KINGDOM OF BAHRAIN
Ministry of Transportation
and Telecommunications

مملكة البحرين
وزارة المواصلات والاتصالات

ANTR-FCL 3

FLIGHT CREW LICENSING MEDICAL

FOREWORD

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Bahrain CAA Publication Revisions Highlight Sheet

☒ ANTR: FCL 3 ☐ CAP:___ ☐ TPM: ___

The following pages have been revised to Revision ICAO Annex 1, 13th Edition, July 2020 and customized to the Personnel Licensing Administered by BCAA

Item	Paragraph Number	Pages	Reason
1.	FOREWORD	i	Amendment to Para 10. Deletion of LEP Status referring to LEP document
2.	3.060	1-A-3	Amendment concerning the upper age limit for pilots engaged in international commercial air transport operations.
3.	3.091	1-A-6	Amendment concerning regulations relating to safety management.
4.	Appendix 2 to 19	App-8 to App-27	Correction to the Appendix numbers
5.	Appendix 14 & 15	App-22 & App 23	Amendment to the Reference Document
6.	IEM FCL 3.001	2-A-1	Deletion of outdated manual references in Abbreviation section

RECORD OF REVISION

ANTR -FCL 3

Revision No.	Date of Issue
3rd Edition	01 August 2010
Revision 1	01 March 2011
Revision 2	28 Feb 2017
4th Edition Revision 00	06 July 2022

LIST OF EFFECTIVE PAGES

ANTR -FCL 3

FOREWORD

1 The Kingdom of Bahrain Civil Aviation Affairs (BCAA), shall be known in these regulations as the "Authority".

2 ICAO Annex 1 has been selected to provide the basic structure of ANTR-FCL 3, but with additional sub-division where considered appropriate.

3 ANTR FCL 1 contains regulations for Aeroplane pilots.

ANTR FCL 2 contains regulations for Helicopter pilots.

ANTR FCL 3 contains Medical regulations.

4 The authority has adopted associated compliance or interpretative material wherever possible and, unless specifically stated otherwise, clarification will be based on this material or other BCAA Guidance Material.

5 The editing practices used in this document are as follows:

(a) „Shall" is used to indicate a mandatory requirement and may appear in ANTRs.

(b) „Should" is used to indicate a recommendation and normally appears in AMCs and IEMs.

(c) „May" is used to indicate discretion by the Authority, the industry or the applicant, as appropriate.

(d) „Will" indicates a mandatory requirement and is used to advise of action incumbent on the Authority.

NOTE: The use of the male gender implies the female gender and vice versa.

6 The Authority has adopted associated compliance or interpretative material wherever possible and, unless specifically stated otherwise, clarification will be based on this material or other ANTR documentation.

7 Definitions and abbreviations of terms used in FCL that are considered generally applicable are contained in Part 1 – Definitions and Abbreviations. However, definitions and abbreviations of terms used in FCL that are specific to FCL are given in ANTR-FCL 1.001 and IEM ANTR-FCL 1.001 and EIM ANTR-FCL 1.475(b).

8 New, amended and corrected text will be indicated with a side bar beside paragraphs, until a subsequent "amendment" is issued.

9 Section 1 regulations are presented in Times Roman font and Section 2 material presented in Arial font.

10 This 4th Edition Revision 00 is dated 06 July 2022.

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SECTION 1 – REGULATIONS

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SUBPART A

GENERAL REQUIREMENTS

ANTR-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

ANTR-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 provisions of 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 ANTR-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 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.

ANTR-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 orunder arrangements made by the Authority and being pronounced fit to function as a member of the flight crew, or upon the Authority exempting, subject to such conditions as it thinks 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 ANTR-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.

ANTR-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 develop and evaluate a new medical assessment protocol. The protocol shall include a risk assessment. 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 ANTR-FCL 3.046".

ANTR-FCL 3.060 Curtailment of privileges of licence holders aged 60 years or more

(See Appendix 1 of ANTR-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 as a member of a multi-pilot crew.

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

(c) On attainment of the age of 65 years, such privileges shall be restricted to that of Private Pilot's Licence.

ANTR-FCL 3.080 Aeromedical Section (AMS)

(a) *Establishment.* Physicians experienced in the practice of aviation medicine shall either form part of the Authority, or be duly empowered as a Medical Assessor to act on behalfof 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 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.

ANTR-FCL 3.081 Medical Assessors

(a) The CAA shall use the services of medical assessors to evaluate reports submitted to the CAA by medical examiners.

(b) The competence of a medical examiner shall be evaluated periodically by the CAA medical assessor.

ANTR-FCL 3.085 Aeromedical Centres (AMCs)

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

(a) within the national boundaries of the State of Bahrain 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 physicianswith 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.

ANTR-FCL 3.090 Authorised Medical Examiners (AMEs)
(See AMC FCL 3.090)

(a) *Designation.* The Authority shall authorise medical examiners, qualified and licensed in the practice of medicine, to conduct medical examinations of fitness of applicants for the issueor renewal of the licences specified in ANTR Part II. The Authority will authorise Medical Examiners (AMEs), within its national boundaries, qualified and licensed in the practice of medicine. Physicians resident outside of Bahrain and wishing to become AMEs for thepurpose of FCL may apply to the Authority. Following appointment the AME shall report to and be supervised by the Authority. 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 bythe AMS and related to such examinations as that AME is to carry out.

(d) *Training.* Medical examiners shall have received training in aviation medicine and shall receive refresher training at regular intervals. Before authorisation, medical examiners shall demonstrate adequate competency in aviation medicine. AMEs shall be qualified and licensed in the practice of medicine and shall have received training in aviation medicine acceptable to the Authority. They shall have 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.

(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 theAMS. 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).

(4) Medical examiners shall have received training in Safety Management System (SMS) principles and shall receive refresher training at regular intervals (see ANTRVol. III Part 19 and CAP 08 – Safety Management.

(e) *Authorisation*. An AME will be authorised for a period not exceeding three years. Authorisation to perform medical examinations may be for Class 1, Class 2 or Class 3 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. The Authority may at any time revoke any authorisation it has issued in accordance with the requirements of FCL if it is established that an AME has not met, or no longer meets, the requirements of FCL.

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

(h) *Assessments.* The medical examiner shall be required to submit sufficient information to the Authority to enable it to undertake Medical Assessment audits and to apply, as part of its State Safety Programme, basic safety management principles to the medical assessmentprocess of license holders, that as a minimum include:

(1) routine analysis of in-flight incapacitation events and medical findings during medical assessments to identify areas of increased medical risk; and

(2) continuous re-evaluation of the medical assessment process to concentrate on identified areas of increased medical risk.

Note 1: The purpose of such auditing is to ensure that medical examiners meet applicable standards for good medical practice and aeromedical risk assessment.

Note 2: A framework for the implementation and maintenance of a State safety programme is contained in Attachment C. Guidance on State safety programmes and safety management principles is contained in ANTR Vol. III Part 19 and CAP 08 – Safety Management.

ANTR-FCL 3.091 Aeromedical examinations and assessment - General

(a) Compliance with ANTRs. The examinations and assessments shall be carried out in accordance with the relevant requirements of ANTR-FCL 3 (ANTR Part II, Chapter 2 for ATC and Cabin Crew licences holders) 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 Manual of Civil Aviation Medicine contains descriptions of good medical and aeromedical practice and the procedures that may be applied in aeromedical examinations and assessments.

(c) Having completed the medical examination of the applicant, the medical examiner shall coordinate the results of the examination and submit a signed report, or equivalent, to the CAA, in accordance with its requirements, detailing the results of the examination andevaluating the findings with regard to medical fitness.

(d) If the medical report is submitted to the Licensing Authority in electronic format, adequate identification of the examiner shall be established.

(e) If the medical examination is carried out by two or more medical examiners, the CAA shall appoint one of these to be responsible for coordinating the results of the examination, evaluating the findings with regard to medical fitness, and signing the report.

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

(g) The medical examiner shall report to the CAA any individual case where, in the examiner‟s judgement, an applicant‟s failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence being applied for, or held, is not likely to jeopardize flight safety .

(h) If the prescribed medical Standards for a particular licence are not met, the appropriate Medical Assessment shall not be issued or renewed unless the following conditions arefulfilled:

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

(2) relevant ability, skill and experience of the applicant and operational conditions have been given due consideration; and

(3) the licence is endorsed with any special limitation or limitations when the safe performance of the licence holder‟s duties is dependent on compliance with such limitation or limitations.

(i) Medical confidentiality shall be respected at all times.

(j) All medical reports and records shall be securely held with accessibility restricted to authorised personnel.

(k) When justified by operational considerations, the medical assessor shall determine to what extent pertinent medical information is presented to relevant officials of the CAA.

Note: The Medical Application Form and Medical Examination Report Form is contained in ANTR FCL 3, Section 2.

(l) When the Authority is satisfied that the requirements of this section and the general provisions of ANTR-FCL3 have been met, a Class 1 or Class 2 Medical Assessment, as applicable, shall be issued to the applicant.

(m) The Authority shall implement appropriate aviation-related health promotion for licence holders subject to a Medical Assessment to reduce future medical risks to flight safety.

Note 1: ANTR-FCL 3.090 (h) indicates how appropriate topics for health promotion activities may be determined.

Note 2: Guidance on the subject is contained in the Manual of Civil Aviation Medicine (ICAO Doc 8984).

Note 3: Guidance on the relationship between the Licensing Authority and the implementation of Medical Assessment for licence holders is contained in ANTR- FCL 3 and CAP 09 – Personnel Licensing.

Note 4: Basic safety management principles, when applied to the medical assessment process, can help ensure that aeromedical resources are utilized effectively.

ANTR-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 medicalcertificate shall be carried out at an AMC. Revalidation and renewal examinations may be delegated to an AME.

(b) *For Class 2 or Class 3 medical certificates.* Initial, revalidation and renewal examinations for a Class 2 or Class 3 medical certificate shall be carried out at an AMC or by an AME.

(c) The applicant shall complete the appropriate application form as described in IEM FCL 3.095(c). On completing a medical examination the AME shall submit without delay a signed full report to the AMS in the case of all 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).

Note: For Class 3 Medical assessments, refer to ANTR Volume 2 (Air Traffic Services)

ANTR-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) Expiry date of the medical certificate

(a) For Class 1:

(i) expiry date (single pilot commercial air transport operations carrying passengers);

(ii) expiry date (other commercial operations);

(b) For Class 2 and Class 3:

(i) expiry date of the medical certificate;

(6) Date of medical examination

(7) Due date of next electrocardiography

(8) Due date of next audiometry

(9) Limitations, conditions and/or variations

(10) AME/AMC/AMS name, number and signature

(b) *Initial issue of medical certificates.* Initial Class 1 medical certificates shall be issued by the AMS. The issue of initial Class 2 or Class 3 certificates shall be by the AMS or may be delegated to an AMC or AME.

(c) *Revalidation and renewal of medical certificates.* Class 1, 2 or 3 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, variation, limitation or suspension*

(1) When a review has been performed and a medicate certificate has been issued in accordance with Paragraph ANTR-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.

ANTR-FCL 3.105 Period of validity of medical certificates
(See Appendix 1 to ANTR-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.

(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 40^{th} birthday will not be valid for Class 2 privileges after his 42^{nd} birthday.

(5) The period of validity of the medical certificate may be reduced when clinically indicated.

Note: For Class 3 Medical assessments, refer to ANTR Volume 2 (Air Traffic Services)

(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 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.

Note: See further Appendix 1 to ANTR-FCL 3.105.

ANTR-FCL 3.110 Requirements for medical assessments

(a) An applicant for, or holder of, a medical certificate issued in accordance with 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 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.

ANTR-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 ANTR-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 disqualifyingfor at least 48 hours.

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

ANTR-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 accurateas the applicant‟s knowledge permits.

(b) *False information.* Any declaration made with intent to deceive shall be reported to the AMS of the Authority. On receipt of such information the AMS shall take such action as it considers appropriate, including the transmission of such information to other Authorities(see ANTR-FCL 3.080(b) Medical Confidentiality).

ANTR-FCL 3.125 Delegation of fit assessment, review policy and secondary review

(a) *Delegation of fit assessment.*

(1) If the medical requirements prescribed in 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 FCL Part 3 (Medical) that the applicant under certain conditions in accordance with the Appendices to Subpart B and C may be assessed as fit, the Authority may do so. Such fit assessments may 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;

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

(4) the requirement for application of any limitations to the medical certificate and licence. (see ANTR-FCL 3.100 (e)(1) and 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*.

The Authority has constituted a secondary review procedure, with independent medical advisers, experienced in the practice of aviation medicine, to consider and evaluate contentious cases.

(Refer to IEM FCL 3.125(c))

Appendix 1 to ANTR-FCL 3.105
Validity period/transfer of medical records for Class 1 and Class 2 renewal
(See ANTR-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 one year, 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.

SUBPART B

CLASS 1 MEDICAL REQUIREMENTS

ANTR-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 and 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 40^{th} 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.

ANTR-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/or95 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 certificate to establish the absence of significant side effects.

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

ANTR-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 fitby 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 renewal or revalidation, a fit assessment may be considered by the AMS if the investigations in paragraph 6 Appendix 1 to Subpart B are completed satisfactorily.

ANTR-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 supra-ventricular or ventricular ectopic complexes need not be assessed as unfit. Frequent or complex forms require full cardiological evaluation in compliance with paragraph 7 Appendix 1 to Subpart B.

