

MÉDECINE AÉRONAUTIQUE & SPATIALE





SOFRAMAS MÉDECINE AÉRONAUTIQUE ET SPATIALE

*Organe officiel
de la Société Francophone
de Médecine Aérospatiale*

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MÉDECINE AÉRONAUTIQUE ET SPATIALE

(NOUVELLE APPELLATION PARUE J.O.R.F. DU 18 DÉCEMBRE 1985 P. 2464)

*Ancienne Société Française de Physiologie
et de Médecine Aéronautiques et Cosmonautiques
fondée le 18 mai 1960 (J.O.R.F. du 30-31 mai 1960, n° 26, p. 4939)*

La Société Francophone de Médecine Aérospatiale (SOFRAMAS), association régie par la loi du 1^{er} juillet 1901 a pour objet le développement et la diffusion des connaissances ainsi que de leurs applications en médecine aérospatiale (article 3 des statuts).

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EDITORIAL

Editorial

Chers confrères,

Nous voici à plus de six ans de l'entrée en vigueur du Règlement 1178/2011 de la Commission déterminant les exigences techniques et les procédures applicables au personnel navigant de l'aéronautique civile.

Comme vous le savez ce grand changement réglementaire a induit de profondes modifications dans la manière d'appliquer les textes et dans vos rapports avec le pôle médical de la direction de la sécurité de l'aviation civile et le conseil médical de l'aéronautique civile : renvoi des dossiers vers le pôle médical, maintien en état de validité de vos agréments plus formalisés etc...

Sachez que tous vos actes comme les nôtres sont beaucoup plus encadrés qu'auparavant par le Règlement Européen. Nous avons dû nous adapter en rédigeant des procédures internes décrivant l'ensemble de nos tâches et nous avons été audités à plusieurs reprises en interne ainsi que par l'Agence Européenne de la Sécurité Aéronautique. Nous vivons donc avec une nouvelle façon de travailler pour laquelle nous nous sommes adaptés; vous avez dû également le faire. Peut-être certains d'entre vous ont vu leurs cabinets audités soit par l'un d'entre nous soit par vidéo interposée; mais rien de bien nouveau car ces audits existent depuis longtemps dans les hôpitaux.

La formation en médecine aéronautique, déjà en place en France depuis 1993 a été confortée dans son principe par le Règlement Européen.

En décembre 2019 une modification du règlement européen est intervenue. Un certain nombre de modifications est en partie dû à la catastrophe de la German Wings qui a profondément marqué le monde de la médecine aéronautique.

C'est pourquoi, le Conseil d'administration de la SOFRAMAS a décidé de réaliser la même opération qu'en 2013. Ce numéro est donc consacré à la publication de l'intégralité du nouveau règlement (traduction officielle en Français et de ses AMC's (acceptable means of compliance)).

Le prochain numéro sera consacré à une « explication de texte » du règlement qui devra être une aide pour vos prises de décisions qui sont de la plus haute importance.

Sachez que tous les documents que vous délivrez sont susceptibles d'être lus par nous-mêmes mais également par des autorités médicales étrangères. Attention donc aux dates de fin de validité, à l'écriture, à votre identification. Les certificats médicaux font partie de ce que le navigant doit toujours avoir sur lui. A ce titre ils peuvent être contrôlés par les autorités de police, de gendarmerie, et administratives en France comme à l'étranger.

Enfin l'année 2020 sera marquée par un événement de grande importance pour la médecine aéronautique : Du 24 au 26 septembre 2020 va se tenir à Paris le premier Congrès International de Médecine Aéronautique l'ICAM 2020 qui réunira les quatre principales sociétés de médecine aéronautique mondiales : L'Aerospace Medical Association (ASMA), l'Académie Internationale de Médecine Aéronautique et Spatiale (ICASM), la Société Européenne de Médecine Aéronautique et Spatiale (ECAM) et la Société Francophone de Médecine Aéronautique et Spatiale (SOFRAMAS) : venez-y nombreux

Bonnes expertises et excellente année 2020 à tous et à vos proches.

René GERMA
Rédacteur en chef adjoint

RÈGLEMENTS

RÈGLEMENT D'EXÉCUTION (UE) 2019/27 DE LA COMMISSION DU 19 DÉCEMBRE 2018 MODIFIANT LE RÈGLEMENT (UE) NO 1178/2011 DÉTERMINANT LES EXIGENCES TECHNIQUES ET LES PROCÉDURES ADMINISTRATIVES APPLICABLES AU PERSONNEL NAVIGANT DE L'AVIATION CIVILE CONFORMÉMENT AU RÈGLEMENT (UE) 2018/1139 DU PARLEMENT EUROPÉEN ET DU CONSEIL.

(Texte présentant de l'intérêt pour l'EEE)

LA COMMISSION EUROPÉENNE

vu le traité sur le fonctionnement de l'Union européenne, vu le règlement (UE) 2018/1139 du Parlement européen et du Conseil du 4 juillet 2018 concernant des règles communes dans le domaine de l'aviation civile et instituant une Agence de l'Union européenne pour la sécurité aérienne, et modifiant les règlements (CE) no 2111/2005, (CE) no 1008/2008, (UE) no 996/2010, (UE) no 376/2014 et les directives 2014/30/UE et 2014/53/UE du Parlement européen et du Conseil, et abrogeant les règlements (CE) no 552/2004 et (CE) no 216/2008 du Parlement européen et du Conseil ainsi que le règlement (CEE) no 3922/91 du Conseil ⁽¹⁾, et notamment son article 23, paragraphe 1, son article 27, paragraphe 1, son article 62, paragraphes 14 et 15, son article 72, paragraphe 5, et son article 74, paragraphe 8, considérant ce qui suit :

(1) Le règlement (UE) no 1178/2011 de la Commission ⁽²⁾ établit des modalités détaillées concernant certaines licences de pilote et concernant les conditions dans lesquelles les licences nationales de pilote et les licences de mécanicien navigant existantes peuvent être converties en licences de pilote, ainsi que les conditions d'acceptation des licences délivrées par les pays tiers. Il définit également des règles concernant les certificats médicaux de pilote, les conditions de conversion des certificats médicaux nationaux et la certification des examinateurs aéromédicaux, et contient des dispositions relatives l'aptitude médicale des membres de l'équipage de cabine.

(2) La mise en œuvre du règlement (UE) no 1178/2011 a fait apparaître que certaines de ses dispositions contiennent des erreurs rédactionnelles et des ambiguïtés. Cela crée des difficultés d'exécution et rend délicat le maintien d'un niveau uniforme de sécurité de l'aviation civile dans

tous les États membres. Il convient dès lors de clarifier et de corriger ces dispositions.

(3) Au cours des inspections de normalisation menées par l'Agence de l'Union européenne pour la sécurité aérienne (ci-après l'« Agence ») et des réunions du groupe d'experts médicaux que l'Agence accueille en son sein, plusieurs failles dans l'annexe IV du règlement (UE) no 1178/2011 ont été recensées, qui seraient susceptibles d'avoir des répercussions sur la sécurité et auxquelles il convient par conséquent de remédier.

(4) À la suite de l'accident sur le vol 9525 de la compagnie Germanwings, le groupe ad hoc dirigé par l'Agence a recensé un certain nombre de risques pour la sécurité et a adopté six recommandations afin d'atténuer ces risques ⁽³⁾. Quatre de ces recommandations, à savoir la recommandation no 2 sur l'évaluation de la santé mentale des membres de l'équipage de conduite (« Mental health assessment of flight crew »), la recommandation no 3 sur la prévention de l'abus d'alcool et d'autres substances psychoactives par les membres de l'équipage de conduite (« Prevention of misuse of alcohol and other psychoactive substances by the flight crew »), la recommandation no 4 sur la formation, la supervision et la mise en réseau des examinateurs aéromédicaux (« Training, oversight and network of AMEs ») et la recommandation no 5 sur la création d'un répertoire aéromédical européen (« Creation of a European aero-medical data repository »), supposent une modification des règles relatives à la certification médicale du personnel navigant figurant dans le règlement (UE) no 1178/2011. Le moment est venu de donner suite à ces recommandations.

(5) Les dispositions du règlement (UE) no 1178/2011 relatives aux exigences médicales et aux examens aéro-

⁽¹⁾ JO L 212 du 22.8.2018, p. 1.

⁽²⁾ Règlement (UE) no 1178/2011 de la Commission du 3 novembre 2011 déterminant les exigences techniques et les procédures administratives applicables au personnel navigant de l'aviation civile conformément au règlement (CE) no 216/2008 du Parlement européen et du Conseil (JO L 311 du 25.11.2011, p. 1).

⁽³⁾ <http://ec.europa.eu/transport/sites/transport/files/modes/air/news/doc/2015-07-17-germanwings-report/germanwings-task-force-final-report.pdf>

(4) Règlement (UE) 2015/340 de la Commission du 20 février 2015 déterminant les exigences techniques et les procédures administratives applicables aux licences et certificats de contrôleur de la circulation aérienne conformément au règlement (CE) no 216/2008 du Parlement européen et du Conseil, modifiant le règlement d'exécution (UE) no 923/2012 de la Commission et abrogeant le règlement (UE) no 805/2011 de la Commission (JO L 63 du 6.3.2015, p. 1).

médicaux devraient être harmonisées avec les dispositions pertinentes du règlement (UE) 2015/340 de la Commission ⁽⁴⁾.

(6) L'Agence a soumis à la Commission européenne, avec son avis no 9/2016, un projet de règles de mise en œuvre.

(7) Les mesures prévues par le présent règlement sont conformes à l'avis du comité établi par l'article 127 du règlement (UE) 2018/1139,

A ADOPTÉ LE PRÉSENT RÈGLEMENT :

ARTICLE PREMIER

Le règlement (UE) no 1178/2011 est modifié comme suit :

1) À l'article 2, les points 22 bis), 22 ter) et 22 quater) suivants sont insérés :

« 22 bis) "ARO.RAMP", la sous-partie RAMP de l'annexe II du règlement sur les opérations aériennes;

22 ter) "automatiquement validée", l'acceptation sans formalités, par un État contractant de l'OACI inclus dans la liste figurant sur le supplément OACI, d'une licence de membre d'équipage de conduite délivrée par un État

conformément à l'annexe 1 de la convention de Chicago;

22 quater) "supplément OACI", un supplément à une licence de membre d'équipage de conduite validée automatiquement et délivrée conformément à l'annexe 1 de la convention de Chicago, mentionné au point XIII de la licence de membre de l'équipage de conduite. »

2) L'annexe IV est modifiée conformément à l'annexe I du présent règlement.

3) L'annexe VI est modifiée conformément à l'annexe II du présent règlement.

ARTICLE 2

Le présent règlement entre en vigueur le vingtième jour suivant celui de sa publication au Journal officiel de l'Union européenne.

Le présent règlement est obligatoire dans tous ses éléments et directement applicable dans tout État membre.

Fait à Bruxelles, 19 décembre 2018.

Par la Commission Le président
Jean-Claude JUNCKER

ANNEXE I

L'annexe IV du règlement (UE) no 1178/2011 est modifiée comme suit :

1) Les sous-parties A et B sont remplacées par le texte suivant :

SOUS-PARTIE A

EXIGENCES GÉNÉRALES

SECTION 1

Généralités

MED.A.001 Autorité compétente

Aux fins de la présente annexe (partie-MED), l'autorité compétente est :

a) pour les centres aéromédicaux (AeMC) :

- 1) l'autorité désignée par l'État membre dans lequel se situe le principal établissement de l'AeMC;
- 2) si l'AeMC se situe dans un pays tiers, l'Agence;

b) pour les examinateurs aéromédicaux (AME) :

- 1) l'autorité désignée par l'État membre dans lequel l'AME a son principal lieu d'activité;
- 2) si le principal lieu d'activité d'un AME se situe dans un pays tiers, l'autorité désignée par l'État membre à laquelle l'AME s'adresse pour la délivrance du certificat d'AME;

c) pour les médecins généralistes (GMP), l'autorité désignée par l'État membre à laquelle le GMP notifie ses activités;

d) pour les médecins du travail (OHMP) qui évaluent l'aptitude médicale des membres d'un équipage de cabine, l'autorité désignée par l'État membre auquel l'OHMP notifie ses activités.

MED.A.005 Domaine d'application

La présente annexe (partie-MED) établit les exigences concernant :

a) la délivrance, la validité, la prorogation et le renouvellement du certificat médical requis pour l'exercice des privilèges d'une licence de pilote ou d'élève-pilote;

b) l'aptitude médicale des membres de l'équipage de cabine;

c) la certification des AME;

d) la qualification des GMP et des OHMP.

MED.A.010 Définitions

Aux fins de la présente annexe (partie-MED), on entend par :

- "limitation", une condition apposée sur le certificat médical ou le rapport médical d'un membre de l'équipage de cabine et qui doit être respectée lors de l'exercice des privilèges de la licence ou du certificat de membre de l'équipage de cabine;

- "examen aéromédical", l'inspection, la palpation, la percussion, l'auscultation ou tout autre moyen d'investigation visant à déterminer l'aptitude médicale à exercer les privilèges de la licence ou à assumer les fonctions de l'équipage de cabine en matière de sécurité;

- "évaluation aéromédicale", la conclusion sur l'aptitude médicale d'un demandeur, basée sur l'évaluation dudit demandeur requise en vertu de la présente annexe (partie-MED), ainsi que sur d'autres examens et tests médicaux lorsque la situation clinique l'exige;

- "grave", l'intensité d'une affection médicale dont les effets sont susceptibles de compromettre l'exercice en toute sécurité des privilèges de la licence ou des fonctions de l'équipage de cabine en matière de sécurité;

- "demandeur", une personne demandeuse ou titulaire d'un certificat médical et qui se soumet à une évaluation aéromédicale d'aptitude à exercer les privilèges de la licence ou à assumer les fonctions de l'équipage de cabine en matière de sécurité;

- "antécédents médicaux", une synthèse ou une énumération des maladies, blessures, traitements ou autres faits médicaux passés, y compris les déclarations d'inaptitude ou limitations d'un certificat médical, présentant ou pouvant présenter un intérêt pour l'évaluation de l'état de santé actuel du demandeur et de son aptitude aéromédicale;

- "autorité de délivrance des licences", l'autorité compétente de l'État membre qui a délivré la licence ou à laquelle une personne demande la délivrance d'une licence ou, quand une personne n'a pas encore fait la demande d'une licence, l'autorité compétente déterminée conformément au point FCL.001 de l'annexe I (partie-FCL);

- "vision sûre des couleurs", la capacité d'un demandeur à correctement distinguer les couleurs utilisées en navigation aérienne et à identifier correctement les feux colorés utilisés dans l'aviation;

- "investigation", l'évaluation chez le demandeur d'un état pathologique suspecté au moyen d'examens et de tests, de façon à vérifier la présence ou l'absence d'une affection médicale;

- "conclusion médicale accréditée", une conclusion, acceptable par l'autorité de délivrance des licences, tirée par un ou plusieurs experts médicaux sur la base de critères objectifs et non discriminatoires, au sujet du cas concerné, avec le concours d'experts de l'utilisation en vol ou d'autres experts, selon les besoins, pour laquelle une évaluation des risques opérationnels peut s'avérer appropriée;

- "abus de substances", l'utilisation d'une ou de plusieurs substances psychoactives par un membre du personnel navigant d'une manière qui :

a) constitue un risque direct pour la personne qui consomme ou compromet la vie, la santé ou le bien-être d'autrui, et/ou

b) engendre ou aggrave un problème ou trouble professionnel, social, mental ou physique;

- "substances psychotropes", l'alcool, les opioïdes, les cannabinoïdes, les sédatifs et les hypnotiques, la cocaïne, les autres psychostimulants, les hallucinogènes et les solvants volatils, à l'exception de la caféine et du tabac;
- "erreur de réfraction", l'écart mesuré en dioptries par rapport à l'emmétropie dans le méridien le plus amétrope, mesuré par les méthodes standard.

MED.A.015 Secret médical

Toutes les personnes intervenant dans un examen, une évaluation et une certification à caractère aéromédical sont tenues de veiller à tout moment au respect du secret médical.

MED.A.020 Diminution de l'aptitude médicale

a) Les titulaires de licence n'exercent à aucun moment les privilèges de leur licence et des qualifications ou certificats qui y sont liés et les élèves-pilotes ne volent jamais en solo s'ils :

- 1) ont connaissance d'une quelconque diminution de leur aptitude médicale susceptible de les rendre incapables d'exercer ces privilèges en toute sécurité;
- 2) prennent ou utilisent des médicaments prescrits ou non prescrits qui sont susceptibles d'influer sur l'exercice en toute sécurité des privilèges de la licence en question;
- 3) reçoivent tout traitement médical, chirurgical ou autre susceptible d'influer sur l'exercice en toute sécurité des privilèges de la licence en question.

b) En outre, les titulaires d'un certificat médical sont tenus d'obtenir auprès de l'AeMC, de l'AME ou du GMP, sans délai et avant d'exercer les privilèges de leur licence, un avis aéromédical lorsqu'ils/elles :

- 1) ont subi une opération chirurgicale ou une procédure invasive;
- 2) ont entamé la prise régulière d'un médicament;
- 3) ont souffert de toute blessure grave impliquant une incapacité de travailler comme membre d'équipage;
- 4) ont souffert d'une maladie grave impliquant une incapacité de travailler comme membre d'équipage;
- 5) sont enceintes;
- 6) ont été admis dans un hôpital ou une clinique médicale;
- 7) ont besoin de verres correcteurs pour la première fois.

c) Dans les cas visés au point b) :

1) le titulaire d'un certificat médical de classe 1 ou 2 doit obtenir un avis aéromédical auprès d'un AeMC ou d'un AME. Dans ce cas, l'AeMC ou l'AME évalue son aptitude médicale et détermine son aptitude à reprendre l'exercice de ses privilèges;

2) le titulaire d'un certificat médical pour licence de pilote d'aéronefs légers doit obtenir un avis aéromédical auprès d'un AeMC, d'un AME ou du GMP qui a signé le certificat médical. Dans ce cas, l'AeMC, l'AME ou le GMP évalue son aptitude médicale et détermine son aptitude à reprendre l'exercice de ses privilèges.

d) Un membre de l'équipage de cabine s'abstient d'exécuter ses tâches sur un aéronef et, le cas échéant, d'exercer les privilèges de son certificat de membre de

l'équipage de cabine s'il a connaissance de toute diminution de son aptitude médicale, dans la mesure où cette affection médicale est susceptible de le rendre incapable d'assumer ses tâches et obligations en matière de sécurité.

e) En outre, s'il présente une des affections médicales énoncées points b) 1) à 5), un membre de l'équipage de cabine doit obtenir, sans retard indu, l'avis d'un AME, d'un AeMC ou d'un OHMP, selon le cas. Dans ce cas, l'AME, l'AeMC ou l'OHMP évalue l'aptitude médicale du membre de l'équipage de cabine et décide s'il est apte à reprendre ses tâches en matière de sécurité.

MED.A.025 Obligations des AeMC, des AME, des GMP et des OHMP

a) En réalisant les examens et évaluations à caractère aéromédical requis en vertu de la présente annexe (partie-MED), les AeMC, les AME, les GMP et les OHMP :

- 1) veillent à établir avec le demandeur une communication sans barrières linguistiques;
- 2) informent le demandeur des conséquences pouvant découler d'une déclaration incomplète, imprécise ou fautive concernant ses antécédents médicaux;
- 3) informent l'autorité de délivrance des licences ou, pour les titulaires d'un certificat de membre de l'équipage de cabine, informent l'autorité compétente lorsque le demandeur produit une déclaration incomplète, imprécise ou fautive concernant ses antécédents médicaux;
- 4) informent l'autorité de délivrance des licences lorsque le demandeur retire sa demande de certificat médical à tout moment du processus.

b) Une fois achevés les évaluations et examens à caractère aéromédical, l'AeMC, l'AME, le GMP ou l'OHMP :

- 1) déclare au demandeur s'il est apte, inapte ou s'il doit être réorienté vers l'évaluateur médical de l'autorité de délivrance des licences, l'AeMC ou l'AME, selon le cas;
- 2) informe le demandeur de toute limitation susceptible de restreindre la formation au vol ou les privilèges de la licence ou du certificat de membre de l'équipage de cabine, selon le cas;
- 3) si le demandeur est jugé inapte, l'informe de son droit de demander le réexamen de la décision conformément aux procédures prévues par l'autorité compétente;
- 4) dans le cas du demandeur d'un certificat médical, soumet sans délai à l'évaluateur médical de l'autorité de délivrance des licences un rapport signé ou authentifié par voie électronique comprenant les résultats détaillés des examens et évaluations à caractère aéromédical requis pour la classe de certificat médical en question, ainsi qu'une copie du formulaire de demande, du formulaire d'examen et du certificat médical;
- 5) informe le demandeur de ses obligations en cas de diminution de son aptitude médicale aux termes du point MED.A.020.

c) Lorsque l'évaluateur médical de l'autorité de délivrance des licences doit être consulté en vertu de la présente annexe (partie-MED), l'AeMC et l'AME sont tenus de suivre la procédure établie par l'autorité compétente.

d) Les AeMC, les AME, les GMP et les OHMP conservent

les dossiers contenant les détails des examens et évaluations à caractère aéromédical effectués conformément à la présente annexe (partie-MED), ainsi que leurs résultats, pendant au moins dix ans ou pendant une période plus longue déterminée par la législation nationale.

e) Les AeMC, les AME, les GMP et les OHMP soumettent sur demande tous les dossiers et rapports aéromédicaux ainsi que toute autre information pertinente à l'évaluateur médical de l'autorité compétente, quand ils sont sollicités à des fins de :

- 1) certification médicale;
- 2) supervision.

f) Les AeMC et AME introduisent ou mettent à jour les données figurant dans le répertoire aéromédical européen conformément au point d) du point ARA.MED.160.

SECTION 2

Exigences relatives aux certificats médicaux

MED.A.030 Certificats médicaux

a) Un élève-pilote ne peut voler en solo à moins de posséder un certificat médical tel que requis pour la licence correspondante.

b) Le demandeur d'une licence, conformément à l'annexe I (partie-FCL), détient un certificat médical délivré conformément à la présente annexe (partie-MED) et correspondant aux privilèges octroyés par la licence demandée.

c) Lors de l'exercice des privilèges :

- 1) d'une licence de pilote d'aéronef léger (LAPL), le pilote détient au moins un certificat médical pour LAPL valable;
- 2) d'une licence de pilote privé (PPL), d'une licence de pilote de planeur (SPL) ou d'une licence de pilote de ballon (BPL), le pilote détient au moins un certificat médical de classe 2;
- 3) d'une SPL ou d'une BPL intervenant dans des vols commerciaux de planeur ou de ballon, le pilote détient au moins un certificat médical de classe 2;
- 4) d'une licence de pilote professionnel (CPL), d'une licence de pilote en équipage multiple (MPL) ou d'une licence de pilote de ligne (ATPL), le pilote détient au moins un certificat médical de classe 1.

d) Si une qualification de vol de nuit est ajoutée à une PPL ou à une LAPL, le titulaire de la licence doit avoir une vision sûre des couleurs.

e) Si une qualification de vol aux instruments ou une qualification de vol aux instruments en route est ajoutée à une PPL, le titulaire de la licence se soumet à une audiométrie par sons purs en se conformant à la périodicité et aux normes requises pour les titulaires d'un certificat médical de classe 1.

f) Un titulaire de licence ne peut en aucun cas détenir plusieurs certificats médicaux délivrés en application de la présente annexe (partie-MED).

MED.A.035 Demande de certificat médical

a) Les demandes de certificat médical respectent le format et les modalités établis par l'autorité compétente.

b) Le demandeur d'un certificat médical fournit à l'AeMC, à l'AME ou au GMP, selon le cas :

- 1) la preuve de son identité;
- 2) une déclaration signée indiquant :
 - i) les éléments médicaux associés à ses antécédents médicaux;
 - ii) s'il a déjà demandé un certificat médical ou effectué un examen à caractère aéromédical afin d'obtenir un certificat médical, auquel cas il fournit l'identité de l'examineur et les résultats de l'examen;
 - iii) s'il a précédemment été déclaré inapte ou si un certificat médical le concernant a déjà fait l'objet d'une suspension ou d'un retrait.

c) S'il demande une prorogation ou un renouvellement de son certificat médical, le demandeur présente le dernier certificat médical à l'AeMC, à l'AME ou au GMP, selon le cas, avant de se soumettre aux examens à caractère aéromédical correspondants.

