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

INTENTIONALLY LEFT BLANK

SUBPART A - GENERAL REQUIREMENTS

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.

[Amdt. 2, 01.06.02; Amdt. 3, 01.06.03; Amdt. 4, 01.08.05]

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.

 $[Amdt.\ 2,\ 01.06.02;\ Amdt.\ 3,\ 01.06.03;\ Amdt.\ 4,\ 01.08.05]$

JAR-FCL 3.035 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

JAR-FCL 3.035 (continued)

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 1 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 FE Class 1 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[] 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)[(1)] Holders of medical certificates who are aware of:
 - [][(i)] any significant personal injury involving incapacity to function as a member of a flight crew; or
 - [][(ii)] any illness involving incapacity to function as a member of a flight crew throughout a period of 21 days or more; or
 - [][(iii)]being pregnant, shall inform the Authority [or the AME, who shall subsequently 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 [][.]
 - [][(2)] [][In] the case of injury or illness the suspension shall be lifted upon the holder [by the AME in consultation with the Authority] being medically [][assessed by the AME] or 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

JAR-FCL 3.040(d)(2) (continued)

thinks [][appropriate], the holder from the requirement of a medical examination[][.]

[][(3)] [][In] the case of pregnancy, the suspension may be lifted [][by the AME in consultation with the Authority] for such period and subject to such conditions as it thinks [][appropriate] (see JAR-FCL 3.195(c) and 3.315(c))[][If an AME assesses a pregnant Class 1 pilot as fit Class 1, a multi-pilot (Class 1 "OML") limitation shall be entered. The suspension shall cease upon the holder being medically assessed by the AME – after the pregnancy has ended – and being pronounced fit. Following fit assessment by an AME at the end of pregnancy, the relevant multi-pilot (Class 1 "OML") limitation may be removed by the AME, informing the Authority].

[Amdt.1, 01.12.00; Amdt. 5, 01.12.06]

JAR-FCL 3.045 Special circumstances (See AMC FCL 3.045)

 Π

[Amdt.5, 01.12.06]

[JAR-FCL 3.046 Special medical circumstances

When a new medical technology, medication or procedure is identified that may justify a fit assessment of applicants otherwise not in compliance with the requirements, an Authority, in cooperation with at least one other Authority, may form a Research and Development Working Group (REDWIG) to develop and evaluate a new medical assessment protocol. The protocol shall include a risk assessment. The protocol shall be endorsed by the LST on the recommendation of the Licensing SubSectorial Team (Medical). Further guidance is given in the relevant guidance material and associated procedures. The exercise of licence privileges based on the protocol will be limited to flights in aircraft registered in States that permit it. The relevant licence, and, if appropriate, medical certificate, shall be endorsed under item XIII with the statement "Issued as a deviation in accordance with JAR-FCL 3.046".]

[Amdt.5, 01.12.06]

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.

[Amdt. 1, 01.12.00; Amdt. 3, 01.06.03; Amdt. 4, 01.08.05]

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

JAR-FCL 3.065(d) (continued)

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.

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

JAR-FCL 3.080 Aeromedical Section (AMS)

- (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 [only] to [][the] AMS, [AMC or AME handling the application and][] for [the purpose of] completion of a medical assessment. The applicant or his physician shall have access to all such documentation in accordance with national law.

[Amdt. 5, 01.12.06]

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 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 [acceptable to the Authority]. 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). [The basic training in Aviation Medicine shall be acceptable to the Authority.]
 - (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 [][authorised] as an AME for Class 2 examinations by an AMS.

JAR-FCL 3.090(d) (continued)

- (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. [The advanced training in Aviation Medicine shall be acceptable to the Authority.]

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 [][authorised] 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 []refresher training [acceptable to the Authority]. 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

JAR-FCL 3.090 (f) (continued)

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.

[(g) Transitional Arrangement. Authorised Medical Examiners (AMEs) appointed prior to implementation of JAR-FCL 3 will be required to attend training in the requirements and documentation of JAR-FCL Part 3 (Medical) but may continue at the discretion of the Authority to exercise the privileges of their authorization without completion of JAR-FCL 3.090(d)(1) & (2).]

[Amdt. 2, 01.06.02; Amdt. 4, 01.08.05; Amdt. 5, 01.12.06]

[JAR-FCL 3.091 Aeromedical examinations and assessment - General

- (a) Compliance with JARs. The examinations and assessments shall be carried out in accordance with the relevant requirements of JAR-FCL 3 and associated procedures.
- (b) Reference material. Subparts B and C contain the requirements for Class 1 and Class 2 applicants, respectively. The Appendices to Subparts B and C contain the requirements for those applicants outside the limits of Subparts B or C for Class 1 and Class 2 applicants, respectively. The JAA Manual of Civil Aviation Medicine [], but contains descriptions of good medical and aeromedical practice and the procedures that may be applied in aeromedical examinations and assessments.]

[Amdt., 01.12.06]

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

JAR-FCL 3.095 (c) (continued)

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).

[Amdt.1, 01.12.00]

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) [][Expiry date of the medical certificate
 - (a) For Class 1:
 - (i) expir date (single pilot commercial air transport operations carrying passengers);
 - (ii) expiry date (other commercial operations);
 - (iii) expiry date of previous medical certificate:
 - (b) For Class 2:
 - (i) expiry date of the medical certificate;
 - (ii) expiry date of previous medical certificate].
 - (7) Date of [][previous] medical examination
 - (8) Date of last electrocardiography
 - (9) Date of last audiometry
 - (10) Limitations, conditions and/or variations
 - (11) AME[/AMC/AMS] name, number and signature
 - (12) Date of [] examination

JAR-FCL 3.095 (continued)

- (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.

(d) Disposition of certificate

- (1) A medical certificate shall be issued, in duplicate if necessary, to the person examined once the examination is completed and a fit assessment made.
- (2) The holder of a medical certificate shall submit it to the AMS for further action if required (see IEM FCL 3.100).
- (3) The holder of a medical certificate shall present it to the AME at the time of the revalidation or renewal of that certificate (see IEM FCL 3.100).
- (e) Certificate annotation, limitation or suspension
 - (1) When a review has been performed and a [][medical certificate has been issued] in accordance with Paragraph JAR-FCL 3.125 [][any limitation that may be required] shall be stated on the medical certificate (see IEM FCL 3.100)[].
 - (2) Following a medical certificate renewal examination, the AMS may, for medical reasons duly justified and notified to the applicant and the AMC or AME, limit or suspend a medical certificate issued by the AMC or by the AME.

(f) Denial of Certificate

- (1) An applicant who has been denied a medical certificate will be informed of this in writing in accordance with IEM FCL 3.100 and of his right of review by the Authority.
- (2) Information concerning such denial will be collated by the Authority within 5 working days and be made available to other Authorities. Medical information supporting this denial will not be released without prior consent of the applicant.