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

(e) Applicants with complete right bundle branch block require cardiological evaluation on first presentation and subsequently in compliance with appropriate items in paragraph 7 Appendix 1 to Subpart B.

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

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

ANTR-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 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 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 treatmentof 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 bythe AMS following cardiological investigation in compliance with paragraph 12 Appendix1 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.

ANTR-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 interferewith the safe exercise of the privileges of the applicable licence(s).

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

(c) Pulmonary function tests (see paragraph 1 Appendix 2 to Subpart B) are required at the initial examination and on clinical indication. Applicants with significant impairment of pulmonary function (see paragraph 1 Appendix 2 to Subpart B) shall be assessed as unfit.

ANTR-FCL 3.160 Respiratory system – Disorders

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

ANTR-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).

ANTR-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).

ANTR-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 of Appendix 4 to Subpart B.

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

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

(e) Applicants with a Body Mass Index $\geq$ 35 may be assessed as fit only if the excess weight is not likely to interfere with the safe exercise of the applicable licence(s) and a satisfactory cardiovascular risk review has been undertaken (see paragraph 1 Appendix 9to Subpart C).

ANTR-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. Applicant 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 shallbe 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).

ANTR-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 organsshall 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 3and 4 Appendix 6 to Subpart B).

ANTR-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.

ANTR-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 interferewith 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 asunfit 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).

ANTR-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.

ANTR-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.

ANTR-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)

ANTR-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 40^{th} 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) andshall 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 ± 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 medicalexamination. If the refractive error is outside this range, then this examination must have beencarried 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.

ANTR-FCL 3.220 Visual requirements

(a) *Distant visual acuity.* Distant visual acuity, with or without correction, shall be 6/9 (0,7) or better in each eye separately and visual acuity with both eyes shall be 6/6 (1,0) or better (see ANTR-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 diopters (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 diopters or with a high myopic refractive error exceeding -6 dioptres may be assessedas 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 revalidation 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.

(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 ANTR-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; and
1,0 prism dioptres 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 SubpartB).

(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, be well tolerated, and suitablefor 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 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 or renewal a fit assessment may be considered by the AMS (see paragraph 7 Appendix 13 to Subpart B).

ANTR-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'

(c) 's test shall be assessed as colour safe if they pass extensive testing with methods acceptable tothe 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.

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

ANTR-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 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.

(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.

ANTR-FCL 3.235 Hearing requirements

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

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

(c) There shall be no hearing loss in either ear, when tested separately, of more than35 dB(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).

ANTR-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 shallbe utilised.

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

ANTR-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,

(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.

ANTR-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.

SUBPART C

CLASS 2 MEDICAL REQUIREMENTS

ANTR-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).

ANTR-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/or95 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.

ANTR-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.

ANTR-FCL 3.265 Cardiovascular system – Rhythm/conduction disturbances

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

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

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

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

(e) Applicants with complete right 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 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 compliancewith 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.

ANTR-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 SubpartC.

(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 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 11 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 compliancewith paragraph 12 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.

ANTR-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 interferewith 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).

ANTR-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.

ANTR-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).

ANTR-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 Appendix3 to Subpart C.

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

(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).

ANTR-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 paragraphs 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 $\geqq$ 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).

ANTR-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. See paragraph 3 Appendix 5 to Subpart C.

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

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

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

ANTR-FCL 3.305 Urinary system

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

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

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

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

(e) Applicants who have undergone a major surgical operation in the urinary tract or the urinary apparatus involving a total or partial excision or a diversion of any of its organsshall 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).

ANTR-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.

ANTR-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 interferewith 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 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 asunfit 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).

ANTR-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.

ANTR-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):

(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.

ANTR-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.

ANTR-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 AMS, by an AME (All abnormal doubtful cases shall be referred to an ophthalmologist acceptable to the AMS) is requiredat 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) andshall include:

(1) History;

(2) Visual acuity, near and distant vision: uncorrected; with best optical correction if needed;

(3) Examination of the external eye, anatomy, media and fundoscopy

(4) Further examination on clinical indication (see paragraph 4 Appendix 12 to Subpart C).

ANTR-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 ANTR-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 revalidation or renewal examinations the refractive error shall not exceed +5 to -8 dioptres (see paragraph 2 (c) Appendix 13 to Subpart C).

(ii) At recertification or renewal examinations, an applicant experienced to the satisfaction of the Authority with refractive 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 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 bythe AMS. Contact lenses shall be worn if the anisometropia exceeds 3,0 dioptres.

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

(7) An applicant shall be able to read N5 chart (or equivalent) at 30–50 centimetres and N14 chart (or equivalent) at 100 centimetres, with correction if prescribed (see ANTR-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 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.

(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 paragraph7 Appendix 13 to Subpart C).

ANTR-FCL 3.345 Colour perception
(See Appendix 14 to Subpart C)

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

(b) An applicant shall have normal perception of colours or be colour safe. 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.

ANTR-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 initial and renewalexaminations (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.

(6) Significant disorder of speech or voice.

ANTR-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, 1 000 and 2 000 Hz, or of more than 50 dB(HL) at 3 000 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)**.**

ANTR-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 relevantpersonality factor, which are likely to interfere with the safe exercise of the privileges of the applicable licence(s).

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

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

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

ANTR-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.

ANTR-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.

APPENDICES TO SUBPARTS B & C

Appendix 1 to Subparts B & C
Cardiovascular system

(See ANTR-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 limitation to multi-pilot operations. (Class 1 “OML”) and for Class 2 “OSL” a safety pilot limitation, a safety pilot restriction may be required.

5 In suspected asymptomatic coronary artery disease, or peripheral arterial disease, exercise electrocardiography according to paragraph 6a 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.

6 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 multiplerevascularisations.

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

At least 6 months from the ischaemic cardiac event, including revascularisation, the following investigations shall be completed:

(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 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 Class2 "OSL" limitation having completed only an exercise ECG to the standards in 6 (a) above.

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

(a) Such evaluation shall include:

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

(2) 24-hour ambulatory ECG which shall demonstrate no significant 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 Class 1 applicants with pre-excitation may be assessed as fit by the AMS for revalidation/renewal with OML.

(ii) Asymptomatic initial Class 1 applicants with pre-exitation may be assessed as fit by the AMS at revalidation/renewal with a multi-pilot (Class1 “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.

(vi) 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 thelong term outcome cannot be assured by invasive or non-invasive testing, an additional period a multi-pilot (Class 1 “OML”) limitation and/or observation maybe 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.

8 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 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 beassessed 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, shall 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 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 theAMS 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 revascularization 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.

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

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

12 Applicants with congenital heart conditions including those surgically corrected, shall normally be assessed as unfit unless functionally unimportant and no medication is required. Cardiological assessment by the AMS shall be required. Investigations may include 2D Doppler echocardiography, exercise ECG and 24- hour ambulatory ECG. Regular cardiological review shall be required. 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 chocardiography 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 fromattacks 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 ofconsciousness 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)

Appendix 2 to Subparts B and C
Respiratory system
(See ANTR-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.

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

1 (a) Applicants with recurrent dyspeptic 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 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 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.

Appendix 4 to Subparts B and C
Metabolic, nutritional and endocrine disorders
(See ANTR-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.

3 The use of antidiabetic drugs is disqualifying. In selected cases, however, the use of biguanides or alpha-glucosidase 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.

4 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.

Appendix 5 to Subparts B and C
Haematology
(See ANTR-FCL 3.180 and 3.300)

1 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.

3 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 andno 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 nohistory 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.

Appendix 6 to Subparts B and C
Urinary system
(See ANTR-FCL 3.185 and 3.305)

1 Any abnormal finding upon urinalysis requires investigation.

2 An asymptomatic calculus or a history of renal colic requires investigation. While awaiting assessment or treatment, the AMS may 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 minimalrisk 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.

Appendix 7 to Subparts B and C
Sexually transmitted diseases and other infections
(See ANTR-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.

3 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.

Appendix 8 to Subparts B and C
Gynaecology and obstetrics
(See ANTR-FCL 3.195 and 3.315)

1 The AMS or the AME or AMC in coordination with the AMS may assess of 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.

Appendix 9 to Subparts B and C
Musculoskeletal requirements
(See ANTR-FCL 3.200 and 3.320)

1 Abnormal physique, including obesity, or muscular weakness may require medical flight or flight simulator testing approved by the AMS. Particular attention shall be paid to emergency procedures and evacuation. Multi-pilot (Class 1 „OML“) or safety pilot (Class 2 „OSL“) limitation or limitation restricted to demonstrated aircraft (“OAL”) or to specific types 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 ANTR-FCL 3.125 and following a satisfactory medical flight test or simulator testing.

3 An applicant with inflammatory, infiltrative, traumatic or degenerative disease of the musculoskeletal system may be 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 (“OAL”) or to specific types 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.

Appendix 10 **to Subparts B and C**
Psychiatric requirements
(See ANTR-FCL 3.205 and 3.325)

1 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 afterfull 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 andmay require psychological or psychiatric review. Neuropsychological assessment may be required.

4 Mental or behavioural disorders due to alcohol or other substance use, with or without dependency, are disqualifying. 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 afit 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 indefiniely.

Appendix 11 **to Subparts B and C**
Neurological requirements
(See ANTR-FCL 3.210 and 3.330)

1 Any stationary or progressive disease of the nervous system which has caused or is likely to cause a significant disability is disqualifying. However, 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 if a syndrome of benign childhood epilepsy associated with a very low risk of recurrence, and unless the applicanthas 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.

5 An applicant having had a single afebrile epileptiform seizure which has not recurred after at least 10 years while off treatment, and where there is no evidence of continuing predisposition to epilepsy, may be 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.

6 Any head injury which has been severe enough to cause loss of consciousness or is associated with penetrating brain injury must be assessed by the AMS and be seen by a consultant neurologist acceptable to the AMS. There must be a full recovery and a low ri sk (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.

Appendix 12 **to Subparts B and C**
Ophthalmological requirements
(See ANTR-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, for the purposes of these requirements, each 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.

Appendix 13 to Subparts B and C
Visual requirements
(See ANTR-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.

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 satisfactory;

(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 ANTR-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 ANTR-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 fields 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 ophthalmologistacceptable 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 ANTR-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 ophthalmologist acceptable to the AMS at the discretion of the AMS.

9 (a) Cataract surgery. A fit assessment 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.

Appendix 14 **to Subparts B and C**
Colour perception
(See ANTR-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 Manual of Civil Aviation Medicine (ICAO DOC 8984).

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

(a) *Anomaloscopy (Nagel or equivalent).* This test is considered passed if the colour match is trichromatic and the matching range is 4 scale units or less, or by

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

Appendix 15 **to Subparts B and C**
Otorhinolaryngological requirements
(See ANTR-FCL 3.230 and 3.350)

1 At the initial examination a comprehensive ORL examination (for further guidance see the Manual of Civil Aviation Medicine; ICAO DOC 8984) 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 caloricor 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.

Appendix 16 **to Subparts B and C**
Hearing requirements
(See ANTR-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:

500 Hz
1 000 Hz
2 000 Hz
3 000 Hz

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.

Appendix 17 **to Subparts B and C**
Psychological requirements
(See ANTR-FCL 3.240 and 3.360)

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

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

Appendix 18 to Subparts B and C
Dermatological requirements
(See ANTR-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.

Appendix 19 to Subparts B and C
Oncology Requirements
(See ANTR-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 may be appropriate.

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SECTION 2 –ACCEPTABLE MEANS OF COMPLIANCE (AMC)/ INTERPRETATIVE EXPLANATORY MATERIAL (IEM)

1 *GENERAL*

1.1 This Section contains Acceptable Means of Compliance and Interpretative/Explanatory Material that has been agreed for inclusion in ANTR-FCL 3.

1.2 Where a particular ANTR paragraph does not have an Acceptable Means of Compliance or any Interpretative/Explanatory Material, it is considered that no supplementary material is required.

2 *PRESENTATION*

2.1 The Acceptable Means of Compliance and Interpretative/Explanatory Material are presented in full page width 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 A numbering system has been used in which the Acceptable Means of Compliance or Interpretative/Explanatory Material uses the same number as the ANTR paragraph to which it refers. The number is introduced by the letters AMC or IEM to distinguish the material from the ANTR itself.

2.3 The acronyms AMC and IEM also indicate the nature of the material and for this purpose the two types of material are defined as follows:

Acceptable Means of Compliance (AMC) illustrate a means, or several alternative means, but not necessarily the only possible means by which a requirement can be met. It should however be noted that where a new AMC is developed, any such AMC (which may be additional to an existing AMC) will be amended into the document following consultation under the NPA procedure.

Interpretative/Explanatory Material (IEM) helps to illustrate the meaning of a requirement.

2.4 New AMC or IEM material may, in the first place, be made available rapidly by being published as a Temporary Guidance Leaflet (TGL). Licensing TGLs can be found in the Joint Aviation Authorities Administrative & Guidance Material, Section 5 – Personnel licensing, Part Three: Temporary Guidance. The procedures associated with Temporary Guidance Leaflets are included in the Licensing Joint Implementation Procedures, Section 5 – Personnel licensing, Part 2 Chapter 7.