MED.A.040 Délivrance, prorogation et renouvellement des certificats médicaux

a) Un certificat médical n'est délivré, prorogé ou renouvelé que si les examens et évaluations à caractère aéromédical requis, selon le cas, ont été effectués et que le demandeur a été déclaré apte.

b) Délivrance initiale

- 1) Les certificats médicaux de classe 1 sont délivrés par un AeMC.
- 2) Les certificats médicaux de classe 2 sont délivrés par un AeMC ou un AME.
- 3) Les certificats médicaux pour LAPL sont délivrés par un AeMC ou un AME. Ils peuvent également être délivrés par un GMP, si le droit national de l'État membre de l'autorité de délivrance des licences auprès de laquelle la demande de certificat médical a été faite le permet.

c) Prorogation et renouvellement

- 1) Les certificats médicaux de classe 1 ou 2 sont prorogés ou renouvelés par un AeMC ou un AME.
- 2) Les certificats médicaux pour LAPL sont prorogés ou renouvelés par un AeMC ou un AME. Ils peuvent également être prorogés ou renouvelés par un GMP, si le droit national de l'État membre de l'autorité de délivrance des licences auprès de laquelle la demande de certificat médical a été faite le permet.

d) Les AeMC, AME ou GMP délivrent, prorogent ou renouvellent un certificat médical uniquement si les deux conditions suivantes ont été remplies :

- 1) le demandeur leur a fourni un dossier médical complet ainsi que, lorsque l'AeMC, l'AME ou le GMP les demande, les résultats des examens et tests médicaux effectués par le médecin traitant du demandeur ou tout médecin spécialiste;
- 2) l'AeMC, l'AME ou le GMP a effectué l'évaluation aéromédicale sur la base des examens et tests médicaux

requis pour le certificat médical concerné afin de vérifier que le demandeur satisfait à toutes les exigences pertinentes de la présente annexe (partie-MED).

e) L'AME, l'AeMC ou, en cas de renvoi, l'évaluateur médical de l'autorité de délivrance des licences peut exiger du demandeur qu'il subisse des examens ou investigations médicaux supplémentaires si cela est indiqué du point de vue clinique ou épidémiologique avant de délivrer, de proroger ou de renouveler un certificat médical.

f) L'évaluateur médical de l'autorité de délivrance des licences peut délivrer ou délivrer à nouveau un certificat médical.

MED.A.045 Validité, prorogation et renouvellement des certificats médicaux

a) Validité

1) Les certificats médicaux de classe 1 sont valables pendant une période de douze mois.

2) Par dérogation au point 1), la période de validité des certificats médicaux de classe 1 est de six mois dans le cas des titulaires de licence qui :

i) exercent des activités de transport aérien commercial monopilote de passagers et ont atteint l'âge de 40 ans;

ii) ont atteint l'âge de 60 ans.

3) Les certificats médicaux de classe 2 sont valables pendant une période de :

i) soixante mois jusqu'à ce que le titulaire de la licence atteigne l'âge de 40 ans. Un certificat médical délivré à un titulaire de licence n'ayant pas 40 ans cesse d'être valable quand celui-ci atteint l'âge de 42 ans;

ii) vingt-quatre mois pour les titulaires de licence âgés de 40 à 50 ans. Un certificat médical délivré à un titulaire de licence n'ayant pas 50 ans cesse d'être valable quand celui-ci atteint l'âge de 51 ans;

iii) douze mois pour les titulaires de licence âgés de plus de 50 ans.

4) Les certificats médicaux pour LAPL sont valables pendant une période de :

i) soixante mois jusqu'à ce que le titulaire de la licence atteigne l'âge de 40 ans. Un certificat médical délivré à un titulaire de licence n'ayant pas 40 ans cesse d'être valable quand celui-ci atteint l'âge de 42 ans;

ii) vingt-quatre mois pour les titulaires de licence âgés de plus de 40 ans.

5) La période de validité d'un certificat médical, y compris tout examen ou investigation spéciale connexe, est calculée à partir de la date de l'examen aéromédical dans le cas d'une délivrance initiale ou d'un renouvellement, et à partir de la date d'expiration du certificat médical précédent dans le cas d'une prorogation.

b) Prorogation

Les examens et évaluations à caractère aéromédical requis, selon le cas, pour la prorogation d'un certificat médical peuvent être effectués jusqu'à quarante-cinq jours avant la date d'expiration du certificat médical.

c) Renouvellement

1) Si le titulaire d'un certificat médical ne satisfait pas au point b), un examen et une évaluation de renouvellement,

selon le cas, sont requis.

2) Dans le cas d'un certificat médical de classe 1 ou 2 :

i) si le certificat médical a expiré depuis moins de deux ans, un examen aéromédical de prorogation de routine doit être réalisé;

ii) si le certificat médical a expiré depuis plus de deux ans mais moins de cinq ans, l'AeMC ou l'AME n'effectue l'examen aéromédical de renouvellement qu'après l'évaluation du dossier aéromédical du demandeur;

iii) si le certificat médical a expiré depuis plus de cinq ans, les exigences d'examen aéromédical pour une délivrance initiale s'appliquent et l'évaluation se fonde sur les exigences de prorogation.

3) Dans le cas de certificats médicaux pour LAPL, l'AeMC, l'AME ou le GMP évalue le dossier médical du demandeur et effectue les examens et les évaluations à caractère aéromédical, selon le cas, conformément aux points MED.B.005 et MED.B.095.

MED.A.046 Suspension ou retrait d'un certificat médical

a) Un certificat médical peut être suspendu ou retiré par l'autorité de délivrance des licences.

b) En cas de suspension d'un certificat médical, le titulaire doit restituer le certificat médical à l'autorité de délivrance des licences sur demande de ladite autorité.

c) En cas de retrait d'un certificat médical, le titulaire doit immédiatement restituer le certificat médical à l'autorité de délivrance des licences.

MED.A.050 Renvoi

a) Si le demandeur d'un certificat médical de classe 1 ou 2 est renvoyé vers l'évaluateur médical de l'autorité de délivrance des licences en application du point MED.B.001, l'AeMC ou l'AME doit transmettre à l'autorité les documents médicaux pertinents.

b) Si le demandeur d'un certificat médical pour LAPL est renvoyé vers un AME ou un AeMC conformément au point MED.B.001, le GMP transfère les documents médicaux pertinents à l'AeMC ou à l'AME.

SOUS-PARTIE B

EXIGENCES APPLICABLES AUX CERTIFICATS MÉDICAUX DE PILOTE

SECTION 1

Généralités

MED.B.001 Limitations des certificats médicaux

a) Limitations des certificats médicaux de classe 1 ou 2

1) Si le demandeur ne satisfait pas pleinement aux exigences applicables à la classe de certificat médical en question mais qu'il n'est pas considéré comme

susceptible de mettre en péril l'exercice en toute sécurité des privilèges de la licence, l'AeMC ou l'AME procède comme suit :

i) dans le cas d'un demandeur de certificat médical de classe 1, il renvoie la décision sur l'aptitude du demandeur à l'évaluateur médical de l'autorité de délivrance des licences, comme indiqué dans la présente sous-partie;

ii) dans les cas où le renvoi à l'évaluateur médical de l'autorité de délivrance des licences n'est pas indiqué dans la présente sous-partie, il détermine si le demandeur est capable d'exécuter ses tâches en toute sécurité en observant une ou plusieurs limitations portées sur le certificat médical, et délivre le certificat médical assorti, le cas échéant, de la ou des limitations;

iii) dans le cas d'un demandeur de certificat médical de classe 2, il détermine, en concertation avec l'évaluateur médical de l'autorité de délivrance des licences comme indiqué dans la présente sous-partie, si le demandeur est capable d'exécuter ses tâches en toute sécurité en observant une ou plusieurs limitations portées sur le certificat médical, et délivre le certificat médical assorti, le cas échéant, de la ou des limitations.

2) L'AeMC ou l'AME peut proroger ou renouveler un certificat médical assorti des mêmes limitations sans renvoyer le demandeur à l'évaluateur médical de l'autorité de délivrance des licences ni consulter celui-ci.

b) Limitations des certificats médicaux pour LAPL

1) Si un GMP, après avoir dûment pris en considération les antécédents médicaux du demandeur d'un certificat médical pour LAPL, conclut que celui-ci ne satisfait pas entièrement aux exigences d'aptitude médicale, il le renvoie à un AeMC ou un AME, sauf si ledit demandeur a uniquement besoin d'une ou de plusieurs limitations relatives à l'emploi de verres correcteurs ou à la période de validité du certificat médical.

2) Si le demandeur d'un certificat médical pour LAPL fait l'objet d'un renvoi conformément au point 1), l'AeMC ou l'AME prend dûment en considération les points MED.B.005 et MED.B.095, détermine si le demandeur est capable d'exécuter ses tâches en toute sécurité en observant une ou plusieurs limitations portées sur le certificat médical, et délivre le certificat médical assorti, le cas échéant, de la ou des limitations. L'AeMC ou l'AME prend toujours en considération la nécessité d'interdire au demandeur de transporter des passagers (limitation opérationnelle passagers - OPL).

3) Le GMP peut proroger ou renouveler un certificat médical pour LAPL assorti de la même limitation sans renvoyer le demandeur à un AeMC ou un AME.

c) En évaluant si une limitation est nécessaire, il faut en particulier tenir compte de ceci :

1) le cas où une conclusion médicale accréditée indique que, dans des circonstances spéciales, le fait que le demandeur ne satisfasse pas à l'une ou l'autre exigence, d'un point de vue quantitatif ou autre, ne rend pas l'exercice des privilèges de la licence demandée susceptible de menacer la sécurité des vols;

2) le fait que le demandeur ait la capacité, la compétence et l'expérience adéquates pour l'activité à accomplir.

d) Codes des limitations opérationnelles

1) Limitation opérationnelle multipilote (OML — classe 1 uniquement)

i) Lorsque le titulaire d'une licence CPL, ATPL ou MPL ne satisfait pas entièrement aux critères pour l'obtention d'un certificat médical de classe 1 et qu'il est renvoyé à un évaluateur médical de l'autorité de délivrance des licences, cet évaluateur détermine si le certificat médical peut être délivré avec une OML "valide seulement comme copilote ou avec un copilote qualifié".

ii) Le titulaire d'un certificat médical assorti d'une limitation OML ne peut piloter un aéronef que dans le cadre d'opérations multipilote, pour autant que l'autre pilote soit entièrement qualifié pour la classe et le type d'aéronef en question, ne soit pas l'objet d'une OML et n'ait pas atteint l'âge de 60 ans.

iii) La limitation OML pour les certificats médicaux de classe 1 est imposée initialement et retirée uniquement par l'évaluateur médical de l'autorité de délivrance des licences.

2) Limitation opérationnelle avec pilote de sécurité (OSL - classe 2 et privilèges LAPL)

i) Le titulaire d'un certificat médical assorti d'une limitation OSL ne peut piloter un aéronef que si un autre pilote entièrement qualifié pour agir en tant que commandant de bord pour la classe et le type d'aéronef en question se trouve à bord, si l'aéronef est équipé de doubles commandes et si cet autre pilote occupe un siège aux commandes.

ii) La limitation OSL pour les certificats médicaux de classe 2 peut être imposée et retirée par l'évaluateur médical de l'autorité de délivrance des licences, ou par un AeMC ou un AME, en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

iii) La limitation OSL pour les certificats médicaux pour LAPL peut être imposée et retirée par l'évaluateur médical de l'autorité de délivrance des licences, ou par un AeMC ou un AME.

3) Limitation opérationnelle passagers (OPL - classe 2 et privilèges LAPL)

i) Le titulaire d'un certificat médical assorti d'une limitation OPL ne peut piloter qu'un aéronef sans passagers à bord.

ii) La limitation OPL pour les certificats médicaux de classe 2 peut être imposée et retirée par l'évaluateur médical de l'autorité de délivrance des licences, ou par un AeMC ou un AME, en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

iii) La limitation OPL pour les certificats médicaux pour LAPL peut être imposée et retirée par l'évaluateur médical de l'autorité de délivrance des licences, ou par un AeMC ou un AME.

4) Limitation opérationnelle avec restriction pilote (ORL - classe 2 et privilèges LAPL)

i) Le titulaire d'un certificat médical assorti d'une limitation ORL ne peut piloter un aéronef que si l'une des deux conditions suivantes a été remplie :

A) un autre pilote entièrement qualifié pour agir en tant que commandant de bord pour la classe et le type d'aéronef en question se trouve à bord, l'aéronef est équipé de doubles commandes et cet autre pilote occupe un siège aux commandes;

B) il n'y a pas de passagers à bord de l'aéronef.

ii) La limitation ORL pour les certificats médicaux de classe 2 peut être imposée et retirée par l'évaluateur

médical de l'autorité de délivrance des licences, ou par un AeMC ou un AME, en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

iii) La limitation ORL pour les certificats médicaux pour LAPL peut être imposée et retirée par l'évaluateur médical de l'autorité de délivrance des licences, ou par un AeMC ou un AME.

5) Restriction particulière à préciser (SSL)
La restriction SSL sur un certificat médical doit être suivie d'une description de la limitation.

e) Toute autre limitation peut être imposée au titulaire d'un certificat médical par l'évaluateur médical de l'autorité de délivrance des licences, l'AeMC, l'AME ou le GMP, selon le cas, si cela est nécessaire pour assurer la sécurité des vols.

f) Toute limitation imposée au titulaire d'un certificat médical doit figurer sur ledit certificat.

MED.B.005 Exigences médicales générales

Le demandeur d'un certificat médical est évalué au regard des exigences médicales détaillées énoncées aux sections 2 et 3.

Il est, en outre, déclaré inapte lorsqu'il présente l'une des affections médicales suivantes qui implique un degré d'incapacité fonctionnelle susceptible d'interférer avec l'exercice en toute sécurité des privilèges de la licence demandée ou de rendre le demandeur brusquement incapable d'exercer ces privilèges :

- a) anomalie congénitale ou acquise;
- b) affection ou invalidité à caractère actif, latent, aigu ou chronique;
- c) blessure, lésion ou séquelle d'opération;
- d) effet indésirable ou secondaire résultant de la prise de toute médication thérapeutique, diagnostique ou préventive, prescrite ou non prescrite.

SECTION 2

Exigences médicales afférentes aux certificats médicaux de classe 1 ou 2

MED.B.010 Système cardiovasculaire

a) Examen

1) Un électrocardiogramme standard de repos à 12 dérivations avec son interprétation est effectué si la situation clinique l'exige et aux moments suivants :

i) pour un certificat médical de classe 1, lors de l'examen initial, puis tous les cinq ans jusqu'à l'âge de 30 ans, tous les deux ans jusqu'à l'âge de 40 ans, tous les ans jusqu'à l'âge de 50 ans, et à chaque examen de prorogation ou de renouvellement par la suite;

ii) pour un certificat médical de classe 2, lors de l'examen initial, lors du premier examen après l'âge de 40 ans et, ensuite, lors du premier examen après l'âge de 50 ans, puis tous les deux ans.

2) Une évaluation cardiovasculaire approfondie est

effectuée si la situation clinique l'exige.

3) Pour un certificat médical de classe 1, une évaluation cardiovasculaire approfondie est effectuée lors du premier examen de prorogation ou de renouvellement après l'âge de 65 ans, puis tous les quatre ans.

4) Pour un certificat médical de classe 1, une estimation des lipides sériques, y compris le cholestérol, est exigée lors de l'examen initial, et lors du premier examen après l'âge de 40 ans.

b) Appareil cardiovasculaire - Généralités

1) Le demandeur d'un certificat médical de classe 1 présentant l'une quelconque des affections médicales suivantes sera déclaré inapte :

- i) anévrisme de l'aorte thoracique ou abdominale supra-rénale avant une intervention chirurgicale;
- ii) anomalie fonctionnelle ou symptomatique grave des valves cardiaques;
- iii) greffe du cœur ou du bloc cœur-poumons;
- iv) cardiomyopathie hypertrophique symptomatique.

2) Pour que l'examen de sa demande puisse se poursuivre, le demandeur d'un certificat médical de classe 1 présentant un diagnostic ou ayant des antécédents médicaux avérés de l'une des affections médicales suivantes est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences :

- i) affection artérielle périphérique, avant ou après intervention chirurgicale;
- ii) anévrisme de l'aorte thoracique ou abdominale supra-rénale après une intervention chirurgicale;
- iii) anévrisme de l'aorte abdominale sous-rénale avant ou après une intervention chirurgicale;
- iv) anomalies valvulaires cardiaques fonctionnelles mineures;
- v) suites d'une intervention chirurgicale cardiaque valvulaire;
- vi) anomalie du péricarde, du myocarde ou de l'endocarde;
- vii) anomalie cardiaque congénitale, avant ou après une intervention chirurgicale correctrice;
- viii) syncope vasovagale de cause incertaine;
- ix) thrombose artérielle ou veineuse;
- x) embolie pulmonaire;
- xi) affection cardiovasculaire nécessitant un traitement anticoagulant systémique.

3) Le demandeur d'un certificat médical de classe 2 chez qui a été diagnostiquée l'une des affections médicales spécifiées aux points 1) et 2) doit être examiné par un cardiologue avant toute évaluation de son aptitude médicale, en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

4) Un demandeur présentant des troubles cardiaques autres que ceux visés aux points 1) et 2) peut être déclaré apte sous réserve d'une évaluation cardiologique satisfaisante.

c) Pression artérielle

1) La pression artérielle du demandeur est mesurée à chaque examen.

2) Le demandeur dont la pression artérielle n'est pas comprise dans les limites normales doit encore être évalué du point de vue de son affection cardiovasculaire et de son traitement médicamenteux en vue de déterminer s'il doit être déclaré inapte conformément aux points 3) et 4).

3) Le demandeur d'un certificat médical de classe 1 présentant l'une quelconque des affections médicales suivantes sera déclaré inapte :

- i) hypotension symptomatique;
- ii) pression artérielle lors de l'examen fréquemment supérieure à 160 mmHg systolique et/ou 95 mmHg diastolique, avec ou sans traitement.

4) Le demandeur qui a entamé l'utilisation d'un traitement médicamenteux visant à contrôler la pression artérielle doit être déclaré inapte jusqu'à ce que l'absence d'effets secondaires graves ait été établie.

d) Coronaropathie

1) Pour que l'examen de sa demande puisse se poursuivre, le demandeur d'un certificat médical de classe 1 présentant l'une des affections médicales suivantes est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences et fait l'objet d'une évaluation cardiologique en vue d'écarter toute ischémie myocardique :

- i) une ischémie myocardique présumée;
- ii) une coronaropathie mineure asymptomatique ne nécessitant pas de traitement anti-angineux.

2) Pour que l'examen de sa demande puisse se poursuivre, le demandeur d'un certificat médical de classe 2 présentant l'une des affections médicales énumérées au point 1) doit faire l'objet d'une évaluation cardiologique satisfaisante.

3) Le demandeur présentant l'une des affections médicales suivantes est déclaré inapte :

- i) ischémie myocardique;
- ii) coronaropathie symptomatique;
- iii) symptômes de coronaropathie maîtrisés par traitement médicamenteux.

4) Dans le cas d'une délivrance initiale d'un certificat médical de classe 1, est déclaré inapte le demandeur présentant des antécédents ou un diagnostic de l'une quelconque des affections médicales suivantes :

- i) ischémie myocardique;
- ii) infarctus du myocarde;
- iii) revascularisation ou implantation d'endoprothèse vasculaire pour coronaropathie.

5) Pour que sa demande soit recevable, le demandeur d'un certificat médical de classe 2 qui est asymptomatique à la suite d'un infarctus du myocarde ou d'une intervention chirurgicale pour coronaropathie doit faire l'objet d'une évaluation cardiologique satisfaisante en concertation avec l'évaluateur médical de l'autorité de délivrance des licences. S'il demande la prorogation d'un certificat médical de classe 1, ce demandeur est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences.

e) Troubles de conduction/du rythme

1) Le demandeur présentant l'une des affections médicales suivantes est déclaré inapte :

- i) maladie sino-auriculaire symptomatique;
- ii) bloc auriculo-ventriculaire complet;
- iii) allongement symptomatique du QT;
- iv) système défibrillateur automatique implantable;
- v) stimulateur anti-tachycardique ventriculaire.

2) Pour que sa demande soit recevable, le demandeur d'un certificat médical de classe 1 est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences s'il présente un trouble grave de la conduction ou du rythme cardiaque, notamment l'un des troubles suivants :

i) troubles du rythme supraventriculaire, y compris dysfonction sino-auriculaire intermittente ou établie, fibrillation et/ou flutter auriculaire et pauses sinusales asymptomatiques;

- ii) bloc de branche gauche complet;
- iii) bloc atrioventriculaire de type Mobitz 2;
- iv) tachycardie à complexes larges et/ou fins;
- v) pré-excitation ventriculaire;
- vi) prolongation asymptomatique du QT;
- vii) syndrome de Brugada sur l'électrocardiogramme.

3) Pour que sa demande soit recevable, le demandeur d'un certificat médical de classe 2 présentant l'une des affections médicales énumérées au point 2) doit faire l'objet d'une évaluation cardiologique satisfaisante en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

4) Le demandeur présentant l'une des affections médicales suivantes peut être déclaré apte sous réserve d'une évaluation cardiologique satisfaisante et en l'absence de toute autre anomalie :

- i) bloc de branche incomplet;
- ii) bloc de branche droit complet;
- iii) déviation axiale gauche stable;
- iv) bradycardie sinusale asymptomatique;
- v) tachycardie sinusale asymptomatique;
- vi) complexes ectopiques supra-ventriculaires ou ventriculaires isolés uniformes asymptomatiques;
- vii) bloc atrioventriculaire du premier degré;
- viii) bloc atrioventriculaire de type Mobitz 1.

5) Le demandeur présentant des antécédents médicaux pour l'une des affections médicales suivantes doit faire l'objet d'une évaluation cardiovasculaire satisfaisante avant de pouvoir être déclaré apte :

- i) traitement par ablation;
- ii) une implantation de stimulateur cardiaque.

S'il demande un certificat médical de classe 1, ce demandeur est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences. S'il demande un certificat médical de classe 2, ce demandeur fait l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

MED.B.015 Appareil respiratoire

a) Est déclaré inapte le demandeur présentant des altérations fonctionnelles pulmonaires graves. Il peut toutefois être déclaré apte une fois la fonction pulmonaire récupérée de façon satisfaisante.

b) Pour un certificat médical de classe 1, le demandeur doit se soumettre à des tests pulmonaires morphologiques et fonctionnels lors de l'examen initial et lorsque la situation clinique l'exige.

c) Pour un certificat médical de classe 2, le demandeur doit se soumettre à des tests pulmonaires morphologiques et fonctionnels lorsque la situation clinique l'exige.

d) Le demandeur présentant un diagnostic ou des antécédents médicaux pour l'une des affections médicales suivantes doit faire l'objet d'une évaluation cardiovasculaire satisfaisante avant de pouvoir être déclaré apte :

- 1) asthme exigeant un traitement;
- 2) atteinte inflammatoire évolutive de l'appareil respiratoire;
- 3) sarcoïdose évolutive;
- 4) pneumothorax;
- 5) syndrome d'apnée du sommeil;
- 6) intervention de chirurgie thoracique importante;
- 7) pneumonectomie;
- 8) maladie respiratoire obstructive chronique.

Pour que sa demande soit recevable, le demandeur chez qui a été diagnostiquée l'une des affections médicales décrites aux points 3) et 5) doit faire l'objet d'une évaluation cardiologique satisfaisante.

e) Évaluation aéromédicale

1) Le demandeur d'un certificat médical de classe 1 présentant l'une des affections médicales décrites au point d) est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences.

2) Le demandeur d'un certificat médical de classe 2 présentant l'une des affections médicales décrites au point d) fait l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

f) Le demandeur d'un certificat médical de classe 1 qui a subi une pneumonectomie est déclaré inapte.

