SECTION 1 – REQUIREMENTS

1  
GENERAL

This section contains the Medical Requirements for Flight Crew Licensing.

2  
PRESENTATION

2.1  The medical requirements of JAR–FCL are presented in two columns on loose pages, each page being identified by the date of issue or the Change number under which it is amended or reissued.

2.2  Sub-headings are italic typeface.

2.3  Explanatory Notes not forming part of the requirements appear in smaller typeface.

2.4  New, amended and corrected text will be enclosed within heavy brackets until a subsequent ‘amendment’ is issued.
JAR–FCL 3.015 Acceptance of licences, ratings, authorisations, approvals or certificates
(See Appendix 1 to JAR–FCL 1.015)
(See AMC FCL 1.005 & 1.015)

(a) Licences, ratings, authorisations, approvals or certificates issued by JAA Member States

(1) Where a person, an organisation or a service has been licensed, issued with a rating, authorisation, approval or certificated by the Authority of a JAA Member State in accordance with the requirements of JAR–FCL and associated procedures, such licences, ratings, authorisations, approvals or certificates shall be accepted without formality by other JAA Member States.

JAR–FCL 3.025 Validity of licences and ratings

[(a)] Validity of the licence and revalidation of a rating

[(1)] The validity of the licence is determined by the validity of the ratings contained therein and the medical certificate.

[(2)] When issuing, revalidating or renewing a rating, the Authority may extend the validity period of the rating until the end of the month in which the validity would otherwise expire. That date remains the expiry date of the rating.

JAR–FCL 3.030 Medical fitness

(See IEM FCL 3.035)

(a) Fitness. The holder of a medical certificate shall be mentally and physically fit to exercise safely the privileges of the applicable licence.

(b) Requirement for medical certificate. In order to apply for or to exercise the privileges of a licence, the applicant or the holder shall hold a medical certificate issued in accordance with the provisions of JAR–FCL Part 3 (Medical) and appropriate to the privileges of the licence.

(c) Aeromedical disposition. After completion of the examination the applicant shall be advised whether fit, unfit or referred to the Authority. The Authorised Medical Examiner (AME) shall inform the applicant of any condition(s) (medical, operational or otherwise) that may restrict flying training and/or the privileges of any licence issued.

(d) Operational Multicrew Limitation (OML - Class I only).

(1) The limitation “valid only as or with qualified co-pilot” is to be applied when the holder of a CPL or an ATPL does not fully meet the class 1 medical certificate requirements but is considered to be within the accepted risk of incapacitation (see JAR-FCL 3 (Medical), IEM FCL A, B and C). This limitation is applied by the Authority in the context of a multi-pilot environment. A “valid only as or with qualified co-pilot” limitation can only be issued or removed by the Authority.

(2) The other pilot shall be qualified on the type, not be over the age of 60, and not be subject to an OML.

(e) Operational Multicrew Limitation for F/E (OML for F/E – Class I only)

(1) The limitation of OML for F/E is to be applied when the holder of a F/E licence does not fully meet the Class 1 medical certificate requirements but is considered to be within the accepted risk of incapacitation (see JAR-FCL 3 (Medical), IEM FCL A, B, and C). This limitation is applied by the Authority and can only be removed by the Authority.

(2) The other flight crew member shall not be subject to an OML.

(f) Operational Safety Pilot Limitation (OSL - Class 2 only). A safety pilot is a pilot who is qualified to act as PIC on the class/type of aeroplane and carried on board the aeroplane, which is fitted with dual controls, for the purpose of taking over control should the PIC holding this
specific medical certificate restriction become incapacitated (see IEM FCL 3.035). An OSL can only be issued or removed by the Authority.

[Amdt.1, 01.12.00; Amdt. 2, 01.06.02]

JAR–FCL 3.040 Decrease in medical fitness

(a) Holders of medical certificates shall not exercise the privileges of their licences, related ratings or authorisations at any time when they are aware of any decrease in their medical fitness which might render them unable to safely exercise those privileges.

(b) Holders of medical certificates shall not take any prescription or non-prescription medication or drug, or undergo any other treatment, unless they are completely sure that the medication, drug or treatment will not have any adverse effect on their ability to perform safely their duties. If there is any doubt, advice shall be sought from the AMS, an AMC, or an AME. Further advice is given in IEM FCL 3.040.

(c) Holders of medical certificates shall, without undue delay, seek the advice of the AMS, an AMC or an AME when becoming aware of:

1. hospital or clinic admission for more than 12 hours; or
2. surgical operation or invasive procedure; or
3. the regular use of medication; or
4. the need for regular use of correcting lenses.

(d) Holders of medical certificates who are aware of:

1. any significant personal injury involving incapacity to function as a member of a flight crew; or
2. any illness involving incapacity to function as a member of a flight crew throughout a period of 21 days or more; or
3. being pregnant, shall inform the Authority in writing of such injury or pregnancy, and as soon as the period of 21 days has elapsed in the case of illness. The medical certificate shall be deemed to be suspended upon the occurrence of such injury or the elapse of such period of illness or the confirmation of the pregnancy, and:

4. in the case of injury or illness the suspension shall be lifted upon the holder being medically examined under arrangements made by the Authority and being pronounced fit to function as a member of the flight crew, or upon the Authority exempting, subject to such conditions as it thinks fit, the holder from the requirement of a medical examination; and

5. in the case of pregnancy, the suspension may be lifted by the Authority for such period and subject to such conditions as it thinks fit (see JAR–FCL 3.195(c) and 3.315(c)) and shall cease upon the holder being medically examined under arrangements made by the Authority after the pregnancy has ended and being pronounced fit to resume her functions as a member of the flight crew.

[Amdt.1, 01.12.00]

JAR–FCL 3.045 Special circumstances

(See AMC FCL 3.045)

(a) It is recognised that the provisions of all parts of JAR–FCL will not cover every possible situation. Where the application of JAR–FCL would have anomalous consequences, or where the development of new training or testing concepts would not comply with the requirements, an applicant may ask the Authority concerned for an exemption. An exemption may be granted only if it can be shown that the exemption will ensure or lead to at least an equivalent level of safety.

(b) Exemptions are divided into short term exemptions and long term exemptions (more than 6 months). The granting of a long term exemption may only be undertaken in agreement with the JAA FCL Committee.

For medical variation and review policy see JAR–FCL 3.125.

JAR–FCL 3.060 Curtailment of privileges of licence holders aged 60 years or more

(See Appendix 1 of JAR-FCL 1.060)

(a) Age 60-64. The holder of a pilot licence who has attained the age of 60 years shall not act as a pilot of an aircraft engaged in commercial air transport operations except:

1. as a member of a multi-pilot crew and provided that,
2. such holder is the only pilot in the flight crew who has attained age 60.

(b) Age 65. The holder of a pilot licence who has attained the age of 65 years shall not act as a
pilot of an aircraft engaged in commercial air transport operations.

[(c) Any national variants to the requirements in (a) and (b) above given in Appendix 1 to JAR–FCL 1.060.]

[JAR–FCL 3.060 (b) (continued)

JAR–FCL 3.065 State of licence issue

(a) An applicant shall demonstrate the satisfactory completion of all requirements for licence issue to the Authority of the ‘State of licence issue’ (see JAR–FCL 3.010(c)).

[(b) In circumstances agreed by both Authorities, an applicant who has commenced training under the responsibility of one Authority may be permitted to complete the requirements under the responsibility of the other Authority.

The agreement shall allow for:

(1) theoretical knowledge training and examinations;
(2) medical examination and assessment;
(3) flight training and testing.

The Authorities shall agree on the ‘State of licence issue’]

[(c) Further ratings may be obtained under JAR–FCL requirements in any JAA Member State and will be entered into the licence by the State of licence issue.

[(d) For administrative convenience, e.g. revalidation, the licence holder may subsequently transfer a licence issued by the State of licence issue to another JAA Member State, provided that employment or normal residency is established in that State (see JAR–FCL 1.070). That State would thereafter become the State of licence issue and would assume the responsibility for licence issue referred to in (a) above.

[(e) An applicant shall hold only one JAR–FCL licence (aeroplane) and only one medical certificate at any time.

[JAR–FCL 3.060(a) (continued)

(a) Establishment. Each JAA Member State will include within its Authority one or more physicians experienced in the practice of aviation medicine. Such physicians shall either form part of the Authority, or be duly empowered to act on behalf of the Authority. In either case they shall be known as the Aeromedical Section (AMS).

(b) Medical Confidentiality. Medical Confidentiality shall be respected at all times. The Authority will ensure that all oral or written reports and electronically stored information on medical matters of licence holders/applicants are made available to an AMS, in order to be used by the Authority for completion of a medical assessment. The applicant or his physician shall have access to all such documentation in accordance with national law.

JAR–FCL 3.085 Aeromedical Centres (AMCs)

Aeromedical centres (AMCs) will be designated and authorised, or reauthorised, at the discretion of the Authority for a period not exceeding 3 years. An AMC shall be:

(a) within the national boundaries of the Member State and attached to or in liaison with a designated hospital or a medical institute;
(b) engaged in clinical aviation medicine and related activities;
(c) headed by an Authorised Medical Examiner (AME), responsible for coordinating assessment results and signing reports and certificates, and shall have on staff physicians with advanced training and experience in aviation medicine;
(d) equipped with medico-technical facilities for extensive aeromedical examinations.

The Authority will determine the number of AMCs it requires.

JAR–FCL 3.090 Authorised Medical Examiners (AMEs)

(See AMC FCL 3.090)

(a) Designation. The Authority will designate and authorise Medical Examiners (AMEs), within its national boundaries, qualified and licensed in the practice of medicine. Physicians resident in non-JAA Member States wishing to become AMEs for the purpose of JAR–FCL may apply to the Authority of a JAA Member State. Following appointment the AME shall report to and be supervised by the Authority of that State. For Class
JAR-FCL 3

1 applicants such AMEs shall be restricted to carrying out standard periodic revalidation/renewal assessments.

(b) Number and location of examiners. The Authority will determine the number and location of examiners it requires, taking account of the number and geographic distribution of its pilot population.

(c) Access to documentation. An AME, responsible for coordinating assessment results and signing reports, shall be allowed access to any prior aeromedical documentation held by the AMS and related to such examinations as that AME is to carry out.

(d) Training. AMEs shall be qualified and licensed in the practice of medicine and shall have received training in aviation medicine. They should acquire practical knowledge and experience of the conditions in which the holders of licences and ratings carry out their duties.

(1) Basic training in Aviation Medicine (see AMC FCL 3.090)

(i) Basic training for physicians responsible for the medical selection and surveillance of Class 2 flying personnel shall consist of a minimum of 60-hours of lectures including practical work (examination techniques).

(ii) A final examination shall conclude the basic training course. A certificate will be awarded to the successful candidate.

(iii) Possession of a certificate of basic training in Aviation Medicine constitutes no legal right to be approved as an AME for Class 1 or Class 2 examinations by an AMS.

(2) Advanced training in Aviation Medicine

(i) Advanced training in Aviation Medicine for physicians responsible for the medical examination and assessment and surveillance of Class 1 flying personnel should consist of a minimum of 120-hours of lectures (60 additional hours to basic training) and practical work, training attachments and visits to Aeromedical Centres, Clinics, Research, ATC, Simulator, Airport and industrial facilities.

Training attachments and visits may be spread over three years. Basic training in Aviation Medicine shall be a compulsory entry requirement (see AMC FCL 3.090).

(ii) A final examination shall conclude this advanced training course in Aviation Medicine and a certificate shall be awarded to the successful candidate.

(iii) Possession of a certificate of Advanced Training in Aviation Medicine constitutes no legal right to be approved as an AME for Class 1 or Class 2 examinations by an AMS.

(3) Refresher Training in Aviation Medicine. During the period of authorisation an AME is required to attend a minimum of 20 hours approved refresher training. A minimum of 6 hours must be under the direct supervision of the AMS. Scientific meetings, congresses and flight deck experience may be approved by the AMS for this purpose, for a specified number of hours (see AMC FCL 3.090).

(e) Authorisation. An AME will be authorised for a period not exceeding three years. Authorisation to perform medical examinations may be for Class 1 or Class 2 or both at the discretion of the Authority. To maintain proficiency and retain authorisation an AME should complete at least ten aeromedical examinations each year. For re-authorisation the AME shall have completed an adequate number of aeromedical examinations to the satisfaction of the AMS and shall also have undertaken relevant training during the period of authorisation (see AMC FCL 3.090). [ ]

[f] Enforcement. A JAA Member State may at any time in accordance with its national procedures revoke any Authorisation it has issued in accordance with the requirements of JAR-FCL if it is established that an AME has not met, or no longer meets, the requirements of JAR-FCL or relevant national law of the State of license issue.]

[Amdt. 2, 01.06.02; Amdt. 4, 01.08.05]

JAR–FCL 3.095 Aeromedical examinations

(See IEM FCL 3.095(a) & (b))

(See IEM FCL 3.095 (c))

(a) For Class 1 medical certificates. Initial examinations for a Class 1 medical certificate shall be carried out at an AMC. Revalidation and renewal examinations may be delegated to an AME.

(b) For Class 2 medical certificates. Initial, revalidation and renewal examinations for a Class 2
medical certificate shall be carried out at an AMC or by an AME.

c) The applicant shall complete the appropriate application form as described in IEM FCL 3.095(c). On completing a medical examination the AME shall submit without delay a signed full report to the AMS in the case of all Class 1 and 2 examinations, except that, in the case of an AMC, the Head of the AMC may sign the reports and certificates on the basis of assessments made by staff physicians of the AMC.