2.5 Explanatory Notes not forming part of the AMC or IEM text appear in a smaller typeface.

2.6 New, amended or corrected text is enclosed within heavy brackets.

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AMC/IEM A

GENERAL REQUIREMENTS

IEM FCL 3.001
Abbreviations

A	Aeroplane
A/C	Aircraft
AMC	Acceptable Means of Compliance
AMC	Aeromedical Centre
AME	Authorised Medical Examiner
AMS	Aeromedical Section
ATC	Air Traffic Control
ATP	Airline Transport Pilot
ATPL	Airline Transport Pilot Licence
CFI	Chief Flying Instructor
CGI	Chief Ground Instructor
CPL	Commercial Pilot Licence
CRE	Class Rating Examiner
CRI	Class Rating Instructor
FCL	Flight Crew Licensing
F/E	Flight Engineer
FE	Flight Examiner
FI	Flight Instructor
FIE	Flight Instructor Examiner
FNPT	Flight and Navigation Procedures Trainer
FS	Flight Simulator
FSTD	Flight Synthetic Training Device
FTO	Flight Training Organisation
H	Helicopter
HT	Head of Training
ICAO	International Civil Aviation Conference
IEM	Interpretive and Explanatory Material
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions
IR	Instrument Rating
IRE	Instrument Rating Examiner
IRI	Instrument Rating Instructor
MCC	Multi Crew Co-operation
ME	Multi-engine
MEP	Multi-engine Piston
MET	Multi-engine Turbo-prop
MPA	Multi-pilot Aeroplane
MPH	Multi-pilot Helicopter
nm	Nautical Miles

OML	Operational Multicrew Limitation
OSL	Operational Safety Pilot Limitation
OTD	Other Training Devices
PF	Pilot Flying
PIC	Pilot-In-Command
PICUS	Pilot-in-Command Under Supervision
PNF	Pilot Not Flying
PPL	Private Pilot Licence
R/F	Radiotelephony
SE	Single-engine
SET	Single-engine (Turbo-prop)
SFE	Synthetic Flight Examiner
SFI	Synthetic Flight Instructor
SIM	Simulator
SPA	Single-pilot Aircraft
SPH	Single-pilot Helicopter
SPIC	Student Pilot-In-Command
TMG	Touring Motor Glider
TR	Type Rating
TRE	Type Rating Examiner
TRI	Type Rating Instructor
TRTO	Type Rating Training Organisation
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions

IEM FCL 3.010
Licence requirements

STUDENT PILOT

ANTR-FCL 1.085 Requirements

a. A student pilot shall meet requirements specified by the Authority in the State in which the student intends to train. In prescribing such requirements the Authority shall ensure that the privileges granted would not permit student pilots to constitute a hazard to air navigation.

b. A student pilot shall not fly solo unless authorised by a flight instructor.

ANTR-FCL 1.090 Minimum age

A student pilot shall be at least 16 years of age before the first solo flight.

ANTR-FCL 1.095 Medical fitness

A student pilot shall not fly solo unless that student pilot holds a valid Class 1 or Class 2 medical certificate.

PRIVATE PILOT LICENCE – PPL

ANTR-FCL 1.100 Minimum age

An applicant for a PPL shall be at least 17 years of age.

ANTR-FCL 1.105 Medical fitness

An applicant for a PPL shall hold a valid Class 1 or Class 2 medical certificate. In order to exercise the privileges of a PPL a valid Class 1 or Class 2 medical certificate shall be held.

COMMERCIAL PILOT LICENCE – CPL

ANTR-FCL 1.140 Minimum age

An applicant for a CPL shall be at least 18 years of age.

ANTR-FCL 1.145 Medical fitness

An applicant for a CPL shall hold a valid Class 1 medical certificate. In order to exercise the privileges of the CPL a valid Class 1 medical certificate shall be held.

AIRLINE TRANSPORT PILOT LICENCE – ATPL

ANTR-FCL 1.265 Minimum age

An applicant for an ATPL shall be at least 21 years of age. In order to exercise the privileges of the ATPL a valid Class 1 medical certificate shall be held.

ANTR-FCL 1.270 Medical fitness

An applicant for or the holder of an ATPL shall hold a valid Class 1 medical certificate. In order to exercise the privileges of the ATPL a valid Class 1 medical certificate shall be held.

IEM FCL 3.035
Carriage of safety pilots
Operational Safety Pilot Limitation (OSL) (Class 2 medical certificate only)
See ANTR-FCL 3.035

INTRODUCTION

1 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 for the purpose of taking over control should the person acting as a PIC holding a specific medical certificate restriction become incapacitated.

2 The following information should be provided to assist persons acting as safety pilots:

a. the background for establishing the role of a safety pilot;

b. the logging of flight time whilst acting as a safety pilot;

c. the types of medical condition which restrict a particular pilot from flying solo;

d. the safety pilot"s role and responsibilities; and

e. guidance material to assist the safety pilot in the conduct of this role.

3 Whenever a pilot licence holder with a safety pilot restriction renews or is issued with the related medical certificate, the holder should receive from the Authority an information sheet. This sheet will give advice to pilots utilised by the licence holder in the capacity of safety pilot. An example of this information sheet is shown below.

INFORMATION SHEET

General considerations

4 The following are a few notes to help you in your role as a safety pilot. Your pilot has been assessed by the Medical Section of the Authority as unfit for solo private flying, but fit to fly with a safety pilot. Although this may sound medically rather alarming, the standards for such pilots are still high, and he/she would undoubtedly be passed fit to lead a „normal life" on the ground. The chances of any problem occurring during the flight are therefore remote. Nevertheless, as with any aspect of flight safety, remote possibilitiesshould be assessed and, as far as possible, eliminated. This is the purpose of the safety pilot limitation.

5 Unless you have to take over the controls you are supernumerary and cannot log any flying time. You should be checked out and current on the aircraft. It must have dual controls and you must be licensed to fly in the proposed airspace and conditions.

6 You should have some idea of your pilot"s medical condition and the problems that might occur during the flight. These could be due to a sudden or subtle incapacitation in a pilot who is otherwise functioning perfectly normally. Alternatively, there may be some fixed problem that is always present (such as poor vision in one eye or an amputated leg) which might cause difficulties in special circumstances.

7 When flying with a pilot who might suffer some form of incapacitation, you should particularly monitor the critical stages of the flight (such as take-off and approach). It may be useful to use some form of question and answer routine as is done during commercial flights. If your pilot does become incapacitated, the two priorities are to fly the aeroplane and try to prevent him/her from compromising the controls. The greatest help in the latter situation is the continuous wearing of a fixed seat belt and shoulder harness (not an inertia reel). With a fixed disability it should be possible to anticipate when help may be needed (maximum braking for example) and to take appropriate action. Further points of consideration are as follows:

a. You should check the medical certificate of your intended PIC to see if the medical restriction is tied to an aeroplane with specially adapted controls, or to a specific type of aeroplane. If so, ensure your PIC is in compliance in this respect.

b. Before the flight, discuss with your PIC the circumstances under which you should intercede and take control of the aeroplane. During this discussion, also establish whether the PIC wishes you to conduct any flight crew ancillary tasks. If so, these should be clearly specified to avoid confusion between the PIC and you during the flight. This is particularly important when events are moving quickly and the aeroplane is near the surface, for example, during take-off or final approach to landing.

c. Bear in mind that you are not just a passenger but may, at any time during the flight, be called upon to take over control. Therefore, you will need to remain alert to this possible situation at all times.

d. You should also keep in mind that accidents have occurred with two qualified pilots on board when both pilots thought the other was in control. A means of communication must be established between you and the PIC in order that both of you know who is in control of the aeroplane at any given time. The spoken words „I have control" from one pilot and the response words „you have control" from the other pilot is simple and appropriate for this purpose.

e. In order to avoid distraction or confusion to the PIC during the flight, you should keep your hands and feet away from the controls unless safety circumstances arise which require you to take over control of the aeroplane.

IEM FCL 3.040
Use of medication, drugs, other treatments and alcohol
See ANTR-FCL 3.040

Medication

1 Accidents and incidents have occurred as a result of pilots flying while medically unfit and the majority have been associated with what have been considered relatively trivial ailments. Although the symptoms of colds, sore throats, diarrhoea and other abdominal upsets may cause little or no problem whilst on the ground they become dangerous in the flying environment by distracting the pilot and degrading performance in the various flying tasks. The in-flight environment may also increase the severity of symptoms which may be minor while on the ground. The effects may be compounded by the side effects of the medication prescribed or bought over the counter for the treatment of such ailments. The following are some widely used medicines which are normally considered incompatible with flying.

2 Antibiotics such as the various Penicillins, Tetracyclines and others may have short term or delayed side effects which can affect pilot performance. More significantly, however, their use usually indicates that an infection is present and thus the effects of this infection will normally mean that a pilot is not fit to fly.

3 Tranquillisers, anti-depressants and sedatives. Inability to react due to the use of this group of medicines has been a contributory cause to fatal aircraft accidents. Again, as with antibiotics, the underlying condition for which these medications have been prescribed will almost certainly mean that a pilot‟s mental state is not compatible with the flying task.

4 Stimulants such as caffeine, amphetamines etc. (often known as “pep” pills) used to maintain wakefulness or suppress appetite are often habit forming. Susceptibility to different stimulants varies from one individual to another, and all may cause dangerous over confidence. Over dosage causes headaches, dizziness and mental disturbance. The use of “pep” pills while flying is not permitted. Where coffee intake does not offer sufficient stimulation, then an individual is not fit to fly. Remember that excessive coffee drinking has harmful effects including disturbance of the heart‟s rhythm.

5 Anti-histamines can cause drowsiness. They are widely used in “cold cures” and in treatment of hay fever, asthma and allergic rashes. They may be in tablet form or a constituent of nose drops or sprays. In many cases the condition itself may preclude flying, so that, if treatment is necessary, advice from the AMS, an AMC or an AME should be sought so that modern drugs, which do not degrade human performance, can be prescribed.

6 Certain drugs used to treat high blood pressure can cause a change in the normal cardiovascular reflexes and impair intellectual performance, both of which can seriously affect flight safety. If the level of blood pressure is such that drug therapy is required the pilot must be temporarily grounded and monitored for any side effects. Any treatment instituted should be discussed with the AMS, an AMC or an AME and a simulator assessment or line check may be appropriate before return to flying.

7 Following local, general, dental and other anaesthetics, a period of time should elapse before return to flying. The period will vary considerably from individual to individual, but a pilot should not fly for at least 12 hours after a local anaesthetic and for 48 hours after a general or spinal anaesthetic.

8 The more potent analgesics may produce a significant decrement in human performance. If such potent analgesics are required, the pain for which they are taken generally indicates a condition which precludes flying.

9 Many preparations are now marketed containing a combination of medicines. It is essential therefore that if there is any new medication or dosage, however slight, the effect should be observed by the pilot on the ground prior to flying. Although the above are the commonest medicines which adversely affect pilot performance, it should be noted that many other forms of medication, although not normally affecting pilot performance, may do so in individuals who are “oversensitive” to a particular preparation. Individuals are therefore advised not to take any medicines before or during flight unless they are completely familiar with their effects on their own bodies. In cases of doubt, pilots should consult an AME, an AMC or the AMS.

10 (a) If you are taking any medicine you should ask yourself the following three questions:

- Do I feel fit to fly?
- Do I really need to take medication at all?
- Have I given this particular medication a personal trial on the ground of at least 24 hours before flight to ensure that it will not have any adverse effects whatever on my ability to fly?

(b) Confirming the absence of adverse effects may well need expert advice and the assistance of the AMS, an AMC or an AME.

(c) If you are ill and need treatment it is vitally important that the doctor whom you consult knows that you are a member of air crew and whether or not you have recently been abroad.

Other Treatments

11 Alternative or complementary medicine, such as acupuncture, homeopathy, hypnotherapy and several other disciplines, is developing and gaining greater credibility. Some such treatments are more acceptable in some States than others. There is a need to ensure that “other treatments”, as well as the underlying condition, are declared and considered by the AMS, an AMC or an AME when assessing fitness.

Alcohol

12 (a) Alcohol is a contributory factor in a number of aircraft accidents every year. It is now well established that even small amounts of alcohol in the blood produce a significant and measurable deterioration in the performance of skilled tasks. Research has shown that blood alcohol concentrations of 0.4 promille are associated with a highly significant increase in errors committed by both experienced and in-experienced pilots even in simple aircraft. This level may be produced after consuming two units of alcohol, e.g. 5cl of whiskey or 0·5L of beer.

(b) The number of units in an alcoholic drink is given by the volume of the drink in centilitres (cl) multiplied by the strength in % weight/volume (%w/v).

Examples:

- 50 cl (0·5L) of beer of 5%w/v contains 2·5 units. (5% of 50 = 2·5)
- 2·5 cl of whiskey of 40%w/v contains 1 unit. (40% of 2·5 = 1)
- 75 cl (1 bottle) of wine of 12%w/v contains 9 units. (12% of 75 = 9)

(c) Alcohol is removed from the body at a relatively constant rate (0·15 promille each hour) regardless of the concentration present. Pilots should not fly for at least 8 hours after taking small amounts of alcohol and proportionally longer if larger amounts are consumed. It should also be remembered that alcohol can have delayed effects on the blood sugar and the inner ear. The effects on the inner ear can be prolonged and increase susceptibility to disorientation and even motion sickness.It may be prudent for a pilot to abstain from alcohol at least 24 hours before flying.