MED.B.020 Appareil digestif

a) Le demandeur présentant des séquelles de maladie ou d'intervention chirurgicale sur une partie quelconque de l'appareil digestif ou de ses annexes, susceptibles de causer une incapacité en vol, notamment toute obstruction par sténose ou compression, est déclaré inapte.

b) Le demandeur porteur d'une hernie capable de provoquer des symptômes susceptibles d'entraîner une incapacité est déclaré inapte.

c) Le demandeur présentant l'un des troubles suivants de l'appareil gastro-intestinal peut être déclaré apte sous réserve d'une évaluation gastro-intestinale satisfaisante après un traitement réussi ou une guérison complète après chirurgie :

- 1) dyspepsie récidivante exigeant un traitement médicamenteux;
- 2) pancréatite;
- 3) calculs biliaires symptomatiques;
- 4) diagnostic clinique ou antécédents médicaux avérés de maladie inflammatoire chronique de l'intestin;
- 5) suites d'une intervention chirurgicale sur l'appareil digestif ou sur ses annexes, y compris l'exérèse totale ou partielle ou la dérivation d'un de ces organes.

d) Évaluation aéromédicale

1) Le demandeur d'un certificat médical de classe 1 chez qui a été diagnostiquée l'une des affections médicales décrites aux points c) 2), 4) et 5) est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences.

2) L'aptitude du demandeur d'un certificat médical de classe 2 chez qui a été diagnostiquée l'affection médicale décrite au point c) 2) fait l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

MED.B.025 Systèmes métabolique et endocrinien

a) Le demandeur présentant un dysfonctionnement métabolique, nutritionnel ou endocrinien peut être déclaré apte si la stabilité de l'affection médicale a été démontrée et sous réserve d'une évaluation aéromédicale satisfaisante.

b) Diabète sucré

1) Le demandeur atteint de diabète sucré nécessitant de l'insuline est déclaré inapte.

2) Le demandeur atteint de diabète sucré ne nécessitant pas d'insuline est déclaré inapte à moins de pouvoir démontrer que la glycémie est équilibrée et stable.

c) Évaluation aéromédicale

1) Le demandeur d'un certificat médical de classe 1 qui nécessite un traitement médicamenteux autre que de l'insuline pour l'équilibration de la glycémie est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences.

2) L'aptitude du demandeur d'un certificat médical de classe 2 qui nécessite un traitement médicamenteux autre que de l'insuline pour l'équilibration de la glycémie est évaluée en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

MED.B.030 Hématologie

a) Le demandeur d'un certificat médical de classe 1 doit se soumettre à un contrôle de l'hémoglobine à chaque examen aéromédical.

b) Le demandeur présentant une affection hématologique peut être déclaré apte sous réserve d'une évaluation aéromédicale satisfaisante.

c) Le demandeur d'un certificat médical de classe 1 présentant l'une des affections hématologiques suivantes est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences :

- 1) hémoglobine anormale, y compris mais sans s'y limiter, anémie, érythrocytose ou hémoglobinopathie;
- 2) hypertrophie lymphatique grave;
- 3) hypertrophie de la rate;
- 4) trouble de la coagulation, hémorragique ou thrombotique;
- 5) leucémie.

d) L'aptitude du demandeur d'un certificat médical de classe 2 présentant l'une des affections hématologiques décrites aux points c) 4) et 5) fait l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

MED.B.035 Appareil urogénital

a) Chaque examen aéromédical doit comporter une analyse d'urine. Le demandeur est déclaré inapte si son urine contient des éléments anormaux considérés comme pathologiques susceptibles d'entraîner un degré d'incapacité fonctionnelle de nature à compromettre l'exercice en toute sécurité des privilèges de la licence en question ou à rendre le demandeur brusquement incapable d'exercer ces privilèges.

b) Le demandeur présentant des séquelles de maladie ou d'intervention chirurgicale sur l'appareil urogénital ou sur ses annexes, susceptibles d'entraîner une incapacité, notamment toute obstruction par sténose ou compression, est déclaré inapte.

c) Le demandeur présentant un diagnostic ou des antécédents médicaux pour les affections suivantes peut être déclaré apte sous réserve d'une évaluation urogénitale satisfaisante, le cas échéant :

- 1) maladies rénales;
- 2) un ou plusieurs calculs des voies urinaires, ou antécédents médicaux de coliques néphrétiques.

d) Le demandeur ayant subi une intervention chirurgicale importante sur l'appareil urogénital ou sur ses annexes comportant une exérèse totale ou partielle ou une dérivation de ses organes est déclaré inapte. Il peut toutefois être déclaré apte après rétablissement complet.

e) Le demandeur d'un certificat médical de classe 1 visé au point c) ou d) est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences.

MED.B.040 Maladies infectieuses

a) Le demandeur est déclaré inapte s'il présente un diagnostic clinique ou des antécédents médicaux pour une maladie infectieuse susceptible de compromettre l'exercice en toute sécurité des privilèges de la licence.

b) Le demandeur qui est positif au VIH peut être déclaré apte sous réserve d'une évaluation aéromédicale satisfaisante. S'il demande un certificat médical de classe 1, ce demandeur est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences.

MED.B.045 Obstétrique et gynécologie

a) La demandeuse qui a subi une intervention gynécologique importante est déclarée inapte. Elle peut toutefois être déclarée apte après rétablissement complet.

b) Grossesse

- 1) En cas de grossesse, la titulaire d'un certificat médical peut continuer à exercer ses privilèges jusqu'à la fin de la 26^e semaine de gestation, mais uniquement si l'AeMC ou l'AME estime qu'elle est apte à le faire.
- 2) Pour les titulaires d'un certificat médical de classe 1 qui sont enceintes, une limitation OML s'applique. Nonobstant le point MED. B.001, dans ce cas, la limitation OML peut être imposée et retirée par l'AeMC ou l'AME.
- 3) La demandeuse peut exercer à nouveau ses privilèges après rétablissement à l'issue de la grossesse.

MED.B.050 Système musculo-squelettique

a) Le demandeur dont la taille en position assise, la longueur des bras et des jambes et la force musculaire ne sont pas suffisantes pour lui permettre l'exercice en toute sécurité des privilèges de la licence est déclaré inapte. Toutefois, si sa taille en position assise, la longueur de ses bras et de ses jambes et sa force musculaire sont suffisantes pour lui permettre l'exercice en toute sécurité

des privilèges pour un certain type d'aéronef, la démonstration en étant faite, si nécessaire, par un test médical en vol ou sur un simulateur de vol, le demandeur peut être déclaré apte et ses privilèges sont limités en conséquence.

b) Le demandeur n'ayant pas un usage fonctionnel satisfaisant de son système musculo-squelettique lui permettant d'exercer en toute sécurité les privilèges de la licence est déclaré inapte. Toutefois, s'il a un usage fonctionnel satisfaisant de son système musculo-squelettique lui permettant d'exercer en toute sécurité des privilèges pour un certain type d'aéronef, la démonstration en étant faite, si nécessaire, par un test médical en vol ou sur un simulateur de vol, le demandeur peut être déclaré apte et ses privilèges sont limités en conséquence.

c) En cas de doute dans le cadre des évaluations mentionnées aux points a) et b), les demandeurs d'un certificat médical de classe 1 sont renvoyés à l'évaluateur médical de l'autorité de délivrance des licences et les demandeurs d'un certificat médical de classe 2 font l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

MED.B.055 Santé mentale

a) L'examen aéromédical initial pour le certificat de classe 1 comporte une évaluation globale de la santé mentale.

b) L'examen aéromédical initial pour le certificat de classe 1 comporte un dépistage de la consommation de drogue et d'alcool.

c) Le demandeur présentant des troubles mentaux ou comportementaux dus à la consommation ou à l'abus d'alcool ou d'autres substances psychotropes est déclaré inapte tant qu'il n'est pas rétabli et libéré de toute dépendance à la consommation ou à l'abus d'une substance psychotrope. Après un traitement couronné de succès, il doit faire l'objet d'une évaluation psychiatrique satisfaisante.

d) Le demandeur présentant un diagnostic clinique ou des antécédents médicaux avérés pour l'une des affections psychiatriques suivantes doit faire l'objet d'une évaluation psychiatrique satisfaisante avant de pouvoir être déclaré apte :

- 1) troubles thymiques;
- 2) troubles névrotiques;
- 3) troubles de la personnalité;
- 4) troubles mentaux et comportementaux;
- 5) abus de substance psychoactive.

e) Le demandeur présentant des antécédents médicaux avérés d'actes isolés ou répétés d'automutilation délibérée ou de tentative de suicide est déclaré inapte. Il peut toutefois être déclaré apte après une évaluation psychiatrique satisfaisante.

f) Évaluation aéromédicale

1) Le demandeur d'un certificat médical de classe 1 présentant l'une des affections décrites aux points c), d) ou e) est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences.

2) L'aptitude du demandeur d'un certificat médical de classe 2 présentant l'une des affections décrites aux points c), d) ou e) fait l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

g) Le demandeur présentant des antécédents médicaux avérés ou un diagnostic clinique de schizophrénie, de trouble schizotypique ou de trouble délirant est déclaré inapte.

MED.B.065 Neurologie

a) Le demandeur présentant un diagnostic clinique ou des antécédents médicaux avérés pour l'une des affections médicales suivantes est déclaré inapte :

- 1) épilepsie, sauf dans les cas visés aux points b) 1) et 2);
- 2) épisodes récurrents de trouble de la conscience de cause incertaine.

b) Le demandeur présentant un diagnostic clinique ou ayant des antécédents médicaux avérés pour l'une des affections médicales suivantes doit se soumettre à une évaluation plus approfondie avant de pouvoir être déclaré apte :

- 1) épilepsie sans récurrence après l'âge de cinq ans;
- 2) épilepsie sans récurrence et dont le traitement a été arrêté depuis plus de dix ans;
- 3) anomalies épileptiformes de l'EEG et ondes lentes focalisées;
- 4) affection évolutive ou stable du système nerveux;
- 5) maladie inflammatoire du système nerveux central ou périphérique;
- 6) migraine;
- 7) épisode unique de trouble de la conscience de cause incertaine;
- 8) perte de connaissance consécutive à un traumatisme crânien;
- 9) lésion cérébrale pénétrante;
- 10) lésion de la moelle épinière ou des nerfs périphériques;
- 11) troubles du système nerveux dus à des insuffisances vasculaires, notamment dus à des accidents hémorragiques et ischémiques.

Le demandeur d'un certificat médical de classe 1 est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences. L'aptitude du demandeur d'un certificat médical de classe 2 fait l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

MED.B.070 Ophtalmologie

a) Examen

- 1) Pour un certificat médical de classe 1 :
 - i) un examen ophtalmologique complet doit être pratiqué lors de l'examen initial, puis lorsque la situation clinique l'exige et à intervalles réguliers, en fonction de la réfraction et de la performance fonctionnelle de l'œil;
 - ii) un examen ophtalmologique standard doit être pratiqué lors de tous les examens pour prorogation et renouvellement.

- 2) Pour un certificat médical de classe 2 :
 - i) un examen ophtalmologique standard doit être pratiqué lors de l'examen initial et de tous les examens pour prorogation et renouvellement;
 - ii) un examen ophtalmologique complet doit être pratiqué lorsque la situation clinique l'exige.

b) Acuité visuelle

- 1) Pour un certificat médical de classe 1 :
 - i) L'acuité visuelle de loin, avec ou sans correction, doit être d'au moins 6/9 (0,7) pour chaque œil pris séparément et l'acuité visuelle avec les deux yeux d'au moins 6/6 (1,0).

ii) Lors de l'examen initial, le demandeur ayant une vision inférieure aux normes pour un œil est déclaré inapte.

iii) Lors des examens pour prorogation et renouvellement, nonobstant le point b) 1) i), le demandeur ayant une vision inférieure aux normes acquise pour un œil ou une vision monoculaire acquise est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences et peut être déclaré apte sous réserve d'une évaluation ophtalmologique satisfaisante.

- 2) Pour un certificat médical de classe 2 :

i) L'acuité visuelle de loin, avec ou sans correction, doit être d'au moins 6/12 (0,5) pour chaque œil pris séparément et l'acuité visuelle avec les deux yeux d'au moins 6/9 (0,7).

ii) Nonobstant le point b) 2) i), le demandeur ayant une vision inférieure aux normes pour un œil ou une vision monoculaire peut être déclaré apte en concertation avec l'évaluateur médical de l'autorité de délivrance des licences et sous réserve d'une évaluation ophtalmologique satisfaisante.

3) Le demandeur doit être capable de lire une planche N5, ou équivalent, à 30-50 cm de distance et une planche N14, ou équivalent, à 100 cm, avec correction si nécessaire.

c) Erreur de réfraction et anisométrie

1) Le demandeur présentant une erreur de réfraction ou une anisométrie peut être déclaré apte sous réserve d'une évaluation ophtalmologique satisfaisante.

2) Nonobstant le point c) 1), le demandeur d'un certificat médical de classe 1 présentant l'une des affections médicales suivantes est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences et peut être déclaré apte sous réserve d'une évaluation ophtalmologique satisfaisante :

- i) myopie supérieure à - 6,0 dioptries;
- ii) astigmatisme supérieur à 2,0 dioptries;
- iii) anisométrie supérieure à 2,0 dioptries.

3) Nonobstant le point c) 1), le demandeur d'un certificat médical de classe 1 présentant une hypermétropie supérieure à + 5,0 dioptries est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences et peut être déclaré apte sous réserve d'une évaluation ophtalmologique satisfaisante, pour autant que les réserves fonctionnelles soient adéquates, que les pressions intraoculaires et les angles des segments antérieurs soient normaux et qu'aucune pathologie grave n'ait été établie. Nonobstant le point b) 1) i), l'acuité visuelle corrigée doit être d'au moins 6/6 pour chaque œil.

4) Le demandeur présentant un diagnostic clinique de kératocône peut être déclaré apte sous réserve d'un examen pratiqué par un ophtalmologue dont le résultat

est satisfaisant. S'il demande un certificat médical de classe 1, ce demandeur est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences.

d) Fonction binoculaire

1) Le demandeur d'un certificat médical de classe 1 est déclaré inapte s'il n'a pas une fonction binoculaire normale et si cette affection médicale est susceptible de compromettre l'exercice en toute sécurité des privilèges de la licence, compte tenu des mesures correctives appropriées qui pourraient, le cas échéant, être prises.

2) Le demandeur atteint de diplopie est déclaré inapte.

e) Champs visuels

Le demandeur d'un certificat médical de classe 1 est déclaré inapte s'il n'a pas des champs visuels normaux et si cette affection médicale est susceptible de compromettre l'exercice en toute sécurité des privilèges de la licence, compte tenu des mesures correctives appropriées qui pourraient, le cas échéant, être prises.

f) Intervention chirurgicale oculaire

Le demandeur qui a subi une intervention chirurgicale oculaire est déclaré inapte. Il peut toutefois être déclaré apte après rétablissement complet de la fonction visuelle et sous réserve d'une évaluation ophtalmologique satisfaisante.

g) Lunettes et lentilles de contact

1) Dans le cas où une fonction visuelle satisfaisante n'est obtenue qu'au moyen d'une correction, les lunettes ou les lentilles de contact doivent assurer une fonction visuelle optimale, être bien tolérées et adaptées à un usage aéronautique.

2) Une seule paire de lunettes doit suffire à satisfaire aux exigences visuelles pendant l'exercice des privilèges de la ou des licences en question.

3) Pour la vision de loin, les lunettes ou lentilles de contact doivent être portées pendant l'exercice des privilèges de la ou des licences en question.

4) Pour la vision de près, la personne doit garder à sa portée une paire de lunettes pendant l'exercice des privilèges de la ou des licences en question.

5) La personne doit disposer, immédiatement à sa portée, d'une paire de lunettes de secours de même formule, pour la vision de loin ou de près, pendant l'exercice des privilèges de la ou des licences en question.

6) En cas de port de lentilles de contact pendant l'exercice des privilèges de la ou des licences en question, celles-ci doivent être adaptées à la vision de loin, monofocales, non teintées et bien tolérées.

7) Le demandeur présentant une erreur de réfraction importante utilise des lentilles de contact ou des verres de lunettes à indice élevé.

8) Les lentilles orthokératologiques ne doivent pas être utilisées.

MED.B.075 Perception des couleurs

a) Le demandeur est déclaré inapte s'il ne peut démontrer sa capacité à percevoir facilement les couleurs dont la reconnaissance est nécessaire à l'exercice en toute sécurité des privilèges de la licence.

b) Examen et évaluation

1) Le demandeur doit se soumettre au test d'Ishihara pour la délivrance initiale d'un certificat médical. Le demandeur qui réussit le test peut être déclaré apte.

2) Pour un certificat médical de classe 1 :

i) en cas d'échec au test d'Ishihara, le demandeur est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences et subit des tests plus approfondis de perception des couleurs permettant de déterminer s'il a une vision sûre des couleurs;

ii) le demandeur doit présenter un trichromatisme normal ou avoir une vision sûre des couleurs;

iii) le demandeur qui échoue aux tests plus approfondis de perception des couleurs est déclaré inapte.

3) Pour un certificat médical de classe 2 :

i) en cas d'échec au test d'Ishihara, le demandeur subit des tests plus approfondis de perception des couleurs permettant de déterminer s'il a une vision sûre des couleurs;

ii) le demandeur n'ayant pas une perception satisfaisante des couleurs est limité dans l'exercice des privilèges de la licence en question aux prestations de jour uniquement.

MED.B.080 Oto-rhino-laryngologie

a) Examen

1) L'audition du demandeur doit être testée à chaque examen.

i) Pour un certificat médical de classe 1, ou pour un certificat médical de classe 2 si une qualification pour vol aux instruments ou une qualification pour vol aux instruments en route doit être ajoutée à la licence, l'audition est testée par une audiométrie tonale à sons purs lors de l'examen initial, puis tous les cinq ans jusqu'à ce que le titulaire de la licence atteigne l'âge de 40 ans et tous les deux ans par la suite.

ii) Lors du test à l'aide d'un audiomètre à sons purs, le demandeur faisant une demande initiale ne doit pas présenter, chaque oreille étant testée séparément, de perte d'audition supérieure à 35 dB aux fréquences de 500, 1 000 et 2 000 Hz, ou supérieure à 50 dB à la fréquence de 3 000 Hz. Lors d'un examen pour prorogation ou renouvellement, le demandeur présentant une perte d'audition supérieure à ces valeurs doit démontrer une capacité auditive fonctionnelle satisfaisante.

2) Il convient de pratiquer un examen oto-rhino-laryngologique approfondi lors de la délivrance initiale d'un certificat médical de classe 1, puis de façon périodique lorsque la situation clinique l'exige.

b) Le demandeur présentant l'une des affections médicales suivantes doit subir un examen médical plus approfondi visant à établir que cette affection médicale ne peut influencer sur l'exercice en toute sécurité des privilèges de la ou des licences en question :

1) hypoacousie;

2) processus pathologique évolutif de l'oreille interne ou de l'oreille moyenne;

3) perforation non cicatrisée ou dysfonction de la ou des membranes tympaniques;

4) dysfonction de la ou des trompes d'Eustache;

5) troubles de la fonction vestibulaire;

6) limitation grave de la perméabilité des voies nasales;

7) dysfonctionnement des sinus;

8) malformation grave ou infection grave de la cavité

buccale ou des voies aériennes supérieures;
9) trouble grave de l'élocution ou de la voix;
10) toute séquelle d'intervention chirurgicale sur l'oreille interne ou l'oreille moyenne.

c) Évaluation aéromédicale

1) Le demandeur d'un certificat médical de classe 1 présentant l'une des affections médicales décrites aux points b) 1), 4) et 5) est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences.

2) L'aptitude du demandeur d'un certificat médical de classe 2 présentant l'une des affections médicales décrites aux points b) 4) et 5) fait l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

3) L'aptitude du demandeur d'un certificat médical de classe 2 pour l'ajout à la licence d'une qualification pour vol aux instruments ou d'une qualification pour vol aux instruments en route présentant l'affection médicale décrite au point b) 1) fait l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

MED.B.085 Dermatologie

Le demandeur est déclaré inapte s'il présente une affection dermatologique avérée susceptible de compromettre l'exercice en toute sécurité des privilèges de la licence.

MED.B.090 Oncologie

a) Pour que sa demande soit recevable, le demandeur présentant une pathologie maligne primitive ou secondaire doit faire l'objet d'une évaluation oncologique satisfaisante. S'il demande un certificat médical de classe 1, ce demandeur est renvoyé à l'évaluateur médical de l'autorité de délivrance des licences. S'il demande un certificat médical de classe 2, ce demandeur fait l'objet d'une évaluation en concertation avec l'évaluateur médical de l'autorité de délivrance des licences.

b) Le demandeur présentant des antécédents médicaux avérés ou un diagnostic clinique de tumeur intracérébrale maligne est déclaré inapte.

SECTION 3

Exigences spécifiques relatives aux certificats médicaux pour licences LAPL

MED.B.095 Examen et évaluation médicaux des demandeurs d'un certificat médical pour licence LAPL

a) Le demandeur d'un certificat médical pour licence LAPL est évalué sur la base des meilleures pratiques aéromédicales.

b) Une attention particulière est portée aux antécédents médicaux complets du demandeur.

c) L'évaluation initiale, toutes les réévaluations ultérieures après que le titulaire de la licence a atteint l'âge de 50 ans et toute évaluation effectuée alors que

l'examineur n'a pas accès aux antécédents médicaux du demandeur comportent au moins tous les éléments suivants :

- 1) examen clinique;
- 2) pression artérielle;
- 3) analyse d'urine;
- 4) vision;
- 5) capacité auditive.

d) Après l'évaluation initiale, les réévaluations ultérieures jusqu'à ce que le titulaire de la licence atteigne l'âge de 50 ans comportent au moins les deux éléments suivants :

- 1) une évaluation des antécédents médicaux du titulaire de LAPL;
- 2) les éléments énumérés au point c) dans la mesure où l'AeMC, l'AME ou le GMP le juge nécessaire au regard des meilleures pratiques aéromédicales. »

SOUS-PARTIE C

EXIGENCES D'APTITUDE MÉDICAL DES ÉQUIPAGES DE CABINE

SECTION 1

Exigences générales

MED.C.001 Généralités

Les membres de l'équipage de cabine ne peuvent assumer les tâches et responsabilités à bord d'un aéronef requises par les règles de sécurité aérienne que s'ils satisfont aux exigences applicables énoncées dans la présente partie.

MED.C.005 Évaluations aéromédicales

a) Les membres de l'équipage de cabine se soumettent à des examens aéromédicaux dont le but est de vérifier qu'ils sont exempts de toute maladie physique ou mentale susceptible d'entraîner une incapacité physique ou mentale à assumer leurs tâches et responsabilités en matière de sécurité.

b) Chaque membre de l'équipage de cabine se soumet à une évaluation aéromédicale avant sa première assignation à des tâches à bord d'un aéronef, et ensuite selon des intervalles de 60 mois au maximum.

c) Les évaluations aéromédicales sont effectuées par un AME, un AeMC ou par un OHMP s'il est satisfait aux exigences du MED.D.040.

SECTION 2

Exigences pour l'évaluation aéromédicale des équipages de cabine

MED.C.020 Généralités

Les membres de l'équipage de cabine doivent être exempts :

- a)** de toute anomalie congénitale ou acquise;

- b)** de toute affection ou invalidité à caractère actif, latent, aigu ou chronique;
- c)** de toute blessure, lésion ou séquelle d'opération;
- d)** de tous effets indésirables ou secondaires résultant de la prise de toute médication thérapeutique, diagnostique ou préventive, prescrite ou non prescrite; susceptibles d'entraîner un degré d'incapacité fonctionnelle pouvant entraîner une incapacité physique ou mentale à assumer leurs tâches et responsabilités en matière de sécurité.

MED.C.025 Contenu des évaluations aéromédicales

- a)** Toute évaluation aéromédicale doit comporter au moins :
 - 1) une évaluation des antécédents médicaux du membre de l'équipage de cabine qui introduit la demande; et
 - 2) un examen clinique des domaines suivants :
 - i) appareil cardiovasculaire;
 - ii) appareil respiratoire;
 - iii) système musculo-squelettique;
 - iv) oto-rhino-laryngologie;
 - v) système visuel; et
 - vi) perception des couleurs.