[Amdt.1, 01.12.00; Amdt. 2, 01.06.02; Amdt 5, 01.12.06]

INTENTIONALLY LEFT BLANK

JAR-FCL 3.100(d) (continued)

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 [[[applicants]] who
 - [(i) are engaged in single-pilot commercial air transport operations carrying passengers and have passed their 40th birthday, or

(ii) have passed their 60th birthday]

[][the period of validity shall be reduced to 6 months.] This increase in frequency after the 40th birthday does not apply to flight engineers.

- (2) Class 2 medical certificates, 60 months until age [][40], 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 [][40th] birthday will not be valid for Class 2 privileges after his [][42nd] birthday.
- [(5) The period of validity of the medical certificate may be reduced when clinically indicated.]

(b) Revalidation.

- [(1)] If the medical revalidation is taken up to 45 days prior to the expiry date calculated in accordance with (a), the [][expiry] of the new certificate [][is calculated by adding] the period stated in (a)(1) or (2)[][, as applicable, to the expiry date of the previous medical certificate.]
- [(2) A medical certificate revalidated prior to its expiry becomes invalid once a new certificate has been issued.]
- (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

JAR-FCL 3.105 (continued)

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.

[Amdt. 3, 01.06.03; Amdt. 4, 01.08.05; Amdt 5, 01.12.06]

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 [] or other treatments

(a) A medical certificate holder who is taking any prescription or non-prescription medication [] or who is receiving any medical, surgical, or other treatment shall comply with the requirements of JAR-FCL 3.115 (continued)

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.

[Amdt.1, 01.12.00; Amdt. 5, 01.12.06]

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 [][Delegation of Fit Assessment, Review Policy and Secondary Review]

(a) [][Delegation of fit assessment]

[(1)] 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 [[[applicant] under certain conditions ([] [in accordance with the Appendices to Subparts B and C]) [[[[may] be [] [assessed as] fit, [the Authority may do so. Such fit assessments may

JAR-FCL 3.125(a) continued

- be] [][done by the AMC or AME in consultation with the Authority].
- [(2) An AMC or AME, that assesses an applicant as fit at discretion of the Authority as in (a)(1), shall inform the Authority of the details of such assessment.]

[(b) Review Policy]

- The [][Authority] may issue, revalidate or renew a medical certificate after due consideration has been given to the requirements, acceptable means of compliance and guidance material[, expert aeromedical opinion and, if appropriate, the opinion of other relevant experts familiar with the operational environment] 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;
 - $\hspace{1.5cm} \textbf{(3)} \hspace{0.3cm} \text{a medical flight test, if appropriate;} \\ \text{and} \hspace{0.3cm}$
 - (4) the requirement for application of any limitations[] to the medical certificate and licencec [(see JAR-FCL 3.100 (e)(1) ans IEM 3.100 (c))].

Where the issue of a certificate will require more than one limitation[] the additive and interactive effects upon flight safety must be considered by the [][Authority] before a certificate can be issued.

[][(c)] 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.

[Amdt. 5, 01.12.06]

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

Amendment 5 1-A-8 01.12.06

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. []
- (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 years 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 years, 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; Amdt. 5, 01.12.06]

INTENTIONALLY LEFT BLANK

01.12.06 1-A-9 Amendment 5

INTENTIONALLY LEFT BLANK

SUBPART B - CLASS 1 MEDICAL REQUIREMENTS

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 at all revalidation or renewal examinations] 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 [AME, or other] 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 the 40th birthday] (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.

[Amdt.1, 01.12.00; Amdt. 4, 01.08.05; Amdt 5, 01.12.06]

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 [at each examination].
- (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 [][medication] shall require a period of temporary suspension of the medical

JAR-FCL 3.135(c) (continued)

certificate to establish the absence of significant side effects.

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

[Amdt. 5, 01.12.06]

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 [][assessed as] 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) [a fit assessment for] initial Class 1 [][applicants] is not possible. [][At revalidation or renewal a fit assessment] may be considered by the AMS if the investigations in paragraph 6 Appendix 1 to Subpart B are completed satisfactorily.

[Amdt.1, 01.12.00; Amdt. 4, 01.08.05; Amdt. 5, 01.12.06]

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.

JAR-FCL 3.145 (continued)

- (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.
- (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 B.
- (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 B.

[Amdt. 4, 01.08.05]

JAR-FCL 3.150 Cardiovascular system – General

- (a) Applicants with peripheral arterial disease before or after surgery shall be assessed as unfit. Provided there is no significant functional impairment, a fit assessment may be considered by the AMS subject to compliance with paragraphs 5 and 6, Appendix 1 to Subpart B.
- (b) Applicants with aneurysm of the thoracic or abdominal aorta, before or after surgery, shall be assessed as unfit. Applicants with aneurysm of the infra-renal abdominal aorta may be [][assessed]

JAR-FCL 3.150(b) (continued)

- as fit] by the AMS at renewal or revalidation examinations, subject to compliance with paragraph [][8] Appendix 1 to Subpart B.
- (c) Applicants with significant abnormality of any of the heart valves shall be assessed as unfit.
 - (1) Applicants with minor cardiac valvular abnormalities may be assessed as fit by the AMS subject to compliance with paragraph [1][9] (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 [][9] (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 [][10] 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 [][11] 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 [][12] 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 [][13] Appendix 1 to Subpart B.

[Amdt.1, 01.12.00; Amdt. 5, 01.12.06]

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

JAR-FCL 3.155(b) (continued)

safe exercise of the privileges of the applicable licence(s).

- (b) Posterior/anterior chest radiography [][may be] required at []initial[, revalidation or renewal] examination[s] []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 [and on clinical indication].[] Applicants with significant impairment of pulmonary function (see paragraph 1 Appendix 2 to Subpart B) shall be assessed as unfit.

[Amdt. 5, 01.12.06]

JAR-FCL 3.160 Respiratory system Disorders

- (a) Applicants with chronic obstructive airway disease shall be assessed as unfit. [Applicants with only minor impairment of their pulmonary function may be assessed as fit.]
- (b) Applicants with [][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; Amdt.5, 01.12.06]

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 []completely free from []herniae that might give rise to incapacitating symptoms.
- (e) Applicants with any [][sequelae] of disease or surgical intervention in any part of the digestive tract or its adnexa likely to cause incapacitation in flight, in particular any obstruction due to stricture or compression, shall be assessed as unfit.
- (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; Amdt.5, 01.12.06]

JAR-FCL 3.175 Metabolic, nutritional and endocrine [][systems]

- (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 [and 4] Appendix 4 to Subpart B.

JAR-FCL 3.175 (continued)

(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 ≥ 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; Amdt.5, 01.12.06]

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 [][. Applicants with abnormal haemoglobin shall be investigated. Applicants] 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, [[applicants] may be [][assessed as fit] by the AMS. [][Applicants] with chronic leukaemias shall be assessed as unfit. [][After a period of demonstrated stability a fit assessment may be considered by the AMS. 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).