(d) It must be remembered that alcohol‟s effects can be enhanced or prolonged significantly if it is taken by an individual who is suffering from an illness or who is taking medication.

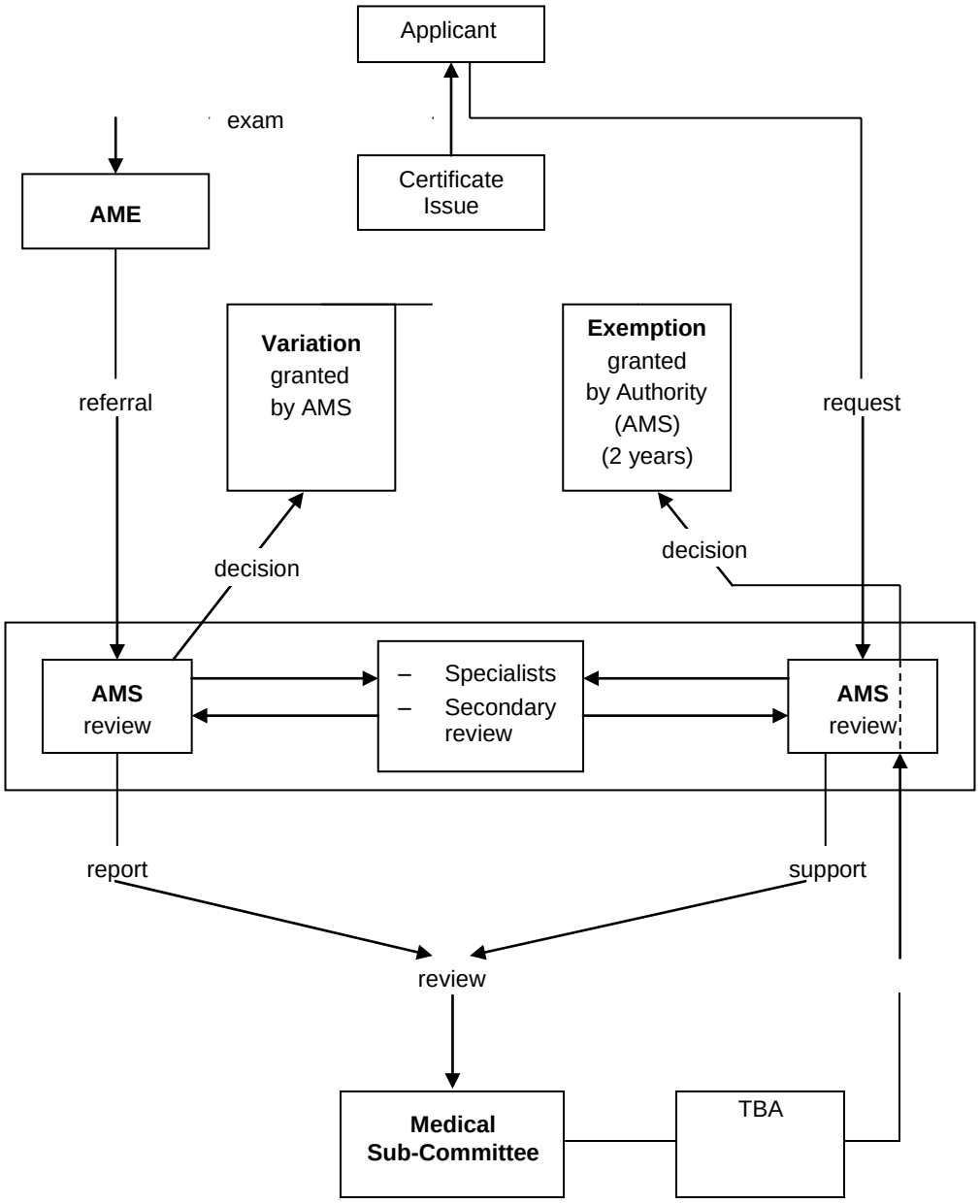
(e) Attention is drawn to ANTR-OPS 1.085(d) where a blood alcohol level of 0·2 promille is described as the upper limit for aircrew on duty as well as an 8 hour abstention period prior to specified reporting time for flight duty.

Psychotropic Drugs and Substance Abuse

13 The use of such drugs or substances has a basic effect of detaching the person from reality as well as more complex short and long term effects. These effects are not compatible with the control of an aircraft and individuals using such drugs or substances are not fit to be members of flight crew. Further details aregiven in:

- Appendix 10 to Sub Part B & C and IEM FCL A, B and C
- IEM FCL A, B and C - The Manual of Civil Aviation Medicine - Aviation Psychiatry Chapter.

IEM FCL 3.046
Procedures for medical certification exemptions/variations
See ANTR-FCL 3.045



AMC FCL 3.090
Training course syllabi for authorised medical examiners
See ANTR-FCL 3.090

A	**BASIC TRAINING IN AVIATION MEDICINE**	**60 HOURS**
1	**Introduction to Aviation Medicine** History of aviation medicine Specific aspects of civil aviation medicine Aspects of military aviation medicine and space medicine	**1 hour**
2	**Physics of Atmosphere and Space** Atmosphere Space Gas and vapour laws and their physiological significance	**1 hour**
3	**Basic aeronautical knowledge** Flight mechanisms Propulsion Instrumentation on board Conventional instruments – „glass cockpit" Professional airline operations Military aviation Air traffic control Recreational flying Simulator/aircraft experience	**3 hours**
4	**Aviation Physiology**	
	ATMOSPHERE Functional limits for humans in flight } Divisions of the atmosphere } Gas laws – physiological significance } Physiological effects of decompression } } RESPIRATION } Blood gas exchange } Oxygen saturation } } **4 hours** HYPOXIA – signs and symptoms } Average time of useful consciousness (TUC) } Hyperventilation – signs and symptoms } Barotrauma } Decompression sickness } ACCELERATION G–Vector orientation } Effects and limits of G–load } Methods to increase gz-tolerance } **1 hour** Positive/negative acceleration } Acceleration and the vestibular system } VISUAL DISORIENTATION Sloping cloud deck } Ground lights and stars – confusion } **1 hour** Visual autokinesis } VESTIBULAR DISORIENTATION Anatomy of the inner ear } Function of the semicircular canals } **2 hours** Function of the otolith organs } The oculogyral and coriolis illusion } „Leans" }	

SIMULATOR ILLUSION
Forward acceleration illusion of „nose up" }
Deceleration illusion of „nose down" } **1 hour**
Motion sickness – causes and management }

NOISE AND VIBRATION
Preventive measures } **1 hour**

5 Ophthalmology
including 1 hour demonstration and practical **4 hours**

Anatomy of the eye
Clinical examination of the eyes
Function testing (visual acuity, colour vision, visual fields etc.
Aspects of eye-pathology significant to aviation
CAA visual requirements

6 Otorhinolaryngology
including 1 hour demonstration and practical **3 hours**

Anatomy of the systems
Clinical examination in ORL
Functional hearing tests
Equilibrium testing
Aero-deafness
Barotrauma – ears and sinuses
Aeronautical ORL – pathology
CAA hearing requirements

7 Cardiology and General Medicine **10 hours**

Complete physical examination
Physical fitness and cardiovascular conditions
– respiratory conditions
– gastrointestinal disease
– renal disorders
– gynaecology
– glucose tolerance
– haematological disorders
– orthopaedic disorders
– pilots with disabilities
CAA requirements

8 Neurology **2 hours**

Complete neurological examination
Physical fitness and neurological disorders
CAA requirements

9 Psychiatry in Aviation Medicine **4 hours**

Psychiatric exploration
Physical fitness and psychiatric conditions
Drugs and alcohol
CAA requirements

10 Psychology **4 hours**
Introduction to psychology in aviation
Behaviour
Personality
Flight motivation and suitability
Group social factors
Workload, ergonomics
Psychological stress, fatigue
Psychomotor functions and age

Fear and refusal of flying
AME/Flight Crew relationships
Psychological selection criteria
CAA requirements

11 Dentistry 1 hour

Dental examination
Barodontalgia
CAA requirements

12 Accidents, Escape and Survival 4 hours

Injuries
Accident statistics
– general, recreational aviation
– commercial aviation
– military aviation
Aviation pathology, post mortem examination, identification

Escape from aircraft in flight
– aircraft on fire
– aircraft in water
– by parachute
– by ejection

13 Legislation, Rules and Regulations 6 hours

ICAO Standards and Recommended Practices
CAA provisions (Regulations, Appendices, AMCs and IEMs)
AMS, AMC, AME

14 Air Evacuation including 1 hour demonstration and practical 3 hours

Organisation and logistics
Disabled passengers
Air ambulance flying
Patients in respiratory distress
Patients with cardiovascular disorders
Psychiatric emergencies

15 Medication and Flying 2 hours

16 Concluding items 2 hours

Final examination
De-briefing and critique

B ADVANCED TRAINING IN AVIATION MEDICINE 60 HOURS

1 Pilot working environment 2 hours

Pressure cabin
Fixed wing
Helicopter
Single-pilot/multi-crew

2 Aerospace physiology including 2 hours demonstration and practical 4 hours

Brief review of basics in physiology
(hypoxia, hyperventilation, acceleration, disorientation)

3 Ophthalmology
including 2 hours demonstration and practical 5 hours

Brief review of basics
(visual acuity, refraction, colour vision, visual fields...)
Class 1 visual requirements
Implications of refractive and other eye surgery
Case review

4 Otorhinolaryngology
including 2 hours demonstration and practical 4 hours

Brief review of basics
(barotrauma - ears and sinuses, functional hearing tests...)
Class 1 hearing requirements
Case review

5 Cardiology and general medicine
including 4 hours demonstration and practical 10 hours

Complete physical examination and review of basics
Class 1 requirements
Medication and flying
Diagnostic steps in cardiology
Clinical cases

6 Neurology/Psychiatry
including 2 hours demonstration and practical 6 hours

Brief review of basics
(neurological examination, psychiatric exploration)
Drugs and alcohol
Class 1 requirements

7 Human Factors in aviation
including 9 hours demonstration and practical 19 hours

a. Long haul flight operations
- flight time limitations
- sleep disturbance
- extended/expanded crew
- jet lag/time zones
- sleep disturbance

b. Human information processing and system design
- FMS, PFD, datalink, fly by wire
- adaptation to the glass cockpit
- CCC, CRM, LOFT etc.
- simulator training
- ergonomics
- flight experience

c. Crew commonality
- flying under the same type rating
  e.g. B737–300, –400, –500
- flying under common type rating
  e.g. B757/767, A320/340

d. Human factors in aircraft accidents
- analysis by and consequences for airlines
- CAA requirements

8 Tropical medicine 2 hours

Endemicity of tropical disease
Tropical pathology and aviation medicine
Vaccination of flight crew and passengers
International health regulations

9 Hygiene
including 2 hours demonstration and practical — 4 hours

Aircraft and transmission of diseases
Disinfection in aviation
Hygiene aboard aircraft
Catering
Crew nutrition

10 Space medicine — 2 hours

Radiation
Spacecraft

11 Concluding items — 2 hours

Organisation, briefing
final examination and critique

Abbreviations

CCC	Crew Co-ordination Concept
CRM	Crew Resource Management
FMS	Flight Management System
LOFT	Line Oriented Flight Training
PFD	Primary Flight Display

C REFRESHER TRAINING IN AVIATION MEDICINE — 20 HOURS

1 Refresher course supervised by the Authority (minimum 6 hours)

2 Agreed accreditation times for training:

a. Attendance at International Academy of Aviation and Space Medicine Annual Congresses — (all 4 days – 10 hours)
b. Attendance at Aerospace Medical Association Annual Scientific Meetings — (all 4 days – 10 hours)
c. Other scientific meetings, as organised or approved by AMS.*
d. Flight deck experience (a maximum of 5 hours credit per 3 years)
   i. jump seat — (5 sectors – 1 hour credit)
   ii. simulator — (4 hours – 1 hour credit)
   iii. aircraft piloting — (4 hours – 1 hour credit)

All credited time must be agreed with the AMS.
* A minimum of 6 hours must be under the direct supervision of the AMS.

IEM FCL 3.095(a) & (b)
Summary of minimum periodic requirements

LICENCE	CLASS 1 COMMERCIAL PILOT AIRLINE TRANSPORT PILOT	CLASS 2 STUDENT PILOT PRIVATE PILOT/FLT ENGINEER
INITIAL EXAMINATION (Reference ANTR-FCL 3.100)	AMC	AMC OR AME *
ISSUE OF MEDICAL CERTIFICATE (ANTR-FCL 3.100)	Initial: AMS Renewal: AMC or AME	AMC or AME
VALIDITY OF MEDICAL CERTIFICATE (3.105)	Under 40 – 12 months 40-59, single- pilot Comm air transport carrying pax – 6 months 40-59, other comm Air transport – 12 months 60 and over – 12 months	Under 40 – 60 months 40-49 – 24 months 50 and over – 12 months
HAEMOGLOBIN (3.180 and 3.300)	At initial then every examination	At initial
ELECTROCARDIOGRAM (3.130 and 3.250)	At initial then under 30 – 5 yearly 30 – 39 – 2 yearly 40 – 49 – annually 50 and over – all reval/ renewal	At initial then 40 – 49 – 2 yearly 50 and over – annually
AUDIOGRAM (3.235 and 3.355)	At initial then under 40 – 5 yearly 40 and over – 2 yearly	At initial issue of instrument rating then under 40 – 5 yearly 40 and over – 2 yearly
COMPREHENSIVE OTORHINOLARYNGOLOGICAL EXAMINATION (3.230 and 3.350)	At initial by AMC or specialist then if indicated	
OPHTHALMOLOGICAL EXAMINATION (3.215 and 3.335, Appendix 1)	At initial and if refractive error exceeds + 3 dioptres Specialist reports every 5 years if refractive error exceeds + 3 up to and including + 5 dioptres or exceeds - 3 up to and including - 6 dioptres Specialist reports every 2 years if refractive error exceeds -6 dioptres	At initial by AME or specialist
LIPID PROFILE (3.130 and 3.250)	At initial then age 40	If two or more coronary risk factors are identified at initial then age 40
PULMONARY FUNCTION TESTS (3.155 and 3.275)	At initial then if indicated	If indicated
URINALYSIS (3.185 and 3.305)	At initial then every examination	At initial then every examination

This Table summarises the principal requirements. Full requirements are detailed in ANTR-FCL 3 Subparts B and C and Appendices 1 to 18.

