgical operation or invasive procedure;

(2) have commenced the regular use of any medication;

(3) have suffered any significant personal injury involving any incapacity to exercise the privileges of their licence;

(4) have been suffering from any significant illness involving any incapacity to exercise the privileges of their licence;

(5) are aware of being pregnant;

(6) have been admitted to hospital or medical clinic;

(7) first require correcting lenses.

4

* Date of issue is the date the certificate is issued and signed.

Appendix III to ANNEX II (Part-ARA.MED) – Certificate for Aeromedical Centres (AeMCs)

CERTIFICATE FOR AERO-MEDICAL CENTRES (AeMCs)

European Union[1]

Competent Authority

AERO-MEDICAL CENTRE CERTIFICATE

REFERENCE:

Pursuant to Commission Regulation (EU) xxx/xxx and subject to the conditions specified below, the [competent authority] hereby certifies

[NAME OF THE ORGANISATION]

[ADDRESS OF THE ORGANISATION]

as a Part-ORA.AeMC-certified aero-medical centre with the privileges and the scope of activities as listed in the attached terms of approval.

CONDITIONS:

1. This certificate is limited to that specified in the scope of approval section of the approved organisation manual.
2. This certificate requires compliance with the procedures specified in the organisation documentation as required by Part-ORA.AeMC.
3. This certificate shall remain valid subject to compliance with the requirements of Part-ORA.AeMC unless it has been surrendered, superseded, suspended or revoked.

Date of issue (dd/mm/yyyy): Signature [Competent Authority]:

EASA Form 146 Issue 3

AERO-MEDICAL CENTRE CERTIFICATE
Attachment to the AeMC certificate number:

PRIVILEGES AND SCOPE

[1] 'European Union' to be deleted for non-EU Member States

[NAME OF THE ORGANISATION] has obtained the privilege(s) to undertake aero-medical examinations and assessments for the issuance of medical certificates and medical reports as stated in the table below and to issue these medical certificates and medical reports for:

	Initial/revalidation/renewal or N/A	Date of issue
Class 1		
Class 2/LAPL/Cabin Crew		
Class 3		

Date of issue (dd/mm/yyyy): Signature [Competent Authority]:

Appendix IV to ANNEX II (Part-ARA.MED) – Certificate for Aeromedical Examiners (AMEs)

CERTIFICATE FOR AERO-MEDICAL EXAMINERS (AMEs)

European Union[1]

Competent Authority

AERO-MEDICAL EXAMINER CERTIFICATE

CERTIFICATE NUMBER/REFERENCE:

Pursuant to Commission Regulation xxx/xxx, and subject to the conditions specified below, the [competent authority] hereby certifies

[NAME OF THE AERO-MEDICAL EXAMINER]

[PRACTICE ADDRESS(ES) OF THE AERO-MEDICAL EXAMINER]

as aero-medical examiner

CONDITIONS:

1. This certificate is limited to the privileges specified in the attachment to this AME certificate;
2. This certificate requires compliance with the implementing rules and procedures specified in Part-MED.
3. This certificate shall remain valid from [dd/mm/yyyy] until [dd/mm/yyyy] subject to compliance with the requirements of Part-MED unless it has been surrendered, superseded, suspended or revoked.

Date of issue: dd/mm/yyyy Signature: [Competent Authority]

EASA Form 148 Issue 3

AERO-MEDICAL EXAMINER CERTIFICATE

[1] 'European Union' to be deleted for non-EU Member States.

Attachment[1] to the AME certificate number:

PRIVILEGES AND SCOPE

[Name and academic title of the aero-medical examiner] has obtained the privilege(s) to undertake aero-medical examinations and assessments for the issuance of medical certificates as stated in the table below and to issue these medical certificates and medical reports for:

Class 1 revalidation/renewal	[valid until]/[Not Applicable]
Class 2/LAPL/Cabin crew Initial/revalidation/renewal	[valid until]
Class 3 revalidation /renewal	[valid until]/[Not Applicable]

Date of issue: dd/mm/yyyy Signature: [Competent Authority]

[1] This attachment may be issued either as a part of the AME certificate or as a separate document

ANNEX III (PART-ORA.AEMC)

SECTION I – GENERAL

ORA.AeMC.105 Scope

This Subpart establishes the additional requirements to be met by an organisation to qualify for the issue or continuation of an approval as an aero-medical centre (AeMC) to:

(a) provide aero-medical expertise and practical training for AMEs;

(b) issue medical certificates and cabin crew medical reports in accordance with Annex I (Part-MED), including initial class 1 or class 3 medical certificates or both, as applicable.