 $[Amdt.1,\,01.12.00;\,Amdt.5,\,01.12.06]$

JAR-FCL 3.185(a) (continued)

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 [by AMS, AMC or AME]. 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 []period of three months [][or] until such time as the effects of the operation are not likely to interfere with the safe exercise of the privileges of the licence(s) (see paragraph 2 Appendix 8 to Subpart B).

[Amdt.5, 01.12.06]

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 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 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.

[Amdt. 3, 01.06.03]

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 [] when indicated by the applicant's history or on clinical grounds [(see Appendix 11 to Subpart B)].

[Amdt.2, 01.06.02; Amdt.5, 01.12.06]

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 [by an ophthalmologist or a vision care specialist acceptable to the AMS (All abnormal and doubtful cases shall be referred to an ophthalmologist acceptable to the AMS)] is required at the initial examination [] 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 [][after the 40th birthday];
 - (8) Examination of the external eye, anatomy, media [(slit lamp)] and fundoscopy. [
- (c) A routine eye examination [may be performed by an AME. It] 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) [][Examination of the external eye, anatomy, media and fundoscopy];
 - (4) Further examination on clinical indication [(see paragraph 4 Appendix 12 to Subpart B)].
- (d) Where, in certificate holders the functional performance standards (6/9 [(0,7)], []6/6 [(1,0)], N14, N5) can only be reached with corrective lenses[][and the refractive error exceeds

JAR-FCL 3.215(d) (continued)

± 3 diopters,] 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).

[][If the refractive error is within the range not exceeding +5 to -6 diopters, then [this] examination must have been carried out within 60 months prior to the general medical examination. If the refractive error is outside this range, then this examination must have been carried out within 24 months prior to the 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)]Visual fields;

- [][(6)]Tonometry [][after the 40th birthday];
- [](7)]Examination of the external eye, anatomy, media [(slit lamp)] and fundoscopy. [

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) Class 1 certificate holders after the 40th birthday should undergo tonometry 2-yearly or submit a report of a tonometry which must have been carried out within 24 months prior to the examination.]
- [][(f)]Where [][specialist] ophthalmological examinations are required for any [significant] 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; Amdt.5, 01.12.06]

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

JAR-FCL 3.220(a) (continued)

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 [][assessed as] fit with respect to refractive errors if they meet the following requirements:

(1) Refractive error

- (i) At the initial examination the refractive error shall [][be within the range of +5 to -6] 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 [a] refractive [][error not exceeding] [][+5] dioptres [or with a high myopic refractive error exceeding -6 dioptres] may be [][assessed as] fit by the AMS (see paragraph 2 (b) Appendix 13 to Subpart B).
- [(iii) Applicants with a large refractive error shall use contact lenses or high-index spectacle lenses.]

(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 [][revalidation] or renewal examinations, an applicant experienced to the satisfaction of the Authority with a refractive error with an astigmatic component []exceeding [][3,0] dioptres may be [][assessed as] fit by the AMS [(see paragraph 3 Appendix 13 to Subpart B)].
- (3) Keratoconus is disqualifying. The AMS may consider [][a fit assessment for revalisation or renewal] if the applicant meets the []requirements [for visual acuity] (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.

JAR-FCL 3.220 (4) (continued)

- (ii) At [][revalidation] or renewal examinations, an applicant experienced to the satisfaction of the Authority with a difference in refractive error between the two eyes [(anisometropia)][] to [exceeding] [][3,0] dioptres may be [][assessed as] fit by the AMS. [Contact lenses shall be worn if the anisometropia exceeds 3,0 dioptres (see paragraph 5 Appendix 13 to Subpart B).]
- (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 [[Centimetres] and N14 chart (or equivalent) at 100 [][Centimetres], 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 [](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;
 - []1,0] prism dioptre in hyperphoria at 33 cms,
 - [[[8,0] 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 [abnormal] visual fields []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 [well-tolerated and] suitable for aviation purposes. [If contact lenses are worn they shall be monofocal and for distant vision. Orthokeratologic lenses shall not be used.]
 - (2) Correcting lenses, when worn for aviation purposes, shall permit the licence holder to meet the visual requirements at all

01.12.06 1-B-7 Amendment 5

JAR-FCL 3.220(g) (continued)

distances. No more than one pair of spectacles shall be used to meet the requirement.

- [(3) Contact lenses, when worn for aviation purposes, shall be monofocal and non-tinted.]
- [][(4)]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. [][A fit assessment] may be considered by the AMS (see paragraph 6 Appendix 13 to Subpart B).
- (2) Cataract surgery, retinal surgery and glaucoma surgery entail unfitness. [][At revalidation / renewal a fit assessment] may be considered by the AMS (see paragraph 7 Appendix 13 to Subpart B).

[Amdt.3, 01.06.03; Amdt.5, 01.12.06]

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. [At the initial examination applicants have to pass the Ishihara test.] Applicants who fail Ishihara's test shall 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 B). [At revalidation or renewal colour vision needs only to be tested on clinical grounds.]
- (c) An applicant who fails the acceptable colour perception tests is to be considered colour unsafe and shall be assessed as unfit.

[Amdt.5, 01.12.06]

JAR-FCL 3.230 Otorhinolaryngological requirements

(a) An applicant for or holder of a Class 1 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

JAR-FCL 3.230(a) (continued)

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 is required at the initial examination and subsequently [on clinical indication][] ([][comprehensive] examination see paragraph 1 and 2 Appendix 15 to Subpart B) [and shall include:
 - (1) History.
 - (2) Clinical examination including otoscopy, rhinoscopy, and examination of the mouth and throat.
 - (3) Tympanometry or equivalent.
 - (4) Clinical assessment of the vestibular system.

All abnormal and doubtful cases within the ENT region shall be referred to a specialist in aviation otorhinolaryngology acceptable to the AMS.1

- (c) A routine Ear-Nose-Throat examination shall form part of all revalidation and renewal examinations (see Appendix 15 to Subpart B).
- (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 B).
 - (3) Disturbances of vestibular function (see paragraph 4 Appendix 15 to Subpart B).
 - (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.

[Amdt.5, 01.12.06]

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.

JAR-FCL 3.235 (continued)

- (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).
- (c) [][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.]

[]

[][(d)] 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).

[Amdt.4, 01.08.05; Amdt.4, 01.12.06]

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):
 - (1) Eczema (Exogenous and Endogenous),
 - (2) Severe Psoriasis,

JAR-FCL 3.245(b) (continued)

- (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.

[Amdt. 2, 01.06.02]

INTENTIONALLY LEFT BLANK

SUBPART C - CLASS 2 MEDICAL REQUIREMENTS

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 [AME or other] 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 the 40th birthday and on clinical indication (see paragraph 2 Appendix 1 to Subpart C)].

[Amdt.4, 01.08.05; Amdt.5, 01.12.06]

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 [at each examination].
- (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 C. The initiation of [][medication] 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.