- b)** Par la suite, chaque réévaluation aéromédicale doit comprendre :
 - 1) une évaluation des antécédents médicaux du membre de l'équipage de cabine, et
 - 2) un examen clinique si cela est jugé nécessaire au regard des meilleures pratiques dans le domaine aéromédical.

- c)** Aux fins des dispositions des points a) et b), en cas de doute ou si cliniquement justifié, l'évaluation aéromédicale du membre de l'équipage de cabine comporte également tout examen, analyse ou investigation supplémentaire d'ordre médical jugé nécessaire par l'AME, le AeMC ou le OHMP.

SECTION 3

Exigences supplémentaires pour les demandeurs ou titulaires d'un certificat de membre d'équipage de cabine

MED.D.030 Rapport médical sur l'équipage de cabine

- a)** Après chaque évaluation aéromédicale, le demandeur ou titulaire d'un certificat de membre d'équipage de cabine :
 - 1) se voit remettre un rapport médical de membre d'équipage de cabine par l'AME, le AeMC ou le OHMP; et
 - 2) fournit les informations correspondantes ou une copie de son rapport médical de membre d'équipage de cabine à l'opérateur ou aux opérateurs qui font appel à ses services.
- b)** Rapport médical de membre d'équipage de cabine

Le rapport médical de membre d'équipage de cabine indique la date de l'évaluation aéromédicale, précise si de membre d'équipage de cabine a été déclaré apte ou inapte, annonce la date de la prochaine évaluation aéromédicale requise et, le cas échéant, la ou les limitations applicables. Tout autre élément fait l'objet du secret médical conformément au MED.A.015.

MED.D.035 Limitations

- a)** Si le titulaire d'un certificat de membre d'équipage de cabine ne satisfait pas entièrement aux exigences médicales présentées à la section 2, il appartient à l'AME, au AeMC ou au OHMP de déterminer si la personne en question est capable d'exécuter en toute sécurité ses tâches d'équipage de cabine en respectant une ou plusieurs limitations.
- b)** Toute limitation de l'exercice des privilèges accordés par le certificat de membre d'équipage de cabine doit figurer dans le rapport médical sur l'équipage de cabine et ne peut être retirée que par un AME, un AeMC ou un OHMP en concertation avec un AME

SOUS-PARTIE D

EXAMINATEURS AÉROMÉDICAUX, MÉDECINS GÉNÉRALISTES ET MÉDECINS DU TRAVAIL

SECTION 1

Examineurs aéromédicaux

MED.D.001 Privilèges

- a)** Les privilèges du titulaire d'un certificat d'examineur aéromédical (AME) consistent à délivrer, proroger et renouveler les certificats médicaux de classe 2 et les certificats médicaux pour licence LAPL, ainsi qu'à réaliser les évaluations et examens médicaux y afférents.
- b)** Le titulaire d'un certificat d'AME peut demander l'extension de ses privilèges pour y inclure les examens médicaux de prorogation et de renouvellement des certificats médicaux de classe 1, pour autant qu'il satisfasse aux exigences énoncées sous MED.D.015.
- c)** Les privilèges du titulaire d'un certificat d'AME visés aux points a) et b) comprennent le privilège d'effectuer des évaluations et examens aéromédicaux sur les membres de l'équipage de cabine et le privilège de fournir les rapports médicaux de membre de l'équipage de cabine correspondants, le cas échéant, conformément à la présente annexe (partie-MED).
- d)** Le champ d'application des privilèges du titulaire d'un certificat d'AME et toutes les conditions y afférentes doivent figurer sur ledit certificat.
- e)** Le titulaire d'un certificat d'AME ne peut en aucune circonstance être en possession de plus d'un certificat d'AME délivré conformément au présent règlement.

f) Le titulaire d'un certificat d'AME ne peut effectuer d'évaluations et d'examens aéromédicaux dans un État membre autre que celui où ce certificat d'AME lui a été délivré, à moins d'avoir franchi toutes les étapes suivantes :

- 1) il a reçu de l'autre État membre concerné l'autorisation d'exercer sur son territoire des activités professionnelles en tant que médecin spécialiste;
- 2) il a informé l'autorité compétente de cet autre État membre de son intention d'effectuer des évaluations et examens aéromédicaux et de délivrer des certificats médicaux dans le cadre de ses privilèges en tant qu'AME; et
- 3) il a reçu des instructions de l'autorité compétente de cet autre État membre.

MED.D.005 Demande

a) Les demandes de certificat d'AME ou d'extension des privilèges accordés par un certificat d'AME sont à établir dans le format et selon les modalités prescrits par l'autorité compétente.

b) Le demandeur d'un certificat d'AME fournit à l'autorité compétente :

- 1) ses données personnelles et son adresse professionnelle;
- 2) les documents justificatifs prouvant qu'il satisfait aux exigences énoncées sous MED.D.010, y compris une preuve qu'il a achevé avec succès la formation en médecine aéronautique correspondant aux privilèges sollicités;
- 3) une déclaration écrite par laquelle il s'engage, une fois en possession du certificat d'AME, à délivrer des certificats médicaux en se basant sur les exigences du présent règlement.

c) Si l'AME effectue des examens aéromédicaux dans plusieurs lieux, il fournit à l'autorité compétente les informations relatives à tous les sites et installations de pratique médicale.

MED.D.010 Exigences relatives à la délivrance d'un certificat d'AME

Le demandeur se voit délivrer un certificat d'AME s'il remplit l'ensemble des conditions suivantes :

- a)** il possède toutes les qualifications et licences pour l'exercice de la médecine et détient une preuve de l'achèvement d'une formation de spécialisation médicale;
- b)** il a achevé avec succès une formation de base en médecine aéronautique, y compris une formation pratique sur les méthodes d'examen et les évaluations aéromédicales;
- c)** il a prouvé à l'autorité compétente qu'il :
 - 1) dispose d'installations, de procédures, de documents et d'équipements fonctionnels appropriés à la réalisation d'examens aéromédicaux;
 - 2) a mis en place les procédures et dispositions nécessaires pour garantir le secret médical.

MED.D.011 Privilèges accordés au titulaire d'un certificat d'AME

La délivrance d'un certificat d'AME confère à son titulaire les privilèges de délivrance initiale, de prorogation et de

renouvellement de tous les documents suivants :

- a)** certificats médicaux de classe 2;
- b)** certificats médicaux pour LAPL;
- c)** rapports médicaux de membres de l'équipage de cabine.

MED.D.015 Exigences relatives à l'extension des privilèges

Le demandeur se voit délivrer un certificat d'AME avec privilèges étendus à la prorogation et au renouvellement de certificats médicaux de classe 1 s'il remplit l'ensemble des conditions suivantes :

- a)** il est titulaire d'un certificat d'AME en cours de validité;
- b)** il a réalisé au moins 30 examens pour la délivrance, la prorogation ou le renouvellement de certificats médicaux de classe 2 ou équivalents, cela sur une période ne remontant pas à plus de trois ans avant la demande;
- c)** il a achevé avec succès une formation avancée en médecine aéronautique, y compris une formation pratique sur les méthodes d'examen et les évaluations aéromédicales;
- d)** il a achevé avec succès une formation pratique d'une durée d'au moins deux jours, soit dans un AeMC, soit sous la supervision de l'autorité compétente.

MED.D.020 Cours de formation en médecine aéronautique

a) Les cours de formation en médecine aéronautique mentionnés sous MED.D.010, point b), et MED.D.015, point c), ne peuvent être dispensés qu'après agrément préalable de l'autorité compétente de l'État membre dans lequel l'organisme de formation a son lieu d'activité principal. Afin d'obtenir cet agrément, l'organisme de formation doit démontrer que le programme d'études comporte les objectifs d'apprentissage visant l'acquisition des compétences nécessaires et que les personnes chargées des cours possèdent les connaissances et l'expérience requises.

b) Sauf dans le cas de cours de recyclage, les cours s'achèvent par un examen écrit sur les matières contenues dans le programme d'études.

c) L'organisme de formation délivre une attestation de réussite aux participants qui ont satisfait à l'examen.

MED.D.025 Modifications au certificat d'AME

a) Le titulaire d'un certificat d'AME notifie, sans retard indu, à l'autorité compétente les circonstances suivantes, susceptibles de changer les caractéristiques de son certificat d'AME :

- 1) l'AME fait l'objet d'une procédure disciplinaire ou d'une enquête de la part d'un organisme médical réglementaire;
- 2) des modifications ont été apportées aux conditions d'octroi du certificat, notamment le contenu des déclarations associées à la demande;
- 3) il n'est plus satisfait aux exigences pour la délivrance

du certificat d'AME;

4) le lieu d'activité ou l'adresse de correspondance de l'examineur aéromédical ont été modifiés.

b) Le fait de ne pas notifier les circonstances visées au point a) à l'autorité compétente entraîne la suspension ou le retrait du certificat d'AME, conformément à l'annexe II, ARA.MED.250 (partie ARA).

MED.D.030 Validité des certificats d'AME

Le certificat d'AME est valable pour une durée de trois ans; l'autorité compétente peut néanmoins décider de réduire cette durée pour des raisons dûment justifiées liées à chaque cas.

Sur demande du titulaire, le certificat

a) est prorogé, pour autant que le titulaire :

1) continue à satisfaire aux conditions générales de l'exercice de la médecine et conserve sa licence pour l'exercice de la médecine;

2) ait entrepris une formation de recyclage en médecine aéronautique au cours des trois dernières années;

3) ait réalisé au moins dix examens aéromédicaux ou équivalents par an;

4) continue à satisfaire aux conditions du certificat;

5) exerce les privilèges conformément aux exigences de la présente annexe (partie-MED);

6) a démontré qu'il maintient le niveau de sa compétence aéromédicale en application de la procédure établie par l'autorité compétente.

b) est renouvelé, pour autant que le titulaire satisfasse soit aux exigences de prorogation énoncées au point a) soit à l'ensemble des exigences suivantes :

1) continue à satisfaire aux conditions générales de l'exercice de la médecine et conserve sa licence pour l'exercice de la médecine;

2) a entrepris une formation de recyclage en médecine aéronautique au cours de l'année précédente;

3) a achevé avec succès une formation pratique au cours de l'année précédente, soit dans un AeMC, soit sous la supervision de l'autorité compétente;

4) continue à satisfaire aux exigences énoncées sous MED.D.010;

5) a démontré qu'il maintient le niveau de sa compétence aéromédicale en application de la procédure établie par l'autorité compétente.

SECTION 2

Médecins généralistes

MED.D.035 Exigences applicables aux médecins généralistes

Un médecin généraliste (GMP) peut agir en tant qu'AME pour délivrer des certificats médicaux pour licence LAPL s'il remplit l'ensemble des conditions suivantes :

a) il exerce son activité dans un État membre où les GMP disposent d'un accès aux dossiers médicaux complets des demandeurs;

b) il exerce son activité en se conformant à toutes exigences supplémentaires établies par le droit national de l'État membre de l'autorité compétente;

c) il possède toutes les qualifications et licences pour l'exercice de la médecine imposées par le droit national de l'État membre de l'autorité compétente;

d) avant d'entamer son activité, il l'a notifiée à l'autorité compétente.

SECTION 3

Médecins du travail

MED.D.040 Exigences applicables aux médecins du travail

Dans les États membres où l'autorité compétente a constaté que les exigences applicables aux médecins du travail (OHMP) en vertu du système national de santé sont à même d'assurer le respect des exigences énoncées dans la présente annexe (partie-MED) concernant les OHMP, un OHMP peut réaliser des évaluations aéromédicales de l'équipage de cabine, pour autant que :

a) il possède toutes les qualifications et licences pour l'exercice de la médecine et des qualifications en médecine du travail;

b) l'environnement de travail et les tâches de sécurité en vol de l'équipage de cabine figuraient au programme de sa formation qualifiante en médecine du travail ou d'autres formations ou expériences opérationnelles;

c) avant d'entamer son activité, il l'a notifiée à l'autorité compétente. »

ANNEXE II

Le point suivant est ajouté à l'annexe VI, sous-partie MED, section I, du règlement (UE) no 1178/2011 :

ARA.MED. 160 Échange d'informations concernant les certificats médicaux par l'intermédiaire d'un répertoire central

a) L'Agence crée et gère un répertoire central, le répertoire aéromédical européen (EAMR).

b) Aux fins de la certification médicale et de la supervision de demandeurs et de titulaires de certificats médicaux de classe 1 et pour la supervision des AME et des AeMC, les personnes visées au point c) échangent, par l'intermédiaire de l'EAMR, les informations suivantes :

1) les données de base du demandeur ou du titulaire d'un certificat médical de classe 1 : l'autorité de délivrance

⁽¹⁾ Règlement (CE) no 45/2001 du Parlement européen et du Conseil du 18 décembre 2000 relatif à la protection des personnes physiques à l'égard du traitement des données à caractère personnel par les institutions et organes communautaires et à la libre circulation de ces données (JO L 8 du 12.1.2001, p. 1).

des licences; le nom et le prénom; la date de naissance; la nationalité; l'adresse électronique et le numéro d'un ou de plusieurs documents d'identité (carte d'identité nationale ou passeport) tels que fournis par le demandeur;

2) les données relatives au certificat médical de classe 1 : la date de l'examen médical ou, si l'examen médical est toujours en cours, la date du début de l'examen médical; les dates de délivrance et d'expiration du certificat médical de classe 1; le lieu de l'examen; le statut des limitations; le statut du certificat en question (nouveau, émis, suspendu ou retiré); le numéro de référence unique de l'évaluateur médical de l'autorité de délivrance des licences, de l'AME ou de l'AeMC délivrant le certificat en question et de l'autorité compétente.

c) Aux fins du point b), les personnes suivantes ont accès à l'EAMR et aux informations qu'il contient :

1) les évaluateurs médicaux de l'autorité de délivrance des licences du demandeur ou du titulaire d'un certificat médical de classe 1, ainsi que tout autre agent dûment autorisé de cette autorité, responsable de la création ou de la gestion du dossier de ce demandeur ou titulaire, conformément au présent règlement;

2) les AME ainsi que tout agent dûment autorisé d'un AeMC, à qui ce demandeur ou ce titulaire a fourni une déclaration conformément au point b) 2) sous MED.A.035;

3) tout agent dûment autorisé de l'autorité compétente responsable de la supervision des AME ou des AeMC réalisant les évaluations aéromédicales de ces demandeurs ou titulaires.

En outre, l'Agence et les autorités nationales compétentes peuvent donner accès à l'EAMR et aux informations qu'il contient à d'autres personnes, lorsque le bon fonctionnement de l'EAMR, en particulier sa maintenance technique, l'impose. Dans ce cas, l'Agence ou l'autorité nationale compétente concernée s'assure que ces personnes sont dûment autorisées et qualifiées, que leur accès reste limité à ce qui est nécessaire à cette fin et qu'elles ont reçu une formation préalable sur la législation applicable en matière de protection des données à caractère personnel et les garanties correspondantes.

Lorsqu'une autorité compétente accorde un tel accès à une personne, elle en informe l'Agence au préalable.

d) Immédiatement après chaque examen d'un demandeur ou d'un titulaire d'un certificat médical de classe 1, les autorités de délivrance des licences, les AME et les AeMC visés au point c) saisissent les données visées au point b) dans l'EAMR ou mettent à jour ces données si nécessaire.

e) Lorsque les données constituent des données à caractère personnel au sens de l'article 2 du règlement (CE) no 45/2001 du Parlement européen et du Conseil ⁽¹⁾, ils informent préalablement le demandeur ou le titulaire du certificat de classe 1 à chaque fois qu'ils introduisent ou mettent à jour ces données.

f) L'Agence veille à l'intégrité et à la sécurité de l'EAMR et des informations qu'il contient moyennant une infrastructure informatique appropriée. Elle élabore et applique, en concertation avec les autorités nationales compétentes, les protocoles et les mesures technologiques nécessaires pour garantir que tout accès à l'EAMR et aux informations qu'il contient est licite et sûr.

g) L'Agence veille à ce que toutes les informations contenues dans l'EAMR soient supprimées au terme d'une période de dix ans. Ce délai est calculé à partir de la date d'expiration du dernier certificat de classe 1 délivré pour le demandeur ou le titulaire concerné, ou de la date de la dernière saisie ou mise à jour de données pour ce demandeur ou titulaire, la date la plus tardive étant retenue.

h) L'Agence veille à ce que le demandeur ou le titulaire d'un certificat médical de classe 1 puisse accéder à toutes les informations le concernant contenues dans l'EAMR et soit averti qu'il peut demander la rectification ou la suppression de ces informations. Les autorités de délivrance des licences évaluent ces demandes et, si elles estiment que les informations en question sont inexacts ou inutiles aux fins indiquées au point b), elles veillent à ce qu'elles soient rectifiées ou supprimées.

ACCEPTABLE MEANS OF COMPLIANCE (AMC)

AND

GUIDANCE MATERIAL (GM)

TO PART-MED

MEDICAL REQUIREMENTS FOR AIR CREW

ISSUE 2

28 JANUARY 2019⁽¹⁾

SUBPART A

GENERAL REQUIREMENTS

SECTION 1

General

AMC1 MED.A.015 Medical confidentiality

To ensure medical confidentiality, all medical reports and records should be securely held with accessibility restricted to personnel authorised by the medical assessor or, where applicable, by the head of the aero-medical centre (AEMC), the aero-medical examiner (AME), general medical practitioner (GMP) or occupational health medical practitioner (OHMP).

GM1 MED.A.020 Decrease in medical fitness

MEDICATION-GUIDANCE FOR PILOTS AND CABIN CREW MEMBERS

(a) Any medication can cause side effects, some of

which may impair the safe performance of flying duties. Equally, symptoms of colds, sore throats, diarrhoea and other abdominal upsets may cause little or no problem whilst on the ground but may distract the pilot or cabin crew member and degrade their performance whilst on duty. The in-flight environment may also increase the severity of symptoms which may only be minor whilst on the ground. Therefore, one issue with medication and flying is the underlying condition and, in addition, the symptoms may be compounded by the side effects of the medication prescribed or bought over the counter for treatment. This guidance material provides some help to pilots and cabin crew in deciding whether expert aero-medical advice by an AME, AeMC, GMP, OHMP or medical assessor is needed.

(b) Before taking any medication and acting as a pilot or cabin crew member, the following three basic questions should be satisfactorily answered:

- (1) Do I feel fit to fly?
- (2) Do I really need to take medication at all?
- (3) Have I given this particular medication a personal trial on the ground to ensure that it will not have any adverse effects on my ability to fly?

(1) For the date of entry into force of this issue, kindly refer to Decision 2019/002/R in the Official Publication of the Agency.

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

(d) The following are some widely used medicines with a description of their compatibility with flying duties:

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

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

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

(4) Cough medicines. Antitussives often contain codeine, dextromethorfan or pseudo-ephedrine which are not compatible with flying duties. However, mucolytic agents (e.g. carbocysteine) are well-tolerated and are compatible with flying duties.

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

(6) Nasal corticosteroids are commonly used to treat hay fever, and they are compatible with flying duties.

(7) (i) Common pain killers and antifebrile drugs. Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and paracetamol, commonly used to treat pain, fever or headaches, may be compatible with flying duties. However, the pilot or cabin crew member should give affirmative answers to the three basic questions listed in (b) before using the medication and carrying out flying duties.

(ii) Strong analgesics. The more potent analgesics including codeine are opiate derivatives, and may produce a significant decrement in human performance and, therefore, are not compatible with flying duties.

(8) Anti-ulcer medicines. Gastric secretion inhibitors such as H2 antagonists (e.g. ranitidine, cimetidine) or proton pump inhibitors (e.g. omeprazole) may be acceptable after diagnosis of the pathological condition. It

is important to seek for the medical diagnosis and not to only treat the dyspeptic symptoms.

(9) Anti-diarrhoeal drugs. Loperamide is one of the more common anti-diarrhoeal drugs and is usually safe to take whilst flying. However, the diarrhoea itself often makes the pilot and cabin crew member unfit for flying duties.

(10) Hormonal contraceptives and hormone replacement therapy usually have no adverse effects and are compatible with flying duties.

(11) Erectile dysfunction medication. This medication may cause disturbances in colour vision and dizziness. There should be at least 6 hours between taking sildenafil and flying duty; and 36 hours between taking vardenafil or tadalafil and flying duty.

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

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

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

(15) Tranquillisers and sedatives. The inability to react, due to the use of this group of medicines, has been a contributory cause to fatal aircraft accidents. In addition, the underlying condition for which these medications have been prescribed will almost certainly mean that the mental state of a pilot or cabin crew member is not compatible with flying duties.

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

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

(18) Coffee and other caffeinated drinks may be acceptable, but excessive coffee drinking may have harmful effects, including disturbance of the heart's rhythm. Other stimulants including caffeine pills, amphetamines, etc. (often known as 'pep' pills) used to maintain wakefulness or suppress appetite can be habit forming. Susceptibility to different stimulants varies from one individual to another, and all may cause dangerous overconfidence.

Overdosage causes headaches, dizziness and mental disturbance. These other stimulants should not be used.

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

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

(f) Other treatments

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

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

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

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

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

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

(e) When data is not being properly recorded in the

European aero-medical data repository (EAMR) due to unavailability of the system, the AeMCs and AMEs should enter, or correct the existing data, in the EAMR without undue delay when the system recovers.

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

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

GUIDELINES FOR THE AeMC, AME OR GMP CONDUCTING THE MEDICAL EXAMINATIONS AND ASSESSMENTS FOR MEDICAL CERTIFICATION OF PILOTS

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

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

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

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

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

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

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

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

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

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

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

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

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

(4) ensure that all of the report forms are complete, accurate and legible.

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

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

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

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

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

(d) The AeMC, AME or GMP should send the documents as required by MED.A.025 (b) to the medical assessor of the applicant's licensing authority within 5 days from the date of the medical examination. If a medical certificate has been denied or the decision has been referred, the documents should be sent to the medical assessor of the licensing authority on the same day that the denial or referral decision is reached.

CODE	LIMITATION
TML	Limited period of validity of the medical certificate
VDL	Valid only with correction for defective distant vision
VML	Valid only with correction for defective distant, intermediate and near vision
VNL	Valid only with correction for defective near vision
CCL	Correction by means of contact lenses
VCL	Valid by day only
RXO	Specialist ophthalmological examination (s)
SIC	Specific medical examination (s)
HAL	Valid only when hearing aids are worn
APL	Valid only with approved prosthesis
AHL	Valid only with approved hand controls
OML	Valid only as, or with, a qualified co-pilot
OCL	Valid only as a qualified co-pilot
OSL	Valid only with a safety pilot and in aircraft with dual controls
OPL	Valid only without passengers
ORL	Valid only with a safety pilot if passengers are carried
OAL	Restricted to demonstrated aircraft type
SSL	Special restriction (s) as specified

SECTION 2

Requirements for medical certificates

AMC1 MED.A.030 Medical certificates

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

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

AMC1 MED.A.035 Application for a medical certificate
Except for initial applicants, the AeMC, AME or GMP should not start the aero-medical examination for the issue of the medical certificate where applicants do not present the most recent medical certificate, unless relevant information is received from the medical assessor of the licensing authority.

SUBPART B

REQUIREMENTS FOR PILOT MEDICAL CERTIFICATES AMC FOR PILOT MEDICAL CERTIFICATES

SECTION 1

General

AMC1 MED.B.001 Limitations to medical certificates

GENERAL

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

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

(c) Initial application of limitations

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

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

(i) for class 1 medical certificates, by the medical assessor of the licensing authority where a referral is required according to MED.B.001;

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

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

(d) Removal of limitations

(1) For class 1 medical certificates, all limitations

should only be removed by the medical assessor of the licensing authority.

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

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

AMC2 MED.B.001 Limitations to medical certificates

LIMITATION CODES

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

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

(1) TML Time limitation

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

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

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

(3) VML Wear multifocal spectacles and carry a spare set of spectacles

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

(4) VNL Have available corrective spectacles and carry a spare set of spectacles

Correction for defective near vision: whilst exercising the privileges of the licence, the holder of the medical certificate should have readily available spectacles that correct for defective near vision as examined and approved by the AeMC, AME or GMP. Contact lenses or full frame spectacles, when either correct for near vision only, may not be worn. A spare set of spectacles, approved by the AeMC, AME or GMP, should be readily available.