Note: Any tests may be required at any time if clinically indicated (ANTR-FCL 3.105(f)).

*AMC = Aeromedical Centre

*AME = Authorised Medical Examiner

APPLICATION FORM FOR AN AVIATION MEDICAL CERTIFICATE

Complete this page fully and in block capitals - Refer to instructions pages for details. MEDICAL IN CONFIDENCE

(1) State of licence issue: BAHRAIN CIVIL AVIATION AFFAIRS	(2) Class of medical certificate applied for 1 ☐ 2 ☐ 3 ☐	
(3) Surname:	(4) Previous surname(s):	(12) Application Initial ☐ Renewal/Revalidation ☐
(5) Forenames:	(6) Date of birth: (7) Sex Male ☐ Female ☐	(13) Reference number:
(8) Place and country of birth:	(9) Nationality:	(14) Type of license applied for:
(10) Permanent address: Country: Telephone No.:	(11) Postal address (if different) Country: Telephone No.:	(15) Occupation (principal) (16) Employer (17) Last medical examination Date: Place:
(18) Aviation licence(s) held (type): Licence number: Country of issue:		(19) Any Conditions/ Limitations/ Variations on the Licence/ Medical Certificate No ☐ Yes ☐ Details:
(20) Have you ever had an aviation medical certificate denied, suspended or revoked by any licensing authority? No ☐ Yes ☐ Date: Country: Details:		(21) Total flight time hours: (22) Flight time hours since last medical: (23) Aircraft presently flown:
(24) Any aircraft accident or reported incident since last medical? No ☐ Yes ☐ Date: Place: Details:		(25) Type of flying intended: (26) Present flying activity Single pilot ☐ Multi pilot ☐
(27) Alcohol - state average weekly intake in units:	(28) Do you currently use any medication? No ☐ Yes ☐ State drug, dose, date started and why:	
(29) Do you smoke tobacco? Never ☐ No ☐ Date stopped: Yes ☐ State type and amount:		

General and medical history: Do you have, or have you ever had, any of the following? (Please tick).

Note: if revalidating at the same venue as last examination, tick only boxes relating to any medical/surgical/ophthalmic or other events or changes since last examined. If 'no change' state this in 'Remarks'.

	Yes	No		Yes	No		Yes	No	**Females only:**	Yes	No
101 Eye trouble/eye operation			112 Nose, throat or speech disorder			123 Malaria or other tropical disease			150 Gynaecological,		
102 Spectacles and/or contact lenses ever worn			113 Head injury or concussion			124 A positive HIV test			menstrual problems		
			114 Frequent or severe headaches			125 Sexually transmitted disease			151 Are you pregnant?		
103 Spectacle/contact lens prescript-tions change since last medical exam.			115 Dizziness or fainting spells			126 Admission to hospital					
			116 Unconsciousness for any reason			127 Any other illness or injury			**Family history of:**		
104 Hay fever, other allergy			117 Neurological disorders; stroke,			128 Visit to medical practitioner			170 Heart disease		
105 Asthma, lung disease			epilepsy, seizure, paralysis, etc			since last medical examination			171 High blood pressure		
106 Heart or vascular trouble			118 Psychological/psychiatric trouble			129 Refusal of life insurance			172 High cholesterol level		
107 High or low blood pressure			of any sort			130 Refusal of flying licence			173 Epilepsy		
108 Kidney stone or blood in urine			119 Alcohol/drug/substance abuse						174 Mental illness		
109 Diabetes, hormone disorder			120 Attempted suicide						175 Diabetes		
110 Stomach, liver or intestinal trouble			121 Motion sickness requiring medication			132 Medical rejection from or for military service			176 Tuberculosis		
									177 Allergy/asthma/eczema		
111 Deafness, ear disorder			122 Anaemia / Sickle cell trait/other			133 Award of pension or			178 Inherited disorders		
			blood disorders			compensation for injury or illness			179 Glaucoma		

(30) **Remarks:** If previously reported and no change since, so state.

(31) **Declaration:** I hereby declare that I have carefully considered the statements made above and to the best of my belief they are complete and correct and that I have not withheld any relevant information or made any misleading statements. I understand that if I have made any false or misleading statements in connection with this application, or fail to release the supporting medical information, the Authority may refuse to grant me a medical certificate or may withdraw any medical certificate granted, without prejustice to any other action applicable under national law. CONSENT TO RELEASE OF MEDICAL INFORMATION: I hereby authorise the release of all information contained in this report and any or all attachments to the Aeromedical Section and where necessary the Aeromedical Section of another State, recognising that these documents or electronically stored data are to be used for completion of a medical assessment and will become and remain the property of the Authority, providing that I or my physician may have access to them according to national law. Medical Confidentiality will be respected at all times.

Date	Signature of applicant	Signature of AME (Witness)

INSTRUCTIONS PAGE FOR COMPLETION OF THE APPLICATION FORMFOR AN AVIATION MEDICAL CERTIFICATE

This Application Form, all attached Report Forms and Reports are required in accordance with ICAO Instructions and will be transmitted to the Aeromedical Section. Medical Confidentiality shall be respected at all times.

The Applicant must personally complete in full all questions (boxes) on the Application Form. Writing must be in Block Capitals using a ball-point pen and be legible. Exert sufficient pressure to make legible copies. If more space is required to answer any question, use a plain sheet of paper bearing the information, your signature and the date signed. The following numbered instructions apply to the numbered headings on the application form.

NOTICE: Failure to complete the application form in full or to write legibly will result in non-acceptance of the application form.The making of False or Misleading statements or the Withholding of relevant information in respect of this application may result in criminal prosecution, denial of this application and/or withdrawal of any medical certificate(s) granted.

1. **BAHRAIN CIVIL AVIATION AFFAIRS**	**17. LAST MEDICAL APPLICATION:** State date (day, month, year) and place (town, country), Initial applicants state „NONE".
2. CLASS OF MEDICAL CERTIFICATE: Tick appropriate box. Class 1: Professional Pilot Class 2: Private Pilot Others: All other uses, e.g. ATC, Cabin Crew	**18. AVIATION LICENCE HELD:** State type of licences held as answered in Question 14. Enter licence number and State of issue for each licence. If no licences are held, state „NONE".
3. SURNAME: State Surname/ Family name.	**19. ANY LIMITATIONS ON THE LICENCE/MEDICAL CERTIFICATE:** Tick appropriate box and give details of any limitations on your licences / medical certificates, e.g. vision, colour vision, safety pilot, etc.
4. PREVIOUS SURNAME(S): If your surname or family name has changed for any reason, state previous name(s).	**20. MEDICAL CERTIFICATE DENIAL OR REVOCATION:** Tick „YES" box if you have ever had a medical certificate denied or revoked even if only temporary. If „YES", state date (DD/MM/YYYY) and Country where occurred.
5. FORENAMES: State first and middle names (maximum three).	**21. PILOT FLIGHT TIME TOTAL:** State total number of hours flown.
6. DATE OF BIRTH: Specify in order Day(DD), Month(MM), Year(YYYY) in numerals, e.g. 22-08-1950.	**22. PILOT FLIGHT TIME SINCE LAST MEDICAL:** State number of hours flown since your last medical examination.
7. SEX: Tick appropriate box.	**23. AIRCRAFT PRESENTLY FLOWN:** State name of principal aircraft flown, e.g. Boeing 737, Cessna 150, etc.
8. PLACE OF BIRTH: State Town and Country of birth.	**24. AIRCRAFT ACCIDENT/INCIDENT:** If „YES" box ticked, state Date (DD/MM/YYYY) and Country of Accident/Incident.
9. NATIONALITY: State name of country of Citizenship.	**25. TYPE OF FLYING INTENDED:** State whether airline, charter, agriculture, pleasure, etc.
10. PERMANENT ADDRESS:. State permanent postal address and country. Enter telephone area code as well as number.	**26. PRESENT FLYING ACTIVITY:** Tick appropriate box to indicate whether you fly as the SOLE pilot or not.
11. POSTAL ADDRESS: If different from permanent address, state full current postal address including telephone number and area code. If the same, enter „SAME".	**27. DO YOU DRINK ALCOHOL?** Tick applicable box. If yes, state weekly alcohol consumption e.g. 2 litres beer
12. APPLICATION: Tick appropriate box.	**28. DO YOU CURRENTLY USE ANY MEDICATION:** If „YES", give full details - name, how much you take and when, etc. Include any non-prescription medication.
13. REFERENCE NUMBER: State Reference Number allocated to you Initial Applicants enter „NONE".	**29. DO YOU SMOKE TOBACCO:** Tick applicable box. Current smokers state type (cigarettes, cigars, pipe) and amount (e.g. 2 cigars daily; pipe – 1 oz. weekly)
14. TYPE OF LICENCE DESIRED: State type of licence applied for from the following list: Aeroplane Transport Pilot Licence Commercial Pilot Licence/Instrument Rating Commercial Pilot Licence Private Pilot Licence/Instrument Rating Private Pilot And whether Fixed Wing / Rotary Wing / Both Other – Please specify	**GENERAL AND MEDICAL HISTORY** All items under this heading from number 101 to 179 inclusive must have the answer „YES" or „NO" ticked. You MUST tick „YES" if you have ever had the condition in your life and describe the condition and approximate date in the **30. REMARK**S box. All questions asked are medically important even though this may not be readily apparent. Items numbered 170 to 179 relate to immediate family history whereas items numbered 150 to 151must be answered by female applicants only.
15. OCCUPATION: Indicate your principal employment.	If information has been reported on a previous application form and there has been no change in your condition, you may state „Previously Reported, No Change Since". However, you must still tick „YES" to the condition. Do not report occasional common illnesses such as colds.
16. EMPLOYER: If principal occupation is pilot, then state employer"s name or if self-employed, state „self".	**31. DECLARATION AND CONSENT TO OBTAINING AND RELEASING INFORMATION:** Do not sign or date these declarations until indicated to do so by the AME who will act as witness and sign accordingly.

AN APPLICANT HAS THE RIGHT TO REFUSE ANY TEST AND TO REQUEST REFERRAL TO THE AUTHORITY (AMS). HOWEVER, THIS MAY RESULT IN TEMPORARY DENIAL OF MEDICAL CERTIFICATION.

AME MEDICAL EXAMINATION GUIDELINES

BEFORE STARTING THE MEDICAL EXAMINATION, CHECK BOTH THE LICENCE AND THE PREVIOUS MEDICAL CERTIFICATE. The licence is checked to verify the identity of the applicant. Should an applicant not have his/her licence or previous medical certificate, you should contact the Authority (Aeromedical Section) to check prior details and requirements. If the applicant is an initial applicant, you should have him/her satisfactorily establish their identity by other means.

The previous medical certificate is checked for limitations. The limitation „Special Instructions – contact AMS" requires you to contact the relevant AMS for special instructions which may even require the applicant to be examined at a designated location or centre. If a pilot has been outside the limits of ANTR-FCL 3, Section 1, Subparts B or C, but has been certified after review procedure by the AMS, the limitation 'REV - Medical certificate issued after review procedure, special instructions may apply, AMS may be contacted' indicates that special instructions may apply. It allows any AME to be aware of that and to contact the AMS for more information if deemed necessary. However, the holder of the medical certificate should present the written report of the AMS concerning the review procedure to the AME to allow quicker processing (Reference ANTR-FCL 3.125).

You should then check the previous medical certificate to establish what tests are required for that medical, i.e. ECG.

Hand the applicant the Application Form and the guidelines for its completion. Instruct the applicant to complete the form but NOT to sign it until instructed. You should go over the form with the applicant elucidating further information as necessary to determine the significance of any entry and asking further questions as an aide- memoire. When you are satisfied that the form is complete and legible, request the applicant to sign and date the form and then sign yourself as witness. If the applicant refuses to complete the application form fully or refuses to sign the declaration consent to release of medical information, you must inform the applicant that you may not issue a medical certificate regardless of the result of the clinical examination; also that you must refer the complete documentation of that examination to the relevant AMS for a decision. This AMS is expected to state that their application for a medical certificate is incomplete and not acceptable.

Perform the medical examination and complete the Medical Examination Report Form as per instructions. Review all tests required and confirm all performed. If an Extended Medical Examination is being performed, confirm completion and receipt of ORL and Ophthalmology report forms.