[Amdt.5, 01.12.06]

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 [][assessed as] 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) [a fit assessment for] Class 2 [][applicants] may be considered by the AMS if the investigations in paragraph 6 Appendix 1 to Subpart C are completed satisfactorily.

[Amdt.1, 01.12.00; Amdt.4, 01.08.05; Amdt..5, 01.12.06]

JAR-FCL 3.265 Cardiovascular system – Rhythm/conduction disturbances

- (a) Applicants with disturbance of supraventricular rhythm, including sinoatrial dysfunction, whether intermittend 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 bundle branch block require cardiological evaluation on first presentation and subsequently in compliance with appropriate items in paragraph 7 Appendix 1 to Subpart C.
- (f) Applicants with complete left bundle branch block shall be assessed as unfit. A fit assessment may be considered by the AMS in

JAR-FCL 3.265 (continued)

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 Cardiovascular system – General

- (a) Applicants with peripheral arterial disease before or after surgery shall be assessed as unfit. Provided there is no significant functional impairment a fit assessment may be considered by the AMS subject to compliance with paragraphs 5 and 6, Appendix 1 to Subpart C.
- (b) Applicants with aneurysm of the thoracic or abdominal aorta, before or after surgery, shall be assessed as unfit. Applicants with infra-renal abdominal aortic aneurysm may be [][assessed as] fit by the AMS subject to compliance with paragraph [][8] Appendix 1 to Subpart C.
- (c) Applicants with significant abnormality of any of the heart valves shall be assessed as unfit.
 - (1) Applicants with minor cardiac valvular abnormalities may be assessed as fit by the AMS subject to compliance with paragraph [][9](a) and (b) Appendix 1 to Subpart C.
 - (2) Applicants with cardiac valve replacement/repair shall be assessed as unfit. A fit assessment may be considered by the AMS

JAR-FCL 3.270(c) (continued)

subject to compliance with paragraph [][9](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 [][10] 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 [[111] 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 in compliance with paragraph [112] 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 [][13] Appendix 1 to Subpart C.

 $[Amdt.1,\,01.12.00;\,Amdt.5,\,01.12.06]$

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) [][Pulmonary function tests (see paragraph 1 Appendix 2 to Subpart C) are required on clinical indication only.] Applicants with significant impairment of pulmonary function shall be assessed as unfit (see paragraph 1 Appendix 2 to [][Subpart] C).

[Amdt.5, 01.12.06]

INTENTIONALLY LEFT BLANK

JAR-FCL 3.280 Respiratory system - Disorders

- (a) Applicants with chronic obstructive airway disease shall be assessed as unfit. [Applicants with only minor impairment of their pulmonary function may be assessed as fit.]
- (b) Applicants with [][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.

[Amdt.1, 01.12.00; Amdt.5, 01.12.06]

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 [recurrent] 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

JAR-FCL 3.290(b) (continued)

compliance with paragraph 2 Appendix 3 to subpart B and C.

- (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 []completely free from [][herniae] that might give rise to incapacitating symptoms.
- (e) Applicants with any [][sequelae] 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).

[Amdt.4, 01.08.05; Amdt.5, 01.12.06]

JAR-FCL 3.295 Metabolic, nutritional and endocrine [][systems]

- (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 [and 4] 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).

[Amdt. 2, 01.06.02; Amdt.5, 01.12.06]

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. [][Applicants with abnormal haemoglobin shall be investigated. Applicants] 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 [][applicants] may be [][assessed as fit] by the AMS. [][Applicants] with chronic leukaemia shall be assessed as unfit. [][After a period of demonstrated stability a fit assessment may be considered by the AMS.] [][(S]ee 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).

[Amdt.1, 01.12.00; Amdt.5, 01.12.06]

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

JAR-FCL 3.305(b) (continued)

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).

[Amdt.1, 01.12.00]

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).

JAR-FCL 3.315 (continued)

- (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 C [by AMS, AMC or AME]. 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 []period of three months [][or] until such time as the effects of the operation are not likely to interfere with the safe exercise of the privileges of the licence(s) (see paragraph 2 Appendix 8 to Subpart C).

[Amdt.5, 01.12.06]

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 10 to Subpart C):

JAR-FCL 3.325(b) (continued)

- (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.

[Amdt.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.

 $[Amdt.2,\,01.06.02]$

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 [by an ophthalmologist or a vision care specialist acceptable to the AMS or, at the discretion of the

JAR-FCL 3.335(b) (continued)

AMS, by an AME (All abnormal doubtful cases shall be referred to an ophthalmologist acceptable to the AMS)] 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[] [and] 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 [may be performed by an AME. It] 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 and 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).

[Amdt.3, 01.06.03; Amdt.5, 01.12.06]

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 [][assessed as] 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 to

JAR-FCL 3.340(b) (continued)

- -8] dioptres (see paragraph 2 (c) Appendix 13 to Subpart C).
- (ii) At [][revalidation] or renewal examinations, an applicant experienced to the satisfaction of the Authority with refractive [][error not exceeding] [][+5 dioptres or a high myopic refractive error exceeding -8 dioptres] may be [][assessed as] fit by the AMS (see paragraph 2 (c) Appendix 13 to Subpart C).
- [(iii) Applicants with a large refractive error shall use contact lenses or high-index spectacle lenses.]

(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 [][revalidation] 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 [][assessed as] fit by the AMS.
- (3) Keratoconus is disqualifying. The AMS may consider [][a fit assessment] if the applicant meets the []requirements [for visual acuity] (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 [][(0,3)] or better. The applicant may be [assessed] as fit provided the visual acuity in the other eye is 6/6 [(1,0)] or better[, with or without correction,] and no [significant] pathology []can be demonstrated.

(5) Anisometropia

- (i) In an initial applicant the difference in refractive error between the two eyes (anisometropia) shall not exceed [1][3,0] dioptres.
- (ii) At [][revalidation] 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 [][assessed as] 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

JAR-FCL 3.335(b) (continued)

- (7) An applicant shall be able to read N5 chart (or equivalent) at 30–50 [[Centimetres] and N14 chart (or equivalent) at 100 [][Centimetres], 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. [](see paragraph 4 Appendix 13 to Subpart C).
- (d) An applicant with diplopia shall be assessed as unfit.
- (e) An applicant with [abnormal] visual fields []shall be assessed as unfit (see paragraph 4 Appendix 13 to Subpart C).
 - (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 [well-tolerated and] suitable for aviation purposes. [If contact lenses are worn they shall be monofocal and for distant vision. Orthokeratologic lenses shall not be used.]
 - (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) Contact lenses, when worn for aviation purposed, shall be monofocal and non-tinted.]
 - [][(4)]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. [][A fit assessment] may be considered by the AMS (see paragraph 6 Appendix 13 to Subpart C).
 - (2) Cataract surgery, retinal surgery and glaucoma surgery entail unfitness. [][A fit assessment] may be considered by the AMS [at revalidation or renewal] (see paragraph 7 Appendix 13 to Subpart C).