(5) CCL Wear contact lenses that correct for defective distant vision

Correction for defective distant vision: whilst exercising the privileges of the licence, the holder of a medical certificate should wear contact lenses that correct for defective

distant vision, as examined and approved by the AeMC, AME or GMP. A spare set of similarly correcting spectacles, approved by the AeMC, AME or GMP, should be readily available for immediate use whilst exercising the privileges of the licence.

(6) VCL Valid by day only

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

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

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

(9) HAL Wear hearing aid (s)

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

(10) APL Valid only with approved prosthesis

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

(11) AHL Valid only with approved hand controls

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

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

This limitation applies to holders of a class 1 medical certificate who do not fully meet the aero-medical requirements for single-pilot operations, but are fit for multi-pilot operations. Refer to MED.B.001 (d) (1).

(13) OCL Valid only as a qualified co-pilot

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

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

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

(15) OPL Valid only without passengers

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

(16) ORL Valid only with a safety pilot if passengers

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

(17) OAL Restricted to demonstrated aircraft type
This limitation applies to a the holder of a medical certificate who has a limb deficiency or other medical problem which had been shown by a medical flight test or flight simulator testing to be acceptable but to require a restriction to a specific class and type of aircraft.

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

SECTION 2A

Medical requirements for class 1 medical certificates

AMC1 MED.B.010 Cardiovascular system

(a) Examination

Exercise electrocardiography

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

(b) General

(1) Cardiovascular risk factor assessment

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

(ii) Applicants with an accumulation of risk factors (smoking, family history, lipid abnormalities, hypertension, etc.) should undergo a cardiovascular evaluation by the AeMC or AME, if necessary in consultation with the medical assessor of the licensing authority.

(2) Cardiovascular assessment

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

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

(c) Peripheral arterial disease

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

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

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

(3) exercise electrocardiography is satisfactory.

Further tests may be required which should show no evidence of myocardial ischaemia or significant coronary artery stenosis.

(d) Aortic aneurysm

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

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

(e) Cardiac valvular abnormalities

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

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

(3) Aortic valve disease

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

(ii) Applicants with aortic stenosis may be assessed as fit provided the left ventricular function is intact and the mean pressure gradient is less than 20 mmHg. Applicants with an aortic valve orifice with indexation on the body surface of more than 0.6 cm²/m² and a mean pressure gradient above 20 mmHg, but not greater than 50 mmHg, may be assessed as fit with an OML. Follow-up with 2D Doppler echocardiography, as necessary, should be determined by the medical assessor of the licensing authority in all cases. Alternative measurement techniques with equivalent ranges may be used. Regular evaluation by a cardiologist should be considered. Applicants with a history of systemic embolism or significant dilatation of the thoracic aorta should be assessed as unfit.

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

(4) Mitral valve disease

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

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

(iii) Applicants with minor regurgitation may be

assessed as fit. Periodic cardiological review should be determined by the medical assessor of the licensing authority.

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

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

(f) Valvular surgery

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

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

(2) Asymptomatic applicants with a tissue valve or with a mechanical valve who, at least 6 months following surgery, are taking no cardioactive medication may be considered for a fit assessment with an OML. Investigations which demonstrate normal valvular and ventricular configuration and function should have been completed as demonstrated by:

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

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

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

(3) Where anticoagulation is needed after valvular surgery, a fit assessment with an OML may be considered if the haemorrhagic risk is acceptable and the anticoagulation is stable. Anticoagulation should be considered stable if, within the last 6 months, at least 5 international normalised ratio (INR) values are documented, of which at least 4 are within the INR target range. The INR target range should be determined by the type of surgery performed.

(g) Thromboembolic disorders

Applicants with arterial or venous thrombosis or pulmonary embolism should be assessed as unfit. A fit assessment with an OML may be considered after a period of stable anticoagulation as prophylaxis, after review by the medical assessor of the licensing authority. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range and the haemorrhagic risk is acceptable. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment with an OML may be considered after review by the medical assessor

of the licensing authority after a stabilisation period of 3 months. Applicants with pulmonary embolism should also be evaluated by a cardiologist. Following cessation of anticoagulant therapy, for any indication, applicants should undergo a re-assessment by the medical assessor of the licensing authority.

(h) Other cardiac disorders

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

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

(i) Syncope

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

(2) Applicants with a history of recurrent vasovagal syncope should be assessed as unfit. A fit assessment may be considered after a 6-month period without recurrence, provided cardiological evaluation is satisfactory. Such evaluation should include:

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

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

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

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

(4) Neurological review should be required.

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

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

(j) Blood pressure

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

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

- (i) non-loop diuretic agents;
- (ii) ACE inhibitors;
- (iii) angiotensin II receptor blocking agents (sartans);
- (iv) channel calcium blocking agents;
- (v) certain (generally hydrophilic) beta-blocking agents.

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

(k) Coronary artery disease

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

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

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

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

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

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

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

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

(ii) At least 6 months from the ischaemic myocardial event or revascularisation procedure, the following investigations should be completed (equivalent tests may be substituted):

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

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

ventricular ejection fraction of 50% or more;

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

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

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

(A) After coronary artery bypass grafting, a myocardial perfusion scan, or equivalent test, should be performed if there is any indication, and in all cases within 5 years from the procedure.

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

(iv) Successful completion of the 6-month or subsequent review will allow a fit assessment with an OML.

(l) Rhythm and conduction disturbances

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

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

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

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

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

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

(v) electrophysiological study;

(vi) myocardial perfusion imaging;

(vii) cardiac magnetic resonance imaging (MRI);

(viii) coronary angiogram.

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

(3) Where anticoagulation is needed for a rhythm disturbance, a fit assessment with an OML may be considered if the haemorrhagic risk is acceptable and the anticoagulation is stable. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment with an

OML may be considered after review by the medical assessor of the licensing authority after a stabilisation period of 3 months.

(4) Ablation

Applicants who have undergone ablation therapy should be assessed as unfit. A fit assessment may be considered following successful catheter ablation and should require an OML for at least one year, unless an electrophysiological study, undertaken at a minimum of 2 months after the ablation, demonstrates satisfactory results. For those whose long-term outcome cannot be assured by invasive or non-invasive testing, an additional period with an OML and/or observation may be necessary.

(5) Supraventricular arrhythmias

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

(i) Atrial fibrillation/flutter

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

(B) For revalidation, applicants may be assessed as fit if cardiological evaluation is satisfactory and the stroke risk is sufficiently low. A fit assessment with an OML may be considered after a period of stable anticoagulation as prophylaxis, after review by the medical assessor of the licensing authority. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment with an OML may be considered after review by the medical assessor of the licensing authority after a stabilisation period of 3 months.

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

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

(6) Mobitz type 2 atrio-ventricular block

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

(7) Complete right bundle branch block

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

(ii) Applicants with bifascicular block may be assessed as fit with an OML after a satisfactory cardiological evaluation. The OML may be considered for removal if an electrophysiological study demonstrates no infra-Hissian block, or a 3-year period of satisfactory surveillance has been completed.

(8) Complete left bundle branch block

(i) A fit assessment may be considered subject to satisfactory cardiological evaluation and a 3-year period with an OML, and without an OML after 3 years of surveillance and satisfactory cardiological evaluation.

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

(9) Ventricular pre-excitation

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

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

(10) Pacemaker

Applicants with a subendocardial pacemaker should be assessed as unfit. A fit assessment with an OML may be considered at revalidation no sooner than 3 months after insertion provided:

(i) there is no other disqualifying condition;

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

(iii) the applicant is not pacemaker dependent; and

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

(11) QT prolongation

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

(12) Brugada pattern on electrocardiography

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

GM1 MED.B.010 Cardiovascular system

MITRAL VALVE DISEASE

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

(b) The following may indicate severe regurgitation:

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

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

(3) Left atrial internal diameter > 4.5 cm.

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

GM2 MED.B.010 Cardiovascular system

VENTRICULAR PRE-EXCITATION

Asymptomatic applicants with pre-excitation may be assessed as fit if they meet the following criteria, which may also indicate a satisfactory electrophysiological evaluation:

(a) refractory period > 300 ms;

(b) no induced atrial fibrillation.

AMC1 MED.B.015 Respiratory system

(a) Examination

(1) Spirometry

A spirometric examination is required for initial examination and on clinical indication. Applicants with an FEV1/FVC ratio of less than 70 % should be evaluated by a specialist in respiratory disease.

(2) Chest radiography

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

(b) Chronic obstructive pulmonary disease

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

(c) Asthma

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

(d) Inflammatory disease

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

(e) Sarcoidosis

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

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

(f) Pneumothorax

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

(i) 1 year following full recovery from a single spontaneous pneumothorax;

(ii) at revalidation, 6 weeks following full recovery from a single spontaneous pneumothorax, with an OML for at least a year after full recovery;

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

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

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

(g) Thoracic surgery

(1) Applicants requiring major thoracic surgery should

be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.

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

(h) Sleep apnoea syndrome/sleep disorder

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

AMC1 MED.B.020 Digestive system

(a) Oesophageal varices

Applicants with oesophageal varices should be assessed as unfit.

(b) Pancreatitis

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

(c) Gallstones

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

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

(d) Inflammatory bowel disease

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

(e) Peptic ulceration

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

(f) Digestive tract and abdominal surgery

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

(g) Liver disease

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

AMC1 MED.B.025 Metabolic and endocrine systems

(a) Metabolic, nutritional or endocrine dysfunction

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

(b) Obesity

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

(c) Addison's disease

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

(d) Gout

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

(e) Thyroid dysfunction

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

(f) Abnormal glucose metabolism

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

(g) Diabetes mellitus

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

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

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

AMC1 MED.B.030 Haematology

(a) Abnormal haemoglobin

Applicants with abnormal haemoglobin should be investigated.

(b) Anaemia

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

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

(c) Erythrocytosis

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

(d) Haemoglobinopathy

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

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

(e) Coagulation disorders

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

(2) Applicants with thrombocytopenia with a platelet count less than $75 \times 10^9/L$ should be assessed as unfit. A fit assessment may be considered once the platelet count is above $75 \times 10^9/L$ and stable.

(f) Haemorrhagic disorders

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

(g) Thromboembolic disorders

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

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

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

(h) Disorders of the lymphatic system

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

(i) Leukaemia

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

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

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

(j) Splenomegaly

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

AMC1 MED.B.035 Genitourinary system

(a) Abnormal urinalysis

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

(b) Renal disease

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

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

(c) Urinary calculi

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

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

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

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

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

(d) Renal and urological surgery

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

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

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

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

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

AMC1 MED.B.040 Infectious disease

(a) Infectious disease General

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

(b) Tuberculosis

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

(2) Applicants with quiescent or healed lesions may be assessed as fit. Specialist evaluation should consider

the extent of the disease, the treatment required and possible side effects of medication.

(c) Syphilis

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

(d) HIV positivity

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

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

(e) Infectious hepatitis

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

AMC1 MED.B.045 Obstetrics and gynaecology

(a) Gynaecological surgery

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

(b) Pregnancy

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

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

AMC1 MED.B.050 Musculoskeletal system

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

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

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

AMC1 MED.B.055 Mental health

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

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

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

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

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

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

(iii) childhood behavioural problems;

(iv) interpersonal and relationship issues;

(v) current work and life stressors; and

(vi) overt personality disorders.

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

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

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

(i) current work and life stressors;

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

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

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

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

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

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

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

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

(d) Psychoactive substance testing

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

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

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

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

(e) Assessment and referral decisions

(1) Psychotic disorder

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

(2) Organic mental disorder

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

(3) Psychoactive medication

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

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

(5) Mood disorder

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

(6) Neurotic, stress-related or somatoform disorder

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

(7) Personality or behavioural disorders

Where there are signs or is established evidence that an

applicant may have a personality or behavioural disorder, the applicant should be referred for psychiatric or psychological opinion and advice.

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

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

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

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

(10) Assessment

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

(f) Specialist opinion and advice

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

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

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

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

GM1 MED.B.055 Mental health

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

- (1) use of alcohol or other psychoactive substances;
- (2) loss of interest/energy;
- (3) eating and weight changes;
- (4) sleeping problems;
- (5) low mood and, if present, any suicidal thoughts;
- (6) family history of psychiatric disorders, particularly suicide;
- (7) anger, agitation or high mood; and
- (8) depersonalisation or loss of control.

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

- (1) Appearance;
- (2) Attitude;
- (3) Behaviour;
- (4) Mood;
- (5) Speech;
- (6) Thoughts process and content;
- (7) Perception;
- (8) Cognition;
- (9) Insight; and
- (10) Judgement.

GM2 MED.B.055 Mental health

(a) Drugs and alcohol screening tests used should:

- (1) provide information regarding medium-term consumption;
- (2) be accepted on national level by the competent authority based on the availability and suitability for the scope mentioned in point (a) (1) above.

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

AMC1 MED.B.065 Neurology

(a) Epilepsy

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

- (2) Applicants may be assessed as fit with an OMLif:
- (i) there is a history of a single afebrile epileptiform seizure;
 - (ii) there has been no recurrence after at least 10 years off treatment;
 - (iii) there is no evidence of continuing predisposition to epilepsy.

(b) EEG

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

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

(c) Neurological disease

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

(d) Migraine

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

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

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

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

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

AMC1 MED.B.070 Visual system

(a) Eye examination
(1) At each aero-medical examination, an assessment of the visual fitness should be undertaken and the eyes should be examined with regard to possible pathology.
(2) All abnormal and doubtful cases should be referred to an ophthalmologist. Conditions which indicate ophthalmological examination include but are not limited to a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity and/or the occurrence of eye disease, eye injury, or eye surgery.
(3) Where specialist ophthalmological examinations are required for any significant reason, this should be imposed as a limitation on the medical certificate.
(4) The possible cumulative effect of more than one eye condition should be evaluated by an ophthalmologist.

(b) Comprehensive eye examination
A comprehensive eye examination by an eye specialist is required at the initial examination. All abnormal and doubtful cases should be referred to an ophthalmologist. The examination should include:
(1) history;
(2) visual acuities near, intermediate and distant vision (uncorrected and with best optical correction if needed);

(3) examination of the external eye, anatomy, media (slit lamp) and fundoscopy;
(4) ocular motility;
(5) binocular vision;
(6) visual fields;
(7) tonometry on clinical indication;
(8) objective refraction: hyperopic initial applicants with a hyperopia of more than +2 dioptres and under the age of 25 should undergo objective refraction in cycloplegia;
(9) assessment of mesopic contrast sensitivity; and
(10) colour vision.

(c) Routine eye examination
A routine eye examination may be performed by an AME and should include:
(1) history;
(2) visual acuities - near, intermediate and distant vision (uncorrected and with best optical correction if needed);
(3) examination of the external eye, anatomy, media and fundoscopy; and
(4) further examination on clinical indication.

(d) Refractive error and anisometropia
(1) Applicants with the following conditions may be assessed as fit subject to satisfactory ophthalmic evaluation and provided that optimal correction has been considered and no significant pathology is demonstrated:
(i) hypermetropia not exceeding +5.0 dioptres;
(ii) myopia not exceeding - 6.0 dioptres;
(iii) astigmatism not exceeding 2.0 dioptres;
(iv) anisometropia not exceeding 2.0 dioptres.
(2) Applicants should wear contact lenses if:
(i) hypermetropia exceeds +5.0 dioptres;
(ii) anisometropia exceeds 3.0 dioptres.
(3) An evaluation by an eye specialist should be undertaken 5-yearly if:
(i) the refractive error is between - 3.0 and - 6.0 dioptres or +3 and +5 dioptres;
(ii) astigmatism or anisometropia is between 2.0 and 3.0 dioptres.
(4) An evaluation by an eye specialist should be undertaken 2-yearly if:
(i) the refractive error is greater than - 6.0 dioptres or +5.0 dioptres;
(ii) astigmatism or anisometropia exceeds 3.0 dioptres.

(e) Uncorrected visual acuity
No limits apply to uncorrected visual acuity.

(f) Visual acuity
(1) Reduced vision in one eye or monocularly: Applicants for revalidation or renewal with reduced central vision or acquired loss of vision in one eye may be assessed as fit with an OML if:
(i) the binocular visual field or, in the case of monocularly, the monocular visual field is acceptable;
(ii) in the case of monocularly, a period of adaptation time has passed from the known point of visual loss, during which the applicant should be assessed as unfit;
(iii) the unaffected eye achieves distant visual

acuity of 6/6 (1,0) corrected or uncorrected;
 (iv) the unaffected eye achieves intermediate visual acuity of N14 and N5 for near;
 (v) the underlying pathology is acceptable according to ophthalmological assessment and there is no significant ocular pathology in the unaffected eye; and
 (vi) a medical flight test is satisfactory.

(2) Visual fields

Applicants with a visual field defect, who do not have reduced central vision or acquired loss of vision in one eye, may be assessed as fit if the binocular visual field is normal.

(g) Keratoconus

Applicants with keratoconus may be assessed as fit if the visual requirements are met with the use of corrective lenses and periodic evaluation is undertaken by an ophthalmologist.

(h) Binocular function

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

- (1) at 6 metres:
 2.0 prism dioptres in hyperphoria,
 10.0 prism dioptres in esophoria,
 8.0 prism dioptres in exophoria and
- (2) at 33 centimetres:
 1.0 prism dioptre in hyperphoria,
 8.0 prism dioptres in esophoria,
 12.0 prism dioptres in exophoria

should be assessed as unfit. A fit assessment may be considered if an orthoptic evaluation demonstrates that the fusional reserves are sufficient to prevent asthenopia and diplopia.

(i) Eye surgery

The assessment after eye surgery should include an ophthalmological examination.

(1) After refractive surgery, a fit assessment may be considered, provided that:

- (i) stability of refraction of less than 0.75 dioptres variation diurnally has been achieved;

- (ii) examination of the eye shows no post-operative complications;
- (iii) glare sensitivity is within normal standards;
- (iv) mesopic contrast sensitivity is not impaired;
- (v) an evaluation is undertaken by an eye specialist.

(2) Following intraocular lens surgery, including cataract surgery, a fit assessment may be considered once recovery is complete and the visual requirements are met with or without correction. Intraocular lenses should be monofocal and should not impair colour vision and night vision.

(3) Retinal surgery entails unfitness. A fit assessment may be considered 6 months after surgery, or earlier if recovery is complete. A fit assessment may also be considered earlier after retinal laser therapy. Regular follow-up by an ophthalmologist should be carried out.

(4) Glaucoma surgery entails unfitness. A fit assessment may be considered 6 months after surgery or earlier if recovery is complete. Regular follow-up by an ophthalmologist should be carried out.

(j) Visual correction

Correcting lenses should permit the licence holder to meet the visual requirements at all distances.

GM1 MED.B.070 Visual system

COMPARISON OF DIFFERENT READING CHARTS (APPROXIMATE FIGURES)

(a) Test distance: 40 cm (see the table below)

(b) Test distance: 80 cm (see the table below)

GM2 MED.B.070 Visual system

EYE SPECIALIST

The term 'eye specialist' refers to an ophthalmologist or a vision care specialist qualified in optometry and trained to recognise pathological conditions.

a: Test distance: 40 cm.

DECIMAL	NIEDEN	JÄGER	SNELLEN	N	PARINAUD
1,0	1	2	1,5	3	2
0,8	2	3	2	4	3
0,7	3	4	2,5		
0,6	4	5	3	5	4
0,5	5	5		6	5
0,4	7	9	4	8	6
0,35	8	10	4,5		8
0,32	9	12	5,5	10	10
0,3	9	12		12	
0,25	9	12		14	
0,2	10	14	7,5	16	14
0,16	11	14	12	20	

b: Test distance: 80 cm.

DECIMAL	NIEDEN	JÄGER	SNELLEN	N	PARINAUD
1,2	4	5	3	5	4
1,0	5	5		6	5
0,8	7	9	4	8	6
0,7	8	10	4,5		8
0,63	9	12	5,5	10	10
0,6	9	12		12	10
0,5	9	12		14	10
0,4	10	14	7,5	16	14
0,32	11	14	12	20	14

AMC1 MED.B.075 Colour vision

(a) At revalidation and renewal examinations, colour vision should be tested on clinical indication.

(b) The Ishihara test (24 plate version) is considered passed if the first 15 plates, presented in a random order, are identified without error.

(c) Those failing the Ishihara test should be examined either by:

(1) anomaloscopy (Nagel or equivalent). This test is considered passed if the colour match is trichromatic and the matching range is 4 scale units or less, or if the anomalous quotient is acceptable; or by

(2) lantern testing with a Spectrolux, Beynes or Holmes-Wright lantern. This test is considered passed if the applicant passes without error a test with accepted lanterns.

(3) Colour Assessment and Diagnosis (CAD) test. This test is considered passed if the threshold is less than 6 standard normal (SN) units for deutan deficiency, or less than 12 SN units for protan deficiency. A threshold greater than 2 SN units for tritan deficiency indicates an acquired cause which should be investigated.

AMC1 MED.B.080 Otorhinolaryngology (ENT)

(a) Hearing

(1) Applicants should understand correctly conversational speech when tested with each ear at a distance of 2 metres from and with the applicant's back turned towards the AME.

(2) Applicants with hypoacusis may be assessed as fit if a speech discrimination test or functional flight deck hearing test demonstrates satisfactory hearing ability. A vestibular function test may be appropriate.

(3) If the hearing requirements can only be met with the use of hearing aids, the hearing aids should provide optimal hearing function, be well tolerated and suitable for aviation purposes.

(b) Comprehensive ENT examination

A comprehensive ENT examination should include:

- (1) history;
- (2) clinical examination including otoscopy, rhinoscopy, and examination of the mouth and throat;

- (3) tympanometry or equivalent;
- (4) clinical examination of the vestibular system.

(c) Ear conditions

(1) Applicants with an active pathological process of the internal or middle ear should be assessed as unfit. A fit assessment may be considered once the condition has stabilised or there has been a full recovery.

(2) Applicants with an unhealed perforation or dysfunction of the tympanic membranes should be assessed as unfit. An applicant with a single dry perforation of non-infectious origin and which does not interfere with the normal function of the ear may be considered for a fit assessment.

(d) Vestibular disturbance

Applicants with disturbance of vestibular function should be assessed as unfit. A fit assessment may be considered after full recovery. The presence of spontaneous or positional nystagmus requires complete vestibular evaluation by specialist. Applicants with significant abnormal caloric or rotational vestibular responses should be assessed as unfit. Abnormal vestibular responses should be assessed in their clinical context.

(e) Sinus dysfunction

Applicants with any dysfunction of the sinuses should be assessed as unfit until there has been full recovery.

(f) Oral/upper respiratory tract infections

Applicants with a significant infection of the oral cavity or upper respiratory tract should be assessed as unfit. A fit assessment may be considered after full recovery.

(g) Speech disorder

Applicants with a significant disorder of speech or voice should be assessed as unfit.

(h) Air passage restrictions

Applicants with significant restriction of the nasal air passage on either side, or significant malformation of the oral cavity or upper respiratory tract may be assessed as fit if ENT evaluation is satisfactory.

(i) Eustachian tube (s) dysfunction

Applicants with permanent dysfunction of the Eustachian

tube (s) may be assessed as fit if ENT evaluation is satisfactory.

(j) Sequelae of surgery of the internal or middle ear
Applicants with sequelae of surgery of the internal or middle ear should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.

GM1 MED.B.080 Otorhinolaryngology (ENT)

PURE TONE AUDIOGRAM

The pure tone audiogram may also cover the 4 000 Hz frequency for early detection of decrease in hearing.

AMC1 MED.B.085 Dermatology

(a) If doubt exists about the fitness of applicants with eczema (exogenous and endogenous), severe psoriasis, bacterial infections, drug induced or bullous eruptions or urticaria, the AME should refer the case to the medical assessor of the licensing authority.

(b) Systemic effects of radiant or pharmacological treatment for a dermatological condition should be reviewed before a fit assessment may be considered.

(c) In cases where a dermatological condition is associated with a systemic illness, full consideration should be given to the underlying illness before a fit assessment may be considered.

AMC1 MED.B.090 Oncology

(a) Applicants who have been diagnosed with a malignant disease may be assessed as fit provided that:

- (1) after primary treatment, there is no evidence of residual malignant disease likely to jeopardise flight safety;
- (2) time appropriate to the type of tumour and primary treatment has elapsed;
- (3) the risk of in-flight incapacitation from a recurrence or metastasis is sufficiently low;
- (4) there is no evidence of short or long-term sequelae from treatment. Special attention should be paid to applicants who have received anthracycline chemotherapy;
- (5) satisfactory oncology follow-up reports are provided to the medical assessor of the licensing authority.