(d) Periodic Requirements. For a summary of special investigations required at initial, routine revalidation or renewal, and extended revalidation and renewal examination see IEM FCL 3.095(a) & (b).

JAR–FCL 3.100 Medical certificates
(See IEM FCL 3.100)

(a) Content of certificate. The medical certificate shall contain the following information:

1. Reference number (as designated by the Authority)
2. Class of certificate
3. Full name
4. Date of birth
5. Nationality
6. Date and place of initial medical examination
7. Date of last extended medical examination
8. Date of last electrocardiography
9. Date of last audiometry
10. Limitations, conditions and/or variations
11. AME name, number and signature
12. Date of general examination
13. Signature of applicant.

(b) Initial issue of medical certificates. Initial Class 1 medical certificates shall be issued by the AMS. The issue of initial Class 2 certificates shall be by the AMS or may be delegated to an AMC or AME.

(c) Revalidation and renewal of medical certificates. Class 1 or 2 medical certificates may be re-issued by an AMS, or may be delegated to an AMC or an AME.

JAR–FCL 3.105 Period of validity of medical certificates
(See Appendix 1 to JAR–FCL 3.105)

(a) Period of validity. A medical certificate shall be valid from the date of the initial general medical examination and for:

1. Class 1 medical certificates, 12 months except that for holders who have passed their 40th birthday the interval is reduced to six months. [This increase in frequency after the 40th birthday does not apply to flight engineers.]
(2) Class 2 medical certificates, 60 months until age 30, then 24 months until age 50 and 12 months thereafter.

(3) The expiry date of the medical certificate is calculated on the basis of the information contained in (1) and (2). The validity period of a medical certificate (including any associated extended examination or special investigation) shall be determined by the age at which the medical examination of the applicant takes place.

(4) Despite (2) above, a medical certificate issued prior to the holder’s 30th birthday will not be valid for Class 2 privileges after his 32nd birthday.

(b) Revalidation. If the medical revalidation is taken up to 45 days prior to the expiry date calculated in accordance with (a), the validity of the new certificate extends from the previous medical certificate expiry date by the period stated in (a)(1) or (2) as applicable.

(c) Renewal. If the medical examination is not taken within the 45 day period referred to in (b) above, the expiry date will be calculated in accordance with paragraph (a) with effect from the date of the next general medical examination.

(d) Requirements for revalidation or renewal. The requirements to be met for the revalidation or renewal of medical certificates are the same as those for the initial issue of the certificate, except where specifically stated otherwise.

(e) Reduction in the period of validity. The period of validity of a medical certificate may be reduced by an AME in consultation with the AMS when clinically indicated.

(f) Additional examination. Where the Authority has reasonable doubt about the continuing fitness of the holder of a medical certificate, the AMS may require the holder to submit to further examination, investigation or tests. The reports shall be forwarded to the AMS.

See further Appendix 1 to JAR–FCL 3.105.

[Amndt. 3, 01.06.03; Amndt. 4, 01.08.05]

JAR–FCL 3.110 Requirements for medical assessments

(a) An applicant for, or holder of, a medical certificate issued in accordance with JAR–FCL Part 3 (Medical) shall be free from:

(1) any abnormality, congenital or acquired,

(2) any active, latent, acute or chronic disability,

(3) any wound, injury or sequela from operation,

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

(b) An applicant for, or holder of, a medical certificate issued in accordance with JAR–FCL Part 3 (Medical) shall not suffer from any disease or disability which could render him likely to become suddenly unable either to operate an aircraft safely or to perform assigned duties safely.

JAR–FCL 3.115 Use of Medication, drugs or other treatments

(a) A medical certificate holder who is taking any prescription or non-prescription medication or drug or who is receiving any medical, surgical, or other treatment shall comply with the requirements of JAR-FCL 3.040. Further advice is given in IEM FCL 3.040.

(b) All procedures requiring the use of a general or spinal anaesthetic shall be disqualifying for at least 48 hours.

(c) All procedures requiring local or regional anaesthetic shall be disqualifying for at least 12 hours.

[Amndt.1, 01.12.00]

JAR–FCL 3.120 Responsibilities of the applicant

(a) Information to be provided. The applicant for or holder of a medical certificate shall produce proof of identification and sign and provide to the AME a declaration of medical facts concerning personal, family and hereditary history.

The declaration shall also include a statement of whether the applicant has previously undergone such an examination and, if so, with what result. The applicant shall be made aware by the AME of the necessity for giving a statement that is as complete and accurate as the applicant’s knowledge permits.

(b) False information. Any declaration made with intent to deceive shall be reported to the AMS of the State to which the licence application is or will be made. On receipt of such information the AMS shall take such action as it considers
appropriate, including the transmission of such information to other JAA Authorities (see JAR–FCL 3.080(b) Medical Confidentiality).

JAR–FCL 3.125 Variation and review policy

(a) AMS Review. If the medical requirements prescribed in JAR–FCL Part 3 (Medical) for a particular licence are not fully met by an applicant the appropriate medical certificate shall not be issued, revalidated or renewed by the AMC or AME but the decision shall be referred to the Authority. If there are provisions in JAR–FCL Part 3 (Medical) that the individual under certain conditions (as indicated by the use of should or may) can be considered fit, a variation may be granted by the Authority. The AMS may issue, revalidate or renew a medical certificate after due consideration has been given to the requirements, acceptable means of compliance and guidance material and to:

(1) the medical deficiency in relation to the operating environment;

(2) the ability, skill and experience of the applicant in the relevant operating environment;

(3) a medical flight test, if appropriate; and

(4) the requirement for application of any limitations, conditions or variations to the medical certificate and licence.

Where the issue of a certificate will require more than one limitation, condition or variation, the additive and interactive effects upon flight safety must be considered by the AMS before a certificate can be issued.

(b) Secondary review. Each Authority will constitute a secondary review procedure, with independent medical advisers, experienced in the practice of aviation medicine, to consider and evaluate contentious cases.
Appendix 1 to JAR–FCL 3.105
Validity [period/transfer] of medical [records for Class 1 and Class 2 renewal]
(See JAR–FCL 3.105)

1 Class 1

(a) If a licence holder allows his Medical Certificate to expire by more than five years, renewal shall require an initial or extended, at AMS discretion, aeromedical examination, performed at an AMC which has obtained his [relevant] medical records. ([For example, the] EEG may be omitted unless clinically indicated.)

(b) If a licence holder allows his Medical Certificate to expire by more than two years but less than five years, renewal shall require the prescribed standard or extended examination to be performed at an AMC which has obtained his [relevant] medical [records], or by an AME at the discretion of the AMS, subject to the records of medical examinations for flight crew licences being made available to the medical examiners.

(c) If a licence holder allows his certificate to expire by more than 90 days but less than two years, renewal shall require the prescribed standard or extended examination to be performed at an AMC, or by an AME at the discretion of the AMS.

(d) If a licence holder allows his certificate to expire by less than 90 days, renewal shall be possible by standard or extended examination as prescribed.

2 Class 2

(a) If an Instrument Rating is added to the licence, pure tone audiometry must have been performed within the last 60 months if the licence holder is 39 years of age or younger, and within the last 24 months if the licence holder is 40 years of age or older.

(b) If a licence holder allows his Medical Certificate to expire by more than five years, renewal shall require an initial aeromedical examination. Prior to the [certificate issue] the [relevant] medical [records] shall be obtained by the AME.

(c) If a licence holder allows his Medical Certificate to expire by more than [two] year[s] but less than five years, renewal shall require the prescribed examination to be performed. Prior to the examination the [relevant] medical [records] shall be obtained by the AME.

(d) If a licence holder allows his certificate to expire by less than [two] year[s], renewal shall require the prescribed examination to be performed.

An extended aeromedical examination shall always be considered to contain a standard aeromedical examination and thus count both as a standard and an extended examination.

[Amdt. 3, 01.06.03; Amdt. 4, 01.08.05]

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JAR–FCL 3.130 Cardiovascular system – Examination

(a) An applicant for or holder of a Class 1 medical certificate shall not possess any abnormality of the cardiovascular system, congenital or acquired, which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) A standard 12-lead resting electrocardiogram (ECG) and report are required at the examination for first issue of a medical certificate, then every 5 years until age 30, every 2 years until age 40, annually until age 50, and every 6 months thereafter and on clinical indication.

(c) Exercise electrocardiography is required only when clinically indicated in compliance with paragraph 1 Appendix 1 to Subpart B.

(d) Reporting of resting and exercise electrocardiograms shall be by specialists acceptable to the AMS.

(e) Estimation of serum lipids, including cholesterol, is required to facilitate risk assessment at the examination for first issue of a medical certificate, and at the first examination after age 40 (see paragraph 2 Appendix 1 to Subpart B).

(f) At the first renewal/revalidation examination after age 65, a Class 1 certificate holder shall be reviewed at an AMC or, at the discretion of the AMS, review may be delegated to a cardiologist acceptable to the AMS.

JAR–FCL 3.135 Cardiovascular system – Blood pressure

(a) The blood pressure shall be recorded with the technique given in paragraph 3 Appendix 1 to Subpart B.

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

(c) Treatment for the control of blood pressure shall be compatible with the safe exercise of the privileges of the applicable licence(s) and be compliant with paragraph 4 Appendix 1 to Subpart B. The initiation of drug therapy shall require a period of temporary suspension of the medical certificate to establish the absence of significant side effects.

JAR–FCL 3.140 Cardiovascular system – Coronary artery disease

(a) Applicants with suspected cardiac ischaemia shall be investigated. Those with asymptomatic minor coronary artery disease, requiring no treatment may be considered fit by the AMS if the investigations in paragraph 5 Appendix 1 to Subpart B are completed satisfactorily.

(b) Applicants with symptomatic coronary artery disease, or with cardiac symptoms controlled by medication, shall be assessed as unfit.

(c) After an ischaemic cardiac event (defined as a myocardial infarction, angina, significant arrhythmia or heart failure due to ischaemia, or any type of cardiac revascularisation) initial Class 1 certification is not possible. Renewal or revalidation may be considered by the AMS if the investigations in paragraph 6 Appendix 1 to Subpart B are completed satisfactorily.

JAR–FCL 3.145 Cardiovascular system – Rhythm/conduction disturbances

(a) Applicants with significant disturbance of supraventricular rhythm, including sinoatrial dysfunction, whether intermittent or established, shall be assessed as unfit. A fit assessment may be considered by the AMS in compliance with paragraph 7 Appendix 1 to Subpart B.

(b) Applicants with asymptomatic sinus bradycardia or sinus tachycardia may be assessed as fit in the absence of underlying abnormality.

(c) Applicants with asymptomatic isolated uniform supra-ventricular [or ventricular] ectopic complexes need not be assessed as unfit. Frequent or complex forms require full cardiological evaluation in compliance with paragraph 7 Appendix 1 to Subpart B.

(d) In the absence of any other abnormality, applicants with incomplete bundle branch block or stable left axis deviation may be assessed as fit.
(e) Applicants with complete right bundle branch block require cardiological evaluation on first presentation and subsequently in compliance with appropriate items in paragraph 7 Appendix 1 to Subpart B.

(f) Applicants with complete left bundle branch block shall be assessed as unfit. A fit assessment may be considered by the AMS in compliance with paragraph 7 Appendix 1 to Subpart B.

(g) Applicants with first degree and Mobitz type 1 A-V block may be assessed as fit in the absence of underlying abnormality. Applicants with Mobitz type 2 or complete A-V block shall be assessed as unfit. A fit assessment may be considered by the AMS in compliance with paragraph 7 Appendix 1 to Subpart B.

(h) Applicants with broad and/or narrow complex tachycardias shall be assessed as unfit. A fit assessment may be considered by the AMS subject to compliance with paragraph 7 Appendix 1 to Subpart B.

(i) Applicants with ventricular pre-excitation shall be assessed as unfit. A fit assessment may be considered by the AMS subject to compliance with paragraph 7 Appendix 1 to Subpart B.

(1) Applicants with minor cardiac valvular abnormalities may be assessed as fit by the AMS subject to compliance with paragraph 10(a) and (b) Appendix 1 to Subpart B.

(2) Applicants with cardiac valve replacement/repair shall be assessed as unfit. A fit assessment may be considered by the AMS subject to compliance with paragraph 10(c) of Appendix 1 to Subpart B.

(d) Systemic anticoagulant therapy is disqualifying. Applicants who have received treatment of limited duration may be considered for a fit assessment by the AMS subject to compliance with paragraph 11 Appendix 1 to Subpart B.

(e) Applicants with any abnormality of the pericardium, myocardium or endocardium not covered above shall be assessed as unfit. A fit assessment may be considered by the AMS following complete resolution and satisfactory cardiological evaluation in compliance with paragraph 12 Appendix 1 to Subpart B.

(f) Applicants with congenital abnormality of the heart, before or after corrective surgery, shall be assessed as unfit. Applicants with minor abnormalities may be assessed as fit by the AMS following cardiological investigation in compliance with paragraph 13 Appendix 1 to Subpart B.

(g) Heart or heart/lung transplantation is disqualifying.

(h) Applicants with a history of recurrent vasovagal syncope shall be assessed as unfit. A fit assessment may be considered by the AMS in applicants with a suggestive history subject to compliance with paragraph 14 Appendix 1 to Subpart B.