[Amdt.3, 01.06.03; Amdt.5, 01.12.06]

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).

JAR-FCL 3.345 (continued)

- (b) An applicant shall have normal perception of colours or be colour safe. [At the initial examination applicants have to pass the Ishihara test.] Applicants who fail Ishihara's test [][shall] 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). [At revalidation or renewal colour vision needs only to be tested on clinical grounds.]
- (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 [] as fit to fly by day only.

[Amdt.3, 01.06.03; Amdt.5, 01.12.06]

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

JAR-FCL 3.350 (continued).

(6) Significant disorder of speech or voice.

[Amdt.5, 01.12.06]

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)][][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.[]
- [][(2)]At [][revalidation] 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).

 $[Amdt.3,\,01.06.03;\,Amdt.4,\,01.08.05\;;\,Amdt..5,\,01.12.06]$

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.

JAR-FCL 3.360 (continued)

(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]

INTENTIONALLY LEFT BLANK

APPENDICES TO SUBPARTS B & C

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 [[revalidation or renewal];
- 2 (a) Serum lipid estimation is case finding and significant abnormalities shall require review, investigation and supervision by the [AMC or AME in conjunction with the] AMS.
- (b) An accumulation of risk factors (smoking, family history, lipid abnormalities, hypertension, etc.) shall require cardiovascular evaluation by the [][AMC or AME] in conjunction with the [][AMS].
- 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 [][medication] may require [][a] to multi-pilot [][(Class 1 "OML") or, for][] Class 2, a safety pilot [(Class 2 "OSL")][][limitation].

- 5 In suspected asymptomatic coronary artery disease [or peripheral arterial disease], exercise electrocardiography [(according to paragraph 6(a) Appendix 1 to Subparts B and C)] 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.
- After an ischaemic cardiac event, including revascularisation [or peripheral arterial disease], applicants without symptoms shall have reduced any vascular risk factors to an appropriate level. [][Medication], 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:

Appendix 1 to Subparts B & C (continued)

(a) an exercise ECG (symptom limited to Bruce Stage IV, or equivalent), showing no evidence of myocardial ischaemia nor rhythm disturbance;

- (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 [for a fit assessment with multi-pilot (Class 1 "OML") limitation for] Class 1 applicants[].

Class 2 applicants having fulfilled the criteria mentioned in paragraph (6) may fly [][without a safety pilot (Class 2 'OSL') limitation], but the AMS may require a period of flying with a safety pilot before solo flying is authorised. Class 2 applicants [][for] revalidation [or renewal][] can fly, at the discretion of the AMS, with a safety pilot [][(Class 2 "OSL") limitation] having completed only an exercise ECG to the standards in 6 (a) above.

- 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 rhythym 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) [][Repeated] 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
 - (i) [][For initial] Class 1 [] applicants [a fit assessment shall be limited to those] 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) [][For initial] Class 1 [][applicants a fit assessment] 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) [][For] Class 1 revalidation/renewal [a fit assessment without a multi-pilot (Class 1 'OML') limitation] may be considered if the applicant is under age 40 years. [][A multi-pilot (Class 1 'OML') limitation] 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) [][For] Class 1 revalidation/renewal[, after a 3 year period with a multi-pilot (Class 1 'OML') limitation applied, a fit assessment without multi-pilot (Class 1 'OML') limitation] may be considered[].
 - (4) Ventricular pre-excitation
- [][(i)] Asymptomatic initial Class 1 applicants with pre-exitation may be [][assessed as fit] 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.
- [][(ii)] Asymptomatic Class 1 applicants with pre-excitation may be [][assessed as fit] by the AMS [][at] revalidation/renewal with [][a multi-pilot (Class 1 'OML') limitation].
 - (5) Pacemaker

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

- [][(i)] no other disqualifying condition;
- [][(ii)] a bipolar lead system;
- [][(iii)] that the applicant is not pacemaker dependent;
- [][(iv)] regular follow-up including a pacemaker check; and
- [][(v)] [][At Class 1 revalidation/renewal][][a fit assessment requires a multi-pilot] (Class 1 'OML') [limitation].
 - (6) Ablation

[A fit assessment for] Class 1 applicants having undergone successful catheter ablation shall [][require a multi-pilot (Class 1 'OML') limitation] 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 [][with a multi-pilot (Class 1 'OML') limitation] and / or observation may be necessary.

(d) AMS assessment Class 2

The AMS assessment Class 2 should follow the Class 1 assessment procedures. [][A safety pilot (Class 2 'OSL')] or OPL [(valid only without passengers)][][limitation] may be considered.

[][Applicants with unoperated] infra-renal abdominal aortic aneurysms may be [][assessed as fit] for [] Class 1 [with a multi-pilot (Class 1 'OML')] or [for] Class 2 [][with a safety pilot (Class 2 'OSL') limitation] by the AMS[]. [Follow-up by ultra-sound scans, as necessary, will be determined by the AMS.] After surgery for infra-renal abdominal aortic aneurysm without complications, and after cardiovascular assessment, []Class 1 [][applicants] may be [][assessed as fit] by the AMS[] with [a multi-pilot (Class 1 'OML') limitation and]

Appendix 1 to Subparts B & C (continued)

follow-up as approved by the AMS[, a Class 2 fit assessment may require a safety-pilot (Class 2 :OSL") limitation].

9 (a) [][Applicants with previously unrecognised] 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

- (1) [][Applicants with bicuspid] aortic valve [][may be assessed as fit] without [][a multi-pilot (Class 1 'OML') or a safety pilot (Class 2 'OSL') limitation] if no other cardiac or aortic abnormality is demonstrated[]. [Follow-up with echocardiography, as necessary, will be determined by the AMS.]
- (2) [][Applicants with aortic] stenosis [][require AMS review] [][Left ventricular function must be intact. A history of systemic embolism or significant dilatation of the thoracic aorta are disqualifying. Those with a mean pressure gradient of up to 20 mm Hg] may be [][assessed as fit] [][Those with mean pressure gradient above 20 mm Hg but no greater than 40 mm Hg may be assessed as fit for Class 2 or for Class 1 with a multi-pilot (Class 1 'OML') limitation. A mean pressure gradient up to 50 mm Hg may be acceptable, at the discretion of the AMS.] [][Follow-up with 2D Doppler echocardiography, as necessary, will be determined by the AMS]
- (3) [][Applicants with aortic] regurgitation may be [][assessed as fit] [][without a multi-pilot (Class 1 'OML') or a safety pilot (Class 2 ('OSL') limitation] only if trivial. There shall be no demonstrable abnormality of the ascending aorta on 2D Doppler echocardiography. [][Follow-up, as necessary, will be determined by the AMS].
- (4) [][Applicants with rheumatic] mitral valve disease [][shall] normally [][be assessed as unfit].
- (5) Mitral leaflet prolapse/mitral regurgitation. Asymptomatic applicants with isolated midsystolic click may need no [][multi-pilot (Class 1 'OML') or safety pilot (Class 2 'OSL') limitation]. [][Class 1 applicants] with uncomplicated minor regurgitation may [][require a] to multi-pilot [][(Class 1 'OML') limitation] as determined by the AMS. Applicants with evidence of volume overloading 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) [][Follow-up with exercise ECG and 2D echocardiography, as necessary, will be determined by the AMS].