(b) An OML should be applied as appropriate.

(c) Applicants receiving ongoing chemotherapy or radiation treatment should be assessed as unfit.

(d) Applicants with pre-malignant conditions of the skin may be assessed as fit if treated or excised as necessary and there is regular follow-up.

SECTION 2B

Medical requirements for class 2 medical certificates

AMC2 MED.B.010 Cardiovascular system

(a) Examination

Exercise electrocardiography

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

(b) General

(1) Cardiovascular risk factor assessment
Applicants with an accumulation of risk factors (smoking, family history, lipid abnormalities, hypertension, etc.) should undergo a cardiovascular evaluation by the AeMC or AME.

(2) Cardiovascular assessment
Reporting of resting and exercise electrocardiograms should be by the AME or an accredited specialist.

(c) Peripheral arterial disease

A fit assessment may be considered for an applicant with peripheral arterial disease, or after surgery for peripheral arterial disease, provided there is no significant functional impairment, any vascular risk factors have been reduced to an appropriate level, the applicant is receiving acceptable secondary prevention treatment, and there is no evidence of myocardial ischaemia.

(d) Aortic aneurysm

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

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

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

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

(e) Cardiac valvular abnormalities

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

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

(3) Aortic valve disease.

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

(ii) Applicants with aortic stenosis may be assessed as fit provided the left ventricular function is intact and the mean pressure gradient is less than 20 mmHg. Applicants with an aortic valve orifice of more than 1 cm² and a mean pressure gradient above 20 mmHg, but not greater than 50 mmHg, may be assessed as fit with an ORL or OSL. Follow-up with 2D Doppler echocardiography, as necessary, should be determined in consultation with the medical assessor of the licensing authority in all

cases. Alternative measurement techniques with equivalent ranges may be used. Regular cardiological evaluation should be considered. Applicants with a history of systemic embolism or significant dilatation of the thoracic aorta should be assessed as unfit.

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

(4) Mitral valve disease

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

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

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

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

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

(f) Valvular surgery

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

(2) Where anticoagulation is needed after valvular surgery, a fit assessment with an ORL or OSL may be considered after cardiological evaluation if the haemorrhagic risk is acceptable. The review should show that the anticoagulation is stable. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range. The INR target range should be determined by the type of surgery performed. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence (s) if the INR is within the target range, may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of 3 months.

(g) Thromboembolic disorders

Applicants with arterial or venous thrombosis or pulmonary embolism should be assessed as unfit. A fit assessment with an ORL or OSL may be considered after a period of

stable anticoagulation as prophylaxis in consultation with the medical assessor of the licensing authority. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range and the haemorrhagic risk is acceptable. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence (s) if the INR is within the target range may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of 3 months. Applicants with pulmonary embolism should also undergo a cardiological evaluation. Following cessation of anticoagulant therapy for any indication, applicants should undergo a re-assessment in consultation with the medical assessor of the licensing authority.

(h) Other cardiac disorders

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

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

(i) Syncope

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

(2) Applicants with a history of recurrent vasovagal syncope should be assessed as unfit. A fit assessment may be considered after a 6-month period without recurrence, providing cardiological evaluation is satisfactory. Neurological review may be indicated.

(j) Blood pressure

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

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

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

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

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

(k) Coronary artery disease

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

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

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

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

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

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

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

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

(ii) At least 6 months from the ischaemic myocardial event, including revascularisation, the following investigations should be completed (equivalent tests may be substituted):

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

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

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

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

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

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

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

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

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

(II) Rhythm and conduction disturbances

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

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

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

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

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

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

(v) electrophysiological study;

(vi) myocardial perfusion imaging;

(vii) cardiac magnetic resonance imaging (MRI);

(viii) coronary angiogram.

(2) Where anticoagulation is needed for a rhythm disturbance, a fit assessment with an ORL or OSL may be considered, if the haemorrhagic risk is acceptable and the anticoagulation is stable. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence (s) if the INR is within the target range may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of 3 months.

(3) Ablation

A fit assessment may be considered following successful catheter ablation subject to satisfactory cardiological review undertaken at a minimum of 2 months after the ablation.

(4) Supraventricular arrhythmias

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

(ii) Applicants with atrial fibrillation/flutter may be assessed as fit if cardiological evaluation is satisfactory and the stroke risk is sufficiently low. Where anticoagulation is needed, a fit assessment with an ORL or OSL may be considered after a period of stable anticoagulation as prophylaxis, in consultation with the medical assessor of the licensing authority. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to

flight and only exercise the privileges of their licence (s) if the INR is within the target range may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of 3 months.

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

(5) Heart block

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

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

(6) Complete right bundle branch block

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

(7) Complete left bundle branch block

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

(8) Ventricular pre-excitation

Asymptomatic applicants with ventricular pre-excitation may be assessed as fit with limitation (s) as appropriate, subject to satisfactory cardiological evaluation. Limitations may not be necessary if an electrophysiological study is conducted and the results are satisfactory.

(9) Pacemaker

Applicants with a subendocardial pacemaker should be assessed as unfit. A fit assessment may be considered no sooner than 3 months after insertion, providing:

(i) there is no other disqualifying condition;

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

(iii) the applicant is not pacemaker dependent; and

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

(10) QT prolongation

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

(11) Brugada pattern on electrocardiography

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

(m) Heart or heart/lung transplantation

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

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

(ii) no significant arrhythmias;

(iii) a left ventricular ejection fraction $\geq 50\%$;

(iv) a symptom limited exercise ECG; and

(v) a coronary angiogram if indicated;

(2) Regular cardiological evaluations should be carried out.

GM3 MED.B.010 Cardiovascular system

ANTICOAGULATION

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

GM4 MED.B.010 Cardiovascular system

MITRAL VALVE DISEASE

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

(b) The following may indicate severe regurgitation:

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

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

(3) Left atrial internal diameter > 4.5 cm.

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

GM5 MED.B.010 Cardiovascular system

VENTRICULAR PRE-EXCITATION

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

(a) no inducible re-entry tachycardia;

(b) refractory period > 300 ms;

(c) no induced atrial fibrillation;

(d) no evidence of multiple accessory pathways.

AMC2 MED.B.015 Respiratory system

(a) Examination

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

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

(b) Chronic obstructive pulmonary disease

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

(c) Asthma

Applicants with asthma may be assessed as fit if the asthma

is considered stable with satisfactory pulmonary function tests and medication is compatible with flight safety. Applicants requiring systemic steroids should be assessed as unfit.

(d) Inflammatory disease

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

(e) Sarcoidosis

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

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

(f) Pneumothorax

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

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

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

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

(g) Thoracic surgery

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

(h) Sleep apnoea syndrome

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

AMC2 MED.B.020 Digestive system

(a) Oesophageal varices

Applicants with oesophageal varices should be assessed as unfit.

(b) Pancreatitis

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

(c) Gallstones

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

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

(d) Inflammatory bowel disease

Applicants with an established diagnosis or history of chronic inflammatory bowel disease may be assessed as fit provided that the disease is stable and not likely to

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

(e) Peptic ulceration

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

(f) Digestive tract and abdominal surgery

Applicants who have undergone a surgical operation:

(1) for herniae; or

(2) on the digestive tract or its adnexa, including a total or partial excision or diversion of any of these organs should be assessed as unfit. A fit assessment may be considered if recovery is complete, the applicant is asymptomatic, and there is only a minimal risk of secondary complication or recurrence.

(g) Liver disease

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

AMC2 MED.B.025 Metabolic and endocrine systems

(a) Metabolic, nutritional or endocrine dysfunction

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

(b) Obesity

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

(c) Addison's disease

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

(d) Gout

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

(e) Thyroid dysfunction

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

(f) Abnormal glucose metabolism

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

(g) Diabetes mellitus

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

AMC2 MED.B.030 Haematology

(a) Abnormal haemoglobin
Haemoglobin should be tested when clinically indicated.

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

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

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

(e) Coagulation and haemorrhagic disorders
Applicants with a coagulation or haemorrhagic disorder may be assessed as fit if there is no likelihood of significant bleeding.

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

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

(h) Leukaemia
(1) Applicants with acute leukaemia may be assessed as fit once in established remission.
(2) Applicants with chronic leukaemia may be assessed as fit after a period of demonstrated stability.
(3) In cases (h) (1) and (h) (2), there should be no history of central nervous system involvement and no continuing side effects from treatment of flight safety importance. Haemoglobin and platelet levels should be satisfactory. Regular follow-up is required.

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

AMC2 MED.B.035 Genitourinary system

(a) Renal disease
Applicants presenting with renal disease may be assessed

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

(b) Urinary calculi
(1) Applicants presenting with one or more urinary calculi should be assessed as unfit.
(2) Applicants with an asymptomatic calculus or a history of renal colic require investigation.
(3) While awaiting assessment or treatment, a fit assessment with an OSL may be considered.
(4) After successful treatment the applicant may be assessed as fit.
(5) Applicants with parenchymal residual calculi may be assessed as fit.

(c) Renal and urological surgery
(1) Applicants who have undergone a major surgical operation on the genitourinary system or its adnexa involving a total or partial excision or a diversion of any of its organs, should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.
(2) After other urological surgery, a fit assessment may be considered when the applicant is completely asymptomatic and there is only minimal risk of secondary complication or recurrence.
(3) Applicants with compensated nephrectomy without hypertension or uraemia may be assessed as fit.
(4) Applicants who have undergone renal transplantation may be considered for a fit assessment if it is fully compensated and with only minimal immuno-suppressive therapy.
(5) Applicants who have undergone total cystectomy may be considered for a fit assessment if there is satisfactory urinary function, no infection and no recurrence of primary pathology.

AMC2 MED.B.040 Infectious disease

(a) Tuberculosis
(1) Applicants with active tuberculosis should be assessed as unfit. A fit assessment may be considered following completion of therapy.
(2) Applicants with quiescent or healed lesions may be assessed as fit. Specialist evaluation should consider the extent of the disease, the treatment required and possible side effects of medication.

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

AMC2 MED.B.045 Obstetrics and gynaecology

(a) Gynaecological surgery
Applicants who have undergone a major gynaecological

operation should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication or recurrence is minimal.

(b) Pregnancy

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

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

AMC2 MED.B.050 Musculoskeletal system

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

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

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

AMC2 MED.B.055 Mental health

(a) Mental health assessment as part of class 2 aeromedical examination

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

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

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

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

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

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

(c) Assessment and referral decisions

(1) Psychotic disorder

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

(2) Organic mental disorder

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

(3) Schizophrenia, schizotypal or delusional disorder

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

(4) Mood disorder

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

(5) Neurotic, stress-related or somatoform disorder

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

(6) Personality or behavioural disorders

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

(7) Psychoactive medication

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

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

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

(ii) Drug and alcohol tests

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

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

(iii) A fit assessment may be considered after a period of two years of documented sobriety or freedom from psychoactive substance use or misuse. At revalidation or renewal, a fit assessment may be considered earlier with an OSL or OPL. Depending on the individual case, treatment and evaluation may include in-patient treatment

of some weeks and inclusion into a support programme followed by ongoing checks, including drug and alcohol testing and reports resulting from the support programme, which may be required indefinitely.

(9) Deliberate self-harm

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

(e) Specialist opinion and advice

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

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

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

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

GM3 MED.B.055 Mental health

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

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

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

(3) childhood behavioural problems;

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

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

(6) overt personality disorders.

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

GM4 MED.B.055 Mental health

Drugs and alcohol screening tests used should:

(a) provide information regarding medium-term consumption;

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

AMC2 MED.B.065 Neurology

(a) Epilepsy

Applicants may be assessed as fit if:

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

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

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

(b) Neurological disease

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

(c) Migraine

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

(d) Head injury

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

(e) Spinal or peripheral nerve injury

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

(f) Vascular deficiencies

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

AMC2 MED.B.070 Visual system

(a) Eye examination

(1) At each aero-medical revalidation examination an assessment of the visual fitness of the applicant should be undertaken and the eyes should be examined with regard to possible pathology. Conditions which indicate further ophthalmological examination include but are not limited to a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity and/or the occurrence of eye disease, eye injury, or eye surgery.

(2) At the initial assessment, the examination should include:

- (i) history;
- (ii) visual acuities near, intermediate and distant vision (uncorrected and with best optical correction if needed);
- (iii) examination of the external eye, anatomy, media and funduscopy;
- (iv) ocular motility;
- (v) binocular vision;
- (vi) visual fields;
- (vii) colour vision;
- (viii) further examination on clinical indication.

(3) At the initial assessment the applicant should submit a copy of the recent spectacle prescription if visual correction is required to meet the visual requirements.

(b) Routine eye examination

A routine eye examination should include:

- (1) history;
- (2) visual acuities - near, intermediate and distant vision (uncorrected and with best optical correction if needed);
- (3) examination of the external eye, anatomy, media and funduscopy;
- (4) further examination on clinical indication.

(c) Visual acuity

Reduced vision in one eye or monocularly: Applicants with reduced vision or loss of vision in one eye may be assessed as fit if:

- (1) the binocular visual field or, in the case of monocularly, the monocular visual field is acceptable;
- (2) in the case of monocularly, a period of adaptation time has passed from the known point of visual loss, during which the applicant should be assessed as unfit;
- (3) the unaffected eye achieves distant visual acuity of 6/6 (1,0), corrected or uncorrected;
- (4) the unaffected eye achieves intermediate visual acuity of N14 or equivalent and N5 or equivalent for near (Refer to GM1 MED.B.070);
- (5) there is no significant ocular pathology in the unaffected eye; and
- (6) a medical flight test is satisfactory.

(d) Binocular function

Reduced stereopsis, abnormal convergence not interfering with near vision and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia may be acceptable.

(e) Eye surgery

- (1) The assessment after eye surgery should include an ophthalmological examination.
- (2) After refractive surgery a fit assessment may be considered provided that there is satisfactory stability of refraction, there are no post-operative complications and no increase in glare sensitivity.
- (3) After cataract, retinal or glaucoma surgery a fit assessment may be considered once recovery is complete and the visual requirements are met with or without correction.

(f) Visual correction

Correcting lenses should permit the licence holder to meet

the visual requirements at all distances.

AMC2 MED.B.075 Colour vision

(a) Colour vision should be tested on clinical indication at revalidation and renewal examinations.

(b) The Ishihara test (24 plate version) is considered passed if the first 15 plates, presented in a random order, are identified without error.

(c) Those failing the Ishihara test should be examined either by:

(1) anomaloscopy (Nagel or equivalent). This test is considered passed if the colour match is trichromatic and the matching range is 4 scale units or less, or if the anomalous quotient is acceptable; or by

(2) lantern testing with a Spectrolux, Beynes or Holmes-Wright lantern. This test is considered passed if the applicant passes without error a test with accepted lanterns.

(3) Colour Assessment and Diagnosis (CAD) test. This test is considered passed if the threshold is less than 6 standard normal (SN) units for deutan deficiency, or less than 12 SN units for protan deficiency. A threshold greater than 2 SN units for tritan deficiency indicates an acquired cause which should be investigated.

AMC2 MED.B.080 Otorhinolaryngology (ENT)

(a) Hearing

(1) Applicants should understand correctly conversational speech when tested with each ear at a distance of 2 metres from and with the applicant's back turned towards the AME.

(2) Applicants with hypoacusis may be assessed as fit if a speech discrimination test or functional cockpit hearing test demonstrates satisfactory hearing ability.

(3) If the hearing requirements can be met only with the use of hearing aids, the hearing aids should provide optimal hearing function, be well tolerated and suitable for aviation purposes.

(4) Applicants with profound deafness or major disorder of speech, or both, may be assessed as fit with an SSL, such as 'limited to areas and operations where the use of radio is not mandatory' The aircraft should be equipped with appropriate alternative warning devices in lieu of sound warnings.

(b) Examination

An ENT examination should form part of all initial, revalidation and renewal examinations.

(c) Ear conditions

(1) Applicants with an active pathological process of the internal or middle ear should be assessed as unfit until the condition has stabilised or there has been a full recovery.

(2) Applicants with an unhealed perforation or dysfunction of the tympanic membranes should be assessed as unfit. An applicant with a single dry perforation of non-infectious origin which does not interfere with the normal function of the ear may be considered for a fit assessment.

(d) Vestibular disturbance

Applicants with disturbance of vestibular function should

be assessed as unfit pending full recovery.

(e) Sinus dysfunction
Applicants with any dysfunction of the sinuses should be assessed as unfit pending full recovery.

(f) Oral/upper respiratory tract infections
Applicants with a significant infection of the oral cavity or upper respiratory tract should be assessed as unfit. A fit assessment may be considered after full recovery.

(g) Speech disorder
Applicants with a significant disorder of speech or voice should be assessed as unfit.

(h) Air passage restrictions
Applicants with significant restriction of the nasal air passage on either side, or significant malformation of the oral cavity or upper respiratory tract may be assessed as fit if ENT evaluation is satisfactory.

(i) Eustachian tube dysfunction
Applicants with permanent dysfunction of the Eustachian tube (s) may be assessed as fit if ENT evaluation is satisfactory.

(j) Sequelae of surgery of the internal or middle ear
Applicants with sequelae of surgery of the internal or middle ear should be assessed as unfit until recovery is complete, the applicant is asymptomatic, and the risk of secondary complication is minimal.

GM2 MED.B.080 Otorhinolaryngology (ENT)

PURE TONE AUDIOGRAM

The pure tone audiogram may also cover the 4 000 Hz frequency for early detection of decrease in hearing.

AMC2 MED.B.085 Dermatology

In cases where a dermatological condition is associated with a systemic illness, full consideration should be given to the underlying illness before a fit assessment may be considered.

AMC2 MED.B.090 Oncology

(a) Applicants who have been diagnosed with a malignant disease may be considered for a fit assessment provided that:

- (1) after primary treatment, there is no evidence of residual malignant disease likely to jeopardise flight safety;
- (2) time appropriate to the type of tumour and primary treatment has elapsed;
- (3) the risk of in-flight incapacitation from a recurrence or metastasis is sufficiently low;
- (4) there is no evidence of short or long-term sequelae from treatment that may jeopardise flight safety;
- (5) arrangements for an oncological follow-up have been made for an appropriate period of time.

(b) Applicants receiving ongoing chemotherapy or radiation treatment should be assessed as unfit.

(c) Applicants with pre-malignant conditions of the skin may be assessed as fit if treated or excised as necessary and there is a regular follow-up.

SECTION 3

Specific requirements for LAPL medical certificates

AMC1 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

When a specialist evaluation is required under this section, the aero-medical assessment of the applicant should be performed by an AeMC, an AME or, in the case of AMC5 MED.B.095 (d), by the medical assessor of the licensing authority.

AMC2 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

CARDIOVASCULAR SYSTEM

(a) Examination

Pulse and blood pressure should be recorded at each examination.

(b) General

(1) Cardiovascular risk factor assessment

An accumulation of risk factors (smoking, family history, lipid abnormalities, hypertension, etc.) requires cardiovascular evaluation.

(2) Aortic aneurysm

Applicants with an aortic aneurysm may be assessed as fit subject to satisfactory cardiological evaluation and a regular follow-up.

(3) Cardiac valvular abnormalities

(i) Applicants with a cardiac murmur may be assessed as fit if the murmur is assessed as being of no pathological significance.

(ii) Applicants with a cardiac valvular abnormality may be assessed as fit subject to satisfactory cardiological evaluation.

(4) Valvular surgery

After cardiac valve replacement or repair, a fit assessment may be considered, with an ORL if anticoagulation is needed, subject to satisfactory post-operative cardiological evaluation. Anticoagulation should be stable and the haemorrhagic risk should be acceptable. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range. The INR target range should be determined by the type of surgery performed. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence if the INR is within the target range, may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of 3 months.

(5) Other cardiac disorders

(i) Applicants with other cardiac disorders may be assessed as fit subject to satisfactory cardiological evaluation. A fit assessment may be considered, with an ORL if anticoagulation is needed. Anticoagulation should be stable and the haemorrhagic risk should be acceptable. Anticoagulation

should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range. The INR target range should be determined by the type of surgery performed. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence if the INR is within the target range, may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of 3 months.

(ii) Applicants with symptomatic hypertrophic cardiomyopathy should be assessed as unfit.

(c) Blood pressure

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

(2) Applicants initiating medication for the control of blood pressure should be assessed as unfit until the absence of significant side effects has been established.

(d) Coronary artery disease

(1) Applicants with suspected myocardial ischaemia should undergo a cardiological evaluation before a fit assessment may be considered.

(2) Applicants with angina pectoris requiring medication for cardiac symptoms should be assessed as unfit.

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

(4) In cases (d) (1), (d) (2) and (d) (3), applicants who have had a satisfactory cardiological evaluation to include an exercise test or equivalent that is negative for ischaemia may be assessed as fit.

(e) Rhythm and conduction disturbances

(1) Applicants with a significant disturbance of cardiac rhythm or conduction should be assessed as unfit unless a cardiological evaluation concludes that the disturbance is not likely to interfere with the safe exercise of the privileges of the licence. A fit assessment may be considered, with an ORL if anticoagulation is needed. Anticoagulation should be stable and the haemorrhagic risk should be acceptable. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range. The INR target range should be determined by the type of surgery performed. Applicants who measure their INR on a 'near patient' testing system within 12 hours prior to flight and only exercise the privileges of their licence if the INR is within the target range, may be assessed as fit without the above-mentioned limitation. The INR results should be recorded and the results should be reviewed at each aero-medical assessment. Applicants taking anticoagulation medication not requiring INR monitoring, may be assessed as fit without the above-mentioned limitation in consultation with the medical assessor of the licensing authority after a stabilisation period of 3 months.

(2) Pre-excitation

Applicants with ventricular pre-excitation may be assessed as fit subject to satisfactory cardiological evaluation. Applicants with ventricular pre-excitation associated with a significant arrhythmia should be assessed as unfit.

(3) Automatic implantable defibrillating system

Applicants with an automatic implantable defibrillating system should be assessed as unfit.

(4) Pacemaker

A fit assessment may be considered subject to satisfactory cardiological evaluation.

AMC3 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

RESPIRATORY SYSTEM

(a) Applicants should undergo pulmonary morphological or functional tests when clinically indicated.

(b) Asthma and chronic obstructive pulmonary disease
Applicants with asthma or impairment of pulmonary function may be assessed as fit provided that the condition is considered stable with satisfactory pulmonary function and medication is compatible with flight safety. Systemic steroids may be acceptable provided that the dosage required is acceptable and there are no adverse side effects.

(c) Sarcoidosis

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

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

(d) Pneumothorax

(1) Applicants with spontaneous pneumothorax may be assessed as fit subject to satisfactory respiratory evaluation following recovery from a single spontaneous pneumothorax or following recovery from surgical intervention for a recurrent pneumothorax.

(2) Applicants with traumatic pneumothorax may be assessed as fit following recovery.

(e) Thoracic surgery

Applicants who have undergone thoracic surgery may be assessed as fit following recovery.

(f) Sleep apnoea syndrome/sleep disorder

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

AMC4 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

DIGESTIVE SYSTEM

(a) Gallstones

Applicants with symptomatic gallstones should be assessed as unfit. A fit assessment may be considered following gallstone removal.

(b) Inflammatory bowel disease

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

(c) Peptic ulceration

Applicants with peptic ulceration may be assessed as fit subject to satisfactory gastroenterological evaluation.

(d) Digestive tract and abdominal surgery

Applicants who have undergone a surgical operation:

- (1) for herniae; or
- (2) on the digestive tract or its adnexa, including a total or partial excision or diversion of any of these organs, should be assessed as unfit. A fit assessment may be considered if recovery is complete, the applicant is asymptomatic, and there is only a minimal risk of secondary complication or recurrence.

(e) Pancreatitis

Applicants with pancreatitis may be assessed as fit after satisfactory recovery.

(f) Liver disease

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

AMC5 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

METABOLIC AND ENDOCRINE SYSTEMS

(a) Metabolic, nutritional or endocrine dysfunction

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

(b) Obesity

Obese applicants may be assessed as fit if the excess weight is not likely to interfere with the safe exercise of the licence.