(Amdt. 4, 01.08.05)

JAR–FCL 3.155 Respiratory system – General

(a) An applicant for or the holder of a Class 1 medical certificate shall not possess any abnormality of the respiratory system, congenital or acquired, which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Posterior/anterior chest radiography is required at the initial examination. It may be required at revalidation/renewal examinations when indicated on clinical or epidemiological grounds.
(c) Pulmonary function tests (see paragraph 1 Appendix 2 to Subpart B) are required at the initial examination. A peak flow test shall be performed at first revalidation or renewal examination after age 30, every 5 years until age 40, and every 4 years thereafter and on clinical indication. Applicants with significant impairment of pulmonary function (see paragraph 1 Appendix 2 to Subpart B) shall be assessed as unfit.

JAR–FCL 3.160 Respiratory system – Disorders

(a) Applicants with chronic obstructive airway disease shall be assessed as unfit.

(b) Applicants with reactive airway disease (bronchial asthma) requiring medication shall be assessed in compliance with paragraph 2 Appendix 2 to Subpart B.

(c) Applicants with active inflammatory disease of the respiratory system shall be assessed as temporarily unfit.

(d) Applicants with active sarcoidosis shall be assessed as unfit (see paragraph 3 Appendix 2 to Subpart B).

(e) Applicants with spontaneous pneumothorax shall be assessed as unfit pending full evaluation in compliance with paragraph 4 Appendix 2 to Subpart B.

(f) Applicants requiring major chest surgery shall be assessed as unfit for a minimum of three months following operation and until such time as the effects of the operation are no longer likely to interfere with the safe exercise of the privileges of the applicable licence(s) (see paragraph 5 Appendix 2 to Subpart B).

(g) Applicants with unsatisfactorily treated sleep apnoea syndrome shall be assessed as unfit.

[Amdt.1, 01.12.00]

JAR–FCL 3.165 Digestive system – General

An applicant for or the holder of a Class 1 medical certificate shall not possess any functional or structural disease of the gastro-intestinal tract or its adnexa which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

JAR–FCL 3.170 Digestive system – Disorders

(a) Applicants with recurrent dyspeptic disorders requiring medication or with pancreatitis shall be assessed as unfit pending assessment in compliance with paragraph 1 Appendix 3 to Subpart B.

(b) Applicants with asymptomatic gallstones discovered incidentally shall be assessed in compliance with paragraph 2 Appendix 3 to Subpart B.

(c) Applicants with an established diagnosis or history of chronic inflammatory bowel disease shall be assessed as unfit (see paragraph 3 Appendix 3 to Subpart B).

(d) Applicants shall be required to be completely free from those herniae that might give rise to incapacitating symptoms.

(e) Applicants with any sequela 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.

(f) Applicants who have undergone a surgical operation on the digestive tract or its adnexa, involving a total or partial excision or a diversion of any of these organs, shall be assessed as unfit for a minimum period of three months or until such time as the effects of the operation are no longer likely to interfere with the safe exercise of the privileges of the applicable licence(s) (see paragraph 4 Appendix 3 to Subpart B).

[Amdt.1, 01.12.00; Amdt. 4, 01.08.05]

JAR–FCL 3.175 Metabolic, nutritional and endocrine diseases

(a) An applicant for or the holder of a Class 1 medical certificate shall not possess any functional or structural metabolic, nutritional or endocrine disorder which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Applicants with metabolic, nutritional or endocrine dysfunctions may be assessed as fit in accordance with paragraph 1 Appendix 4 to Subpart B.

(c) Applicants with diabetes mellitus may be assessed as fit only in accordance with paragraphs 2 and 3 Appendix 4 to Subpart B.

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

(e) 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 applicable licence(s) and a satisfactory cardiovascular risk review has been undertaken (see paragraph 1 Appendix 9 to Subpart C).

[Amdt. 2, 01.06.02]

JAR–FCL 3.180 Haematology

(a) An applicant for or the holder of a Class 1 medical certificate shall not possess any haematological disease which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Haemoglobin shall be tested at every medical examination and cases of significant anaemia with a haematocrit below 32% shall be assessed as unfit (see paragraph 1 Appendix 5 to Subpart B).

(c) Applicants with sickle cell disease shall be assessed as unfit (see paragraph 1 Appendix 5 to Subpart B).

(d) Applicants with significant localised and generalised enlargement of the lymphatic glands and diseases of the blood shall be assessed as unfit (see paragraph 2 Appendix 5 to Subpart B).

(e) Applicants with acute leukaemia shall be assessed as unfit. After established remission, certification may be considered by the AMS. Initial applicants with chronic leukaemias shall be assessed as unfit. For certification see paragraph 3 Appendix 5 to Subpart B.

(f) Applicants with significant enlargement of the spleen shall be assessed as unfit (see paragraph 4 Appendix 5 to Subpart B).

(g) Applicants with significant polycythaemia shall be assessed as unfit (see paragraph 5 Appendix 5 to Subpart B).

(h) Applicants with a coagulation defect shall be assessed as unfit (see paragraph 6 Appendix 5 to Subpart B).

[Amdt.1, 01.12.00]

JAR–FCL 3.185 Urinary system

(a) An applicant for or the holder of a Class 1 medical certificate shall not possess any functional or structural disease of the urinary system or its adnexa which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Applicants presenting any signs of organic disease of the kidney shall be assessed as unfit. Urinalysis shall form part of every medical examination. The urine shall contain no abnormal element considered to be of pathological significance. Particular attention shall be paid to disease affecting the urinary passages and the genital organs. (see paragraph 1 Appendix 6 to Subpart B).

(c) Applicants presenting with urinary calculi shall be assessed as unfit (see paragraph 2 Appendix 6 to Subpart B).

(d) Applicants with any sequela of disease or surgical procedures on the kidneys and the urinary tract likely to cause incapacitation, in particular any obstruction due to stricture or compression, shall be assessed as unfit. An applicant with compensated nephrectomy without hypertension or uraemia may be considered fit (see paragraph 3 Appendix 6 to Subpart B).

(e) Applicants who have undergone a major surgical operation in the urinary tract or the urinary apparatus involving a total or partial excision or a diversion of any of its organs shall be assessed as unfit for a minimum period of three months and until such time as the effects of the operation are no longer likely to cause incapacity in flight (see paragraphs 3 and 4 Appendix 6 to Subpart B).

[Amdt.1, 01.12.00]

JAR–FCL 3.190 Sexually transmitted diseases and other infections

(a) An applicant for or holder of a Class 1 medical certificate shall have no established medical history or clinical diagnosis of any sexually transmitted disease or other infection which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Particular attention (see Appendix 7 to this Subpart) shall be paid to a history of or clinical signs indicating:

(1) HIV positivity,
(2) immune system impairment,
(3) infectious hepatitis,
(4) syphilis.
JAR–FCL 3.195 Gynaecology and obstetrics

(a) An applicant for or the holder of a Class 1 medical certificate shall not possess any functional or structural obstetric or gynaecological condition which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) An applicant with a history of severe menstrual disturbances unamenable to treatment shall be assessed as unfit.

(c) Pregnancy entails unfitness. If obstetric evaluation indicates a completely normal pregnancy, the applicant may be assessed as fit until the end of the 26th week of gestation, in accordance with paragraph 1 Appendix 8 to Subpart B. Licence privileges may be resumed upon satisfactory confirmation of full recovery following confinement or termination of pregnancy.

(d) An applicant who has undergone a major gynaecological operation shall be assessed as unfit for a minimum period of three months and until such time as the effects of the operation are not likely to interfere with the safe exercise of the privileges of the licence(s) (see paragraph 2 Appendix 8 to Subpart B).

JAR–FCL 3.200 Musculoskeletal requirements

(a) An applicant for or holder of a Class 1 medical certificate shall not possess any abnormality of the bones, joints, muscles and tendons, congenital or acquired which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) An applicant shall have sufficient sitting height, arm and leg length and muscular strength for the safe exercise of the privileges of the applicable licence (see paragraph 1 Appendix 9 to Subpart B).

(c) An applicant shall have satisfactory functional use of the musculoskeletal system. An applicant with any significant sequel from disease, injury or congenital abnormality of the bones, joints, muscles or tendons with or without surgery shall be assessed in accordance with paragraphs 1, 2 and 3 Appendix 9 to Subpart B.

JAR–FCL 3.205 Psychiatric requirements

(a) An applicant for or holder of a Class 1 medical certificate shall have no established medical history or clinical diagnosis of any psychiatric disease or disability, condition or disorder, acute or chronic, congenital or acquired, which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Particular attention shall be paid to the following (see Appendix 10 to Subpart B):

1. Schizophrenia, schizotypal and delusional disorders;
2. Mood disorders;
3. Neurotic, stress-related and somatoform disorders;
4. Personality disorders;
5. Organic mental disorders;
6. Mental and behavioural disorders due to alcohol;
7. Use or abuse of psychotropic substances.

JAR–FCL 3.210 Neurological requirements

(a) An applicant for or holder of a Class 1 medical certificate shall have no established medical history or clinical diagnosis of any neurological condition which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Particular attention shall be paid to the following (see Appendix 11 to Subpart B):

1. Progressive disease of the nervous system,
2. Epilepsy and other causes of disturbance of consciousness,
3. Conditions with a high propensity for cerebral dysfunction,
4. Head injury,
5. Spinal or peripheral nerve injury.

(c) Electroencephalography is required at the initial examination (see Appendix 11 to Subpart B) and when indicated by the applicant’s history or on clinical grounds.

[Amendt. 3, 01.06.03]
JAR–FCL 3.215 Ophthalmological requirements
(See Appendix 12 to Subpart B)

(a) An applicant for or holder of a Class 1 medical certificate shall not possess any abnormality of the function of the eyes or their adnexa or any active pathological condition, congenital or acquired, acute or chronic, or any sequela of eye surgery or trauma, which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) An ophthalmological examination is required at the initial examination (see paragraph 1 (a) Appendix 12 to Subpart B) and shall include:

1. History;
2. Visual acuity, near, intermediate and distant vision: uncorrected; with best optical correction if needed;
3. Objective refraction. Hyperopic applicants under age 25 in cycloplegia;
4. Ocular motility and binocular vision;
5. Colour vision;
6. Visual fields;
7. Tonometry on clinical indication and over age 40;
8. Examination of the external eye, anatomy, media and fundoscopy. Slit lamp examination.

(c) A routine eye examination shall form part of all revalidation and renewal examinations (see paragraph 2 Appendix 12 to Subpart B) and shall include:

1. History;
2. Visual acuity, near, intermediate and distant vision: uncorrected and with best optical correction if needed;
3. Objective refraction. Hyperopic applicants under age 25 in cycloplegia;
4. Ocular motility and binocular vision;
5. Colour vision;
6. Visual fields;
7. Tonometry on clinical indication and over age 40;
8. Examination of the external eye, anatomy, media and fundoscopy. Slit lamp examination.

(d) Where, in certificate holders the functional performance standards (6/9, 6/9, 6/6, N14, N5) can only be reached with corrective lenses, the applicant shall supply to the AME an examination report from an ophthalmologist or vision care specialist acceptable to the AMS (see paragraph 3 Appendix 12 to Subpart B). The report must refer to an examination which was carried out at the time of the general medical examination and in any case not more than 24 months before the general medical examination. The examination shall include:

(1) History;
(2) Visual acuity, near, intermediate and distant vision: uncorrected; with best optical correction if needed;
(3) Refraction;
(4) Ocular motility and binocular vision;
(5) Colour vision;
(6) Visual fields;
(7) Tonometry over age 40;
(8) Examination of the external eye, anatomy, media and fundoscopy. Slit lamp examination.

The report shall be forwarded to the AMS. If any abnormality is detected, such that the applicant’s ocular health is in doubt, further ophthalmological examination will be required (see paragraph 4 Appendix 12 to Subpart B).

(e) Where specialists ophthalmological examinations are required for any reason, the medical certificate is to be marked with the limitation “Requires specialist ophthalmological examinations – RXO”. Such a limitation may be applied by an AME but may only be removed by the AMS.

[Amdt. 3, 01.06.03]

JAR–FCL 3.220 Visual requirements

(a) Distant visual acuity. 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 (see JAR–FCL 3.220(g) below). No limits apply to uncorrected visual acuity.

(b) Refractive errors. Refractive error is defined as the deviation from emmetropia measured in dioptres in the most ametropic meridian. Refraction shall be measured by standard methods (see paragraph 1 Appendix 13 to Subpart B). Applicants shall be considered fit with respect to refractive errors if they meet the following requirements:

(1) Refractive error
   (i) At the initial examination the refractive error shall not exceed ±3 dioptres (see paragraph 2 (a) Appendix 13 to Subpart B).
   (ii) At revalidation or renewal examinations, an applicant experienced to the satisfaction of the Authority with
refractive errors up to +5/-8 dioptres may be considered fit by the AMS (see paragraph 2 (b) Appendix 13 to Subpart B).

(2) Astigmatism
   (i) In an initial applicant with a refractive error with an astigmatic component, the astigmatism shall not exceed 2.0 dioptres.
   (ii) At recertification or renewal examinations, an applicant experienced to the satisfaction of the Authority with a refractive error with an astigmatic component not exceeding 3.0 dioptres may be considered fit by the AMS.

(3) Keratoconus is disqualifying. The AMS may consider re-certification if the applicant meets the visual requirements (see paragraph 3 Appendix 13 to Subpart B).

