

CIVIL AVIATION NOTICES

CAN 4-12

MEDICAL REQUIREMENTS (Applicants Over 60yrs of Age)

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MEDICAL REQUIREMENTS (Applicants Over 60yrs of Age)

8.1 General

This Notice applies to all appointed AME's and SAME's conducting aeromedical examinations in Oman for the issue of an aeromedical assessments.

8.2 Purpose

The Civil Aviation Notices, hereinafter referred to as Notices, are issued by the Public Authority for Civil Aviation (PACA). The Notices are a means of circulating essential information of an administrative or technical nature to holders of PACA licenses and Certificates, foreign air operators in Oman, and foreign operators of Omani registered aircraft.

8.3 Applicability

This CAN applies to all Oman certified aviation personnel required to pass the medical fitness standards required for either a Class 1, Class 2 or Class 3 medical, prior to them operating in the relevant field of aviation requiring that standard of medical fitness.

8.4 Cancellation

Not Applicable

8.5 Effective date

This CAN is effective from date of issue.

8.7 Medical certification requirements

In addition to the change in frequency of medical examinations stated in CAR FCL-3.105, when an applicant for a medical certificate has passed their 60th birthday the following requirements for all classes of medicals are to be implemented with immediate effect.

(1) Initial issuance of over 60th birthday medical certificate requirements.

- (a) All initial over 60 medical certifications shall be done at the approved AMC.
- (b) In addition to the usual medical assessment required by the class of medical over 40 years, the first medical assessment at age of 60 years should include:
 - i. A psychological evaluation, which shall be conducted by a psychologist who has the privileges to conduct the neurocognitive assessment.
 - ii. Medical examination by a SAME or SAME equivalent which should include alcohol screening test ***[See paragraph (8.8) for alcohol screening]***.
 - iii. An extended eye examination by an ophthalmologist.
 - iv. Fasting blood glucose and a glucose tolerance test in cases where the initial test is abnormal.
 - v. Lipid profile.
 - vi. Cardiac evaluation by stress ECG.
 - vii. Haemoglobin.

- (2) **Revalidation Requirements.** Renewal of over 60 medical certificates can be conducted at any recognised AeMC. The license holder will undergo, in addition to the usual medical assessment requirements;
- (a) Every 6 months;
 - i. An ECG.
 - ii. Fasting blood Glucose
 - iii. Lipid profile
 - iv. Haemoglobin
 - (b) Every 12 months;
 - i. Ophthalmology consultation
 - ii. Audiogram
 - iii. Stress ECG

8.8 Alcohol screening tests

8.8.1 Indications

- (a) Screening as part of over 60 medical certifications.
- (b) As part of the medical evaluation determined by the AME during the regulatory medical examination.
- (c) New cases of cardiac arrhythmias especially Atrial Fibrillation, Insomnia, Mood disorders, Liver function derangement, Isolated Hyper triglyceridemic.
- (d) Newly diagnosed Hypertension,
- (e) Newly diagnosed Diabetes,
- (f) Suspicious Musculoskeletal injuries e.g. Rib fractures or Metacarpal fractures or Road Traffic Accidents,
- (g) New onset of Gout.
- (h) Any elevated MCV, isolated elevated GGT, elevated ferritin and elevated CDT detected on routine testing not related with clinical findings and investigated appropriately.
- (i) Referral following an aviation incident or work related issues.
- (j) Third party notifications for suspected Drug or Alcohol misuse.
- (k) Drink/Drug drive arrests whether local or international

8.8.2 Screening tools:

8.8.2.1 *A detailed interview and system review should be conducted with emphasis on the following:*

- (a) Alcohol intake – amount /type/how often
- (b) Smoking history
- (c) Family history of substance misuse
- (d) Physical dependence – withdrawal symptoms
- (e) Sickness absence record – pattern of frequent, short term, last minute leave is often seen with substance use disorder
- (f) Neurological issues
- (g) Cardiac – arrhythmias/hypertension
- (h) Gastroenterology – Gastritis/GORD
- (i) Injuries- recurrent or unexplained
- (j) Legal and social problems
- (k) Marital disharmony

- (l) Psychological problems

8.8.2.2 Examination

- (a) Physical dependence – signs of withdrawal (e.g. irritability, restlessness, apprehension etc.)
- (b) General appearance – complexion
- (c) Liver damage – spider naevi, hepatomegaly
- (d) Hypertension
- (e) Pancreatitis
- (f) Cardiomegaly, arrhythmias

8.8.2.3 Questionnaire

- (a) AUDIT (Alcohol Use Disorders Identification Test) – score of eight (8) or more suggests that there could be a problem with alcohol.
- (b) It should be correlated with history and clinical examination and blood tests.