(c) Thyroid dysfunction

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

(d) Diabetes mellitus

(1) Applicants using antidiabetic medications that are not likely to cause hypoglycaemia may be assessed as fit.

(2) Applicants with diabetes mellitus Type 1 should be assessed as unfit.

(3) Applicants with diabetes mellitus Type 2 treated with insulin may be assessed as fit with limitations for re-validation if blood sugar control has been achieved and the process under (e) and (f) is followed. An ORL is required. A TML for 12 months may be needed to ensure compliance with the follow-up requirements below. Licence privileges should not include rotary aircraft flying.

(e) Aero-medical assessment by, or under the guidance of, the medical assessor of the licensing authority:

- (1) A diabetology review at yearly intervals, including:
 - (i) symptom review;
 - (ii) review of data logging of blood sugar;
 - (iii) cardiovascular status. Exercise ECG at age 40, at 5-yearly intervals thereafter and on clinical indication, including an accumulation of risk factors;
 - (iv) nephropathy status.

(2) Ophthalmological review at yearly intervals, including:

- (i) visual fields-Humphrey-perimeter;
- (ii) retinae-full dilatation slit lamp examination;
- (iii) cataract-clinical screening.

The development of retinopathy requires a full ophthalmological review.

(3) Blood testing at 6-monthly intervals:

- (i) HbA1c;
- (ii) renal profile;
- (iii) liver profile;
- (iv) lipid profile.

(4) Applicants should be assessed as temporarily unfit after:

- (i) changes of medication/insulin leading to a change to the testing regime until stable blood sugar control can be demonstrated;
- (ii) a single unexplained episode of severe hypoglycaemia until stable blood sugar control can be demonstrated.

(5) Applicants should be assessed as unfit in the following cases:

- (i) loss of hypoglycaemic awareness;
- (ii) development of retinopathy with any visual field loss;
- (iii) significant nephropathy;
- (iv) any other complication of the disease where flight safety may be jeopardised.

(f) Pilot responsibility

Blood sugar testing is carried out during non-operational and operational periods. A whole blood glucose measuring device with memory should be carried and used. Equipment for continuous glucose monitoring (CGMS) should not be used. Pilots should prove to the AME or AeMC or medical assessor of the licensing authority that testing has been performed as indicated below and with which results.

(1) Testing during non-operational periods: normally 3 - 4 times/day or as recommended by the treating physician, and on any awareness of hypoglycaemia.

- (2) Testing frequency during operational periods:
 - (i) 120 minutes before departure;
 - (ii) < 30 minutes before departure;
 - (iii) 60 minutes during flight;
 - (iv) 30 minutes before landing.

(3) Actions following glucose testing:

- (i) 120 minutes before departure: if the test result is > 15 mmol/l, piloting should not be commenced.

(ii) 10 - 15g of carbohydrate should be ingested and a re-test performed within 30 minutes if:

- (A) any test result is < 4,5 mmol/l;
- (B) the pre-landing test measurement is missed or a subsequent go-around/diversion is performed.

GM1 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

DIABETES MELLITUS TYPE 2 TREATED WITH INSULIN-GENERAL

(a) Pilots and their treating physician should be aware that if the HbA1c target level was set to normal (non-diabetic) levels, this will significantly increase the chance of hypoglycaemia. For safety reasons the target level of HbA1c is therefore set to 7,5 – 8,5% even though there is evidence that lower HbA1c levels are correlated with fewer diabetic complications.

(b) The safety pilot should be briefed pre-flight on the potential condition of the pilot. The results of blood sugar testing before and during flight should be shared with the safety pilot for the acceptability of the values obtained.

GM2 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

DIABETES MELLITUS TYPE 2 TREATED WITH INSULIN - CONVERSION TABLE FOR HbA1c IN % AND MMOL/MOL

HbA1c IN %	HbA1c IN MMOL/MOL
4,7	28
5,0	31
5,3	34
5,6	38
5,9	41
6,2	44
6,5	48
6,8	51
7,4	57
8,0	64
8,6	70
9,2	77
9,8	84
10,4	90
11,6	103

AMC6 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

HAEMATOLOGY

Applicants with a haematological condition, such as:

(a) abnormal haemoglobin including, but not limited

to, anaemia, erythrocytosis or haemoglobinopathy;

(b) coagulation, haemorrhagic or thrombotic disorder;

(c) significant lymphatic enlargement;

(d) acute or chronic leukaemia;

(e) splenomegaly; may be assessed as fit subject to satisfactory aero-medical evaluation. If anticoagulation is being used as treatment, refer to AMC2 MED.B.095 (b) (4).

AMC7 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

GENITOURINARY SYSTEM

(a) Applicants with a genitourinary disorder, such as:
 (1) renal disease; or
 (2) one or more urinary calculi, or a history of renal colic may be assessed as fit subject to satisfactory renal and urological evaluation, as applicable.

(b) Applicants who have undergone a major surgical operation on the genitourinary system or its adnexa may be assessed as fit following recovery.

(c) Applicants who have undergone renal transplantation may be assessed as fit subject to satisfactory renal evaluation.

AMC8 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

INFECTIOUS DISEASE

(a) Applicants who are HIV positive may be assessed as fit subject to satisfactory aero-medical evaluation.

(b) Applicants with other chronic infections may be assessed as fit provided the infections are not likely to interfere with the safe exercise of the privileges of the licence.

AMC9 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

OBSTETRICS AND GYNAECOLOGY

(a) Pregnancy
 Holders of a LAPL medical certificate should only exercise the privileges of their licences until the end of the 26th week of gestation under routine antenatal care.

(b) Applicants who have undergone a major gynaecological operation may be assessed as fit after recovery.

AMC10 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

MUSCULOSKELETAL SYSTEM

Applicants should have satisfactory functional use of the musculoskeletal system to enable the safe exercise of the privileges of the licence.

AMC11 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

MENTAL HEALTH

(a) Applicants with a mental or behavioural disorder due to use or misuse of alcohol or other psychoactive substances, with or without dependency, should be assessed as unfit. A fit assessment may be considered after a period of two years of documented sobriety or freedom from psychoactive substance use or misuse, subject to satisfactory psychiatric evaluation after successful treatment. At revalidation or renewal, a fit assessment may be considered earlier. Depending on the individual case, treatment and evaluation may include in-patient treatment of some weeks followed by ongoing checks, including blood testing and peer reports, which may be required indefinitely.

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

(c) Applicants with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder should be assessed as unfit. A fit assessment may only be considered if the original diagnosis was inappropriate or inaccurate as confirmed by psychiatric evaluation or, in the case of a single episode of delirium, provided that the applicant has suffered no permanent impairment.

(d) Psychoactive substances
Applicants who use or misuse psychoactive substances or psychoactive medication likely to affect flight safety should be assessed as unfit. If stability on maintenance psychoactive medication is confirmed, a fit assessment with appropriate limitation (s) may be considered. If the dosage or type of medication is changed, a further period of unfit assessment should be required until stability is confirmed.

(e) Applicants with a psychiatric condition, such as:
(1) mood disorder;
(2) neurotic disorder;
(3) personality disorder;
(4) mental or behavioural disorder should undergo satisfactory psychiatric evaluation before a fit assessment may be considered.

(f) Applicants with a history of significant or repeated acts of deliberate self-harm should undergo satisfactory psychiatric or psychological evaluation or both before a fit assessment may be considered.

(g) Psychiatric evaluations and reviews may include reports from the applicant's flight instructor.

(h) Applicants with a psychological disorder may need to be referred for psychological opinion and advice.

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

GM3 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

MOOD DISORDER

After full recovery from a mood disorder and after full consideration of the individual case, a fit assessment may be considered, depending on the characteristics and gravity of the mood disorder. If stability on maintenance psychoactive medication is confirmed, a fit assessment may be considered. If the dosage or type of medication is changed, a further evaluation may be required until stability is confirmed.

AMC12 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

NEUROLOGY

(a) Epilepsy and seizures
(1) Applicants with an established diagnosis of and under treatment for epilepsy should be assessed as unfit. A re-assessment after all treatment has been stopped for at least 5 years should include a review of neurological reports.

(2) Applicants may be assessed as fit if:
(i) there is a history of a single afebrile epileptiform seizure considered to have a very low risk of recurrence;
(ii) there has been no recurrence after at least 5 years off treatment;
(iii) a cause has been identified and treated and there is no evidence of continuing predisposition to epilepsy.

(b) Neurological disease
Applicants with any disease of the nervous system which is likely to cause a hazard to flight safety should be assessed as unfit. However, in certain cases, including cases of functional loss associated with stable disease, a fit assessment may be considered after full evaluation including, if necessary, a medical flight test.

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

(d) Head injury

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

(e) Spinal or peripheral nerve injury
Applicants with a history or diagnosis of spinal or peripheral nerve injury or a disorder of the nervous system due to a traumatic injury may be assessed as fit if neurological evaluation is satisfactory and the conditions of AMC10 MED.B.095 are satisfied.

(f) Vascular deficiencies
Applicants with a disorder of the nervous system due to vascular deficiencies including haemorrhagic and ischaemic events should be assessed as unfit. A fit assessment may be considered if neurological evaluation is satisfactory and the conditions of AMC10 MED.B.095 are satisfied. A cardiological evaluation and medical flight test should be undertaken for applicants with residual deficiencies.

AMC13 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

VISUAL SYSTEM

(a) Applicants should not possess any abnormality of the function of the eyes or their adnexa or any active pathological condition, congenital or acquired, acute or chronic, or any sequelae of eye surgery or trauma, which is likely to interfere with the safe exercise of the privileges of the applicable licence.

(b) Eye examination
The examination should include visual acuities (near, intermediate and distant vision) and visual field.

(c) Visual acuity
(1) Visual acuity with or without corrective lenses should be 6/9 (0,7) binocularly and 6/12 (0,5) in each eye.
(2) Applicants who do not meet the required visual acuity should be assessed by an AME or AeMC, taking into account the privileges of the licence held and the risk involved.
(3) Applicants should be able to read, binocularly, an N5 chart (or equivalent) at 30-50 cm and an N14 chart (or equivalent) at 100 cm, with correction if prescribed (Refer to GM1 MED.B.070).

(d) Visual acuity
Applicants with substandard vision in one eye may be assessed as fit if the better eye:
(1) achieves distant visual acuity of 6/6 (1,0), corrected or uncorrected;
(2) achieves distant visual acuity less than 6/6 (1,0) but not less than 6/9 (0,7), after ophthalmological evaluation.

(e) Visual field defects
Applicants with a visual field defect may be assessed as

fit if the binocular visual field or, in the case of monocularity, the monocular visual field is acceptable.

(f) Eye surgery
(1) After refractive surgery, a fit assessment may be considered, provided that there is satisfactory stability of refraction, there are no post-operative complications and no significant increase in glare sensitivity.
(2) After cataract, retinal or glaucoma surgery a fit assessment may be considered once recovery is complete.

(g) Visual correction
Correcting lenses should permit the licence holder to meet the visual requirements at all distances.

AMC14 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

COLOUR VISION

Applicants for a night rating should correctly identify 9 of the first 15 plates of the 24-plate edition of Ishihara pseudoisochromatic plates or should be colour safe.

AMC15 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

OTORHINOLARYNGOLOGY (ENT)

(a) Hearing
(1) Applicants should understand correctly conversational speech when tested with or without hearing aids at a distance of 2 metres from and with the applicant's back turned towards the examiner.
(2) If the hearing requirements can only be met with the use of hearing aid (s), the hearing aid (s) should provide optimal hearing function, be well-tolerated, and be suitable for aviation purposes.

(3) Applicants with hypoacusis should demonstrate satisfactory functional hearing ability.
(4) Applicants with profound deafness or major disorder of speech, or both, may be assessed as fit with an SSL such as 'limited to areas and operations where the use of radio is not mandatory'. The aircraft should be equipped with appropriate alternative warning devices in lieu of sound warnings.

(b) Ear conditions
Applicants with:
(1) an active pathological process of the internal or middle ear;
(2) unhealed perforation or dysfunction of the tympanic membrane (s);
(3) disturbance of vestibular function;
(4) significant restriction of the nasal passages;
(5) sinus dysfunction;
(6) significant malformation or significant infection of the oral cavity or upper respiratory tract; or
(7) significant disorder of speech or voice should undergo further examination to establish that the condition does not interfere with the safe exercise of the privileges of the licence.

(b) Ear conditions
Applicants with:
(1) an active pathological process of the internal or middle ear;
(2) unhealed perforation or dysfunction of the tympanic membrane (s);
(3) disturbance of vestibular function;
(4) significant restriction of the nasal passages;
(5) sinus dysfunction;
(6) significant malformation or significant infection of the oral cavity or upper respiratory tract; or
(7) significant disorder of speech or voice should undergo further examination to establish that the condition does not interfere with the safe exercise of the privileges of the licence.

AMC16 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

DERMATOLOGY

In cases where a dermatological condition is associated with a systemic illness, full consideration should be given to the underlying illness before a fit assessment may be considered.

AMC17 MED.B.095 Medical examination and assessment of applicants for LAPL medical certificates

ONCOLOGY

(a) In the case of malignant disease, applicants may be considered for a fit assessment if:

- (1) there is no evidence of residual malignant disease likely to jeopardise flight safety;
- (2) time appropriate to the type of tumour has elapsed since the end of primary treatment;
- (3) the risk of in-flight incapacitation from a recurrence or metastasis is sufficiently low;
- (4) there is no evidence of short or long-term sequelae from treatment that may jeopardise flight safety.

(b) Arrangements for an oncological follow-up should be made for an appropriate period of time.

(c) Applicants with an established history or clinical diagnosis of intracerebral malignant tumour should be assessed as unfit.

SUBPART C

REQUIREMENTS FOR MEDICAL FITNESS OF CABIN CREW

SECTION 1

General requirements

AMC1 MED.C.005 Aero-medical assessments

(a) When conducting aero-medical examinations and assessments of cabin crew members, as applicable, their medical fitness should be assessed with particular regard to their physical and mental ability to:

- (1) undergo the training required for cabin crew to acquire and maintain competence, e.g. actual fire-fighting, slide descending, using Protective Breathing Equipment (PBE) in a simulated smoke-filled environment, providing first aid;
- (2) manipulate the aircraft systems and emergency equipment to be used by cabin crew, e.g. cabin management systems, doors/exits, escape devices, fire extinguishers, taking also into account the class and type of aircraft operated, e.g. narrow-bodied or wide-bodied, single/multi-deck, single/multi-cabin crew operation;
- (3) continuously tolerate the aircraft environment whilst performing duties, e.g. altitude, pressure, re-circulated air, noise; and the type of operations such as short/medium/long/ultra long haul; and

(4) perform the required duties and responsibilities efficiently during normal and abnormal operations, and in emergency situations and psychologically demanding circumstances, e.g. assistance to crew members and passengers in case of decompression; stress management, decision-making, crowd control and effective crew coordination, management of disruptive passengers and of security threats. When relevant, operating as single cabin crew should also be taken into account when assessing the medical fitness of cabin crew.

(b) Intervals

(1) The interval between aero-medical assessments should be determined by the competent authority. The intervals established by the competent authority apply to cabin crew members who:

- (i) undergo aero-medical assessments by an AME, AeMC or OHMP under the oversight of that competent authority; or
- (ii) are employed by an operator under the oversight of that competent authority.

(2) The interval between aero-medical assessments may be reduced by the AME, AeMC or OHMP for medical reasons and in accordance with MED.C.035.

(3) Aero-medical assessments for the revalidation of a cabin crew medical report may be undertaken up to 45 days prior to the expiry date of the previous medical report. The validity period of the aero-medical assessment should be calculated from the expiry date of the previous aero-medical assessment.

SECTION 2

Requirements for aero-medical assessment of cabin crew

AMC1 MED.C.025 Content of aero-medical assessments

Aero-medical examinations and assessments of cabin crew members should be conducted in accordance with AMC2 to AMC18 MED.C.025.

GM1 MED.C.025 Content of aero-medical assessments

(a) When conducting aero-medical examinations and assessments, typical cabin crew duties as listed in (b) and (c), particularly those to be performed during abnormal operations and emergency situations, and cabin crew responsibilities to the travelling public should be considered in order to identify:

- (1) any physical and/or mental conditions that could be detrimental to the performance of the duties required from cabin crew; and
- (2) which examination (s), test (s) or investigation (s) should be undergone to complete an appropriate aero-medical assessment.

(b) Main cabin crew duties and responsibilities during day-to-day normal operations

- (1) During pre/post-flight ground operations with/without passengers on board:
 - (i) monitoring of situation inside the aircraft cabin and awareness of conditions outside the aircraft

including observation of visible aircraft surfaces and information to flight crew of any surface contamination such as ice or snow;

(ii) assistance to special categories of passengers (SCPs) such as infants and children (accompanied or unaccompanied), persons with disabilities or reduced mobility, medical cases with or without medical escort, and inadmissible persons, deportees and passengers in custody;

(iii) observation of passengers (any suspicious behaviour, passengers under the influence of alcohol and/or drugs, mentally disturbed), observation of potential able-bodied persons, crowd control during boarding and disembarkation;

(iv) safe stowage of cabin luggage, safety demonstrations and cabin secured checks, management of passengers and ground services during re-fuelling, observation of use of portable electronic devices;

(v) preparedness to carry out safety and emergency duties at any time, and security alertness.

(2) During flight:

(i) operation and monitoring of aircraft systems, surveillance of the cabin, lavatories, galleys, crew areas and flight crew compartment;

(ii) coordination with flight crew on situation in the cabin and turbulence events/effects;

(iii) management and observation of passengers (consumption of alcohol, behaviour, potential medical issues), observation of use of portable electronic devices;

(iv) safety and security awareness and preparedness to carry out safety and emergency duties at any time, and cabin secured checks prior to landing.

(c) Main cabin crew duties and responsibilities during abnormal and emergency operations

(1) In case of planned or unplanned emergency evacuation: briefing and/or commands to passengers including SCPs and selection and briefing to able-bodied persons; crowd control monitoring and evacuation conduct including in the absence of command from the flight crew; post-evacuation duties including assistance, first aid and management of survivors and survival in particular environments; activation of applicable communication means towards search and rescue services.

(2) In case of decompression: checking of crew members, passengers, cabin, lavatories, galleys, crew rest areas and flight crew compartment, and administering oxygen to crew members and passengers as necessary.

(3) In case of pilot incapacitation: secure pilot in his/her seat or remove from flight crew compartment; administer first aid and assist operating pilot as required.

(4) In case of fire or smoke: identify source/cause/type of fire/smoke to perform the necessary required actions; coordinate with other cabin crew members and flight crew; select appropriate extinguisher/agent and fight the fire using portable breathing equipment (PBE), gloves, and protective clothing as required; management of necessary passengers' movement if possible; instructions to passengers to prevent smoke inhalation/suffocation; give first aid as necessary; monitor the affected area until landing; preparation for possible emergency landing.

(5) In case of first aid and medical emergencies: assistance to crew members and/or passengers; correct assessment and correct use of therapeutic oxygen, defi-

brillator, first-aid kits/emergency medical kit contents as required; management of events, of incapacitated person (s) and of other passengers; coordination and effective communication with other crew members, in particular when medical advice is transmitted by frequency to flight crew or by a telecommunication connection.

(6) In case of disruptive passenger behaviour: passenger management as appropriate including use of restraint technique as considered required.

(7) In case of security threats (bomb threat on ground or in-flight and/or hijack): control of cabin areas and passengers' management as required by the type of threat, management of suspicious device, protection of flight crew compartment door.

(8) In case of handling of dangerous goods: observing safety procedures when handling the affected device, in particular when handling chemical substances that are leaking; protection and management of self and passengers and effective coordination and communication with other crew members.

AMC2 MED.C.025 Content of aero-medical assessments

CARDIOVASCULAR SYSTEM

(a) Examination

(1) A standard 12-lead resting electrocardiogram (ECG) and report should be completed on clinical indication, at the first examination after the age of 40 and then at least every five years after the age of 50. If cardiovascular risk factors such as smoking, abnormal cholesterol levels or obesity are present, the intervals of resting ECGs should be reduced to two years.

(2) Extended cardiovascular assessment should be required when clinically indicated.

(b) Cardiovascular system - general

(1) Cabin crew members with any of the following conditions:

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

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

(iii) heart or heart/lung transplantation should be assessed as unfit.

(2) Cabin crew members with an established diagnosis of one of the following conditions:

(i) peripheral arterial disease before or after surgery;

(ii) aneurysm of the abdominal aorta, before or after surgery;

(iii) minor cardiac valvular abnormalities;

(iv) after cardiac valve surgery;

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

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

(vii) a cardiovascular condition requiring systemic anticoagulation;

(viii) vasovagal syncope of uncertain cause;

(ix) arterial or venous thrombosis; or

(x) pulmonary embolism should be evaluated by a cardiologist before a fit assessment

may be considered.

(c) Thromboembolic disorders

Whilst anticoagulation therapy is initiated, cabin crew members should be assessed as unfit. After a period of stable anticoagulation, a fit assessment may be considered with limitation (s), as appropriate. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range and the haemorrhagic risk is acceptable. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment may be considered after a stabilisation period of 3 months. Cabin crew members with pulmonary embolism should also be evaluated by a cardiologist. Following cessation of anticoagulant therapy, for any indication, cabin crew members should undergo a re-assessment.

(d) Syncope

(1) In the case of a single episode of vasovagal syncope which can be satisfactorily explained, a fit assessment may be considered.

(2) Cabin crew members with a history of recurrent vasovagal syncope should be assessed as unfit. A fit assessment may be considered after a 6-month period without recurrence, provided cardiological evaluation is satisfactory. Neurological review may be indicated.

(e) Blood pressure

Blood pressure should be recorded at each examination.

(1) The blood pressure should be within normal limits and should not consistently exceed 160 mmHg systolic and/or 95 mmHg diastolic, with or without treatment, taking into account other risk factors.

(2) Cabin crew members initiating medication for the control of blood pressure should be assessed as unfit until the absence of any significant side effects has been established and verification that the treatment is compatible with the safe exercise of cabin crew duties has been achieved.

(f) Coronary artery disease

(1) Cabin crew members with:
(i) cardiac ischaemia;
(ii) symptomatic coronary artery disease; or
(iii) symptoms of coronary artery disease controlled by medication should be assessed as unfit.

(2) Cabin crew members who are asymptomatic after myocardial infarction or surgery for coronary artery disease should have fully recovered before a fit assessment may be considered. The affected cabin crew members should be on appropriate secondary prevention treatment.

(g) Rhythm/conduction disturbances

(1) Cabin crew members with any significant disturbance of cardiac conduction or rhythm should undergo cardiological evaluation before a fit assessment may be considered.

(2) Cabin crew members with a history of:
(i) ablation therapy; or
(ii) pacemaker implantation should undergo satisfactory cardiovascular evaluation before a fit assessment may be made.

(3) Cabin crew members with:
(i) symptomatic sinoatrial disease;
(ii) symptomatic hypertrophic cardiomyopathy

(iii) complete atrioventricular block;
(iv) symptomatic QT prolongation;
(v) an automatic implantable defibrillating system; or
(vi) a ventricular anti-tachycardia pacemaker should be assessed as unfit.

AMC3 MED.C.025 Content of aero-medical assessments

RESPIRATORY SYSTEM

(a) Cabin crew members with significant impairment of pulmonary function should be assessed as unfit. A fit assessment may be considered once pulmonary function has recovered and is satisfactory.

(b) Cabin crew members should undergo pulmonary morphological or functional tests on when clinically indicated.

(c) Cabin crew members with a history or established diagnosis of:

(1) asthma;
(2) active inflammatory disease of the respiratory system;
(3) active sarcoidosis;
(4) pneumothorax;
(5) sleep apnoea syndrome/sleep disorder; or
(6) major thoracic surgery

should undergo respiratory evaluation with a satisfactory result before a fit assessment may be considered.

(d) Cabin crew members who have undergone a pneumonectomy should be assessed as unfit.

AMC4 MED.C.025 Content of aero-medical assessments

DIGESTIVE SYSTEM

(a) Cabin crew members with any disease or sequelae of surgical intervention in any part of the digestive tract or its adnexa likely to cause incapacitation in flight, in particular any obstruction due to stricture or compression, should be assessed as unfit.