(4) Anisometropia
   (i) In initial applicants the difference in refractive error between the two eyes (anisometropia) shall not exceed 2.0 dioptres.
   (ii) At recertification or renewal examinations, an applicant experienced to the satisfaction of the Authority with a difference in refractive error between the two eyes of up to 3.0 dioptres may be considered fit by the AMS.

(5) The development of presbyopia shall be followed at all aeromedical renewal examinations.

(6) An applicant shall be able to read N5 chart (or equivalent) at 30–50 cms and N14 chart (or equivalent) at 100 cms, with correction if prescribed (see JAR–FCL 3.220(g) below).

(c) An applicant with significant defects of binocular vision shall be assessed as unfit. There is no stereoscopic test requirement (see paragraph 4 Appendix 13 to Subpart B).

(d) An applicant with diplopia shall be assessed as unfit.

(e) An applicant with imbalance of the ocular muscles (heterophorias) exceeding (when measured with usual correction, if prescribed):

   2.0 prism dioptres in hyperphoria at 6 metres,
   10.0 prism dioptres in esophoria at 6 metres,
   8.0 prism dioptres in exophoria at 6 metres;

   and

1.0 prism dioptre in hyperphoria at 33 cms,
6.0 prism dioptres in esophoria at 33 cms,
12.0 prism dioptres in exophoria at 33 cms

shall be assessed as unfit. If the fusional reserves are sufficient to prevent asthenopia and diplopia the AMS may consider a fit assessment (see paragraph 5 Appendix 13 to Subpart B).

(f) An applicant with visual fields which are not normal shall be assessed as unfit (see paragraph 4 Appendix 13 to Subpart B).

(g) (1) If a visual requirement is met only with the use of correction, the spectacles or contact lenses must provide optimal visual function and be suitable for aviation purposes.
   (2) Correcting lenses, when worn for aviation purposes, shall permit the licence holder to meet the visual requirements at all distances. No more than one pair of spectacles shall be used to meet the requirement.
   (3) A spare set of similarly correcting spectacles shall be readily available when exercising the privileges of the licence.

(h) Eye Surgery.
   (1) Refractive surgery entails unfitness. Certification may be considered by the AMS (see paragraph 6 Appendix 13 to Subpart B).
   (2) Cataract surgery, retinal surgery and glaucoma surgery entail unfitness. Recertification may be considered by the AMS (see paragraph 7 Appendix 13 to Subpart B).

[Amdt. 3, 01.06.03]

JAR–FCL 3.225 Colour perception

(a) Normal colour perception is defined as the ability to pass the Ishihara test or to pass Nagel’s anomaloscope as a normal trichromate (see paragraph 1 Appendix 14 to Subpart B).

(b) An applicant shall have normal perception of colours or be colour safe. Applicants who fail Ishihara’s test shall be assessed as colour safe if they pass extensive testing with methods acceptable to the AMS (anomaloscope or colour lanterns – see paragraph 2 Appendix 14 to Subpart B).

(c) An applicant who fails the acceptable colour perception tests is to be considered colour unsafe and shall be assessed as unfit.
(c) At the initial examination for a Class 1 medical certificate there shall be no hearing loss in either ear, when tested separately, of more than 20 dB(HL) at any of the frequencies 500, 1 000 and 2 000 Hz, or of more than 35 dB(HL) at 3 000 Hz. [ ]

d) At revalidation or renewal examinations, there shall be no hearing loss in either ear, when tested separately, of more than 35dB(HL) at any of the frequencies 500, 1 000, and 2 000 Hz, or of more than 50 dB(HL) at 3 000 Hz. An applicant whose hearing loss is within 5 dB(HL) of these limits in two or more of the frequencies tested, shall undergo pure tone audiometry [ ] annually.

e) At revalidation or renewal, applicants with hypoacusis may be assessed as fit by the AMS if a speech discrimination test demonstrates a satisfactory hearing ability (see paragraph 2 Appendix 16 to Subpart B).

[JAR–FCL 3.240 Psychological requirements]

(a) An applicant for or holder of a Class 1 medical certificate shall have no established psychological deficiencies (see paragraph 1 Appendix 17 to Subpart B), which are likely to interfere with the safe exercise of the privileges of the applicable licence(s). A psychological evaluation may be required by the AMS where it is indicated as part of, or complementary to, a specialist psychiatric or neurological examination (see paragraph 2 Appendix 17 to Subpart B).

(b) When a psychological evaluation is indicated a psychologist acceptable to the AMS shall be utilised.

(c) The psychologist shall submit to the AMS a written report detailing his opinion and recommendation.

[JAR–FCL 3.245 Dermatological requirements]

(a) An applicant for or holder of a Class 1 Medical Certificate shall have no established dermatological condition, likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Particular attention should be paid to the following disorders (see Appendix 18 to Subpart B):

JAR–FCL 3.235 Hearing requirements

(a) 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 his back turned towards the AME.

(b) Hearing shall be tested with pure tone audiometry at the initial examination and at subsequent revalidation or renewal examinations every five years up to the 40th birthday and every two years thereafter (see paragraph 1 Appendix 16 to Subpart B).
JAR-FCL 3.245(a) (continued)

(1) Eczema (Exogenous and Endogenous),
(2) Severe Psoriasis,
(3) Bacterial Infections,
(4) Drug Induced Eruptions,
(5) Bullous Eruptions,
(6) Malignant Conditions of the skin,
(7) Urticaria.

Referral to the AMS shall be made if doubt exists about any condition.

JAR-FCL 3.246 Oncology

(a) An applicant for or holder of a Class 1 medical certificate shall have no established primary or secondary malignant disease likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) After treatment for malignant disease applicants may be assessed as fit in accordance with Appendix 19 to Subpart B.

[Amndt. 2, 01.06.02]
JAR–FCL 3.250 Cardiovascular system – Examination

(a) An applicant for or holder of a Class 2 medical certificate shall not possess any abnormality of the cardiovascular system, congenital or acquired, which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) A standard 12-lead resting electrocardiogram (ECG) and report are required at the examination for first issue of a medical certificate, at the first examination after the 40th birthday and at each aeromedical examination thereafter.

(c) Exercise electrocardiography is required only when clinically indicated in compliance with paragraph 1 Appendix 1 to Subpart C.

(d) Reporting of resting and exercise electrocardiograms shall be by specialists acceptable to the AMS.

(e) If two or more major risk factors (smoking, hypertension, diabetes mellitus, obesity, etc) are present in an applicant, estimation of [serum] lipids and serum cholesterol is required at the examination for first issue of a medical certificate and at the first examination after age 40.

JAR–FCL 3.255 Cardiovascular system – Blood pressure

(a) The blood pressure shall be recorded with the technique given in paragraph 3 Appendix 1 to Subpart C.

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

(c) Treatment for the control of blood pressure shall be compatible with the safe exercise of the privileges of the applicable licence(s) and be in compliance with paragraph 4 Appendix 1 to Subpart C. The initiation of drug therapy shall require a period of temporary suspension of the medical certificate to establish the absence of significant side effects.

(d) Applicants with symptomatic hypotension shall be assessed as unfit.

JAR–FCL 3.260 Cardiovascular system – Coronary artery disease

(a) Applicants with [suspected cardiac ischaemia shall be investigated. Those with] asymptomatic, minor, coronary artery disease[, requiring no treatment,] may be considered fit by the AMS [if the investigations in paragraph 5 Appendix 1 to Subpart C [are completed satisfactorily].

(b) Applicants with symptomatic coronary artery disease[, or with cardiac symptoms controlled by medication,] shall be assessed as unfit.

(c) [After an ischaemic cardiac event (defined as a myocardial infarction, angina, significant arrhythmia or heart failure due to ischaemia, or any type of cardiac revascularisation) Class 2 certification may be considered by the AMS if the investigations in paragraph 6 Appendix 1 to Subpart C are completed satisfactorily.]

JAR–FCL 3.265 Cardiovascular system – Rhythm/conduction disturbances

(a) Applicants with disturbance of supraventricular rhythm, including sinoatrial dysfunction, whether intermittent or established shall be assessed as unfit. A fit assessment may be considered by the AMS subject to compliance with paragraph [7] Appendix 1 to Subpart C.

(b) Applicants with asymptomatic sinus bradycardia or sinus tachycardia may be assessed as fit in the absence of underlying abnormality.

(c) Applicants with asymptomatic isolated uniform [supra-]ventricular [or ventricular] ectopic complexes need not be assessed as unfit. Frequent or complex forms require full cardiological evaluation in compliance with paragraph [7] Appendix 1 to Subpart C.

(d) In the absence of any other abnormality, applicants with incomplete bundle branch block or stable left axis deviation may be assessed as fit.

(e) Applicants with complete right [or] bundle branch block require cardiological evaluation on first presentation and subsequently in compliance with [appropriate items in] paragraph [7] Appendix 1 to Subpart C.
JAR-FCL 3.265 (continued)

(f) Applicants with complete left bundle branch block shall be assessed as unfit. A fit assessment may be considered by the AMS in compliance with paragraph 7 Appendix 1 to Subpart C.

(g) Applicants with first degree and Mobitz type 1 A-V block may be assessed as fit in the absence of underlying abnormality. Applicants with Mobitz type 2 or complete A-V block shall be assessed as unfit. A fit assessment may be considered by the AMS in compliance with paragraph 7 Appendix 1 to Subpart C.

(h) Applicants with broad and/or narrow complex tachycardias shall be assessed as unfit. A fit assessment may be considered by the AMS subject to compliance with paragraph 7 Appendix 1 to Subpart C.

(i) Applicants with ventricular pre-excitation shall be assessed as unfit. A fit assessment may be considered by the AMS subject to compliance with paragraph 7 Appendix 1 to Subpart C.

(j) Applicants with an endocardial pacemaker shall be assessed as unfit. A fit assessment may be considered by the AMS subject to compliance with paragraph 7 Appendix 1 to Subpart C.

(k) Applicants who have received ablation therapy shall be assessed as unfit. A fit assessment may be considered by the AMS in compliance with paragraph 7 Appendix 1 to Subpart C.

[Amdt.4, 01.08.05]

JAR-FCL 3.270 (c) (continued)

(2) Applicants with cardiac valve replacement/repair shall be assessed as unfit. A fit assessment may be considered by the AMS subject to compliance with paragraph 10(c) Appendix 1 to Subpart C.

(d) Systemic anticoagulant therapy is disqualifying. Applicants who have received treatment of limited duration, may be considered for a fit assessment by the AMS subject to compliance with paragraph 11 Appendix 1 to Subpart C.

(e) Applicants with any abnormality of the pericardium, myocardium or endocardium not covered above shall be assessed as unfit. A fit assessment may be considered by the AMS following complete resolution and satisfactory cardiological evaluation in compliance with paragraph 12 Appendix 1 to Subpart C.

(f) Applicants with congenital abnormality of the heart, before or after corrective surgery, shall be assessed as unfit. A fit assessment may be considered by the AMS subject to compliance with paragraph 13 Appendix 1 to Subpart C.

(g) Heart or heart/lung transplantation is disqualifying.

(h) Applicants with a history of recurrent vasovagal syncope shall be assessed as unfit. A fit assessment may be considered by the AMS in an applicant with a suggestive history subject to compliance with paragraph 14 Appendix 1 to Subpart C.

[Amdt.1, 01.12.00]

JAR-FCL 3.275 Respiratory system – General

(a) An applicant for or the holder of a Class 2 medical certificate shall not possess any abnormality of the respiratory system, congenital or acquired, which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Posterior/anterior chest radiography is required only when indicated on clinical or epidemiological grounds.

(c) A pulmonary peak flow test in accordance with paragraph 1 Appendix 2 to Subpart C, is required at the initial examination, at the first examination after the 40th birthday, every four years thereafter and when clinically indicated. Applicants with significant impairment of pulmonary function shall be assessed as unfit (see paragraph 1 Appendix 2 to subpart C).
SECTION 1

JAR–FCL 3.280 Respiratory system – Disorders

(a) Applicants with chronic obstructive airway disease shall be assessed as unfit.

(b) Applicants with reactive airway disease (bronchial asthma) requiring medication shall be assessed in compliance with paragraph 2 Appendix 2 to Subpart C.

(c) Applicants with active inflammatory disease of the respiratory system shall be assessed as temporarily unfit.

(d) Applicants with active sarcoidosis shall be assessed as unfit (see paragraph 3 Appendix 2 to Subpart C).

(e) Applicants with spontaneous pneumothorax shall be assessed as unfit pending full evaluation in compliance with paragraph 4 Appendix 2 to Subpart C.

(f) Applicants requiring major chest surgery shall be assessed as unfit for a minimum of three months following operation and until such time as the effects of the operation are no longer likely to interfere with the safe exercise of the privileges of the applicable licence(s) (see paragraph 5 Appendix 2 to Subpart C).

(g) Applicants with unsatisfactorily treated sleep apnoea syndrome shall be assessed as unfit.

[Amendment 1, 01.12.00]

JAR–FCL 3.285 Digestive system – General

An applicant for or holder of a Class 2 medical certificate shall not possess any functional or structural disease of the gastro-intestinal tract or its adnexa which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

JAR–FCL 3.290 Digestive system – Disorders

(a) Applicants with dyspeptic disorders requiring medication or with pancreatitis shall be assessed as unfit pending examination in compliance with paragraph 1 Appendix 3 to Subpart C.

(b) Applicants with asymptomatic gallstones discovered incidentally shall be assessed in compliance with paragraph 2 Appendix 3 to subpart B and C.