8.8.3 Laboratory testing

- (a) **GGT (Gamma-Glutamyl Transferase)**: Is raised in about 80% of heavy drinkers, but is not a completely specific marker for harmful use of alcohol.
- (b) **MCV (mean Corpuscular Volume)**: The MCV is raised above normal values in about 60% of alcohol dependent people and, like GGT, is not a completely specific marker. The value takes 1-3 months to return to normal following abstinence.
- (c) **CDT (Carbohydrate Deficient Transferring)**: CDT has similar properties to GGT in so far its use as a screening test is concerned. It is more specific to heavy drinking than GGT, but perhaps less sensitive to intermittent “binge” drinking. In persons who consume significant quantities of alcohol (> 4 or 5 standard drinks per day for two weeks or more), CDT will increase and is an important marker for alcohol –use disorder. CDT usually increases within one week of the onset of heavy drinking and recovers 1 to 3 weeks after cessation of drinking. Any elevation of CDT requires immediate grounding, plus a liver ultrasound to assess for biliary disease and a full report from a substance abuse specialist must be provided to the PACA medical assessing officer regarding the alcohol intake.
- (d) **Others if indicated** (e.g. LFTs, Triglycerides, Ferritin, Liver Ultrasound, Urine EtG/PeTH) will be considered when making the final evaluation report.

8.8.4 Laboratory evaluation

In the presence of a high index of suspicion, the AME will without delay, evaluate the applicant against all the assessments as per the PACA Alcohol Use Disorder Form and then the AME should refer the case to the SAME and/or PACA Medical Assessor for further evaluation and recommendation.

Appendix A

The Alcohol Use Disorders Identification Test: Self-Report Version					
<p>PATIENT: Because alcohol use can affect your health and can interfere with certain medication and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential so please be honest.</p> <p>Place an X in one box that best describes your answer to each question.</p>					
Questions	0	1	2	3	4
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
9. Have you or someone else been injured because of your drinking?	NO		Yes, but not in the last year		Yes, during the last year
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	NO		Yes, but not in the last year		Yes, during the last year
					Total

Appendix B

The Alcohol Use Disorders Identification Test: Interview Version	
Read questions as written. Record answers carefully. Begin the AUDIT by saying "Now I am going to ask you some questions about your use of alcoholic beverages during this past year." Explain what is meant by "alcoholic beverages" by using local examples of beer, wine, vodka, etc. Code answers in terms of "standard drinks". Place the correct answer number in the box at the right.	
<p>1. How often do you have a drink containing alcohol?</p> <p>(0) Never [Skip to Qs 9-10] (1) Monthly or less (2) 2 to 4 times a month (3) 2 to 3 times a week (4) 4 or more times a week</p> <p style="text-align: right;"><input type="text"/></p>	<p>6. How often during the last year have you needed first drink in the morning to get yourself going after a heavy drinking session?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <p style="text-align: right;"><input type="text"/></p>
<p>2. How many drinks containing alcohol do you have on a typical day when you are drinking?</p> <p>(0) 1 or 2 (1) 3 or 4 (2) 5 or 6 (3) 7, 8, or 9 (4) 10 or more</p> <p style="text-align: right;"><input type="text"/></p>	<p>7. How often during the last year have you had a feeling of guilt or remorse after drinking?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <p style="text-align: right;"><input type="text"/></p>
<p>3. How often do you have six or more drinks on one occasion?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <p><i>Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0</i></p> <p style="text-align: right;"><input type="text"/></p>	<p>8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <p style="text-align: right;"><input type="text"/></p>
<p>4. How often during the last year have you found that you were not able to stop drinking once you had started?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <p style="text-align: right;"><input type="text"/></p>	<p>9. Have you or someone else been injured as a result of your drinking?</p> <p>(0) No (2) Yes, but not in the last year (4) Yes, during the last year</p> <p style="text-align: right;"><input type="text"/></p>
<p>5. How often during the last year have you failed to do what was normally expected from you because of drinking?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <p style="text-align: right;"><input type="text"/></p>	<p>10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?</p> <p>(0) No (2) Yes, but not in the last year (4) Yes, during the last year</p> <p style="text-align: right;"><input type="text"/></p>
<p>Record total of specific items here</p> <p><i>If total is greater than recommended cut-off, consult User's Manual.</i></p> <p style="text-align: right;"><input type="text"/></p>	

Appendix C

PACA ALCOHOL USE EVALUATION FORM

Applicant Name	License Num.	Class	Rank	Date of birth	
AME NAME and Number				Nationality	
Interview and system review				Yes	No
Alcohol intake – amount /type/how often					
Smoking history					
Family history of substance misuse					
Physical dependence – withdrawal symptoms					
Sickness absence record-pattern of frequent, short term, last minute leave is often seen with substance-use disorder Neurological issues					
Cardiac – arrhythmias/hypertension					
Gastroenterology – Gastritis/GORD					
Injuries- recurrent or unexplained					
Legal and social problems					
Marital disharmony					
Psychological problems					
Details of the interview and System review if answer positive					
Examination				NORM.	ABNORMAL
Physical dependence – signs of withdrawal (e.g. irritability, restlessness, apprehension ...)					
General appearance- complexion					
Liver damage – spider naevi, hepatomegaly					
Hypertension					
Pancreatitis					
Cardiomegaly, arrhythmias					

Laboratory test	Result
GGT (Gamma-Glutamyl Trasferase)	
MCV (mean Corpuscular Volume)	
CDT (Carbohydrate Deficient Transferring)	
Others if indicated (LFTs, Triglycerides, Ferritin, Liver Ultrasound, Urine EtG/ PeTH)	

In the presence of high index of suspicion, the AME will without delay evaluate the applicant to all the assessments as per PACA Alcohol Use Disorder Form and then the AME should refer the case to the SAME and/or PACA for further evaluation recommendation.