(b) Cabin crew members should be free from herniae that might give rise to incapacitating symptoms.

(c) Cabin crew members with disorders of the gastrointestinal system, including:

(1) recurrent severe dyspeptic disorder requiring medication;
(2) peptic ulceration;
(3) pancreatitis;
(4) symptomatic gallstones;
(5) an established diagnosis or history of chronic inflammatory bowel disease;
(6) after surgical operation on the digestive tract or its adnexa, including surgery involving total or partial excision or a diversion of any of these organs;
(7) morphological or functional liver disease; or
(8) after surgery, including liver transplantation may be assessed as fit subject to satisfactory gastroenterological evaluation.

AMC5 MED.C.025 Content of aero-medical assessments

METABOLIC AND ENDOCRINE SYSTEMS

(a) Cabin crew members should not possess any functional or structural metabolic, nutritional or endocrine disorder which is likely to interfere with the safe exercise of their duties and responsibilities.

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

(c) Diabetes mellitus

(1) Cabin crew members with diabetes mellitus requiring insulin may be assessed as fit:

(i) if it can be demonstrated that adequate blood sugar control has been achieved and hypoglycaemia awareness is established and maintained; and

(ii) in the absence, within the preceding 12 months, of any;

(A) hospitalisation related to diabetes; or

(B) hypoglycaemia that resulted in a seizure, loss of consciousness, impaired cognitive function or that required the intervention by another party; or

(C) episode of hypoglycaemia unawareness.

(2) Limitations should be imposed as appropriate. A limitation to undergo specific medical examinations (SIC) and a restriction to operate only in multi-cabin crew operations (MCL) should be placed as a minimum.

(3) Cabin crew members with diabetes mellitus not requiring insulin may be assessed as fit if it can be demonstrated that adequate blood sugar control has been achieved and hypoglycaemia awareness, if applicable considering the medication, is achieved.

GM2 MED.C.025 Content of aero-medical assessments

DIABETES MELLITUS TREATED WITH INSULIN

When considering a fit assessment for cabin crew with diabetes mellitus requiring insulin, account should be taken of the IATA Guidelines on Insulin-Treated Diabetes (Cabin Crew), as last amended.

AMC6 MED.C.025 Content of aero-medical assessments

HAEMATOLOGY

Cabin crew members with a haematological condition, such as:

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

(b) coagulation, haemorrhagic or thrombotic disorder;

(c) significant lymphatic enlargement;

(d) acute or chronic leukaemia; or

(e) splenomegaly

may be assessed as fit subject to satisfactory aero-medical evaluation. If anticoagulation is being used as treatment, refer to AMC2 MED.C.025 (c).

AMC7 MED.C.025 Content of aero-medical assessments

GENITOURINARY SYSTEM

(a) Urine analysis should form part of every aero-medical examination and assessment. The urine should not contain any abnormal element (s) considered to be of pathological significance.

(b) Cabin crew members with any disease or sequelae of surgical procedures on the kidneys or the urinary tract, in particular any obstruction due to stricture or compression likely to cause incapacitation should be assessed as unfit.

(c) Cabin crew members with a genitourinary disorder, such as:

(1) renal disease; or

(2) a history of renal colic due to one or more urinary calculi may be assessed as fit subject to satisfactory renal/urological evaluation.

(d) Cabin crew members who have undergone a major surgical operation in the genitourinary apparatus involving a total or partial excision or a diversion of its organs should be assessed as unfit and be re-assessed after recovery before a fit assessment may be made.

(e) Cabin crew members who have undergone renal transplantation may be considered for a fit assessment if it is fully compensated and tolerated with only minimal immuno-suppressive therapy after at least 12 months. A requirement to undergo specific medical examinations (SIC) and a restriction to operate only in multi-cabin crew operations (MCL) should be considered.

(f) Cabin crew members requiring dialysis should be assessed as unfit.

AMC8 MED.C.025 Content of aero-medical assessments

INFECTIOUS DISEASE

Cabin crew members who are HIV positive may be assessed as fit if investigation provides no evidence of clinical disease and subject to satisfactory aero-medical evaluation.

AMC9 MED.C.025 Content of aero-medical assessments

OBSTETRICS AND GYNAECOLOGY

(a) Cabin crew members who have undergone a major gynaecological operation should be assessed as unfit until after recovery.

(b) Pregnancy

(1) A pregnant cabin crew member may be assessed as fit only during the first 16 weeks of gestation following

review of the obstetric evaluation by the AME or OHMP.

(2) A limitation not to perform duties as single cabin crew member should be considered.

(3) The AME or OHMP should provide written advice to the cabin crew member and supervising physician regarding potentially significant complications of pregnancy resulting from flying duties.

AMC10 MED.C.025 Content of aero-medical assessments

MUSCULOSKELETAL SYSTEM

(a) Cabin crew members should have sufficient standing height, arm and leg length and muscular strength for the safe exercise of their duties and responsibilities.

(b) Cabin crew members should have satisfactory functional use of the musculoskeletal system. Particular attention should be paid to emergency procedures and evacuation, and related training.

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

(d) Cabin crew members with inflammatory, infiltrative, traumatic or degenerative disease of the musculoskeletal system may be assessed as fit provided the condition is in remission or is stable and the affected cabin crew member is not taking any medication that may lead to unfitness.

AMC11 MED.C.025 Content of aero-medical assessments

MENTAL HEALTH

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

(b) Cabin crew members with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder should be assessed as unfit.

(c) Cabin crew members with a psychiatric condition such as:

- (1) mood disorder;
- (2) neurotic disorder;
- (3) personality disorder; or
- (4) mental or behavioural disorder

should undergo satisfactory psychiatric evaluation before a fit assessment may be considered.

(d) Cabin crew members with a history of a single or repeated acts of deliberate self-harm should be assessed as unfit. Cabin crew members should undergo satisfactory psychiatric evaluation before a fit assessment may be considered.

(e) Where there is established evidence that a cabin crew member has a psychological disorder, he/she should be referred for psychological opinion and advice.

(f) The psychological evaluation may include a collection of biographical data, the review of aptitudes, and personality tests and psychological interview.

(g) The psychologist should submit a report to the AME or OHMP, detailing the results and recommendation.

AMC12 MED.C.025 Content of aero-medical assessments

NEUROLOGY

(a) Cabin crew members with an established history or clinical diagnosis of:

- (1) epilepsy; or
- (2) recurring episodes of disturbance of consciousness of uncertain cause should be assessed as unfit.

(b) Cabin crew members with an established history or clinical diagnosis of:

- (1) epilepsy without recurrence after 5 years of age and without treatment for more than 10 years;
 - (2) epileptiform EEG abnormalities and focal slow waves;
 - (3) progressive or non-progressive disease of the nervous system;
 - (4) inflammatory disease of the central or peripheral nervous system;
 - (5) migraine;
 - (6) a single episode of disturbance of consciousness of uncertain cause;
 - (7) loss of consciousness after head injury;
 - (8) penetrating brain injury; or
 - (9) spinal or peripheral nerve injury
- should undergo further evaluation before a fit assessment may be considered.

(c) Cabin crew members with a disorder of the nervous system due to vascular deficiencies including haemorrhagic and ischaemic events should be assessed as unfit. A fit assessment may be considered if neurological review and musculoskeletal assessments are satisfactory.

AMC13 MED.C.025 Content of aero-medical assessments

VISUAL SYSTEM

(a) Examination

- (1) a routine eye examination should form part of the initial and all further examinations and assessments; and
- (2) an extended eye examination should be undertaken by an eye specialist when clinically indicated. (Refer to GM2 MED.B.070)

(b) Distant visual acuity, with or without correction, should be with both eyes 6/9 (0,7) or better.

(c) Cabin crew members should be able to read an N5 chart (or equivalent) at 30 – 50 cm, with correction if prescribed (Refer to GM1 MED.B.070).

(d) The binocular visual field or, in the case of monocularity, the monocular visual field should be acceptable.

(e) Cabin crew members who have undergone refractive surgery may be assessed as fit subject to satisfactory ophthalmic evaluation.

(f) Cabin crew members with diplopia should be assessed as unfit.

(g) Spectacles and contact lenses:
If satisfactory visual function is achieved only with the use of correction:

(1) in the case of myopia or hyperopia or both, spectacles or contact lenses should be worn whilst on duty;

(2) in the case of presbyopia, spectacles should be readily available for immediate use;

(3) the correction should provide optimal visual function and be well-tolerated;

(4) a spare set of similarly correcting spectacles should be readily available for immediate use whilst on duty;

(5) orthokeratologic lenses should not be used.

AMC14 MED.C.025 Content of aero-medical assessments

COLOUR VISION

Cabin crew members should be able to correctly identify 9 of the first 15 plates of the 24-plate edition of Ishihara pseudoisochromatic plates. Alternatively, cabin crew members should demonstrate the ability to readily perceive those colours of which the perception is required for the safe performance of their duties.

GM3 MED.C.025 Content of aero-medical assessments

COLOUR VISION - GENERAL

Examples of colours of which the perception is required for the safe performance of cabin crew members' duties are: cabin crew indication panels, pressure gauges of emergency equipment (e.g. fire extinguishers) and cabin door status.

AMC15 MED.C.025 Content of aero-medical assessments

OTORHINOLARYNGOLOGY (ENT)

(a) Hearing should be satisfactory for the safe exercise of cabin crew duties and responsibilities. Cabin crew with hypoacusis should demonstrate satisfactory functional hearing abilities.

(b) Examination

(1) An ear, nose and throat (ENT) examination should form part of all examinations and assessments. A tympanometry or equivalent should be performed at the initial examination and when clinically indicated.

(2) Hearing should be tested at all examinations and assessments:

(i) the cabin crew member should understand correctly conversational speech when tested with each ear at a distance of 2 metres from and with the cabin crew member's back turned towards the examiner;

(ii) notwithstanding (b) (2) (i), hearing should be tested with pure tone audiometry at the initial examination and when clinically indicated;

(iii) at initial examination the cabin crew member should not have a hearing loss of more than 35 dB at any of the frequencies 500 Hz, 1 000 Hz or 2 000 Hz, or more than 50 dB at 3 000 Hz, in either ear separately.

(3) If the hearing requirements can be met only with the use of hearing aid (s), the hearing aid (s) should provide optimal hearing function, be well-tolerated, and suitable for aviation purposes.

(c) Cabin crew members with:

(1) an active pathological process of the internal or middle ear;

(2) unhealed perforation or dysfunction of the tympanic membrane (s);

(3) disturbance of vestibular function;

(4) significant restriction of the nasal passages;

(5) sinus dysfunction;

(6) significant malformation or significant infection of the oral cavity or upper respiratory tract;

(7) significant disorder of speech or voice

State of issue		
CABIN CREW MEDICAL REPORT FOR CABIN CREW ATTESTATION (CCA) APPLICANT OR HOLDER		

I The State where the aero-medical assessment is conducted:	II Aero-medical assessment result (fit/unfit):
III Cabin crew attestation reference number:	Expiry date of the previous cabin crew medical report (dd/mm/yyyy):
IV Last and first name:	Date of aero-medical assessment (dd/mm/yyyy):
XIV Date of birth (dd/mm/yyyy):	X Date of issue* (dd/mm/yyyy):
VI Nationality:	X Signature of the AeMC, AME or OHMP:
VII Signature of CCA applicant/holder:	XI Seal or stamp of the AeMC, AME or OHMP
2	3
* Date of issue is the date the Cabin Crew Medical Report is issued and signed.	

XII Limitation (s), if applicable: Code: Description: Code: Description: Code: Description:	IX Expiry date of this medical report (dd/mm/yyyy):
4	5

should undergo further examination to establish that the condition does not interfere with the safe exercise of their duties and responsibilities.

GM4 MED.C.025 Content of aero-medical assessments

OTORHINOLARYNGOLOGY (ENT) - PURE TONE AUDIOGRAM

The pure tone audiogram may also cover the 4000 Hz frequency for early detection of decrease in hearing.

AMC16 MED.C.025 Content of aero-medical assessments

DERMATOLOGY

In cases where a dermatological condition is associated with a systemic illness, full consideration should be given to the underlying illness before a fit assessment may be made.

AMC17 MED.C.025 Content of aero-medical assessments

ONCOLOGY

(a) After treatment for malignant disease, cabin crew members should undergo satisfactory oncological and aero-medical evaluation before a fit assessment may be considered.

(b) Cabin crew members with an established history or clinical diagnosis of intracerebral malignant tumour should be assessed as unfit. Considering the histology of the tumour, a fit assessment may be considered after successful treatment and recovery.

SECTION 3

Additional requirements for applicants for, and holders of, a cabin crew attestation

AMC1 MED.C.030 Cabin crew medical report

The cabin crew medical report to be provided in writing to the applicants for, and holders of, a cabin crew attestation:

(a) should be issued in the national language (s) and/or in English; and

(b) should include the following elements:

(1) The State where the aero-medical assessment of the Cabin Crew Attestation (CCA) applicant/holder was conducted (I);

(2) Last and first name of the CCA applicant/holder (IV);

(3) Date of birth of the CCA applicant/holder (dd/mm/yyyy) (XIV);

(4) Nationality of the CCA applicant/holder (VI);

(5) Signature of the CCA applicant/holder (VII);

(6) Aero-medical assessment result (fit or unfit) (II);

(7) Expiry date of the previous cabin crew medical report (dd/mm/yyyy);

(8) Date of issue (dd/mm/yyyy) and signature of the AeMC, AME, or OHMP (X);

(9) Date of the aero-medical assessment (dd/mm/yyyy);

(10) Seal or stamp of the AeMC, AME or OHMP (XI);

(11) Limitation (s), if applicable (XII);

(12) Expiry date of medical report (dd/mm/yyyy) (IX).

GM1 MED.C.030 (b) Cabin crew medical report

GENERAL

The format of the cabin crew medical report may be as shown in the example below, with the size of each sheet being 1/8 of A4.

AMC1 MED.C.035 Limitations

When assessing whether the holder of a cabin crew attestation may be able to perform cabin crew duties safely if complying with one or more limitations, the following possible limitations should be considered:

(a) a restriction to operate only in multi-cabin crew operations (MCL);

(b) a restriction to specified aircraft type (s) (OAL) or to a specified type of operation (OOL);

(c) a requirement to undergo the next aero-medical examination and assessment at an earlier date than required by MED.C.005 (b) (TML);

(d) a requirement to undergo specific medical examination (s) (SIC);

(e) a requirement for visual correction (CVL), or by means of contact lenses that correct for defective vision (CCL);

(f) a requirement to use hearing aids (HAL); and

(g) special restriction as specified (SSL).

RECOMMANDATIONS AUX AUTEURS

LA REVUE DE MEDECINE AERONAUTIQUE ET SPATIALE

La revue de *Médecine Aéronautique et Spatiale* est publiée trimestriellement par la Société Francophone de Médecine Aéronautique et Spatiale. Le journal publie des articles dans le domaine de la médecine aéronautique et spatiale (recherche, médecine clinique, expertise médicale, enseignement). Les articles sont soumis anonymement par le comité de lecture à l'avis de lecteurs experts mandatés dont l'approbation, après modifications éventuelles, est nécessaire pour leur publication. Les manuscrits proposés ne doivent avoir fait l'objet d'aucune publication antérieure, ni être soumis ou en cours de publication dans une autre revue. Des exceptions sont toutefois possibles pour des mises au point ou des travaux originaux particulièrement intéressants et didactiques. Lorsqu'il soumet un article, le premier auteur certifie par écrit avoir obtenu l'accord de tous les cosignataires pour la soumission, sous cette forme, à la Revue de Médecine Aéronautique et Spatiale. Ces données doivent être synthétisées dans la lettre d'accompagnement du manuscrit.

TYPE D'ARTICLE

Sont pris en considération les éditoriaux, les articles originaux, les revues de la littérature, les faits cliniques, les lettres à la rédaction mais aussi les analyses d'ouvrage ou d'articles médicaux rédigés en français ou en anglais. Pour les articles expérimentaux, l'obtention de l'aval d'un comité d'éthique est indispensable, ce qui doit être précisé dans le chapitre : « méthodes ». La rubrique « qu'auriez vous fait devant... ? » propose une démarche d'expertise médicale aéronautique didactique et concise, illustrée par un cas clinique. La Revue publie également les comptes rendus et annonces de réunion, de congrès et d'événements scientifiques.

SOUSSION DES ARTICLES

Les auteurs peuvent envoyer leur texte par e-mail à revue.soframas@gmail.com

Le manuscrit sera organisé de la manière suivante :

1. page de titre et auteurs, **2.** résumé et mots clés, **3.** texte, **4.** références, **5.** figures, **6.** tableaux. Il sera envoyé au format A4 (Word, Arial 12, 35 lignes par page) sur fichier attaché e-mail. La version soumise d'un article est définitive. Il n'est pas possible aux auteurs d'adresser ultérieurement une deuxième version du même article, sous prétexte d'une population étudiée plus importante, d'un suivi plus grand, ou d'une discussion plus étayée. Les articles soumis peuvent être : acceptés sans modifications; acceptés une fois corrigés selon des modifications proposées aux auteurs par le Comité de lecture après avis des experts (les auteurs doivent expliciter les corrections qu'ils ont apportées); refusés, un avis motivé étant alors adressé aux auteurs.

PRESENTATION DES MANUSCRITS

Les auteurs doivent veiller à ce que les textes soumis soient clairs, précis et concis. Les abréviations doivent être expliquées lors de leur première apparition dans le texte et, ensuite, être utilisées de manière cohérente et invariable. Aucune abréviation ne sera utilisée dans le titre ni dans le résumé. Pour ne pas nuire à la clarté, elles doivent être en nombre restreint. Les unités de mesure abrégées doivent être conformes aux nomenclatures internationales. Les composés chimiques doivent être désignés par leur nom générique (dénomination commune internationale [DCI]), avec la première lettre en minuscule. Les noms de spécialités, s'ils ne peuvent pas être évités, doivent être donnés à la suite, entre parenthèses, avec la première lettre en majuscule.

1 PAGE DE TITRE : Elle comportera un titre précis et concis avec sa traduction en anglais; les noms des auteurs (initiale du prénom suivie d'un point abrégé et nom de famille) limités à 10; les coordonnées complètes des auteurs; pour l'auteur correspondant: téléphone, fax et adresse e-mail.

2 RESUME ET MOTS-CLÉS : Chaque article comprend un résumé de 250 mots au maximum (150 mots maximum pour les faits cliniques), en français et en anglais, ainsi que des mots clés (5 à 10) en français et en anglais. Pour les articles originaux, ces résumés doivent être structurés, c'est-à-dire comporter les sous-titres suivants : but de l'étude, méthodologie, résultats, conclusion.

3 TEXTE : Sa longueur est limitée à 7 000 mots (avec l'accord du comité de lecture, il est possible de soumettre des articles de longueur plus importante) pour les articles originaux, les revues de la littérature, les compte-rendus de réunion. Pour les faits cliniques, les lettres à la rédaction mais aussi les analyses d'ouvrage ou d'articles médicaux la longueur est limitée à 3 000 mots. En ce qui concerne les articles originaux, en particulier expérimentaux, ils sont dans la mesure du possible subdivisés en : introduction, méthodes, résultats, discussion, conclusion. L'introduction

définit succinctement la nature, le but de l'étude et résume brièvement la littérature dans le domaine. Les méthodes doivent être concises mais suffisamment détaillées pour permettre d'être reproduites par d'autres groupes. Les résultats doivent être présentés clairement en se limitant aux seules données de l'étude; ils peuvent être allégés par des tableaux ou des figures qui ne doivent pas faire double emploi avec le texte. La discussion interprète les résultats sans les répéter en insistant sur les relations existantes avec les travaux antérieurs dans le même domaine; elle souligne les conséquences cliniques qui en découlent.

4 REFERENCES : Le nombre des références est limité à 30 pour les articles originaux (sauf pour les revues d'articles), à 12 pour les faits cliniques. Celles-ci sont toutes appelées dans le texte et numérotées en chiffres arabes suivant l'ordre d'apparition. Les numéros d'appel doivent figurer dans le texte entre parenthèses, séparés par des tirets quand il s'agit de références consécutives, par exemple (1-4), et par des virgules quand il s'agit de références non consécutives : (1,4). Les abréviations des noms des revues sont celles de l'Index Medicus (new series) de la National Library of Medicine. Les références doivent être présentées selon les normes adoptées par la convention de « Vancouver » (International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. Fifth edition. N Engl J Med 1997; 336 : 309 – 16). Jusqu'à six auteurs, ceux-ci doivent être nommément indiqués; à partir de sept, les six premiers seront cités, suivis d'une virgule et de la mention « et al. ».

Article de périodique classique :

1 Monteil M, Taillemite JP, Bertran PE, Gonzalez JP, Gommeaux H, Gomis JP et al. Tabagisme et personnel navigant. *Rev Med Aero Spat* 2007; 47 : 21-31.

Article d'un supplément à un volume :

2 Lacombe D. Les protéines de la morphogénèse osseuse (BMP). *Arch Pédiatr* 1997; 4 (Suppl 2) : 121 – 4.

Article d'un supplément à un numéro :

3 Payne DK, Sullivan MD, Massie MJ. Women's psychological reactions to breast cancer. *Semin Oncol* 1996; 23 (1 Suppl 2) : 89-97.

Ouvrage à auteurs multiples avec coordinateurs :

4. Colin J, Timbal J, éd. *Médecine Aérospatiale*. Paris : Expansion Scientifique Française; 1999.

Chapitre d'ouvrage :

5. Burlaton JP, Carlioz R. Aptitude PN et appareil pleuro-pulmonaire in : Colin J, Timbal J, éd. *Médecine Aérospatiale*. Paris : Expansion Scientifique Française; 1999. p 364-71.

5 FIGURES : Les illustrations sont présentées sous forme de dessins originaux ou de photographies (sous format informatique). Les illustrations seront numérotées en chiffres arabes (pour les schémas, les figures) et indexées dans le texte par rappel de leur numéro. Les dessins soigneusement exécutés devront pouvoir être reproduits directement. Chaque figure sera identifiée par un numéro; le titre et les légendes seront indiqués sur une feuille séparée.

6 TABLEAUX : Chaque tableau doit être présenté sur une page séparée, numéroté en chiffres romains et indexé dans le texte par appel de son numéro entre parenthèses. Il est accompagné d'un titre (placé au-dessus) et, éventuellement, de notes explicatives (au-dessous). Le lettrage (symboles, chiffres, etc.) doit être uniforme pour toutes les figures et de taille suffisante pour rester lisible après réduction.

CONFLITS D'INTERÊT, ETHIQUE

Les auteurs doivent déclarer explicitement s'ils ont ou non des conflits d'intérêt en rapport avec le manuscrit soumis. Ils doivent figurer à la fin de l'article (avant les références). Sinon, l'auteur doit indiquer l'absence de conflits d'intérêt dans la lettre d'accompagnement. L'auteur doit également dans cette lettre indiquer qu'il a respecté les principes de la Déclaration d'Helsinki de l'Association Médicale Mondiale et ses amendements, sur la recherche biomédicale et l'utilisation de sujets humains ou animaux.

TIRE A PART

Des tirés-à-part peuvent être commandés contre paiement. Les tarifs, variables selon le nombre et le genre de tirés-à-part commandé, peuvent être obtenus en s'adressant au Bureau de la Rédaction, et réservés avant la parution de l'article concerné.

Ces recommandations ainsi que leur traduction en langue anglaise sont disponibles sur le site www.soframas.asso.fr

LES SERVICES DE SANTÉ MILITAIRES FRANÇAIS PENDANT LA CONQUÊTE DU TONKIN ET DE L'ANNAM (1882-1896)

A COMMANDER ET PAYABLE UNIQUEMENT PAR CHÈQUE

Alain MOUNIER-KUHN

Ancien Professeur Agrégé de
Chirurgie de la Faculté de Médecine
de Lyon

Docteur en Histoire de l'Université
du Littoral-Côte d'Opale

*Les difficultés techniques, médi-
cales et financières de tous les
services médicaux des armées ont
été très présentes durant la
conquête et la pacification du
Tonkin et de l'Annam.*

*Quinze années marquées par le
courage, le dévouement, l'esprit
d'organisation, de compétences et
d'abnégation, sont retranscrites
dans ce livre sous la plume du Dr.
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