JAR–FCL 3.290 (continued)

(c) Applicants with an established diagnosis or history of chronic inflammatory bowel disease shall be assessed as unfit (see paragraph 3 Appendix 3 to Subpart C).

(d) Applicants shall be required to be completely free from those hernias that might give rise to incapacitating symptoms.

(e) Applicants with any sequela of disease or surgical intervention on any part of the digestive tract or its adnexae likely to cause incapacitation in flight, in particular any obstruction due to stricture or compression, shall be assessed as unfit.

(f) Applicants who have undergone a surgical operation on the digestive tract or its adnexa, involving a total or partial excision or a diversion of any of these organs, shall be assessed as unfit for a minimum period of three months or until such time as the effects of the operation are no longer likely to interfere with the safe exercise of the privileges of the applicable licence(s) (see paragraph 4 Appendix 3 to Subpart C).

[Amendment 4, 01.08.05]

JAR–FCL 3.295 Metabolic, nutritional and endocrine diseases

(a) An applicant for or holder of a Class 2 medical certificate shall not possess any functional or structural metabolic, nutritional or endocrine disorder which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Applicants with metabolic, nutritional or endocrine dysfunctions may be assessed as fit in accordance with paragraph 1 Appendix 4 to Subpart C.

(c) Applicants with diabetes mellitus may be assessed as fit only in accordance with paragraphs 2 and 3 Appendix 4 Subpart C.

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

(e) 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 a satisfactory cardiovascular risk review has been undertaken (See paragraph 1 Appendix 9 to Subpart C).

[Amendment 2, 01.06.02]
JAR–FCL 3.300 Haematology

(a) An applicant for or the holder of a Class 2 medical certificate shall not possess any haematologic disease which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Haemoglobin shall be tested at the initial examination for a medical certificate and when indicated on clinical grounds. Cases of significant anaemia with a haematocrit below 32% shall be assessed as unfit (see paragraph 1 Appendix 5 Subpart C).

(c) Applicants with sickle cell disease shall be assessed as unfit (see paragraph 1 Appendix 5 to Subpart C).

(d) Applicants with significant localised and generalised enlargement of the lymphatic glands and diseases of the blood shall be assessed as unfit (see paragraph 2 Appendix 5 to Subpart C).

(e) Applicants with acute leukaemia shall be assessed as unfit. After established remission certification may be considered by the AMS. Initial applicants with chronic leukaemia shall be assessed as unfit. For certification see paragraph 3 Appendix 5 to Subpart C.

(f) Applicants with significant enlargement of the spleen shall be assessed as unfit (see paragraph 4 Appendix 5 to Subpart C).

(g) Applicants with significant polycythaemia shall be assessed as unfit see paragraph 5 Appendix 5 to Subpart C.

(h) Applicants with a coagulation defect shall be assessed as unfit (see paragraph 6 Appendix 5 to Subpart C).

JAR–FCL 3.305 Urinary system

(a) An applicant for or the holder of a Class 2 medical certificate shall not possess any functional or structural disease of the urinary system or its adnexa which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Applicants presenting any signs of organic disease of the kidney shall be assessed as unfit. Urinalysis shall form part of every medical examination. The urine shall contain no abnormal element considered to be of pathological significance. Particular attention shall be paid to disease affecting the urinary passages and the genital organs. (see paragraph 1 Appendix 6 to Subpart C).

(c) Applicants presenting with urinary calculi shall be assessed as unfit (see paragraph 2 Appendix 6 to Subpart C).

(d) Applicants with any sequela of disease or surgical procedures on the kidneys and the urinary tract likely to cause incapacitation, in particular any obstruction due to stricture or compression, shall be assessed as unfit. Applicants with compensated nephrectomy without hypertension or uraemia may be considered fit by the AMS subject to compliance with paragraph 3 Appendix 6 to Subpart C.

(e) Applicants who have undergone a major surgical operation in the urinary tract or the urinary apparatus involving a total or partial excision or a diversion of any of its organs shall be assessed as unfit for a minimum period of three months and until such time as the effects of the operation are no longer likely to interfere with the safe exercise of the privileges of the applicable licence(s) (see paragraphs 3 and 4 Appendix 6 to Subpart C).

JAR–FCL 3.310 Sexually transmitted diseases and other infections

(a) An applicant for or holder of a Class 2 medical certificate shall have no established medical history or clinical diagnosis of any sexually transmitted disease or other infection which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Particular attention, in accordance with Appendix 7 to Subpart C, shall be paid to a history of or clinical signs indicating:

   (1) HIV positivity,
   (2) immune system impairment,
   (3) infectious hepatitis,
   (4) syphilis.

JAR–FCL 3.315 Gynaecology and obstetrics

(a) An applicant for or the holder of a Class 2 medical certificate shall not possess any functional or structural obstetric or gynaecological condition which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) An applicant with a history of severe menstrual disturbances unamenable to treatment shall be assessed as unfit.
JAR-FCL 3.315 (continued)
(c) Pregnancy entails unfitness. If obstetric evaluation indicates a completely normal pregnancy, the applicant may be assessed as fit until the end of the 26th week of gestation, in accordance with paragraph 1 Appendix 8 to Subpart C. Licence privileges may be resumed upon satisfactory confirmation of full recovery following confinement or termination of pregnancy.

(d) An applicant who has undergone a major gynaecological operation shall be assessed as unfit for a minimum period of three months and until such time as the effects of the operation are not likely to interfere with the safe exercise of the privileges of the licence(s) (see paragraph 2 Appendix 8 to Subpart C).

JAR–FCL 3.320 Musculoskeletal requirements
(a) An applicant for or holder of a Class 2 medical certificate shall not possess any abnormality of the bones, joints, muscles and tendons, congenital or acquired which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) An applicant shall have sufficient sitting height, arm and leg length and muscular strength for the safe exercise of the privileges of the applicable licence (see paragraph 1 Appendix 9 to Subpart C).

(c) An applicant shall have satisfactory functional use of the musculo-skeletal system. An applicant with any significant sequela from disease, injury or congenital abnormality of the bones, joints, muscles or tendons with or without surgery shall be assessed in accordance with paragraphs 1, 2 and 3 Appendix 9 to Subpart C.

JAR–FCL 3.325 Psychiatric requirements
(a) An applicant for or holder of a Class 2 medical certificate shall have no established medical history or clinical diagnosis of any psychiatric disease or disability, condition or disorder, acute or chronic, congenital or acquired, which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Particular attention shall be paid to the following (see Appendix 11 to Subpart C):

(1) schizophrenia, schizotypal and delusional disorders;
(2) mood disorders;
(3) neurotic, stress-related and somatoform disorders;
(4) personality disorders;
(5) organic mental disorders;
(6) mental and behavioural disorders due to alcohol;
(7) use or abuse of psychotropic substances.

[Amndt. 3, 01.06.03]

JAR–FCL 3.330 Neurological requirements
(a) An applicant for or holder of a Class 2 medical certificate shall have no established medical history or clinical diagnosis of any neurological condition which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Particular attention shall be paid to the following (see Appendix 11 to Subpart C):

(1) progressive disease of the nervous system,
(2) epilepsy and other causes of disturbance of consciousness,
(3) conditions with a high propensity for cerebral dysfunction,
(4) head injury,
(5) spinal or peripheral nerve injury.

[Amndt. 2, 01.06.02]

JAR–FCL 3.335 Ophthalmological requirements
(See Appendix 12 to Subpart C)
(a) An applicant for or holder of a Class 2 medical certificate shall not possess any abnormality of the function of the eyes or their adnexa or any active pathological condition, congenital or acquired, acute or chronic, or any sequela of eye surgery or trauma, which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) An ophthalmological examination is required at the initial examination (see paragraph 1b Appendix 12 to Subpart C) and shall include:

(1) History;
(2) Visual acuity, near and distant vision; uncorrected; with best optical correction if needed;
(3) Ocular motility and binocular vision;
(4) Colour vision;
(5) Visual fields;
(6) Examination of the external eye, anatomy, media and fundoscopy.
(c) A routine eye examination shall form part of all revalidation and renewal examinations (see paragraph 2 Appendix 12 to Subpart C) and shall include:
(1) History;
(2) Visual acuity, near and distant vision: uncorrected; with best optical correction if needed;
(3) Examination of the external eye, anatomy, media and fundoscopy
(4) Further examination on clinical indication (see paragraph 4 Appendix 12 to Subpart C).

JAR–FCL 3.340 Visual requirements
(a) Distant visual acuity. 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 6/6 (1.0) or better (see JAR–FCL 3.340(f) below). No limits apply to uncorrected visual acuity.
(b) Refractive errors. Refractive error is defined as the deviation from emmetropia measured in dioptres in the most ametropic meridian. Refraction shall be measured by standard methods (see paragraph 1 Appendix 13 to Subpart C). Applicants shall be considered fit with respect to refractive errors if they meet the following requirements.
(1) Refractive error
   (i) At the initial examination the refractive error shall not exceed ±5 dioptres (see paragraph 2 (c) Appendix 13 to Subpart C).
   (ii) At recertification or renewal examinations, an applicant experienced to the satisfaction of the Authority with refractive errors up to +5/-8 dioptres may be considered fit by the AMS (see paragraph 2 (c) Appendix 13 to Subpart C).

JAR–FCL 3.340(b) (continued)
(2) Astigmatism
   (i) In an initial applicant with a refractive error with an astigmatic component, the astigmatism shall not exceed 3·0 dioptres.
   (ii) At recertification or renewal examinations, an applicant experienced to the satisfaction of the Authority with a refractive error with an astigmatic component of more than 3·0 dioptres may be considered fit by the AMS.
(3) Keratoconus is disqualifying. The AMS may consider re-certification if the applicant meets the visual requirements (see paragraph 3 Appendix 13 to Subpart C).
(4) In an applicant with amblyopia, the visual acuity of the amblyopic eye shall be 6/18 (0/32) or better. The applicant may be accepted as fit provided the visual acuity in the other eye is 6/6 or better and no pathology (including refractive error) can be demonstrated.
(5) Anisometropia
   (i) In an initial applicant the difference in refractive error between the two eyes (anisometropia) shall not exceed 3·0 dioptres.
   (ii) At recertification or renewal examinations, an applicant experienced to the satisfaction of the Authority with a difference in refractive error between the two eyes (anisometropia) of more than 3·0 dioptres may be considered fit by the AMS. Contact lenses shall be worn if the anisometropia exceeds 3·0 dioptres.
(6) The development of presbyopia shall be followed at all aeromedical renewal examinations.
(7) An applicant shall be able to read N5 chart (or equivalent) at 30–50 cms and N14 chart (or equivalent) at 100 cms, with correction if prescribed (see JAR–FCL 3.340(f) below).
(c) An applicant with significant defects of binocular vision shall be assessed as unfit. There is no stereoscopic test requirement (see paragraph 4 Appendix 13 to Subpart C).
(d) An applicant with diplopia shall be assessed as unfit.
(e) An applicant with visual fields which are not normal shall be assessed as unfit (see paragraph 4 Appendix 13 to Subpart C).
SECTION 1

JAR-FCL 3.340 (continued)

(f)  (1) If a visual requirement is met only with the use of correction, the spectacles or contact lenses must provide optimal visual function and be suitable for aviation purposes.

(2) Correcting lenses, when worn for aviation purposes, shall permit the licence holder to meet the visual requirements at all distances. No more than one pair of spectacles shall be used to meet the requirements.

(3) A spare set of similarly correcting spectacles shall be readily available when exercising the privileges of the licence.

(g) Eye Surgery.

(1) Refractive surgery entails unfitness. Certification may be considered by the AMS (see paragraph 6 Appendix 13 to Subpart C).

(2) Cataract surgery, retinal surgery and glaucoma surgery entail unfitness. Recertification may be considered by the AMS (see paragraph 7 Appendix 13 to Subpart C).

[Amdt. 3, 01.06.03]

JAR–FCL 3.345 Colour perception
(See Appendix 14 to Subpart C)

(a) Normal colour perception is defined as the ability to pass Ishihara’s test or to pass Nagel’s anomaloscope as a normal trichromate (see paragraph 1 Appendix 14 to Subpart C).

(b) An applicant shall have normal perception of colours or be colour safe. Applicants who fail Ishihara’s test may be assessed as colour safe if they pass extensive testing with methods acceptable to the AMS (anomaloscopy or colour lanterns) (see paragraph 2 Appendix 14 to Subpart C).

(c) An applicant who fails the acceptable colour perception tests is to be considered colour unsafe and shall be assessed as unfit.

(d) A colour unsafe applicant may be assessed by the AMS as fit to fly by day only.

[Amdt. 3, 01.06.03]

JAR–FCL 3.350 Otorhinolaryngological requirements

(a) An applicant for or holder of a Class 2 medical certificate shall not possess any abnormality of the function of the ears, nose, sinuses, or throat (including oral cavity, teeth and larynx), or any active pathological condition, congenital or acquired, acute or chronic, or any sequela of surgery and trauma which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) A comprehensive otorhinolaryngological examination by an AME is required at the initial examination.

(c) A routine Ear-Nose-Throat examination shall form part of all revalidation and renewal examinations (see paragraph 2 Appendix 15 to Subpart C).

(d) Presence of any of the following disorders in an applicant shall result in an unfit assessment.

(1) Active pathological process, acute or chronic, of the internal or middle ear.

(2) Unhealed perforation or dysfunction of the tympanic membranes (see paragraph 3 Appendix 15 to Subpart C).

