

# Class 1/ 2 certification – Left Bundle Branch Block (LBBB)

LBBB on resting ECG

UNFIT

Cardiology review  
Shall require: (note 1)  
Exercise ECG  
24 hour ECG  
Echocardiogram  
Over age 40: (note 2)  
Investigation of coronary arteries  
May require:  
Electrophysiological studies (note 3)

Results acceptable  
(note 4)

Class 1 OML (note 5)  
Class 2 unrestricted or OSL (note 6)

Unrestricted Class 1 / 2  
Follow-up (note 7)

## NOTES:

1) By a cardiological specialist. Shall include:

Exercise ECG – Bruce protocol and symptom limited. Requirements are at least 9 minutes and no significant ECG (apart from LBBB) or blood pressure changes. (See UK CAA exercise ECG protocol).

24 hr ECG – No significant rhythm or conduction disturbance apart from LBBB.

Echocardiogram – Structurally normal heart and normal LV and RV function (ejection fraction  $\geq 50\%$ ).

2) Coronary artery investigation – shall be required in all applicants over the age of 40. A myocardial perfusion scan, stress echo, CT angiogram or cardiac MRI will normally be sufficient. Pharmacological stress should be used to avoid difficulties in the interpretation of septal perfusion.

3) EPS studies – should be performed if the PR interval is  $>200$  msec, and possibly if the ECG shows an abnormal axis. The HV interval should be less than 100 msec.

4) For Class 1 applicants the cardiology report will be reviewed by the CAA. It may be necessary to see the investigations in which case the actual tracings / films / videos will be requested. In difficult cases a review will be undertaken by the CAA.

5) Class 1 certification – satisfactory investigations will allow Class 1 OML. Annual cardiology review with a minimum of an exercise ECG, . Review at 3 years should also include a 24 hour ECG and echocardiogram. If satisfactory – unrestricted class 1 can be issued. Initial Class 1 applicants will need to show a 3 year period of stability, as above, before a class 1 certificate can be issued.

6) Class 2 certification – Satisfactory investigations will allow unrestricted Class 2. If coronary artery investigation was not done at initial assessment, Class 2 applicants over the age of 40 may need to be restricted to OSL (safety pilot).

7) Follow-up after the 3 year period: pilots with long standing LBBB will require an echocardiogram every 3 years to reassess left ventricular function. Other investigations or cardiology reviews may occasionally be required, particularly if any changes are noted on the resting ECG.

**PLEASE PRINT THIS DOCUMENT AND TAKE TO YOUR SPECIALIST ADVISOR**



UK Civil Aviation Authority  
Guidance Material  
Version 2.2 June 2018  
[www.caa.co.uk/medical](http://www.caa.co.uk/medical)