

From the literature: Mechanism of CAD

Recently the New England Journal of Medicine published an excellent in-depth review article titled “Mechanisms of disease: Inflammation, atherosclerosis, and coronary artery disease”¹.

The article notes that cardiovascular disease causes 38% of all deaths in North America and is the most common cause of death in European men under 65 years of age and the second most common cause in women.

The role of inflammatory processes in coronary artery disease is discussed in depth and the concluding section, titled “therapeutic opportunities” includes reference to the possibility of vaccination being an option to produce protective immunity.

“In conclusion, new knowledge about inflammation in CAD has provided surprising insights into its pathogenesis, has offered new opportunities for diagnosis and prediction, and may lead to new treatments for this life-threatening disease.”

From the (draft) new Part 67

The draft re-issue of Civil Aviation Rule Part 67² (Medical Standards and certification) contains a number of new provisions when compared to the current rule. This new rule is likely to come into force during July – August this year.

The draft new rule defines three groups or categories of Medical Examiner: ME1; ME2; and Special ME (draft rule 67.163). Under draft rule 67.159 ME1s “may conduct medical examinations for the purpose of issuing any class of medical certificate”, ME2s “may conduct medical examinations for the purpose of issuing a class 2 medical certificate”, and Special MEs “may conduct medical examinations as specified in writing by the Director”.

The requirements for becoming an ME are outlined in draft rules 67.157 and 67.161. These requirements include, for ME1s and ME2s, being a medical practitioner, having completed acceptable

aviation medicine training, having completed acceptable aviation regulatory medical training, having met the listed competencies, having access to appropriate clinical and administrative facilities, having a reasonable ability to communicate in English, and meeting the exposition requirements. Otherwise, if the Director is satisfied that there are emergency or special geographic circumstances or special operational circumstances, a special ME certificate may be issued to a medical practitioner.

The proposed new Rule Part 67 defines three categories of Medical Examiner: ME1; ME2; & Special ME.

Policy Consultation: Recreational Pilot Licence

The CAA recently published a policy paper outlining proposals for developing a Recreational Pilot Licence (RPL) and is seeking submissions before finalising the policy and initiating rulemaking³.

Such a licence would have a lower medical standard than that applying to a conventional Private Pilot Licence, but there would be limitations on operating privileges to compensate. A key issue to be resolved is the medical certification system, including the medical standard, for the RPL. This needs to be settled before work on the proposal can be progressed. The paper discusses the options for RPL medical certification.

In the courts

CAA recently prosecuted a person under s46B(1)(a) of the Civil Aviation Act, for making a misleading statement for the purpose of obtaining a medical certificate⁴. The defendant had failed to disclose a previous history of substance abuse on the CAA *Application for a Medical Certificate* form.

In Court the defendant argued that the disclosures to the ME were protected by law and could not be passed on to the Director or disclosed in the prosecution. Judge Doogue rejected this argument stating that the law only protected communications made to a medical practitioner for the purpose of

¹ [Mechanisms of disease: Inflammation, atherosclerosis, and coronary artery disease](#). Hansson GK. New England Journal of medicine, 352(16): 1685 – 1695, 21 April 2005. Available online for a short time.

² The Ministry of Transport’s [Part 67 NPRM](#) and [public consultation submissions](#)

³ [Recreational Pilot Licence – Medical Certification Policy Proposal](#). CAA, 11 April 2005.

⁴ Reserved decision of Judge J P Doogue, in the District Court at Auckland. CAA v M. CRN 3004631789. 21 February 2005.

treatment or in situations in which the practitioner “acts for the patient”. The Judge concluded that this did not “describe the role of a medical practitioner who is required to examine someone for Civil Aviation purposes.” He went on to say that “The Medical Examiner could not fulfil his/her part in the statutory process of certification if he was restrained from passing on to the Director information that was given to him during the consultation.”

The defendant was found guilty and sentenced to 150 hours of community service and was ordered to pay \$900 to CAA for witness expenses and \$130 court costs.

This is the first case that clearly clarifies the role of ME's under the new certification system.

“There is no such policy reason why someone, for example, who must undergo a medical examination under Part 2A of the Civil Aviation Act 1990, should similarly have their communications protected by a privilege which prevents the disclosure of what was communicated to the doctor who has been appointed as the designated medical examiner by the Director of Civil Aviation.”

From the literature: Colour vision

In a recent article from the Aerospace Medical Association's journal, *Aviation Space and Environmental Medicine*, a British group report their analysis of aviation colour vision testing methodologies⁵.

Their report concludes “Variability in pass / fail results can be attributed to many factors apart from loss of chromatic sensitivity” and “Since the flight safety consequences of the current situation cannot be ignored, the development of a less variable technique for colour vision assessment that is accepted internationally, allied with better understanding of colour vision requirements, is needed.” The latter conclusion doubtlessly presages the ongoing work of the City University group to develop a PC-based colour vision testing tool.

“The difficulty of defining how different or deficient an individual's colour vision can be without being unsafe has often been avoided by requiring applicants to have normal colour vision.”

⁵ [Color vision tests for aviation: comparison of the anomaloscope and three lantern types](#). Squire TJ et al. *Aviation, Space, & Environmental Medicine*. 76:421–429, May 2005. Available online for a short time.

Reminder: Completion of an application after obtaining an AMC

An application for the issue of a CAA medical certificate starts a process that needs to be completed one way or another. It is important that the completion or closure of an application is documented by the ME who has been handling the application. In lawyer-speak that ME is *seized of the matter* until they have completed the application.

The commonest modes of completion of applications are the issue of a medical certificate under section 27B(1) of the Act (approx 85% of applications) and the issue of a medical certificate under the flexibility provisions of section 27B(2) of the Act (approx 15%).

Less often (<1%) a certificate is denied after s27B(1) or s27B(2) (flexibility) consideration and occasionally an application is withdrawn before assessment is completed.

In the rare case of an applicant where flexibility is pursued but an ‘adverse’⁶ AMC is obtained the application still requires formal completion by the ME (as the delegate of the Director). This usually takes the form of a letter to the applicant declining the issue of a medical certificate, forwarding a copy of the AMC, and advising the applicant of review / appeal options along the lines of the “What are my review options?”⁷ document on the CAA website. The AMC itself is not a ‘decision’ of the Director; it is simply one of the three things that need to be considered in the exercise of statutory flexibility under section 27B(2) of the Act.

After receiving an AMC the ME must complete the assessment process and advise the applicant of the result.

For further information about the AMC process you may wish to also refer your applicants to the relevant *Medical Information Sheet*⁸.

⁶ An AMC that is “is unable to indicate that in special circumstances the applicant's failure to meet any medical standard prescribed in the rules is such that the exercise of the privileges to which a medical certificate relates is not likely to jeopardise aviation safety.”

⁷ <http://www.caa.govt.nz> | Medical | Review of Medical Certification Decisions Options if denied a Medical Certificate | [What are my review options?](#)

⁸ <http://www.caa.govt.nz> | Medical | How to get a medical certificate | Medical Information Sheets | [Accredited Medical Conclusion](#).

CAA Medical Help

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