(3) Disturbances of vestibular function (see paragraph 4 Appendix 15 to Subpart C).

(4) Significant restriction of the nasal air passage on either side, or any dysfunction of the sinuses.

(5) Significant malformation or significant, acute or chronic infection of the oral cavity or upper respiratory tract.

(6) Significant disorder of speech or voice.

JAR–FCL 3.355 Hearing requirements

(a) Hearing shall be tested at all examinations. The applicant shall be able to understand correctly ordinary conversational speech when at a distance of 2 metres from and with his back turned towards the AME.

(b) If an instrument rating is to be added to the applicable licence(s), a hearing test with pure tone audiometry (see paragraph 1 Appendix 16 to Subpart C) is required at the first examination for the rating and shall be repeated every 5 years up to the 40th birthday and every 2 years thereafter.

(1) At the initial examination for a Class 2 medical certificate with instrument ratings there shall be no hearing loss in either ear, when tested separately, of more than 20 dB(HL) at any of the frequencies 500, 1 000 and 2 000 Hz, or of more than 35 dB(HL) at 3 000 Hz. [ ]
JAR-FCL 3.355(b) (continued)

(2) At recertification or renewal examinations there shall be no hearing loss in either ear, when tested separately of more than 35 db (HL) at any of the frequencies 500, 1000, and 2000 Hz, or more than 50 db (HL) at 3000 Hz. An applicant whose hearing loss is within 5 db (HL) of these limits in two or more of the frequencies tested shall undergo pure tone audiometry [annually].

(3) At recertification or renewal examinations applicants with hypoacusis may be assessed as fit by the AMS if a speech discrimination test demonstrates a satisfactory hearing ability (see paragraph 2 Appendix 16 to Subpart C).

JAR–FCL 3.360 Psychological requirements

(a) An applicant for or holder of a Class 2 medical certificate shall have no established psychological deficiencies, particularly in operational aptitudes or any relevant personality factor, which are likely to interfere with the safe exercise of the privileges of the applicable licence(s).

A psychological evaluation (see paragraph 1 Appendix 17 to Subpart C) may be required by the AMS where it is indicated as part of, or complementary to, a specialist psychiatric or neurological examination (see paragraph 2 Appendix 17 to Subpart C).

(b) When a psychological evaluation is indicated a psychologist acceptable to the Authority shall be utilised.

(c) The psychologist shall submit to the AMS a written report detailing his opinion and recommendation.

JAR–FCL 3.365 Dermatological requirements

(a) An applicant for or holder of a Class 2 Medical Certificate shall have no established dermatological condition, likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) Particular attention should be paid to the following disorders (see Appendix 18 to Subpart B).

(1) Eczema (Exogenous and Endogenous),

(2) Severe Psoriasis,

(3) Bacterial Infections,

(4) Drug Induced Eruptions,

(5) Bullous Eruptions,

(6) Malignant Conditions of the skin,

(7) Urticaria.

Referral to the AMS shall be made if doubt exists about any condition.

JAR-FCL 3.370 Oncology

(a) An applicant for or holder of a Class 2 medical certificate shall have no established primary or secondary malignant disease likely to interfere with the safe exercise of the privileges of the applicable licence(s).

(b) After treatment for malignant disease applicants may be assessed as fit in accordance with Appendix 19 to Subpart C.

[Amdt. 2, 01.06.02]
Appendix 1 to Subparts B & C

Cardiovascular system

(See JAR–FCL 3.130 through 3.150 and 3.250 through 3.270)

1 Exercise electrocardiography shall be required:
   (a) when indicated by signs or symptoms suggestive of cardiovascular disease;
   (b) for clarification of a resting electrocardiogram;
   (c) at the discretion of an aeromedical specialist acceptable to the AMS;
   (d) at age 65 and then every 4 years for Class 1 recertification;

2 (a) Serum lipid estimation is case finding and significant abnormalities shall require review, investigation and supervision by the AMS.
    (b) An accumulation of risk factors (smoking, family history, lipid abnormalities, hypertension, etc.) shall require cardiovascular evaluation by the AMS and, where appropriate, in conjunction with the AMC or AME.

3 The diagnosis of hypertension shall require review of other potential vascular risk factors. The systolic pressure shall be recorded at the appearance of the Korotkoff sounds (phase I) and the diastolic pressure at their disappearance (phase V). The blood pressure should be measured twice. If the blood pressure is raised and/or the resting heart rate is increased, further observations should be made during the assessment.

4 Anti-hypertensive treatment shall be agreed by the AMS. Drugs acceptable to the AMS may include:
   (a) non-loop diuretic agents;
   (b) certain (generally hydrophilic) beta-blocking agents;
   (c) ACE Inhibitors;
   (d) angiotensin II AT1 blocking agents (the sartans);
   (e) slow channel calcium blocking agents.

   For Class 1, hypertension treated with pharmacological agents may require restriction to multi-pilot operations. For Class 2, a safety pilot restriction may be required.

5 In suspected asymptomatic coronary artery disease, exercise electrocardiography shall be required [followed, if necessary, by further tests (myocardial perfusion scanning, stress echocardiography, coronary angiography or equivalent investigations acceptable to the AMS) which shall show no evidence of myocardial ischaemia or significant coronary artery stenosis.]

6 [After an ischaemic cardiac event, including revascularisation, applicants without symptoms shall have reduced any vascular risk factors to an appropriate level. Drugs, when used only to control cardiac symptoms, are not acceptable. All applicants should be on acceptable secondary prevention treatment.

   A coronary angiogram obtained around the time of, or during, the ischaemic cardiac event shall be available. A complete and detailed clinical report of the ischaemic event, the angiogram and any operative procedures shall be available to the AMS.

   There shall 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 leading to an infarct. More than two stenoses between 30% and 50% within the vascular tree should not be acceptable.

   The whole coronary vascular tree shall be assessed as satisfactory by a cardiologist acceptable to the AMS, and particular attention should be paid to multiple stenoses and/or multiple revascularisations.

   An untreated stenosis greater than 30% in the left main or proximal left anterior descending coronary artery should not be acceptable.

   At least 6 months from the ischaemic cardiac event, including revascularisation, the following investigations shall be completed: ]
   (a) [n] exercise ECG [symptom limited to Bruce Stage IV, or equivalent], [ ] showing no evidence of myocardial ischaemia [nor rhythm disturbance];]
Appendix 1 to Subparts B & C (continued)

(b) [an echocardiogram (or equivalent test acceptable to the AMS) 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 echocardiography (or equivalent test acceptable to the AMS) which shall 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 will also be required;]

(d) [Further investigations, such as a 24 hour ECG, may be necessary to assess the risk of any significant rhythm disturbance.]

Follow-up shall be yearly (or more frequently if necessary) to ensure that there is no deterioration of cardiovascular status. It shall include a review by a specialist acceptable to the AMS, exercise ECG and cardiovascular risk assessment. Additional investigations may be required by the AMS.

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

In all cases coronary angiography, or an equivalent test acceptable to the AMS, shall be considered at any time if symptoms, signs or non-invasive tests indicate cardiac ischaemia.

AMS assessment

Successful completion of the six month review will allow Class 1 applicants to fly multi-pilot (OML).

Class 2 applicants having fulfilled the criteria mentioned in paragraph (6) may fly unrestricted, but the AMS may require a period of flying with a safety pilot before solo flying is authorised. Class 2 applicants (for renewal/revalidation) can fly, at the discretion of the AMS, with a safety pilot limitation (OSL) having completed only an exercise ECG to the standards in 6 (a) above.

[ ]

[7] Any significant rhythm or conduction disturbance requires evaluation by a cardiologist acceptable to the AMS [and appropriate follow-up in the case of a fit assessment].

[(a)] Such evaluation shall include:

(1) [Exercise ECG to the Bruce protocol or equivalent. The test should be to maximum effort or symptom limited. Bruce stage 4 shall be achieved and no significant abnormality of rhythm or conduction, nor evidence of myocardial ischaemia shall be demonstrated. Withdrawal of cardioactive medication prior to the test should be considered.]

(2) [24-hour ambulatory ECG which shall demonstrate no significant rhythm or conduction disturbance, [ ]]

(3) [2D Doppler echocardiogram which shall show no significant selective chamber enlargement, [ ] or [significant] structural, [or] functional abnormality[, and a left ventricular ejection fraction of at least 50%].]

[(b)] Further evaluation may include:

(1) Repeat 24-hour ECG recording;

[(2)] electrophysiological [study];

[(3) myocardial perfusion scanning, or equivalent test;

(4) cardiac MRI or equivalent test;

(5) coronary angiogram or equivalent test (see Appendix 1 paragraph 6).]

[(c)] AMS Assessment Class 1

(1) Atrial fibrillation/flutter

Amendment 4
Appendices-2
01.08.05
Appendix 1 to Subparts B & C (continued)

(i) Initial Class 1 certification shall be limited to applicants with a single episode of arrhythmia which is considered by the AMS to be unlikely to recur.

(ii) Revalidation/renewal Class 1 shall be determined by the AMS.

(2) Complete right bundle branch block

(i) Initial Class 1 certification may be considered by the AMS if the applicant is under age 40 years. If over age 40 years, initial Class 1 applicants should demonstrate a period of stability, normally 12 months.

(ii) Unrestricted Class 1 revalidation/renewal may be considered if the applicant is under age 40 years. An OML should be applied for 12 months for those over 40 years of age.

(3) Complete left bundle branch block

Investigation of the coronary arteries is necessary in applicants over age 40.

(i) Initial Class 1 applicants should demonstrate a 3 year period of stability.

(ii) Unrestricted Class 1 revalidation/renewal may be considered after a 3 year period with an OML applied.

(4) Ventricular pre-excitation

(i) Asymptomatic Class 1 applicants with pre-excitation may be considered by the AMS for revalidation/renewal with OML.

(ii) Asymptomatic initial Class 1 applicants with pre-excitation may be considered by the AMS if an electrophysiological study, including adequate drug-induced autonomic stimulation reveals no inducible re-entry tachycardia and the existence of multiple pathways is excluded.

(5) Pacemaker

Following permanent implantation of a subendocardial pacemaker a fit assessment [which shall be no sooner than] three months after insertion [shall require]:

(1) [ ] no other disqualifying [condition];

(2) a bipolar lead system [ ];

(3) [ that] the applicant is not pacemaker dependent;

[(4) regular follow-up including a pacemaker check; and]

[(5) ] Revalidation/renewal] is restricted to multi-crew operation (Class 1 ‘OML’). [ ]

[(6) Ablation

Class 1 applicants having undergone successful catheter ablation shall be restricted to OML operations for at least one year, unless an electrophysiological study, undertaken at a minimum of two months after the ablation, demonstrates satisfactory results. For those in whom the long term outcome cannot be assured by invasive or non-invasive testing, an additional period of restriction and / or observation may be necessary.

(d) AMS assessment Class 2

The AMS assessment Class 2 should follow the Class 1 assessment procedures. An OSL or OPL restriction may be considered.[

[8] Unoperated infra-renal abdominal aortic aneurysms may be considered for restricted Class 1 or Class 2 certification by the AMS if followed by six monthly ultra-sound scans. After surgery for infra-renal abdominal aortic aneurysm without complications, and after cardiovascular assessment, restricted Class 1 or Class 2 certification may be considered by the AMS, with follow-up as approved by the AMS.

[9] (a) Unidentified cardiac murmurs shall require evaluation by a cardiologist acceptable to the AMS and assessment by the AMS. If considered significant, further investigation shall include at least 2D Doppler echocardiography.

(b) Valvular Abnormalities
Appendix 1 to Subparts B & C (continued)

(1) Bicuspid aortic valve is acceptable without restriction if no other cardiac or aortic abnormality is demonstrated, but requires biannual review with echocardiography.

(2) Aortic stenosis (Doppler flow rate <2·0m/sec) may be acceptable for multi-pilot operations. Annual review shall be required, with 2D Doppler echocardiography, by a cardiologist acceptable to the AMS.

(3) Aortic regurgitation may be acceptable for unrestricted certification only if trivial. There shall be no demonstrable abnormality of the ascending aorta on 2D Doppler echocardiography. Annual review shall be carried out by a cardiologist acceptable to the AMS.

(4) Rheumatic mitral valve disease is normally disqualifying.

(5) Mitral leaflet prolapse/mitral regurgitation. Asymptomatic applicants with isolated mid-systolic click may need no restriction. Applicants with uncomplicated minor regurgitation may need to be restricted to multi-pilot operations [as determined by the AMS]. Applicants with evidence of volume overload of the left ventricle demonstrated by increased left ventricular end-diastolic diameter shall be assessed as unfit. [Periodic] review [ ] and assessment [as determined] by the AMS is required.

(c) Valvular surgery

(1) Applicants with implanted mechanical valves shall be assessed as unfit.

(2) Asymptomatic applicants with a tissue valve who at least 6 months following surgery shall have satisfactorily completed investigations which demonstrate normal valvular and ventricular configuration and function may be considered for a fit assessment by the AMS as judged by:

(i) a satisfactory symptom limited exercise ECG to Bruce Stage IV or equivalent which a cardiologist acceptable to the AMS interprets as showing no significant abnormality. Myocardial scintigraphy/stress echocardiography shall be required if the resting ECG is abnormal and any coronary artery disease has been demonstrated. See also paragraphs 5, 6 and 7 of Appendix 1 to Subparts B & C;

(ii) a 2D Doppler echocardiogram showing no significant selective chamber enlargement, a tissue valve with minimal structural alterations and with a normal Doppler blood flow, and no structural, nor functional abnormality of the other heart valves. Left ventricular fractional or shortening shall be normal;

(iii) the demonstrated absence of coronary artery disease unless satisfactory revascularisation has been achieved – see paragraph 7 above;

(iv) the absence of requirement for cardioactive medication;

(v) a follow up with annual cardiological review by a cardiologist acceptable to the AMS with exercise ECG and 2D Doppler echocardiography.