GM1 ORA.AeMC.105 Scope

It is recommended that AeMCs provide support to regional AME peer groups in order to enhance professional expertise.

ORA.AeMC.115 Application

Applicants for an AeMC certificate shall:

(a) comply with MED.D.005; and

(b) in addition to the documentation for the approval of an organisation required in point ORA.GEN.115 of Annex VII (Part-ORA) to Regulation(EU) 1178/2011, provide details of activities that are contracted to designated hospitals or medical institutes for the purpose of specialist medical examinations.

AMC1 ORA.AeMC.115 Application

GENERAL

(a) The documentation for the approval of an AeMC should include the names and qualifications of all medical staff and of supporting specialist consultants, and a list of medical and technical facilities for initial class 1 and class 3 aero-medical examinations, as applicable according to the scope of the AeMC approval.

(b) Medical staff should be sufficient to perform the standard required medical examinations to be performed within the organisation of the AeMC.

(c) The standard required medical examinations should at least encompass the following specialities: ophthalmology including colour vision, otorhinolaryngology, cardiology and mental health.

(d) Contracted activities with designated hospitals or medical institutes for the purpose of additional specialist medical examinations include clinical attachments or liaison with hospitals, medical institutions and/or specialists.

ORA.AeMC.120 AeMC certificate

An organisation holding an AeMC certificate shall not, at any time, hold more than one AeMC certificate issued with the same scope in accordance with Regulation (EU) 2018/1139 and the implementing and delegated acts adopted on the basis thereof.

ORA.AeMC.135 Continued validity

The AeMC certificate shall be issued for an unlimited duration. It shall remain valid subject to the holder and the aero-medical examiners of the organisation complying with the following conditions:

(a) complying with point MED.D.030 of Annex I (Part-MED) to this Regulation; and

(b) ensuring their continued experience by performing every year an adequate number of class 1, class 3 medical examinations or both, as appropriate, or equivalent military aero-medical examinations.

AMC1 ORA.AeMC.135 Continued validity

EXPERIENCE

(a) A total of at least 200 class 1, class 3 or equivalent military aero-medical examinations and assessments should be performed at an AeMC every year.

(b) In Member States where the number of aero-medical examinations and assessments mentioned in point (a) cannot be reached due to a low number of professional pilots and/or ATCOs, a proportionate number, as defined by the competent authority, of class 1 or class 3 aero-medical examinations and assessments should be performed.

(c) In these cases, the continued experience of the AMEs in the AeMC may also be ensured by them performing aero-medical examinations and assessments for:

(1) class 2 medical certificates as established in Part-MED; and/or

(2) third-country class 1, class 3 or equivalent military medical certificates.

(d) Aero-medical research including publication in peer-reviewed journals may also be accepted as contributing to the continued experience of the AMEs in an AeMC.

ORA.AeMC.160 Reporting

The AeMC shall provide the competent authority with statistical reports regarding the aero-medical assessments of applicants, including reports of the drugs and alcohol screening performed in accordance with point MED.B.055(b) of Annex I (Part-MED) and any health risk factors or trends identified during the aero-medical assessments.

SECTION II – MANAGEMENT

ORA.AeMC.200 Management system

The AeMC shall establish and maintain a management system that includes the items addressed in point ORA.GEN.200 of Annex VII (Part-ORA) to Regulation (EU) 1178/2011 and, in addition, processes:

(a) for medical certification in compliance with Part-MED;

(b) to facilitate cooperation between the AMEs and other medical experts of the AeMC; and

(c) to ensure medical confidentiality at all times.

AMC1 ORA.AeMC.200 Management system

(a) In order to maintain personnel trained and competent to perform their tasks as specified in ORA.GEN.200(a)(4) of Annex VII (Part-ORA) to Regulation (EU) No 1178/2011, the management system should ensure that each AME performs a sufficient number of aero-medical examinations and assessments to meet the professional standards of an AeMC. The required activity of each AME should be specified in the management system.

(b) The management system should encompass regular exchange of professional expertise including case analysis.