A [Class 1] fit assessment shall [][require a] multi-pilot [](Class 1 []['OML') limitation]. [][A fit assessment for Class 2 applicants] may be applicable [without a safety pilot (Class 2 " OSL") limitation].

Appendix 1 to Subparts B & C (continued)

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.

- 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 []multi-pilot [](Class 1 'OML') or safety pilot [](Class 2 'OSL') [limitation] may be required [][after fit assessment].
- 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. [[[Multi-pilot] (Class 1 'OML') and safety pilot (Class 2 'OSL') [[[limitation] 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 [as] fit, [][requiring] multi-[][pilot] (Class 1 []['OML']) or safety pilot [](Class 2 []['OSL') limitation] not less than 6 months following an index event provided there has been no recurrence. Neurological review will normally be indicated. []5 years freedom from attacks [shall be required before a fit assessment without a multi-pilot (Class 1 'OML') or a safety pilot (Class 2 'OSL') limitation.] 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 [][assessment] and should be consulted together with the Chapter specific to this system.

(See Section 2, Aviation Cardiology Chapter)

 $[Amdt.1,\,01.12.00;\,Amdt.4,\,01.08.05;\,Amdt.5,\,01.12.06]$

Appendix 2 to Subparts B & C (continued)

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.

- 2 Applicants experiencing recurrent attacks of asthma shall be assessed as unfit.
- (a) [A fit assessment for] Class 1 [] may be considered by the AMS if considered stable with acceptable pulmonary function tests and medication compatible with flight safety (no systemic steroids).
- (b) [A fit assessment for] Class 2 []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. [][A fit assessment] 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) [][A fit assessment] following a fully recovered single spontaneous pneumothorax may be acceptable after one year from the event with full respiratory evaluation.
- (b) [][At revalidation or renewal a fit assessment may be considered by the AMS][][with] multi-pilot (Class 1 'OML') []or []safety pilot (Class 2 'OSL') [][limitation] if the applicant fully recovers from a single spontaneous pneumothorax after six weeks. [][A fit assessment without multi-pilot (Class 1 'OML') or safety pilot (Class 2 'OSL') limitation] may be considered by the AMS after one year from the event with full respiratory investigation.
- (c) A recurrent spontaneous pneumothorax is disqualifying. [][A fit assessment] may be considered by the AMS following surgical intervention with a satisfactory recovery.
- 5 Pneumonectomy is disqualifying. [][A fit assessment] 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') [][limitation] 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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt.5, 01.12.06]

Appendix 3 to Subparts B and C Digestive system

(See JAR-FCL 3.165, 3.170, 3.285 and 3.290)

1 (a) [[Applicants with recurrent] [[Idyspeptic disorder] requiring medication shall be investigated[].

- (b) Pancreatitis is disqualifying. [][A fit assessment] may be considered by the AMS if the cause of obstruction (e.g. [][medication], 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 [][Applicants with a] single asymptomatic large gallstone may be [][be assessed as fit] []after consideration by the AMS. An [][applicant] with asymptomatic multiple gallstones may be [][assessed as fit for Class 2 or with] [][multi-pilot] (Class 1 "OML") [limitation at Class 1 revalidation / renewal] []by the AMS.
- 3 [][Inflammatory bowel disease is acceptable provided that it is in established remission and stabilised and that systemic steroids are not required for its control].
- 4 Abdominal surgery is disqualifying for a minimum of three months. The AMS may consider [an] earlier [][fit assessment at revalidation or renewal] if recovery is complete, the applicant is asymptomatic and there is [only] 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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt.1, 01.12.00, Amdt.4, 01.08.05; Amdt.5, 01.12.06]

01.12.06 Appendices-7 Amendment 5

Appendix 4 to Subparts B and C Metabolic, nutritional and endocrine [][systems]

(See JAR-FCL 3.175 and 3.295)

1 Metabolic, nutritional or endocrinological dysfunction is disqualifying. [][A fit assessment] 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. [][A fit assessment] 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.
- The use of antidiabetic drugs is disqualifying. In selected cases, however, the use of biguanides or alphaglucosidase inhibitors may be acceptable for [a Class 1 fit assessment with] multi-pilot [](Class 1 'OML') [limitation] or [][a Class 2 fit assessment without a safety pilot (Class 2 'OSL') limitation]. The use of sulphonylureas may be acceptable for [][a] Class 2 [][fit assessment with a safety pilot (Class 2 'OSL') limitation at revalidation or renewal].
- Addison's disease is disqualifying. [][A fit assessment] may be considered by the AMS [for Class 2 or at revalidation or renewal for Class 1], provided that cortisone is carried and available for use, whilst exercising the privileges of the licence. [][A multi-pilot (Class 1 'OML') or safety pilot (Class 2 '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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt. 2, 01.06.02; Amdt.5, 01.12.06]

Appendix 5 to Subparts B and C Haematology

(See JAR-FCL 3.180 and 3.300)

Anaemias demonstrated by reduced haemoglobin level require investigation. Anaemia which is unamenable to treatment is disqualifying. [][A fit assessment] 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. [][A fit assessment] 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. []
- In cases of chronic leukaemia [][a fit assessment] may be considered by the AMS [][There shall be no history of central nervous system involvement and no continuing side-effects from treatment of flight safety importance. Haemoglobin and platelet levels shall be satisfactory.] Regular follow-up is required. []
- 4 Splenomegaly requires investigation. The AMS may consider [][a fit assessment] 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 [][a fit assessment with a multi-pilot (Class 1 'OML') or safety pilot (Class 2 ('OSL') limitation] if the condition is stable and no associated pathology has been demonstrated.
- 6 Significant coagulation defects require investigation. The AMS may consider [][a fit assessment with a multi-pilot (Class 1 ('OML') or safety pilot (Class 2 ('OSL') limitation] 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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt.1, 01.12.00; Amdt.5, 01.12.06]

01.12.06 Appendices-9 Amendment 5

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.
- An asymptomatic calculus or a history of renal colic requires investigation. While awaiting assessment or treatment, the AMS may consider [][a fit assessment at revalidation or renewal] with a multi-pilot [](Class 1 'OML') or safety pilot [](Class 2 'OSL') [limitation]. After successful treatment [][a fit assessment without multi-pilot (Class 1 ('OML') or safety pilot (Class 2 ('OSL') limitation] may be considered by the AMS. For residual calculi, the AMS may consider [][a fit assessment at revalidation or renewal] with a multi-pilot [] (Class 1 'OML'), safety pilot [](Class 2 'OSL') [limitation], or [][, for] Class 2 [][, without safety pilot (Class 2 ('OSL') limitation].
- 3 Major urological surgery is disqualifying for a minimum of three months. The AMS may consider [][a fit assessment] 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 []Class 1 [][at initial examination]. [][At revalidation or renewal a fit assessment] may be considered by the AMS in the case of:
- (a) renal transplant which is fully compensated and tolerated with [only] 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 [][a multi-pilot] (Class 1 'OML') or [][safety pilot] (Class 2 'OSL') [][limitation] may be [][appropriate].