Review all forms for correctness of answers and results. If you are satisfied that the applicant meets the CAA Standards, issue a new certificate of the appropriate class. When completing the certificate, verify that all the required information is entered and in particular that all limitations, conditions, variations and their corresponding codes are entered on Page 4. Dates of future examinations and tests can be completed at the option of the AME. Ask the applicant to then sign the certificate after your signature.

If all the CAA medical standards are not clearly met, or if a doubt exists about the fitness of the applicant for the class of medical certificate applied, either refer the decision to the AMS or deny issuance of a certificate. He/she must be informed of their right to review by the AMS and it should be explained to them why a certificate is being denied.

Complete all forms as soon as possible and certainly within 5 days. Forward them to your AMS (or supervisory AMS if you are an AME based outside of Bahrain). If a medical certificate has been denied or decision referred, documentation must be forwarded immediately by post and preferably also by fax.

IEM FCL 3.095(c)(4)

MEDICAL EXAMINATION REPORT

(201) Examination Category	(202) Height cm	(203) Weight kg	(204) Colour Eye	(205) Colour Hair	(206) Blood Pressure-seated (mmHg)		(207) Pulse - resting	
					Systolic	Diastolic	Rate (bpm)	Rhythm
Initial ☐ Revalidation/Renewal ☐ Extended ☐ Special referral ☐								Reg ☐ Irreg ☐

Clinical exam: Check each item

	Normal	Abnormal		Normal	Abnormal
(208) Head, face, neck, scalp			(218) Abdomen, hernia, liver, spleen		
(209) Mouth, throat, teeth			(219) Anus, rectum		
(210) Nose, sinuses			(220) Genito - urinary system		
(211) Ears, drums, eardrum motility			(221) Endocrine system		
(212) Eyes - orbit & adnexa; visual fields			(222) Upper & lower limbs, joints		
(213) Eyes - pupils and optic fundi			(223) Spine, other musculoskeletal		
(214) Eyes - ocular motility; nystagmus			(224) Neurologic - reflexes, etc.		
(215) Lungs, chest, breasts			(225) Psychiatric		
(216) Heart			(226) Skin, identifying marks and lymphatics		
(217) Vascular system			(227) General systemic		

(228) **Notes:** Describe every abnormal finding. Enter applicable item number before each comment.

Visual acuity

(229) *Distant vision at 5m /6m*

	uncorrected	Corrected to	Spectacles	Contact lenses
Right eye		Corrected to		
Left eye		Corrected to		
Both eyes		Corrected to		

(230) *Intermediate vision*

	Uncorrected		Corrected	
N14 at 100 cm	Yes	No	Yes	No
Right eye				
Left eye				
Both eyes				

(231) *Near vision*

	Uncorrected		Corrected	
N5 at 30-50 cm	Yes	No	Yes	No
Right eye				
Left eye				
Both eyes				

(232) **Glasses** Yes ☐ No ☐

Type:

Refraction	Sph	Cyl	Axis	Add
Right eye				
Left eye				

(233) **Contact lenses** Yes ☐ No ☐

Type:

(313) **Colour perception** Normal ☐ Abnormal ☐

Pseudo-isochromatic plates Type: Ishihara (24 plates)
No. of plates No. of errors

(234) **Hearing** (when 241 not performed)

	Right ear	Left ear
Conversional voice test at 2 m back turned to examiner	Yes ☐ No ☐	Yes ☐ No ☐

Audiometry

Hz	500	1000	2000	3000
Right				
Left				

(236) **Pulmonary function**

FEV_1/FVC_____ %

Normal ☐ Abnormal ☐

(237) **Haemoglobin** ***(unit)***

Normal ☐ Abnormal ☐

(235) **Urinanalysis** Normal ☐ Abnormal ☐

Glucose	Protein	Blood	Other

Accompanying Reports

	Normal	Abnormal/Comment
(238) ECG		
(239) Audiogram		
(240) Ophthalmology		
(241) ORL (ENT)		
(243) Blood lipits		
(243) Pulmonary function		
(244) Pulmonary function		
(246) Other (what?)		

(247) **Aviation medical examiner's recommendation**

Name of applicant: Date of birth

_____ _____

☐ Fit Class _____

☐ Medical certificate issued class _____

☐ Unfit class_____(FCL para_____)

☐ Deferred for further evaluation. If yes, why and to whom?

(248) **Comments, restrictions, limitations:**

(249) **Medical examiner's declaration:**

I hereby certify that I/my AME group have personally examined the applicant named on this medical examination report and that this report with any attachment embodies my findings completely and correctly.

(250) Place and date:	Examiner's Name and Address:(Block Capitals)	AME Stamp with AME No

Authorised Medical Examiners Signature:	Email Telephone No Telefax No.:	

AME INSTRUCTIONS FOR COMPLETION OF THE MEDICAL EXAMINATION REPORT FORM

All questions (boxes) on the Medical Examination Report Form must be completed in full. If an Otorhinolaryngology Examination Report Form is attached, then Questions 209, 210, 211, and 234 may be omitted. If an Ophthalmology Examination Report Form is attached then Questions 212, 213, 214, 229, 230, 231, 232, and 233 may be omitted.

Writing must be in BLOCK CAPITALS using a ball-point pen and be legible. Exert sufficient pressure to make legible copies. Completion of this form by typing/printing is both acceptable and preferable. If more space is required to answer any question, write on a plain sheet of paper the applicant‟s name, the information, your signature and the date signed. The following instructions apply to the same numbered headings on the Medical Examination Report Form.

NOTICE – Failure to complete the medical examination report form in full as required or to write legibly may result in non-acceptance of the application in total and may lead to withdrawal of any medical certificate issued. The making of False or Misleading statements or the withholding of relevant information by an AME may result in criminal prosecution, denial of an application or withdrawal of any medical certificate granted.

201 EXAMINATION CATEGORY – Tick appropriate box.

Initial – Initial examination for either Class 1 or 2; also initial exam for upgrading from Class 2 to 1 (notate „upgrading‟ in Section 248).

Renewal / Revalidation – Subsequent ROUTINE examinations.

Extended Renewal / Revalidation – Subsequent ROUTINE examinations which include comprehensive Ophthalmological and ORL examinations.

202 HEIGHT – Measure height without shoes in centimetres to nearest cm.

203 WEIGHT – Measure weight in indoor clothes in kilograms to nearest kg.

204 EYE COLOUR – State colour of applicants eyes from the following list: brown, blue, green, hazel, grey, multi.

205 HAIR COLOUR – State colour of applicants hair from the following list: brown, black, red, fair, bald.

206 BLOOD PRESSURE – Blood Pressure readings should be recorded as Phase 1 for Systolic pressure and Phase 5 for Diastolic pressure. The applicant should be seated and rested. Recordings in mm Hg.

207 PULSE (RESTING) – The pulse rate should be recorded in beats per minute and the rhythm should be recorded as regular or irregular. Further comments if necessary may be written in Section 228, 248 or separately.

SECTION 208 – 227 inclusive constitute the general clinical examination and each of the sections must be checked as Normal or Abnormal.

208 **HEAD, FACE, NECK, SCALP** – To include appearance, range of neck and facial movements, symmetry, etc.

209 **MOUTH, THROAT, TEETH** – To include appearance of buccal cavity, palate motility, tonsillar area, pharynx and also gums, teeth and tongue.

210 **NOSE, SINUSES** – To include appearance and any evidence of nasal obstruction or sinus tenderness on palpation.

211 **EARS, DRUMS, EARDRUM MOTILITY** – To include otoscopy of external ear, canal, tympanic membrane. Eardrum motility by valsalva manoeuvre or by pneumatic otoscopy.

212 **EYES – ORBIT AND ADNEXA, VISUAL FIELDS** – To include appearance, position and movement of eyes and their surrounding structures in general, including eyelids and conjunctiva. Visual fields check by campimetry, perimetry or confrontation.

213 **EYES – PUPILS AND OPTIC FUNDI** – To include appearance, size, reflexes, red reflex and fundoscopy. Special note of corneal scars.

214 **EYES – OCULAR MOTILITY, NYSTAGMUS** – To include range of movement of eyes in all directions; symmetry of movement of both eyes; ocular muscle balance; convergence; accommodation; signs of nystagmus.

215 **LUNGS, CHEST, BREAST** – To include inspection of chest for deformities, operation scars, abnormality of respiratory movement, auscultation of breath sounds. Physical examination of female applicants breasts should only be performed with informed consent.

216 **HEART** – To include apical heart beat, position, auscultation for murmurs, carotid bruits, palpation for trills.

217 **VASCULAR SYSTEM** – To include examination for varicose veins, character and feel of pulse, peripheral pulses, evidence of peripheral circulatory disease.

218 **ABDOMEN, HERNIA, LIVER, SPLEEN** – To include inspection of abdomen; palpation of internal organs; check for inquinal hernias in particular.

219 **ANUS, RECTUM** – Examination only with informed consent.

220 **GENITO-URINARY SYSTEM** – To include renal palpation; inspection palpation male/female reproductive organs only with informed consent.

221 **ENDOCRINE SYSTEM** – To include inspection, palpation for evidence of hormonal abnormalities/imbalance; thyroid gland.

222 **UPPER AND LOWER LIMBS, JOINTS** – To include full range of movements of joints and limbs, any deformities, weakness or loss. Evidence of arthritis.

223 **SPINE, OTHER MUSCULOSKELETAL** – To include range of movements, abnormalities of joints.

224 **NEUROLOGIC – REFLEXES ETC**. To include reflexes, sensation, power, vestibular system – balance, romberg test, etc.

225 **PSYCHIATRIC** – To include appearance, appropriate mood/thought, unusual behaviour.

226 **SKIN, LYMPHATICS, IDENTIFYING MARKS** – To include inspection of skin; inspection, palpation for lymphadenopathy, etc. Briefly describe scars, tattoos, birthmarks, etc. which could be used for identification purposes.

227 **GENERAL SYSTEMIC** – All other areas, systems and nutritional status.

228 **NOTES** – Any notes, comments or abnormalities to be described – extra notes if required on paper, signed and dated.

229 **DISTANT VISION AT 5/6 METRES** – Each eye to be examined separately and then both together. First without correction, then with spectacles (if used) and lastly with contact lenses, if used. Record visual acuity in appropriate boxes. Visual acuity to be tested at either 5 or 6 metres with the appropriate chart for the distance.

230 **INTERMEDIATE VISION AT 1 METRE** – Each eye to be examined separately and then both together. First without correction, then with spectacles if used and lastly with contact lenses if used. Record visual acuity in appropriate boxes as ability to read N14 at 100 cm (Yes/No).

231 **NEAR VISION AT 30–50 CMS.** – Each eye to be examined separately and then both together. First without correction, then with spectacles if used and lastly with contact lenses, if used. Record visual acuity in appropriate boxes as ability to read N5 at 30–50 cm (Yes/No).

Note: Bifocal contact lenses and contact lenses correcting for near vision only are not acceptable.

232 **SPECTACLES** – Tick appropriate box signifying if spectacles are or are not worn by applicant. If used, state whether unifocal, bifocal, varifocal or look-over.

233 **CONTACT LENSES** – Tick appropriate box signifying if contact lenses are or are not worn. If worn, state type from the following list; hard, soft, gas-permeable or disposable.

313 COLOUR PERCEPTION – Tick appropriate box signifying if colour perception is normal or not. If abnormal state number of plates of the first 15 of the pseudo-isochromatic plates (Ishihira 24 plates) have not read correct.

234 **HEARING** – Tick appropriate box to indicate hearing level ability as tested separately in each ear at 2 m.

235 **URINALYSIS** – State whether result of urinalysis is normal or not by ticking appropriate box. If no abnormal constituents, state NIL in each appropriate box.

236 **FEV_1/FEC** – When required or on indication, state actual value obtained in % and state if normal or not with reference to height, age, sex and race.

237 **HAEMOGLOBIN** – Enter actual haemoglobin test result and state units used. Then state whether normal value or not by ticking appropriate box.

238–246 ACCOMPANYING REPORTS – One box opposite each of these sections must be ticked. If the test is not required and has not been performed, then tick the NOT PERFORMED box. If the test has been performed (whether required or on indication) complete the normal or abnormal box as appropriate. In the case of question 246, the number of other accompanying reports must be stated.

247 MEDICAL EXAMINER'S RECOMMENDATION – Enter name of applicant in Block Capitals and then tick appropriate box with applicable class of Medical Certificate. If a fit assessment is recommended, please indicate whether a Medical Certificate has been issued or not. An applicant may be recommended as Fit for Class 2 but also deferred or recommended as Unfit for Class I. If an Unfit recommendation is made, applicable ANTR Med. Para No(s) must be entered. If an applicant is deferred for further evaluation, indicate the reason and the doctor to whom applicant referred.

248 COMMENTS, RESTRICTIONS, LIMITATIONS, ETC. – Enter here your findings and assessment of any abnormality in the history or examination. State also any limitation required.

249 MEDICAL EXAMINERS DETAILS – In this section the AME must sign the declaration, complete his name and address in block capitals, contact telephone number (and fax if available) and lastly stamp the relevant box with his designated AME stamp incorporating his AME number.

250 PLACE AND DATE – Enter the place (town or city) and the date of examination. The date of examination is the date of the general examination and not the date of finalisation of form. If the medical examination report is finalised on a different date, enter date of finalisation in Section 248 as „Report finalised on ".