GM1 ORA.AeMC.200 Management system

RESEARCH

If aero-medical research is conducted at an AeMC, its management system should include processes to conduct that research and publish the results.

GM2 ORA.AeMC.200 Management system

The assessment of the AeMC's management system by a national health authority may be a part of the AeMC's overall management system.

ORA.AeMC.205 Contracted activities

Notwithstanding point ORA.GEN.205 of Annex VII (Part-ORA) to Regulation (EU) No 1178/2011, all of the following shall apply:

(a) minimum required aero-medical examinations shall be performed within the organisation of the AeMC, in accordance with the scope and privileges defined in the terms of approval attached to the AeMC's certificate;

(b) additional medical examinations and investigations may be performed by contracted individual experts or organisations. The organisation shall ensure that when contracting any part of its activity, the contracted service or product conforms to the applicable requirements.

AMC1 ORA.AeMC.205 Contracted activities

In addition to the documentation for the approval of an organisation listed in AMC1 ORA.GEN.205 to Regulation (EU) No 1178/2011, the AeMC should provide a written declaration of their subcontractor that contracted examinations or assessments will be performed on the basis of the requirements of Regulation (EU) No 1178/2011 and associated AMC and GM.

ORA.AeMC.210 Personnel requirements

(a) The personnel of the AeMC shall include:

(1) an aero-medical examiner (AME) nominated as head of the AeMC, with privileges to issue class 1 or class 3 medical certificates or both, as applicable, in accordance with the scope defined in the terms of approval attached to the AeMC's certificate and sufficient experience in aviation medicine to exercise their duties;

(2) at least one additional qualified AME with privileges to issue class 1 or class 3 medical certificates or both, as applicable, in accordance with the scope defined in the terms of approval attached to the AeMC's certificate privileges, and other technical personnel; and

(3) available medical experts.

(b) The head of the AeMC shall be responsible for:

(1) coordinating the assessment of examination results; and

(2) signing reports, certificates, and initial class 1 or class3 medical certificates or both, as applicable.

AMC1 ORA.AeMC.210 Personnel requirements

GENERAL

An aero-medical examiner (AME) should have held AME privileges, as applicable in accordance with the scope defined in the terms of approval attached to the AeMC's certificate and have performed at least 200 aero-medical examinations and assessments for a class 1, class 3 or equivalent military medical certificate before being nominated as head of an AeMC.

ORA.AeMC.215 Facility requirements

The AeMC shall be equipped with medical-technical facilities adequate to perform aero-medical examinations necessary for the exercise of the privileges included in the scope of the approval.

AMC1 ORA.AeMC.215 Facility requirements

ED Decision 2012/007/R

MEDICAL-TECHNICAL FACILITIES

The medical-technical facilities of an AeMC should consist of the equipment of a general medical practice and, in addition, of equipment for:

(a) Cardiology

Facilities to perform 12-lead resting ECG.

(b) Ophthalmology

Facilities for the examination of:

(1) near, intermediate and distant vision;

(2) external eye, anatomy, media and fundoscopy;

(3) ocular motility;

(4) binocular vision;

(5) colour vision (anomaloscopy or equivalent);

(6) visual fields;

(7) refraction;

(8) heterophoria; and

(9) contrast sensitivity, including mesopic conditions with and without glare.

(c) Hearing

Pure-tone audiometer

(d) Otorhinolaryngology (ENT)

Facilities for the clinical examination of mouth and throat and:

(1) otoscopy;

(2) rhinoscopy;

(3) tympanometry or equivalent; and

(4) clinical assessment of vestibular system.

(e) Examination of pulmonary function

Spirometry

(f) The following facilities should be available at the AeMC or arranged through contracted activities:

(1) clinical laboratory facilities;

(2) ultrasound of the abdomen;

(3) stress ECG;

(4) 24-hour blood pressure monitoring;

(5) 24-hour heart rhythm monitoring; and

(6) mental health assessment including psychometric testing.

ORA.AeMC.220 Record-keeping

In addition to the records required in point ORA.GEN.220 of Annex VII (Part-ORA) to Regulation (EU) No 1178/2011, the AeMC shall:

(a) maintain records with details of medical examinations and assessments performed for the issue, revalidation or renewal of medical certificates and their results, for a minimum period of 10 years after the last examination date; and

(b) keep all medical records in a way that ensures that medical confidentiality is respected at all times.