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

[Amdt.1, 01.12.00; Amdt.5, 01.12.06]

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 [][At revalidation or renewal a fit assessment] of HIV positive individuals [][with] multi-pilot (Class 1 'OML') or safety pilot (Class 2 'OSL') [][limitation] may be considered by the AMS subject to frequent review. The occurrence of AIDS or AIDS related complex is disqualifying.
- Acute syphilis is disqualifying. [][A fit assessment] 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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt.5, 01.12.06]

01.12.06 Appendices-11 Amendment 5

Appendix 8 to Subparts B and C Gynaecology and obstetrics

(See JAR-FCL 3.195 and 3.315)

The AMS [or the AME or AMC in coordination with the AMS] may [][assess] pregnant aircrew [as fit] during the first 26 weeks of gestation following review of the obstetric evaluation. The AMS[, AMC or AME] shall provide written advice to the applicant and the supervising physician regarding potentially significant complications of pregnancy (see Manual). Class 1 certificate holders [][require a temporary] multi-pilot [] (Class 1 'OML') [limitation. In case of pregnant Class 1 certificate holders this temporary multi-pilot (Class 1 ('OML') limitation may be imposed and, following confinement or termination of the pregnancy, removed by the AME or AMC informing the AMS].

- 2 Major gynaecological surgery is disqualifying for a minimum of three months. The AMS may consider [an] earlier [][fit assessment at revalidation or renewal] 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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt.5, 01.12.06]

Amendment 5 Appendices-12 01.12.06

Appendix 9 to Subparts B and C Musculoskeletal requirements

(See JAR-FCL 3.200 and 3.320)

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. [][Multi]-pilot (Class 1 'OML') or safety pilot (Class 2 'OSL') [][limitation or limitation restricted to demonstrated aircraft ("OAL") or to specified type(s)] may be required.

- 2 In cases of limb deficiency, [][a fit assessment] may be considered by the AMS [for Class 2, or at revalidation or renewal for Class 1] according to JAR-FCL 3.125 and following a satisfactory medical flight test or simulator testing.
- An applicant with inflammatory, infiltrative, traumatic or degenerative disease of the musculoskeletal system may be [][assessed as fit] 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, []multi-pilot (Class 1'OML') or safety pilot (Class 2 'OSL') [][limitation or limitation restricted to demonstrated aircraft type(s) ("OAL") or to specified type(s)] 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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt.1, 01.12.00; Amdt.5, 01.12.06]

01.12.06 Appendices-13 Amendment 5

Appendix 10 to Subparts B and C Psychiatric requirements

(See JAR-FCL 3.205 and 3.325)

An established schizophrenia, schizotypal or delusional disorder is disqualifying. [][A fit assessment] 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 [][a fit assessment] 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. [][A fit assessment] 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.
- Mental or behavioural disorders due to alcohol or other substance use, with or without dependency, are disqualifying. [][A fit assessment] may be considered by the AMS after a period of two years documented sobriety or freedom from [][substance] use. [][At revalidation or renewal a fit assessment] may be considered earlier [and a] multi-[][pilot] [](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.

[Amdt. 3, 01.06.03; Amdt.5, 01.12.06]

Appendix 11 to Subparts B and C Neurological requirements

(See JAR-FCL 3.210 and 3.330)

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

- 2 [][A history of one or more episodes of disturbance of consciousness of uncertain cause is disqualifying. In case of a single episode of such disturbance of consciousness, which can be satisfactorily explained, a fit assessment may be considered by the AMS, but a recurrence is normally disqualifying.]
- 3 Epileptiform paroxysmal EEG abnormalities and focal slow waves normally are disqualifying. Further evaluation shall be carried out by the AMS.
- 4 [][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 unless 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 are disqualifying. However, in case of an acute symptomatic seizure, which is considered to have a very low risk of recurrence by a consultant neurologist acceptable to the AMS, a fit assessment may be considered by the AMS.]
- 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 [][assessed as fit] if the risk of a further seizure is considered [][to be within] the limits acceptable to the AMS. For [a] Class 1 [][fit assessment a multi-pilot (Class 1 'OML')] limitation shall be applied.
- 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 ([][within] the limits acceptable to the AMS) of epilepsy before [][a fit assessment] is possible.
- 7 [][Assessment] 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 [][assessment] and should be consulted together with the Chapter specific to this system. All intracerebral malignant tumours are disqualifying.

[Amdt. 2, 01.06.02; Amdt.5, 01.12.06]

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 [medical] 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 [medical] 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. [All abnormal and doubtful cases shall be referred to an ophthalmologist acceptable to the AMS.] Applicants requiring visual correction to meet the standards shall submit a copy of the recent spectacle prescription.
- 2 At each aeromedical [][revalidation] 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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt. 3, 01.06.03; Amdt. 5, 01.12.06]

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. [][For those, who reach the functional performance standards only with corrective lenses] the AMS may consider [a] Class 1 [][fit assessment if the refractive error is not exceeding +5 to -6 dioptres and] if:
 - (1) no significant pathology can be demonstrated;
 - (2) optimal correction has been considered[][;]
 - (3) [5 yearly review is undertaken by an ophthalmologist or vision care specialist acceptable to the AMS, if the refractive error is outside the range ±3 dioptres.]
- (b) [][Class 1.The AMS may consider a fit assessment at revalidation or renewal if the myopic refraction is greater then -6 dioptres if:]
 - (1) no significant pathology can be demonstrated;
 - (2) optimal correction has been considered;
 - (3) [][a 2 yearly review is undertaken by an ophthalmologist or vision care specialist acceptable to the AMS for those with a myopic refraction greater than -6 dioptres.]

[]

- (c) Class 2. If the refractive error is within the range -5/-8 dioptres [at initial examination or exceeding -8 dioptres at revalidation / renewal], the AMS may consider [a fit assessment for] Class 2 []provided that:
 - (1) no significant pathology can be demonstrated;
 - (2) optimal correction has been considered[][.]