IEM FCL-3.095(c)

OPHTHALMOLOGY EXAMINATION REPORT

Complete this page fully and in block capitals – Refer to instructions pages for details

MEDICAL IN CONFIDENCE

Applicant"s details

(1) BAHRAIN CIVIL AVIATION AFFAIRS	(2) Class of medical certificate applied for 1st ☐ 2nd ☐ Others ☐		
(3) Surname:	(4) Previous surname(s):		(12) Application Initial ☐ Revalidation/Renewal ☐
(5) Forenames:	(6) Date of birth:	(7) Sex Male ☐ Female ☐	(13) Reference number:
(8) Place and country of birth:	(9) Nationality:		(14) Type of licence desired:

(301) **Consent to release of medical information:** I hereby authorise the release of all information contained in this report and any or all attachments to the Aeromedical Examiner, the Authority and where necessary the Aeromedical Section of another State, recognising that these documents or any other electronically stored data are to be used for completion of a medical assessment and will become and remain the property of the Authority, providing that I or my physician may have access to them according to national law. Medical Confidentiality will be respected at all times.

~~Date:~~ Signature of the ~~applicant:~~ Signature of medical examiner ~~(witness)~~

(302) Examination Category
Initial ☐
Reval/Renewal ☐
Special referral ☐

(303) Ophthalmological history:

Clinical examination

Check each item		Normal	Abnormal
(304) Eyes, external & eyelids			
(305) Eyes, Exterior (slit lamp, ophth.)			
(306) Eye position and movements			
(307) Visual fields (confrontation)			
(308) Pupillary reflexes			
(309) Fundi (Ophthalmoscopy)			
(310) Convergence	cm		
(311) Accommodation	D		

Visual acuity

(314) *Distant vision at 5 m /6 m*

	Uncorrected		Spectacles	Contact lenses
Right eye		Corrected to		
Left eye		Corrected to		
Both eyes		Corrected to		

(315) *Intermediate vision at 1 m*

	Uncorrected		Spectacles	Contact lenses
Right eye		Corrected to		
Left eye		Corrected to		
Both eyes		Corrected to		

(316) *Near vision at 30–50 cm*

	Uncorrected		Spectacles	Contact lenses
Right eye		Corrected to		
Left eye		Corrected to		
Both eyes		Corrected to		

(312) *Ocular muscle balance* (in prisme dioptres)

Distant at 5/6 metres	Near at 30–50 cm
Ortho	Ortho
Eso	Eso
Exo	Exo
Hyper	Hyper
Cyclo	Cyclo

Tropia Yes No Phoria Yes No

Fusional reserve testing Not performed Normal Abnormal

(317) *Refraction*

	Sph	Cylinder	Axis	Near (add)
Right eye				
Left eye				

Actual refraction examined Spectacles prescription based

(318) *Spectacles*

Yes ☐ No ☐

Type:

(319) *Contact lenses*

Yes ☐ No ☐

Type:

(313) *Colour perception*

Pseudo-Isochromatic plates Type:

No of plates: No of errors:

Advanced colour perception testing indicated Yes No
Method:

Colour SAFE Colour UNSAFE

(320) *Intra-ocular pressure*

Right (mmHg)	Left (mmHg)
Metho	Normal ☐ Abnormal ☐

(321) **Ophthalmological remarks and recommendation:**

(322) **Examiner's declaration:**

I hereby certify that I/my AME group have personally examined the applicant named on this medical examination report and that this report with any attachment embodies my findings completely and correctly.

(323) Place and date:	Ophth Examiner"s Name and Address:(Block Capitals)	AME or Specialist Stamp with No:
Authorised Medical Examiner"s Signature:	Telefax No.: Telefax No.:	

INSTRUCTIONS FOR COMPLETION OF THE OPHTHALMOLOGY EXAMINATION REPORT FORM

Writing must be in Block Capitals using a ball-point pen and be legible. Exert sufficient pressure to make legible copies. Completion of this form by typing or printing is both acceptable and preferable. If more space is required to answer any question, use a plain sheet of paper bearing the applicant‟s name, the information, your signature and the date signed. The following numbered instructions apply to the numbered headings on the Medical Examination Report Form.

NOTICE – Failure to complete the medical examination report form in full as required or to write legibly may result in non-acceptance of the application in total and may lead to withdrawal of any medical certificate issued. The making of False or Misleading statements or the withholding of relevant information by an authorised examiner mayresult in criminal prosecution, denial of an application or withdrawal of any medical certificate granted.

GENERAL – The AME or Ophthalmology specialist performing the examination should verify the identity of the applicant. The applicant should then be requested to complete the sections 1, 2, 3, 4, 5, 6, 7, 12 and 13 on the form and then sign and date the **consent to release of medical information** (Section 301) with the examiner countersigning as witness.

302 EXAMINATION CATEGORY – Tick appropriate box.

Initial – Initial examination for either Class 1 or 2; also initial exam. for upgrading from Class 2 to 1 (notate „upgrading‟ in Section 303).

Renewal/Revalidation – Subsequent comprehensive Ophthalmological examinations due to refractive error.

Special Referral – NON Routine examination for assessment of an ophthalmological symptom or finding.

303 OPHTHALMOLOGY HISTORY – Detail here any history of note or reasons for special referral.

CLINICAL EXAMINATION – SECTIONS 304-309 INCLUSIVE – These sections together cover the general clinical examination and each of the sections must be checked as Normal or Abnormal. Enter any abnormal findings or comments on findings in Section 321.

310 CONVERGENCE – Enter near point of convergence in cms. as measured using RAF Near Point Rule or equivalent. Please also tick whether Normal or Abnormal and enter abnormal findings and comments in Section 321.

311 ACCOMMODATION – Enter measurement recorded in Dioptres using RAF Near Point Rule or equivalent. Please also tick whether Normal or Abnormal and enter abnormal findings and comments in Section 321.

312 OCULAR MUSCLE BALANCE – Ocular Muscle Balance is tested at Distant 5 or 6 ms and Near at 30-50 cms and results recorded. Presence of Tropia or Phoria must be entered accordingly and also whether Fusional Reserve Testing was NOT performed and if performed whether normal or not.

313 COLOUR PERCEPTION – Enter type of Pseudo-Isochromatic Plates (Ishihara) as well as number of plates presented with number of errors made by examinee. State whether Advanced Colour Perception Testing is indicated and what methods used (which Colour Lantern or Anomaloscopy) and finally whether judged to be Colour Safe or Unsafe. Advanced Colour Perception Testing is usually only required for initial assessment unless indicated by change in applicant‟s colour perception.

314–316 VISUAL ACUITY TESTING AT 5/6 ms, 1 m and 30–50 cms. – Record actual visual acuity obtained in appropriate boxes. If correction not worn nor required, put line through corrected vision boxes. Distant visual acuity to be tested at either 5 or 6 metres with the appropriate chart for that distance.

317 **REFRACTION** – Record results of refraction. Indicate also whether for Class 2 applicants, refraction details are based upon spectacle prescription.

318 **SPECTACLES** – Tick appropriate box signifying if spectacles are or are not worn by applicant. If used, state whether unifocal, bifocal, varifocal or look-over.

319 **CONTACT LENSES** – Tick appropriate box signifying if contact lenses are or are not worn. If worn, state type from the following list; hard, soft, gas-permeable, disposable.

320 **INTRA-OCULAR PRESSURE** – Enter Intra-Ocular Pressure recorded for right and left eyes and indicate whether normal or not. Also indicate method used – applanation, air etc.

321 **OPHTHALMOLOGY REMARKS AND RECOMMENDATIONS** – Enter here all remarks, abnormal findings and assessment results. Also enter any limitations recommended. If there is any doubt about findings or recommendations the examiner may contact the AMS for advice before finalising the report form.

322 **OPHTHALMOLOGY EXAMINERS DETAILS** – In this section the Ophthalmology examiner must sign the declaration, complete his name and address in block capitals, contact telephone number (and fax if available) and lastly stamp the report with his designated stamp incorporating his AME or specialist number.

323 **PLACE AND DATE** – Enter the place (town or city) and the date of examination. The date of examination is the date of the clinical examination and not the date of finalisation of form. If the Ophthalmology examination report is finalised on a different date, enter date of finalisation on Section 321 as „Report finalised on .....".

IEM FCL 3.095(c)(8)

OTORHINOLARYNGOLOGY EXAMINATION REPORT

Complete this page fully and in block capitals – Refer to instructions pages for details.

MEDICAL IN CONFIDENCE

Applicant"s details

(1) BAHRAIN CIVIL AVIATION AFFAIRS	(2) Class of medical certificate applied for Class 1 Class 2 Class 3		
(3) Surname:	(4) Previous surname(s):		(12) Application Initial □ Revalidation/Renewal □
(5) Forenames:	(6) Date of birth:	(7) Sex Male □ Female □	(13) Reference number:

(401) **Consent to release of medical information:** I hereby authorise the release of all information contained in this report and any or all attachments to the Aeromedical Examiner, the Authority and where necessary the Aeromedical Section of another State, recognising that these documents or any other electronically stored data are to be used for completion of a medical assessment and will become and remain the property of the Authority, providing that Ior my physician may have access to them according to national law. Medical Confidentiality will be respected at all times.

Date: Signature of the applicant: Signature of medical examiner (witness)

(402) Examination Category Initial □ Special referral □	(403) Otorhinolaryngology history:

Clinical examination

Check each item	Normal	Abnormal
(404) Head, face, neck, scalp		
(405) Buccal cavity, teeth		
(406) Pharynx		
(407) Nasal passages and naso-pharynnx (incl. anterior rhinoscopy)		
(408) VestIbular system incl. Romberg test		
(409) Speech		
(410) Sinuses		
(411) Ext acoustic meati, tympanic membranes		
(412) Pneumatic otoscopy		
(413) Impedance tympanometry including Valsalva menoeuvre (initial only)		

(419) *Pure tone audiometry*

dB HL (hearing level)

Hz	Right ear	Left ear
250		
500		
1000		
2000		
3000		
4000		
6000		
8000		

(420) *Audiogram*

o = Right – – – = Air
x = Left..... = Bone

dB/HL								
–10								
0								
10								
20								
30								
40								
50								
60								
70								
80								
90								
100								
110								
120								
Hz	250	500	1000	2000	3000	4000	6000	8000

Additional testing (if indicated)	Not performed	Normal	Abnormal
(414) Speech audiometry			
(415) Posterior rhinoscopy			
(416) EOG; spontaneous and positional nystagnus			
(417) Differential caloric test or vestibular autorotation test			
(418) Mirror or fibre laryngoscopy			

(421) **Otorhinolaryngology remarks and recommendation:**

(422) **Examiner's declaration:**

I hereby certify that I/my AME group have personally examined the applicant named on this medical examination report and that this report with any attachment embodies my findings completely and correctly.

(423) Place and date:	ORL Examiner"s Name and Address:(Block Capitals)	AME or Specialist Stamp with No:
Authorised Medical Examiner"s Signature:		
	Telephone No.: Telefax No.:	

IEM FCL 3.095(c)(9)

INSTRUCTIONS FOR COMPLETION OF THE OTORHINOLARYNGOLOGY EXAMINATION REPORT FORM

Writing must be in Block Capitals using a ball-point pen and be legible. Exert sufficient pressure to make legible copies. Completion of this form by typing or printing is both acceptable and preferable. If more space is required to answer any question, use a plain sheet of paper bearing the applicant's name, the information, your signature and the date signed. The following numbered instructions apply to the numbered headings on the Otorhinolaryngology Examination Report Form.

NOTICE – Failure to complete the medical examination report form in full as required or to write legibly may result in non-acceptance of the application in total and may lead to withdrawal of any medical certificate issued. The making of False or Misleading statements or the withholding of relevant information by an authorised examiner mayresult in criminal prosecution, denial of an application or withdrawal of any medical certificate granted.

GENERAL – The AME or Otorhinolaryngology specialist performing the examination should verify the identity of the applicant. The applicant should then be requested to complete the sections 1, 2, 3, 4, 5, 6, 7, 12 and 13 on the form and then sign and date the **consent to release of medical information** (section 401) with the examiner countersigning as witness.

402 EXAMINATION CATEGORY – Tick appropriate box.

Initial – Initial examination for Class 1; also initial exam. for upgrading from Class 2 to 1 (notate 'upgrading' in Section 403)

Special Referral – NON Routine examination for assessment of an ORL symptom or finding

403 OTORHINOLARYNGOLOGY HISTORY – Detail here any history of note or reasons for special referral.

CLINICAL EXAMINATION – SECTIONS 404-413 INCLUSIVE – These sections together cover the general clinical examination and each of the sections must be checked as Normal or Abnormal. Enter any abnormal findings and comments on findings in Section 421.

ADDITIONAL TESTING – SECTIONS 414-418 INCLUSIVE – These tests are only required to be performed if indicated by history or clinical findings and are not routinely required. For each test one of the boxes must be completed – if the test is not performed then tick that box – if the test has been performed then tick the appropriate box for a normal or abnormal result. All remarks and abnormal findings should be entered in section 421.