A fit assessment shall be limited to multi-pilot operation (Class 1 OML). Full Class 2 certification may be applicable.

[10] Applicants following anticoagulant therapy require review by the AMS. Venous thrombosis or pulmonary embolism is disqualifying until anticoagulation has been discontinued. Pulmonary embolus requires full evaluation. Anticoagulation for possible arterial thromboembolism is disqualifying.

[11] Applicants with abnormalities of the epicardium/myocardium and/or endocardium, primary or secondary, shall be assessed as unfit until clinical resolution has taken place. Cardiovascular assessment by the AMS may include 2D Doppler echocardiography, exercise ECG and/or myocardial scintigraphy/stress echocardiography and 24-hour ambulatory ECG. Coronary angiography may be indicated. Frequent review and restriction to multi-pilot operation (Class 1 ‘OML’) or safety pilot limitation (Class 2 ‘OSL’) may be required following certification.

[12] Applicants with congenital heart conditions including those surgically corrected, shall normally be assessed as unfit unless functionally unimportant and no medication is required. Cardiological assessment by the AMS shall be required. Investigations may include 2D Doppler echocardiography, exercise ECG and 24-hour ambulatory ECG. Regular cardiological review shall be required. Restriction to multi-crew (Class 1 ‘OML’) and safety pilot (Class 2 ‘OSL’) operation may be required.

[13] Applicants who have suffered recurrent episodes of syncope shall undergo the following:

(a) a symptom limited 12 lead exercise ECG to Bruce Stage IV, or equivalent, which a cardiologist
acceptable to AMS interprets as showing no abnormality. If the resting ECG is abnormal, myocardial scintigraphy/stress echocardiography shall be required.

(b) a 2D Doppler echocardiogram showing no significant selective chamber enlargement nor structural nor functional abnormality of the heart, valves nor myocardium.

c) a 24-hour ambulatory ECG recording showing no conduction disturbance, nor complex, nor sustained rhythm disturbance nor evidence of myocardial ischaemia.

d) and may include a tilt test carried out to a standard protocol which in the opinion of a cardiologist acceptable to the AMS shows no evidence of vasomotor instability.

Applicants fulfilling the above may be assessed fit, restricted to multi-crew operation (Class 1 OML) or safety pilot operation (Class 2 OSL) not less than 6 months following an index event provided there has been no recurrence. Neurological review will normally be indicated. Unrestricted certification requires 5 years freedom from attacks. Shorter or longer periods of consideration may be accepted by the AMS according to the individual circumstances of the case. Applicants who suffered loss of consciousness without significant warning shall be assessed as unfit.

[14] The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

(See Section 2, Aviation Cardiology Chapter)

[Amdt.1, 01.12.00; Amdt. 4, 01.08.05]

Appendix 2 to Subparts B and C
Respiratory system
(See JAR–FCL 3.155, 3.160, 3.275 and 3.280)

1 Spirometric examination is required for initial Class 1 examination. An FEV1/FVC ratio less than 70% shall require evaluation by a specialist in respiratory disease. For Class 2, a pulmonary peak flow test of less than 80% of predicted normal value according to age, sex and height shall require evaluation by a specialist in respiratory diseases.

2 Applicants experiencing recurrent attacks of asthma shall be assessed as unfit.

(a) Class 1 certification may be considered by the AMS if considered stable with acceptable pulmonary function tests and medication compatible with flight safety (no systemic steroids).

(b) Class 2 certification may be considered by the AME in consultation with the AMS if considered stable with acceptable pulmonary function tests, medication compatible with flight safety (no systemic steroids), and a full report is submitted to the AMS.

3 Applicants with active sarcoidosis are unfit. Certification may be considered by the AMS if the disease is:

(a) investigated with respect to the possibility of systemic involvement; and

(b) limited to hilar lymphadenopathy shown to be inactive and the applicant requires no medication.

4 Spontaneous pneumothorax.

(a) Certification following a fully recovered single spontaneous pneumothorax may be acceptable after one year from the event with full respiratory evaluation.

(b) Recertification in multi-pilot (Class 1 ‘OML’) operations or under safety pilot (Class 2 ‘OSL’) conditions may be considered by the AMS if the applicant fully recovers from a single spontaneous pneumothorax after six weeks. Unrestricted recertification may be considered by the AMS after one year from the event with full respiratory investigation.

(c) A recurrent spontaneous pneumothorax is disqualifying. Certification may be considered by the AMS following surgical intervention with a satisfactory recovery.
Appendix 2 to Subparts B & C (continued)

5 Pneumonectomy is disqualifying. Certification following lesser chest surgery may be considered by the AMS after satisfactory recovery and full respiratory evaluation. Multi-pilot (Class 1 ‘OML’) or safety pilot (Class 2 ‘OSL’) restrictions may be appropriate.

6 The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

Appendix 3 to Subparts B and C
Digestive system
(See JAR–FCL 3.165, 3.170, 3.285 and 3.290)

1 (a) Recurrent dyspepsia requiring medication shall be investigated by internal examination (radiologic or endoscopic). Laboratory testing should include haemoglobin assessment and faecal examination. Any demonstrated ulceration or significant inflammation requires evidence of recovery before recertification by the AMS.

(b) Pancreatitis is disqualifying. Certification may be considered by the AMS if the cause of obstruction (e.g. drug, gallstone) is removed.

(c) Alcohol may be a cause of dyspepsia and pancreatitis. If considered appropriate a full evaluation of its use/abuse is required.

2 A single asymptomatic large gallstone may be compatible with certification after consideration by the AMS. An individual with asymptomatic multiple gallstones may be considered for multicrew (Class 1 ‘OML’) or safety pilot (Class 2 ‘OSL’) recertification by the AMS.

3 Established chronic inflammatory bowel disease ([Crohn’s Disease], ulcerative colitis[ ]) is disqualifying. [In cases of ulcerative colitis certification (Class 1 and 2) ] ] may be considered by the AMS if there is full remission [(minimum of one year)] and[, for Class 1, minimum] medication [only] is [required]. [Systemic steroids are not acceptable. In cases of Crohn’s disease, certification (Class 1 and Class 2) may be considered by the AMS if there is full remission (minimum of one year, without medication) and, for Class 1, disease was minimal and has completely excised surgically, and medication is not required. ] [ Class 1 ‘OML’ ] ] or [ ] Class 2 ‘OSL’ ] ] restriction may be appropriate.

4 Abdominal surgery is disqualifying for a minimum of three months. The AMS may consider earlier recertification if recovery is complete, the applicant is asymptomatic and there is a minimal risk of secondary complication or recurrence.

5 The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

[Amtd.1, 01.12.00, Amtd. 4, 01.08.05]

Appendix 4 to Subparts B and C
Metabolic, nutritional and endocrine disorders
(See JAR–FCL 3.175 and 3.295)

1 Metabolic, nutritional or endocrinological dysfunction is disqualifying. Certification may be considered by the AMS if the condition is asymptomatic, clinically compensated and stable with or without replacement therapy, and regularly reviewed by an appropriate specialist.

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

3 The use of antidiabetic drugs is disqualifying. In selected cases, however, the use of biguanides or alpha-glucosidase inhibitors may be acceptable for multi-pilot operations (Class 1 ‘OML’) or unrestricted (Class 2) certification. The use of sulphonylureas may be acceptable for restricted Class 2 re-certification.
Appendix 4 to Subparts B & C (continued)

4 Addison’s disease is disqualifying. Re-certification (Class 1) or certification (Class 2) may be considered by the AMS, provided that cortisone is carried and available for use, whilst exercising the privileges of the licence. An “OML” or “OSL” limitation may be required.

5 The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

[Amdt. 2, 01.06.02]

Appendix 5 to Subparts B and C
Haematology
(See JAR–FCL 3.180 and 3.300)

1 Anaemias demonstrated by reduced haemoglobin level require investigation. Anaemia which is unamenable to treatment is disqualifying. Certification may be considered by the AMS in cases where the primary cause has been satisfactorily treated (e.g. iron deficiency or B12 deficiency) and haematocrit has stabilised at greater than 32%, or where minor thalassaemia or haemoglobinopathies are diagnosed without a history of crises and where full functional capability is demonstrated.

2 Lymphatic enlargement requires investigation. Certification may be considered by the AMS in cases of acute infectious process which is fully recovered or Hodgkin's lymphoma and Non Hodgkin’s lymphoma of high grade which has been treated and is in full remission. If chemotherapy has included anthracycline treatment, cardiological review shall be required (see Manual Aviation Cardiology, chapter 1, paragraph 10).

3 In cases of chronic leukaemia recertification may be considered by the AMS if diagnosed as lymphatic at stages O, I (and possibly II) without anaemia and minimal treatment, or ‘hairy cell’ leukaemia and are stable with normal haemoglobin and platelets. Regular follow-up is required. If chemotherapy has included anthracycline treatment, cardiological review shall be required (see Manual Aviation Cardiology, chapter 1, paragraph 10).

4 Splenomegaly requires investigation. The AMS may consider certification where the enlargement is minimal, stable and no associated pathology is demonstrable (e.g. treated chronic malaria), or if the enlargement is minimal and associated with another acceptable condition (e.g. Hodgkin’s lymphoma in remission).

5 Polycythaemia requires investigation. The AMS may consider restricted certification if the condition is stable and no associated pathology has been demonstrated.

6 Significant coagulation defects require investigation. The AMS may consider restricted certification if there is no history of significant bleeding or clotting episodes.

7 The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

[Amdt.1, 01.12.00]

Appendix 6 to Subparts B and C
Urinary system
(See JAR–FCL 3.185 and 3.305)

1 Any abnormal finding upon urinalysis requires investigation.

2 An asymptomatic calculus or a history of renal colic requires investigation. While awaiting assessment or treatment, the AMS may consider recertification with a multi-pilot limitation (Class 1 ‘OML’) or safety pilot limitation (Class 2 ‘OSL’). After successful treatment unrestricted certification may be considered by the AMS. For residual calculi, the AMS may consider recertification with a multi-pilot limitation (Class 1 ‘OML’), safety pilot limitation (Class 2 ‘OSL’), or unrestricted Class 2 recertification.
3. Major urological surgery is disqualifying for a minimum of three months. The AMS may consider certification if the applicant is completely asymptomatic and there is a minimal risk of secondary complication or recurrence.

4. Renal transplantation or total cystectomy is not acceptable for initial Class 1 certification. Recertification may be considered by the AMS in the case of:
   (a) renal transplant which is fully compensated and tolerated with minimal immuno-suppressive therapy after at least 12 months; and
   (b) total cystectomy which is functioning satisfactorily with no indication of recurrence, infection or primary pathology.

In both cases ‘multi-pilot’ (Class 1 ‘OML’) or ‘safety pilot’ (Class 2 ‘OSL’) restriction may be considered necessary.

5. The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

[Amtd. 1, 01.12.00]

Appendix 7 to Subparts B and C
Sexually transmitted diseases and other infections
(See JAR–FCL 3.190 and 3.310)

1. HIV positivity is disqualifying.

2. Recertification of HIV positive individuals to multi-pilot (Class 1 ‘OML’) or safety pilot (Class 2 ‘OSL’) operations may be considered by the AMS subject to frequent review. The occurrence of AIDS or AIDS related complex is disqualifying.

3. Acute syphilis is disqualifying. Certification may be considered by the AMS in the case of those fully treated and recovered from the primary and secondary stages.

4. The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

Appendix 8 to Subparts B and C
Gynaecology and obstetrics
(See JAR–FCL 3.195 and 3.315)

1. The AMS may approve certification of pregnant aircrew during the first 26 weeks of gestation following review of the obstetric evaluation. The AMS shall provide written advice to the applicant and the supervising physician regarding potentially significant complications of pregnancy (see Manual). Class 1 certificate holders shall be restricted to multi-pilot operations (Class 1 ‘OML’).

2. Major gynaecological surgery is disqualifying for a minimum of three months. The AMS may consider earlier recertification if the holder is completely asymptomatic and there is only a minimal risk of secondary complication or recurrence.

3. The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

Appendix 9 to Subparts B and C
Musculoskeletal requirements
(See JAR–FCL 3.200 and 3.320)
SECTION 1

Appendix 9 to Subparts B & C (continued)

1 Abnormal physique, including obesity, or muscular weakness may require medical flight or flight simulator testing approved by the AMS. Particular attention shall be paid to emergency procedures and evacuation. Restriction to specified type(s) or multi-pilot (Class 1 ‘OML’) or safety pilot (Class 2 ‘OSL’) operations may be required.

2 In cases of limb deficiency, recertification (Class 1) and certification (Class 2) may be considered by the AMS according to JAR-FCL 3.125 and following a satisfactory medical flight test or simulator testing.

3 An applicant with inflammatory, infiltrative, traumatic or degenerative disease of the musculoskeletal system may be considered for certification by the AMS. Provided the condition is in remission and the applicant is taking no disqualifying medication and has satisfactorily completed a medical flight or simulator flight test when necessary, restriction to specified type(s) or multi-pilot (Class 1 ‘OML’) or safety pilot (Class 2 ‘OSL’) operation may be required.