[]

- 3 [Astigmatism. Class 1. The AMS may consider a fit assessment at revalidation or renewal if the astigmatic component is greater than 3,0 dioptres if:
 - (1) no significant pathology can be demonstrated;
 - (2) optimal correction has been considered;
 - (3) a 2 yearly review is undertaken by an ophthalmologist or vision care specialist acceptable to the AMS.]
- 4 [Keratoconus]. The AMS may consider [][fit assessment for Class 2 and fit assessment for Class 1 at revalidation or renewal] after diagnosis of a keratoconus provided that:
 - (a) the visual requirements are met with the use of corrective lenses;
 - (b) [] review is undertaken by an ophthalmologist acceptable to the AMS[, the frequency to be determined by the AMS
- 5 Anisometropia. Class 1. The AMS may consider fit assessment at revalidation or renewal if the anisometropia exceeds 3,0 dioptres if:
 - (1) no significant pathology can be demonstrated;
 - (2) optimal correction has been considered;
 - (3) a 2 yearly review is undertaken by an ophthalmologist or vision care specialist acceptable to the AMS.]

Appendix 13 to Subparts B & C (continued)

[][6] (a) *Monocularity*[].]

- [(1) Monocularity entails unfitness for a Class 1 certificate;
- (2) In the case of an initial Class 2 applicant who is functionally monocular, the AMS may consider a fit assessment if,
 - (a) the monocularity occurred after the age of 5.
 - (b) at the time of initial examination, the better eye achieves the following:
 - (i) distant visual acuity (uncorrected) of at least 6/6;
 - (ii) no refractive error;
 - (iii) no history of refractive surgery;
 - (iv) no significant pathology.
 - (c) a flight test with a suitable qualified pilot acceptable to the Authority, who is familiar with the potential difficulties associated with monocularity, must be sastisfactory;
 - (d) operational limitations, as specified by the aviation authority, may apply.
 - (3) The AMS may consider a fit assessment at revalidation or renewal for Class 2 applicants if the underlying pathology is acceptable according to ophthalmological specialist assessment and subject to a satisfactory flight test with a suitably qualified pilot acceptable to the Authority, who is familiar with the potential difficulties associated with monocularity.

Operational limitations as specified by the Authority, may apply]

- (b) [][Applicants with central] vision in one eye below the limits stated in JAR-FCL 3.220 may be [][assessed as fit] [][at revalidation or renewal for Class 1] if the binocular visual field is normal and the underlying pathology is acceptable according to [][ophthalmological] specialist assessment. A satisfactory flight test is [][and] multi-pilot (Class 1 'OML') [][limitation are required].
- (c) In case of reduction of vision in one eye to below the limits stated in JAR-FCL 3.340 [a fit assessment at revalidation or renewal for] Class 2 [] may be considered if [the] underlying pathology and the visual ability of the remaining eye are acceptable following [] []ophthalmological] evaluation acceptable to the AMS and subject to a satisfactory medical flight test, if indicated.
- [(d) An applicant with a visual fiels defect may be considered as fit if the binocular visual field is normal and the underlying pathology is acceptable to the AMS.]
- [][7] Heterophorias. The applicant/certificate holder shall be reviewed by an ophthalmologist acceptable to the AMS. The fusional [][reserve] shall be tested using a method acceptable to the AMS (e.g. Goldman Red/Green binocular fusion test).
- [][8] After refractive surgery, [][a fit assessment] 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 [][no greater than +5 or -6 dioptres] for Class 1 and [][no greater than +5 or -8 dioptres] for Class 2;
- (b) satisfactory stability of refraction has been achieved (less than [][0,75] dioptres variation diurnally);
 - (c) examination of the eye shows no postoperative complications;
 - (d) glare sensitivity is within normal standards;[]
 - (e) mesopic contrast [][sensitivity] is not impaired[][;]
 - (f) [review is undertaken by an oppthalmologist acceptable to the AMS at the descretion of the AMS.]
- [][9](a) Cataract surgery. [][A fit assessmen] for Class 1 and for Class 2 may be considered by the AMS after 3 months[].
 - (b) Retinal surgery. [[A fit assessment] for Class [][2] and [][a fit assessment] for Class [][1 at

revalidation or renewal] may be considered by the AMS normally 6 months after successful surgery. [A fit assessment for Class 1 and 2 may be acceptable to the AMS after retinal Laser therapy.] [][Follow-up, as necessary, will be determined by the AMS].

(c) Glaucoma surgery. [][A fit assessment] may be considered by the AMS [][6 months after successful surgery] [][for Class 2 or at revalidation or renewal for Class 1]. [][Follow-up, as necessary, will be determined by the AMS].

[Amdt.3, 01.06.03; Amdt.5, 01.12.06]

01.12.06 Appendices-19 Amendment 5

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.

[Amdt. 3, 01.06.03]

Amendment 5 Appendices-20 01.12.06

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 [(for further guidance see JAA Manual of Civil Aviation Medicine)] shall be carried out by [an AMC] or []a specialist in aviation otorhinolaryngology acceptable to the AMS.

- 2 [] 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. []
- 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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt. 3, 01.06.03; Amdt.5, 01.12.06]

01.12.06 Appendices-21 Amendment 5

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:

- 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, [][a fit assessment] may be considered [][at revalidation or renewal].

[Amdt. 4, 01.08.05; Amdt.5, 01.12.06]

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.

01.12.06 Appendices-23 Amendment 5

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 [][fit assessment. A] multi-pilot (Class 1 'OML') [][or] safety pilot (Class 2 'OSL') [][limitation may be required].
- 3 Malignant or Pre-malignant Conditions of the Skin
- (a) Malignant melanoma, squamous cell epithelioma, [][Bowen's] disease and [][Paget's] disease are disqualifying. [][A fit assessment] may be considered by the AMS if, when necessary, lesions are totally excised and there is adequate follow-up.
- (b) [][In case of basal] cell epithelioma[,] []rodent ulcer, keratoacanthoma [][or] actinic keratoses [][a fit assessment may be considered after] treatment and/or excision in order to maintain certification.
- 4 [][In case of other] skin conditions:
 - (a) Acute or widespread chronic eczema,
 - (b) Skin reticulosis,
 - (c) Dermatological aspects of a generalised condition,

and similar conditions require [][assessment] of treatment and any underlying condition before assessment 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 [][assessment] and should be consulted together with the Chapter specific to this system.

[Amdt.5, 01.12.06]

Appendix 19 to Subparts B and C Oncology Requirements

(See JAR-FCL 3.246 and 3.370)

1 [][A fit assessment] may be considered by the AMS [for Class 1] and [] by the AME in consultation with the AMS [for Class 2] 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. [][Special attention shall be paid to applicants] who have received anthracycline chemotherapy[];
 - (e) Arrangements for follow-up are acceptable to the AMS.
- 2 [][A multi]-pilot (Class 1 []['OML']) for [][Class 1 revalidation or renewal] or [a] safety pilot (Class 2 []['OSL']) [][limitation for Class 2] may be appropriate.

[Amdt. 2, 01.06.02; Amdt.5. 01.12.06]I

NTENTIONALLY LEFT BLANK

01.12.06 Appendices-25 Amendment 5

NTENTIONALLY LEFT BLANK