



# From JARs to IRs Workshop NPA FCL

## **NPA Part Medical**

Acceptable Means of Compliance Class 2

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# General (1)

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- JAR-FCL 3 requirements for class 2 medical certificates were considered to be too high by many
- As a result some NAAs established national requirements at a lower level
- The new leisure pilot licence is being created to give a broader access to private flying in Europe



## General (2)

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- The original idea of the Subgroup Medical was to bring class 2 requirements down to ICAO level in order to
  - ★ answer to the requests to lower the JAR-FCL 3 class 2 standards
  - ★ apply these standards also to the leisure pilot licence in order to have only 2 sets of medical regulations (class 1 for commercial and class 2 for private flying)



## General (3)

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- The LPL requirements received from the MDM.032 group were below ICAO Annex 1 standards
- This lead to the decision to circulate in this NPA
  - ✧ IRs and AMCs for an ICAO compliant medical certificate for the PPL and
  - ✧ IRs and AMCs for a medical certificate for the LPL as proposed by the MDM.032 group



## General (4)

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- General changes and amendments to JAR-FCL 3 class 2 requirements:
  - ✦ medical tests according to ICAO Annex 1
  - ✦ numerical limits according to ICAO Annex 1
  - ✦ OSL limitation deleted in many cases
  - ✦ AME or AeMC to evaluate contentious cases



# Cardiology - Examination

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- 12 lead resting ECG:
  - ✧ at first examination after age 40 and
  - ✧ every 2 years after age 50
  
- Deleted:
  - ✧ ECG at initial examination
  - ✧ estimation of serum lipids



# Cardiology - General

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- Peripheral arterial disease (AMC only)
  - ★ Contains necessary result of investigations but does not detail the tests to be done.
- Aortic aneurysm (AMC only)
  - ★ Applicants with an aneurysm of the thoracic or abdominal aorta (before and after surgery) may be assessed as fit, subject to satisfactory cardiological evaluation and follow up.
- JAR-FCL 3: Was only possible for infra-renal aneurysm



# Cardiology - General

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- Minor cardiac valvular abnormalities (AMC only)
  - ★ Applicants may be assessed as fit
- Significant abnormality of any of the heart valves
  - ★ No AMC. Evaluation by a cardiologist before a fit assessment
- Valvular surgery
  - ★ Applicants who have undergone cardiac valve replacement or repair should be assessed as fit if post-operative cardiac function and investigations are satisfactory





# Cardiology - General

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- A cardiovascular condition requiring anticoagulant therapy (no AMC)
- Heart or heart/lung transplantation (no AMC)
  - ★ IR Class 2: A fit assessment may be considered subject to a satisfactory evaluation by a cardiologist
- Note: Anticoagulant therapy and heart/lung transplantation not mentioned in ICAO Annex 1



# Cardiology - General

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- Primary or secondary abnormality of the pericardium, myocardium or endocardium (AMC only)
- Congenital abnormality of the heart before and after surgical correction (AMC only)
  - ✧ A fit assessment may be considered subject to a satisfactory cardiological evaluation
- JAR-FCL 3: Detailed description of investigations to be performed



# Coronary Artery Disease

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- Cardiological investigations as in JAR-FCL 3
- **Difference:** follow-up periods not specified
- **Editorial (?)**: definition of “ischaemic cardiac event” not contained in AMC



## ICAO Annex 1 – Class 2

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- An applicant who has undergone coronary bypass grafting or angioplasty (with or without stenting) or other cardiac intervention or who has a history of myocardial infarction or who suffers from any other potentially incapacitating cardiac condition shall be assessed as unfit unless the applicant's cardiac condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.



# Rhythm and conduction disturbance

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- Applicants may be assessed as fit if cardiological evaluation is satisfactory:
  - ★ Ablation
  - ★ supraventricular arrhythmias
  - ★ atrial fibrillation / flutter
  - ★ asymptomatic sinus pauses up to 2,5 sec. on resting ECG
  - ★ complete right bundle branch block
  - ★ complete left bundle branch block
  - ★ ventricular pre-excitation



## Rhythm and conduction disturbance

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- Applicants with Mobitz type 2 AV block may be assessed as fit in the absence of distal conducting tissue disease
  - ★ detailed description of necessary investigations deleted
  
- Applicants with anti-tachycardia pacemaker should be assessed as unfit
  - ★ Duplication from IRs – will be deleted



# ICAO Annex 1

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- 6.4.2.5.2 An applicant with an abnormal cardiac rhythm shall be assessed as unfit unless the cardiac arrhythmia has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.



# Metabolic, and endocrine systems

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## ➤ Deleted:

- ★ Reference to body mass index
- ★ Reference as to which (oral) medication is compliant with flight safety

## ➤ Added (AMC only):

- ★ Gout – must be asymptomatic before a fit assessment can be considered
- ★ Thyroid dysfunction – must achieve a stable euthyroid state





## Other changes

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- Haematology: No reference to haematocrit level of 32 mg%
  - ★ (no testing required)
  
- Musculoskeletal system, addition:
  - ★ In cases of limb deficiency, a fit assessment may be considered following satisfactory medical flight test



# Alcohol and other substance use

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## ➤ Psychiatry, deletions:

- ★ all guidance on how to treat and evaluate the use or misuse of alcohol has been deleted, except:

- ➔ Use or abuse of psychotropic substances likely to affect flight safety is disqualifying

- ★ Please comment.



# Ophthalmology - Examinations

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- No guidance given:
  - ★ who performs ophthalmological examinations
  - ★ which tests should be undertaken in cases of an pathological condition
  - ★ regular intervals of ophthalmological examinations in cases of a pathological condition
  
- No change to parameters of the routine eye examination



# Ophthalmology

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- All differences between initial and revalidation examination deleted
- No limits for refractive error
- Deleted:
  - ★ reference to keratokonus
  - ★ reference to heterophorias



➤ ICAO 6.4.3.5

- ★ The applicant shall be required to have normal fields of vision.

➤ AMC B to MED.B.065

- ★ An applicant with a visual field defect may be considered as fit if the binocular visual field is normal and the underlying pathology acceptable



# When commenting ....

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- Please take into account:
  - ★ the objective was to align the requirements class 2 to ICAO Annex 1
  - ★ the IRs and AMCs should allow for a high degree of flexibility and individual decisions
  - ★ when an applicant does not fully comply with the requirements the AME/ AeMC should issue medical certificates with limitation(s) to ensure flight safety



# When commenting ....

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- Please take into account:
  - ★ in some countries the AMEs and AeMCs may have more experience in evaluating medical cases than physicians working for authorities
  - ★ where specific investigations are not mentioned in the AMCs
  - ★ oversight by the competent authority will include inspections and spot checks in AME offices and at AeMCs



European Aviation Safety Agency

. . . **thank you** . . . .

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**A**gency