4 The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

[Amendment 1, 01.12.00]

Appendix 10 to Subparts B and C
Psychiatric requirements
(See JAR–FCL 3.205 and 3.325)

1 An established schizophrenia, schizotypal or delusional disorder is disqualifying. Certification may only be considered if the AMS concludes that the original diagnosis was inappropriate or inaccurate, or in the case of a single episode of delirium provided that the applicant has suffered no permanent impairment.

2 An established mood disorder is disqualifying. The AMS may consider certification after full consideration of an individual case, depending on the mood disorder characteristics and gravity and after all psychotropic medication has been stopped for an appropriate period.

3 A single self destructive action or repeated acts of deliberate self-harm are disqualifying. Certification may be considered by the AMS after full consideration of an individual case and may require psychological or psychiatric review. Neuropsychological assessment may be required.

4 Mental or behavioural disorders due to alcohol or other substance use, with or without dependency, are disqualifying. Certification may be considered by the AMS after a period of two years documented sobriety or freedom from drug use. Recertification may be considered earlier – multi-crew limitation (Class 1 OML) or safety pilot limitation (Class 2 OSL) may be appropriate. Depending on the individual case and at the discretion of the AMS, treatment and review may include:

(a) in-patient treatment of some weeks followed by]
(b) review by a psychiatric specialist acceptable to the AMS; and
(c) ongoing review including blood testing and peer reports, which may be required indefinitely.

[Amendment 3, 01.06.03]

Appendix 11 to Subparts B and C
Neurological requirements
(See JAR–FCL 3.210 and 3.330)

1 Any stationary or progressive disease of the nervous system which has caused or is likely to cause a significant disability is disqualifying. However, the AMS may consider minor functional losses, associated with stationary disease, acceptable after full evaluation.

2 A diagnosis of epilepsy is disqualifying, unless there is unequivocal evidence of a syndrome of benign childhood epilepsy associated with a very low risk of recurrence, and the applicant has been free of recurrence and off treatment for more than 10 years. One or more convulsive episodes after the age of 5 is disqualifying.
Appendix 11 to Subparts B & C (continued)

However, an acute symptomatic seizure which is considered by a consultant neurologist acceptable to the AMS to have a very low risk of recurrence may be accepted by the AMS.

3 Epileptiform paroxysmal EEG abnormalities and focal slow waves normally are disqualifying. Further evaluation shall be carried out by the AMS.

4 A history of one or more episodes of disturbance of consciousness of uncertain cause is disqualifying. A single episode of such disturbance of consciousness may be accepted by the AMS when satisfactorily explained but a recurrence is normally disqualifying.

5 An applicant having had a single afebrile epileptiform seizure which has not recurred after at least 10 years while off treatment, and where there is no evidence of continuing predisposition to epilepsy, may be granted a licence if the risk of a further seizure is considered in the limits acceptable to the AMS. For Class 1 certification an “OML” limitation shall be applied.

6 Any head injury which has been severe enough to cause loss of consciousness or is associated with penetrating brain injury must be assessed by the AMS and be seen by a consultant neurologist acceptable to the AMS. There must be a full recovery and a low risk (in the limits acceptable to the AMS) of epilepsy before re-certification is possible.

7 Consideration of applicants with a history of spinal or peripheral nerve injury shall be undertaken in conjunction with the musculo-skeletal requirements, Appendices and Manual Chapter.

8 The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system. All intracerebral malignant tumours are disqualifying.

[Amendment 2, 01.06.02]

Appendix 12 to Subparts B and C
Ophthalmological requirements

(See JAR–FCL 3.215 and 3.335)

1 (a) At the initial examination for a Class 1 certificate the ophthalmological examination shall be carried out by an ophthalmologist acceptable to the AMS or by a vision care specialist acceptable to the AMS. All abnormal and doubtful cases shall be referred to an ophthalmologist acceptable to the AMS.

(b) At the initial examination for a Class 2 certificate the examination shall be carried out by an ophthalmologist acceptable to the AMS or by a vision care specialist acceptable to the AMS or, at the discretion of the AMS, by an AME. Applicants requiring visual correction to meet the standards shall submit a copy of the recent spectacle prescription.

2 At each aeromedical recertification or renewal examination an assessment of the visual fitness of the licence holder shall be performed and the eyes shall be examined with regard to possible pathology. All abnormal and doubtful cases shall be referred to an ophthalmologist acceptable to the AMS.

3 Owing to the differences in provision of optometrist services across the JAA Member States, for the purposes of these requirements, each nation’s AMS shall determine whether the training and experience of its vision care specialists is acceptable for these examinations.

4 Conditions which indicate specialist 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.

5 The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

[Amendment 3, 01.06.03]
Appendix 13 to Subparts B and C
Visual requirements
(See JAR–FCL 3.215, 3.220, 3.335 and 3.340)

1 Refraction of the eye and functional performance shall be the index for assessment.

2 (a) Class 1. If the refractive error is within the range ±5 dioptres the AMS may consider Class 1 certification if:

   (1) no significant pathology can be demonstrated;
   (2) optimal correction has been considered.

   (b) Class 1. If the refractive error is within the range –5/-8 dioptres at the renewal or recertification examinations the AMS may consider re-certification provided that:

   (1) no significant pathology can be demonstrated;
   (2) optimal correction has been considered;
   (3) the ametropy is not caused by ocular pathology;
   (4) 2 yearly review is undertaken by an ophthalmologist or vision care specialist acceptable to the AMS.

   (c) Class 2. If the refractive error is within the range –5/-8 dioptres, the AMS may consider Class 2 certification provided that:

   (1) no significant pathology can be demonstrated;
   (2) optimal correction has been considered;
   (3) the ametropy is not caused by ocular pathology;
   (4) 5 yearly review is undertaken by an ophthalmologist or vision care specialist acceptable to the AMS.

3 The AMS may consider re-certification after diagnosis of a keratoconus provided that:

   (a) the visual requirements are met with the use of corrective lenses;
   (b) 6-monthly review is undertaken by an ophthalmologist acceptable to the AMS.

4 (a) Monocularly entails unfitness for a Class 1 certificate. The AMS may consider recertification for a Class 2 certificate if the underlying pathology is acceptable according to ophthalmic specialist assessment and subject to a satisfactory flight test.

   (b) Central vision in one eye below the limits stated in JAR–FCL 3.220 may be considered for Class 1 recertification if the binocular visual field is normal and the underlying pathology is acceptable according to ophthalmic specialist assessment. A satisfactory flight test is required and operations limited to multi-pilot (Class 1 ‘OML’) only.

   (c) In case of reduction of vision in one eye to below the limits stated in JAR–FCL 3.340 Class 2 recertification may be considered if underlying pathology and the visual ability of the remaining eye are acceptable following ophthalmic evaluation acceptable to the AMS and subject to a satisfactory medical flight test, if indicated.

5 Heterophorias. The applicant/certificate holder shall be reviewed by an ophthalmologist acceptable to the AMS. The fusional reserves shall be tested using a method acceptable to the AMS (e.g. Goldman Red/Green binocular fusion test).

6 After refractive surgery, certification for Class 1 and for Class 2 may be considered by the AMS provided that:

   (a) pre-operative refraction (as defined in JAR-FCL 3.220(b) and 3.340(b)) was less than 5 dioptres for Class 1 and less than +5/-8 dioptres for Class 2;
   (b) satisfactory stability of refraction has been achieved (less than 0.75 dioptres variation diurnally);
Appendix 13 to Subparts B & C (continued)

(c) examination of the eye shows no postoperative complications;
(d) glare sensitivity is within normal standards; and
(e) mesopic contrast sensitivity is not impaired.

7 (a) Cataract surgery. Certification for Class 1 and for Class 2 may be considered by the AMS after 3 months, provided that the visual requirements are met either with contact lenses or with intraocular lenses.

(b) Retinal surgery. Re-certification for Class 1 and certification for Class 2 may be considered by the AMS normally 6 months after successful surgery. The applicant should be re-examined by an ophthalmologist annually.

(c) Glaucoma surgery. Re-certification for Class 1 and certification for Class 2 may be considered by the AMS normally 6 months after successful surgery. The applicant should be re-examined by an ophthalmologist semi-annually.

Appendix 14 to Subparts B and C
Colour perception
(See JAR–FCL 3.225 and 3.345)

1 The Ishihara test (24 plate version) is to be considered passed if the first 15 plates are identified without error, without uncertainty or hesitation (less than 3 seconds per plate). These plates shall be presented randomly. For lighting conditions see the JAA Manual of Civil Aviation Medicine.

2 Those failing the Ishihara test shall be examined either by:

   (a) 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 by

   (b) Lantern testing. This test is considered passed if the applicant passes without error a test with lanterns acceptable to the AMS such as Holmes Wright, Beynes, or Spectrolux.

Appendix 15 to Subparts B and C
Otorhinolaryngological requirements
(See JAR–FCL 3.230 and 3.350)

1 At the initial examination a comprehensive ORL examination shall be carried out by or under the guidance and supervision of a specialist in aviation otorhinolaryngology acceptable to the AMS.

2 (a) At revalidation or renewal examinations all abnormal and doubtful cases within the ENT region shall be referred to a specialist in aviation otorhinolaryngology acceptable to the AMS.

   (b) At intervals stated in JAR–FCL 3.230(b) the revalidation or renewal examination shall include a comprehensive ORL examination carried out by or under the guidance and supervision of a specialist in aviation otorhinolaryngology acceptable to the AMS.

3 A single dry perforation of non-infectious origin and which does not interfere with the normal function of the ear may be considered acceptable for certification.

4 The presence of spontaneous or positional nystagmus shall entail complete vestibular evaluation by a specialist acceptable to the AMS. In such cases no significant abnormal caloric or rotational vestibular responses can be accepted. At revalidation or renewal examinations abnormal vestibular responses shall be assessed in their clinical context by the AMS.

5 The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.
Appendix 16 to Subparts B and C
Hearing requirements
(See JAR–FCL 3.235 and 3.355)

1 The pure tone audiogram shall cover [ ] the frequencies from [500 – 3000] Hz. Frequency thresholds shall be determined as follows:

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
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<tbody>
<tr>
<td>500 Hz</td>
</tr>
<tr>
<td>1 000 Hz</td>
</tr>
<tr>
<td>2 000 Hz</td>
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<tr>
<td>3 000 Hz</td>
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</tbody>
</table>

2 (a) Cases of hypoacusis shall be referred to the AMS for further evaluation and assessment.

(b) If satisfactory hearing in a noise field corresponding to normal flight deck working conditions during all phases of flight can be demonstrated, recertification may be considered by the AMS.

[Amdt. 4, 01.08.05]

Appendix 17 to Subparts B and C
Psychological requirements
(See JAR–FCL 3.240 and 3.360)

1 Indication. A psychological evaluation should be considered as part of, or complementary to, a specialist psychiatric or neurological examination when the Authority receives verifiable information from an identifiable source which evokes doubts concerning the mental fitness or personality of a particular individual. Sources for this information can be accidents or incidents, problems in training or proficiency checks, delinquency or knowledge relevant to the safe exercise of the privileges of the applicable licences.

2 Psychological Criteria. The psychological evaluation may include a collection of biographical data, the administration of aptitude as well as personality tests and psychological interview.

Appendix 18 to Subparts B and C
Dermatological requirements
(See JAR–FCL 3.245 and 3.365)

1 Any skin condition causing pain, discomfort, irritation or itching can distract flight crew from their tasks and thus affect flight safety.

2 Any skin treatment, radiant or pharmacological, may have systemic effects which must be considered before assessing fit/unfit or restricted to multi-pilot (Class 1 ‘OML’)/safety pilot (Class 2 ‘OSL’) operations.

3 Malignant or Pre-malignant Conditions of the Skin

(a) Malignant melanoma, squamous cell epithelioma, Bowens disease and Pagets disease are disqualifying. Certification may be considered by the AMS if, when necessary, lesions are totally excised and there is adequate follow-up.

(b) Basal cell epithelioma or rodent ulcer, keratoacanthoma and actinic keratoses will require treatment and/or excision in order to maintain certification.

4 Other skin conditions:

(a) Acute or widespread chronic eczema,

(b) Skin reticulosis,

(c) Dermatological aspects of a generalised condition,

and similar conditions require consideration of treatment and any underlying condition before assessment by the AMS.
Appendix 18 to Subparts B & C (continued)

5 The assessment of malignant conditions in this system is also explained in the Oncology Chapter of the Manual which provides information regarding certification and should be consulted together with the Chapter specific to this system.

Appendix 19 to Subparts B and C
Oncology Requirements
(See JAR-FCL 3.246 and 3.370)

1 Class 1 certification may be considered by the AMS and Class 2 certification may be considered by the AME in consultation with the AMS if:
   (a) There is no evidence of residual malignant disease after treatment;
   (b) Time appropriate to the type of tumour has elapsed since the end of treatment;
   (c) The risk of inflight incapacitation from a recurrence or metastasis is within limits acceptable to the AMS;
   (d) There is no evidence of short or long-term sequelae from treatment. Applicants who have received anthracycline chemotherapy shall require cardiological review;
   (e) Arrangements for follow-up are acceptable to the AMS.

2 Multi-pilot (Class 1 OML) for recertification or safety pilot (Class 2 OSL) restriction may be appropriate.

[Amndt. 2, 01.06.02]