419 PURE TONE AUDIOMETRY – Complete figures for dB HL (Hearing Level) in each ear at all listed frequencies.

420 AUDIOGRAM – Complete Audiogram from figures as listed in Section 419.

421 OTORHINOLARYNGOLOGY REMARKS AND RECOMMENDATIONS – Enter here all remarks, abnormal findings and assessment results. Also enter any limitations recommended. If there is any doubt about findings or recommendations the examiner may contact the AMS for advice before finalising the report form.

422 OTORHINOLARYNGOLOGY EXAMINERS DETAILS – In this section the Otorhinolaryngology examiner must sign the declaration, complete his name and address in block capitals, contact telephone number (and fax if available) and lastly stamp the report with his designated stamp incorporating his AME or specialist number.

423 PLACE AND DATE – Enter the place (town or city) and the date of examination. The date of examination is the date of the clinical examination and not the date of finalisation of form. If the ORL examination report is finalised on a different date, enter date of finalisation in Section 421 as 'Report finalised on '.

IEM FCL 3.100(c)

Limitations, Conditions and Variations

LIMITATIONS

CODE	LIMITATION, CONDITION, VARIATION	IMPOSED BY	REMOVED BY
TML	VALID ONLY FOR .....MONTHS	AME/AMC/AMS	AMS
VDL	SHALL WEAR CORRECTIVE LENSES AND CARRY A SPARE SET OF SPECTACLES	AME/AMC/AMS	AMS
VML	SHALL WEAR MULTIFOCAL LENSES AND CARRY A SPARE SET OF SPECTICLES	AME/AMC/AMS	AMS
VNL	SHALL HAVE AVAILABLE CORRECTIVE SPECTACLES FOR NEAR VISION AND CARRY A SPARE SET OF SPECTACLES	AME/AMC/AMS	AMS
VCL	VALID BY DAY ONLY	AMS**	AMS
OML	VALID ONLY AS OR WITH QUALIFIED CO-PILOT	AMS*	AMS*
[ ]			
OCL	VALID ONLY AS CO-PILOT	AMS	AMS
OSL	VALID ONLY WITH SAFETY PILOT AND IN AIRCRAFT WITH DUAL CONTROLS	AMS	AMS
OAL	RESTRICTED TO DEMONSTRATED AIRCRAFT TYPE	AMS	AMS
OPL	VALID ONLY WITHOUT PASSENGERS	AMS	AMS
APL	VALID ONLY WITH APPROVED PROSTHESIS	AMS	AMS
AHL	VALID ONLY WITH APPROVED HAND CONTROLS	AMS	AMS
AGL	VALID ONLY WITH APPROVED EYE PROTECTION	AMS	AMS
SSL	(SPECIAL RESTRICTIONS AS SPECIFIED)	AMS	AMS
SIC	SPECIAL INSTRUCTIONS – CONTACT AMS	AMS	AMS
AMS	RECERTIFICATION OR RENEWAL ONLY BY AMS	AMS	AMS
REV	MEDICAL CERTIFICATE ISSUED AFTER REVIEW PROCEDURE, SPECIAL INSTRUCTIONS MAY APPLY< AMS MAY BE CONTACTED	AMS	AMS
RXO	REQUIRES SPECIALIST OPHTHALMOLOGICAL EXAMINATIONS	AME/AMC/AMS	AMS
FEV	FOR F/E DUTIES VALID FOR AN ADDITIONAL PERIOD OF ^ MONTHS	AME/AMC/AMS	AMS

* *in case of pregnancy by AMS,AMC, AME*

** *in case of colour deficient Class 2 applicants by AMS, AMC AME*

LIMITATION TML

- **TML 'VALID ONLY FOR_____MONTHS'**

EXPLANATION:

The period of validity of your medical certificate has been limited to the duration as shown above for the reasons explained to you by your Authorised Medical Examiner. This period of validity commences on the date of your medical examination. Any period of validity remaining on your previous medical certificate is now no longer valid. You should present for re-examination when advised and follow any medical recommendations. (Reference ANTR- FCL 3.105(e)).

LIMITATION VDL

- **VDL'SHALL WEAR CORRECTIVE LENSES AND CARRY A SPARE SET OF SPECTACLES'**

EXPLANATION:

In order to comply with the vision requirements of your licence, you are required to wear those spectacles or contact lenses that correct for defective distant vision as examined and approved by an Authorised Medical Examiner whilst exercising the privileges of your licence. You must also carry with you a similar set of spectacles. Should you wear contact lenses, you must carry a spare set of spectacles as approved by an AME. You may not wear contact lenses whilst exercising the privileges of your licence until cleared to do so by an AME. You must also carry a spare set of spectacles. (Reference ANTR-FCL 3.220(h) and ANTR-FCL 3.3440(f)).

LIMITATION VML

- **VML 'SHALL WEAR MULTIFOCAL SPECTACLES AND CARRY A SPARE SET OF SPECTACLES'.**

EXPLANATION:

In order to comply with the vision requirements of your licence, you are required to wear those spectacles that correct for defective distant, intermediate and near vision as examined and approved by the Authorised Medical Examiner whilst exercising the privileges of your licence. Contact lenses or full frame spectacles, when either correct for near vision only, may not be worn. You must also carry a spare set of spectacles.

LIMITATION VNL

- **VNL'SHALL HAVE AVAILABLE CORRECTIVE SPECTACLES FOR NEAR VISION AND CARRY A SPARE SET OF SPECTACLES'**

EXPLANATION:

In order to comply with the vision requirements of your licence, you are required to carry with you those spectacles that correct for defective near vision as examined and approved by an Authorised Medical Examiner whilst exercising the privileges of your licence. Contact lenses or full frame spectacles, when either correct for near vision only, may not be worn. You must also carry a spare set of spectacles. (Reference ANTR-FCL 3.220(h) and ANTR-FCL 3.340(f)).

LIMITATION VCL

- **VCL 'VALID BY DAY ONLY'**

EXPLANATION:

This limitation applies to private pilots and can therefore only be applied to a Class 2 medical certificate. This allows private pilots with varying degrees of colour deficiency to operate within specified circumstances. (Reference ANTR-FCL 3.345(e)).

LIMITATION OML

- **OML 'VALID ONLY AS OR WITH QUALIFIED CO-PILOT'**

EXPLANATION:

This applies to crew members who do not meet the medical requirements for single crew operations, but are fit for multi-crew operations.

[ ]

LIMITATION OCL

- **OCL 'VALID ONLY AS CO-PILOT'**

EXPLANATION:

This limitation is a further extension of the OML limitation and is applied when, for some well defined medical reason, the individual is assessed as safe to operate in a co-pilot role but not in command. (Reference ANTR-FCL 3.100(e)).

LIMITATION OSL

- **OSL 'VALID ONLY WITH SAFETY PILOT AND IN AIRCRAFT WITH DUAL CONTROLS'.**

EXPLANATION:

This limitation requires that the aircraft have dual flying controls. The Safety Pilot must be qualified as PIC on the class/type of aircraft and rated for the flight conditions. He must occupy a control seat, be aware of the type(s) of possible incapacity that you may suffer and be prepared to take over the aircraft controls during flight. (Reference ANTR-FCL 3.035 and IEM FCL 3.035).

LIMITATION OAL

- **OAL 'RESTRICTED TO DEMONSTRATED AIRCRAFT TYPE'**

EXPLANATION:

This limitation may apply to a pilot who has a limb deficiency or some other anatomical problem which had been shown by medical flight test or flight simulator testing to be acceptable but to require a restriction to a specific type of aircraft. (Reference ANTR-FCL 3.200 and 3.320 – particularly Appendix 9 Paragraph 2).

LIMITATION OPL

- **OPL 'VALID ONLY WITHOUT PASSENGERS'**

EXPLANATION:

This limitation may be considered when a pilot with a musculo-skeletal problem, or some other medical condition, may involve an increased element of risk to flight safety which might be acceptable to the pilot but which is not acceptable for the carriage of passengers.

LIMITATION APL

- **APL 'VALID ONLY WITH APPROVED PROTHESIS'**

EXPLANATION:

This is similar in application to Limitation OPL and revolves around cases of limb deficiency. (Reference ANTR- FCL 3.200 and 3.320, Appendix 9 Paragraph 2).

LIMITATION AHL

- **AHL 'VALID WITH APPROVED HAND CONTROLS'**

EXPLANATION:

(Reference ANTR-FCL 3.320, Appendix 9 Paragraph 2).

LIMITATION AGL

- **AGL 'VALID ONLY WITH APPROVED EYE PROTECTION'**

EXPLANATION:

(Reference ANTR-FCL 3.215, 3.220, 3.335, 3.340 and, in particular, Appendix 13 Paragraph 3).

LIMITATION SSL

- **SSL 'SPECIAL RESTRICTIONS AS SPECIFIED'**

EXPLANATION:

This limitation is for use in cases that are not clearly defined in FCL Part 3 (Medical) but where a limitation is considered to be appropriate by the AMS. (Reference ANTR-FCL 3.125).

LIMITATION SIC

- **SIC 'SPECIAL INSTRUCTIONS – AME TO CONTACT AMS'**

EXPLANATION:

This limitation requires the AME to contact the AMS before embarking upon renewal or recertification medical assessment. It is likely to concern a medical history of which the AME should be aware prior to undertaking the assessment. (Reference ANTR-FCL 3.100(e)).

LIMITATION AMS

- **AMS 'RECERTIFICATION OR RENEWAL ONLY BY AMS'**

EXPLANATION:

The AMS, as the duly empowered part of the Authority with overall responsibility for medical certification, has the right to determine that a certificate shall be issued be the AMS only and not by an AMC or an AME, if the medical circumstances so require. (Reference ANTR-FCL 3.125(b) (c)).

LIMITATION REV

- **REV 'MEDICAL CERTIFICATE ISSUED AFTER REVIEW PROCEDURE, SPECIAL INSTRUCTIONS MAY APPLY, AMS MAY BE CONTACTED'**

EXPLANATION:

If a pilot has been outside the limits of ANTR-FCL 3, Section 1, Subparts B or C, but has been certified after review procedure by the AMS, this annotation allows any AME to be aware of the previous AMS review procedure and to contact the AMS for more information if deemed necessary. Special instruction(s) not mentioned on the medical certificate might apply. However, the holder of the medical certificate should present the written report of the AMS concerning the review procedure to the AME to allow quicker processing (Reference ANTR-FCL 3.125).

LIMITATION RXO

- **RXO 'REQUIRES SPECIALIST OPHTHALMOLOGICAL EXAMINATIONS'**

EXPLANATION:

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 only be removed by the AMS. (Reference ANTR-FCL 3.215(h))

[ ]

IEM FCL 3.100(d)
Notification of Initial Placing of Limitation on Medical Certificate

Reference No. :		
Name:		
NOTIFICATION OF INITIAL PLACING OF LIMITATION ON MEDICAL CERTIFICATE The below-mentioned limitation, (conditions or restriction) has been recommended to the AMS to be placed on your medical certificate. Should you require further clarification or explanation of this limitation, you should contact the AMS. Should you disagree with the applicability of this limitation, you should apply in writing to the same AMS to have the limitation reviewed. If the decision with which you disagree has been made by the AMS, you will be advised of the procedures, if any, required in order to obtain a further review.		
LIMITATION PLACED: (Limitation Number, Code, Wording)		
EXPLANATION:		
Date:	**AME Signature:**	**AME Number:**

IEM FCL 3.125(c)
Secondary Review Procedure

a. General

Secondary Review Procedures such as Medical Evaluation Boards are convened in various situations where the applicant"s ability to meet the medical standards has not been clearly demonstrated or where there has been a change to the existing physical condition of the candidate. The decision on conducting a medical board can be made based either at the request by the candidate, or the concerned AME, or the need as ascertained by the AMS.

Once the decision has been taken, the AMS, will notify the president of the board authorizing him to conduct the board on the specified candidate for the specified reasons and also informing him of the AME(s) who will assist him. Another notification is made to the applicant informing of the intent to convene a Medical Evaluation Board, giving information as to who will be the president and instructing them to contact the president of the board. The purpose of the Board will be to determine the applicant"s fitness, the medical restrictions which may be imposed to maintain a reasonable level of safety, the lifting of restrictions, a change in the medical category of the individual or any other reason as may be deemed necessary by the AMS. **[**The Board usually comprises of two authorised AMEs one of whom is appointed in the capacity of the president of the board.**]**

The AMS may authorize the President of the Board to consult with other experts in the medical community to conduct a proper evaluation of the applicant's medical qualification. The other AME will assist the President in arriving at a formal medical conclusion which shall be formally presented to the AMS in the form of a written report. Original copies of all tests conducted by the Board should be forwarded to the AMS, a copy should be retained by the President and another copied to the licence holder"s AME. The AMS shall review the findings and consider the Board"s recommendations as to the applicant's medical qualifications. The AMS is not bound by the findings of the Board and may uphold the recommendations of the Board, or disapprove the recommendations. Usually the concerned AME will give the AMS the names of the AMEs who have been dealing with the case and the one who has been most involved. In order to avoid bias and to have fresh input the board might comprise of people who have not been involved in the case before.

b. Medicals Not Requiring Board

A Medical Evaluation Board may not be convened by the AMS, if in the opinion of the AME, the illness, injury, disability, or further treatment does not affect the applicant's licence and rating privileges. The AMS must be consulted and give approval to waive the Board prior to the issuance of a medical certificate. In certain cases the AME might recommend a board but the AMS might decide that there is no need for one and might decide the case or vice versa.