



Australian Government
Civil Aviation Safety Authority

Instrument number CASA EX25/10

I, JOHN FRANCIS McCORMICK, Director of Aviation Safety, on behalf of CASA, make this instrument under regulation 308 of the *Civil Aviation Regulations 1988 (CAR 1988)*.

[Signed John F. McCormick]

John F. McCormick
Director of Aviation Safety

8 April 2010

Exemption — from standard take-off and landing minima –Cathay Pacific

1 Duration

This instrument:

- (a) commences on the day of registration; and
- (b) stops having effect at the end of 30 April 2012.

2 Definitions

In this instrument:

ATC means air traffic control.

CAT means category, and refers to Category I, Category II or Category III minima.

DH means decision height.

ICUS refers to a pilot and means in command under supervision.

low visibility operation or **LVO** means:

- (a) a landing with less than CAT I minima; or
- (b) a take-off with less than 550 m RV or RVR.

runway zone means the touch-down zone (**TDZ**), the mid-zone (**MID**) or the end zone (**END**) of a runway.

RV means runway visibility and is assessed by an approved observer and reported by ATC. RV only applies where the visibility is 350 m or more.

RVR means runway visual range and is measured by instrument and reported by ATC.

3 Application

This instrument applies only to aircraft mentioned in Schedule 1 operated by Cathay Pacific Airways Ltd (*Cathay Pacific*), Aviation Reference Number 503091 (the *operator*), in LVO at an aerodrome when both of the following apply:

- (a) ATC is in operation;
- (b) ATC has informed the pilot of the aircraft that low visibility procedures are in force.

4 Exemption

Each aircraft operated by the operator is exempt from compliance with regulation 257 of CAR 1988 in relation to the standard take-off and landing minima determined by CASA under subregulation 257 (1) of CAR 1988.

Note Details of the determination are set out in AIP En Route 1.5, sections 4.3 and 4.4.

5 Conditions

The exemption is subject to the following conditions:

- (a) each aircraft must use not less than the aerodrome minima mentioned for it in Schedule 1, in accordance with Schedule 1;
- (b) the requirements mentioned in Schedule 2 must be complied with.

Schedule 1 Aerodrome minima for LVO

- 1 At aerodromes that have the facilities required to support low visibility take-offs and CAT II and Cat III landings installed and in operation, the following are the minima that may be used by the aircraft mentioned.
- 2 Within Australia, an aerodrome's runways capable of supporting LVO will be shown in the AIP or by NOTAM.

Take-off minima

- 1 Take-off minima with TDZ, MID and END RVR measurements available for A330, A340-300, A340-600, B747-400 and B777 aircraft are:
 - 150 m RVR TDZ and 150 m RVR MID and 150 m RVR END.
- 2 Take-off minima with TDZ and either MID or END RVR measurements available for A330, A340-300, A340-600, B747-400 and B777 aircraft are:
 - (a) 200 m RVR TDZ and 200 m RVR MID or, if MID is not available, then 200 m RVR END; and
 - (b) 350 m RV TDZ and 350 m RV MID or, if MID RV is not available, then 350 m RV END. For 350 m or greater RV TDZ, the pilot in command must act as the approved observer for the TDZ.

Note Also see Schedule 2, clause 8, for specific runway lighting and marking requirements.

Landing minima

- 1 CAT II minima for A330, A340-300, A340-600, B747-400 and B777 aircraft are:
 - (a) visibility: 350 m RVR TDZ and 125 m RVR MID or, if MID RVR is not available, then 125m RVR END; and
 - (b) DH: 100 feet.

- 2 CAT III A minima for A330, A340-300, A340-600, B747-400 and B777 aircraft are:
 - (a) visibility: 200 m RVR TDZ and 125 m RVR MID or, if MID RVR is not available, then 125 m RVR END; and
 - (b) DH: 50 feet.
- 3 CAT III B minima for A330, A340-300, A340-600 aircraft are:
 - (a) visibility: 75 m RVR TDZ and 75 m RVR MID and 75 m RVR END; and
 - (b) DH: No DH.
- 4 CAT III B minima for B747-400 and B777 aircraft are:
 - (a) visibility: 100 m RVR TDZ and 100 m RVR MID and 100 m RVR END; and
 - (b) DH: No DH.

Schedule 2 Requirements for LVO

Approach bans

- 1 For landings, the following approach ban rules apply:
 - (a) when making an approach, the pilot in command of the aircraft must not continue beyond 1 000 feet above aerodrome elevation if a controlling zone RVR is reported by ATC as continually less than the specified minimum for the approach;
 - (b) if, after passing 1 000 feet above aerodrome elevation, a controlling zone RVR is reported by ATC as falling below the specified minimum, the approach may be continued to the minima.

Required visual references

- 2 For landings, the pilot in command of the aircraft must not continue an approach below the applicable minima unless visual reference is established and maintained in accordance with the following:
 - (a) for CAT II — at least:
 - (i) 3 consecutive longitudinally aligned lights, being the centreline of the approach lights, the touchdown zone lights, or the runway lights; and
 - (ii) a lateral element of lighting, being an approach lighting crossbar, landing threshold or a barrette of touchdown lighting;
 - (b) for CAT III A — at least 3 consecutive longitudinally aligned lights, being the centreline of the approach lights, the touchdown zone lights, or the runway lights;
 - (c) for CAT III B:
 - (i) with a DH — at least 1 centreline light; and
 - (ii) with no DH — no visual contact is required.

Operational restrictions

- 3 The LVO must be conducted in accordance with the operator's relevant Hong Kong Civil Aviation Department approval.
- 4 The maximum cross-wind component for an aircraft conducting an LVO is:
 - (a) if any RVR is less than 200 m — 10 knots; or
 - (b) otherwise — 15 knots.

- 5 For a CAT II landing, until visual conditions are established, the aircraft must have and use at least a fail-passive automatic landing system.
 - 6 For a CAT III A landing, the aircraft must have and use at least a fail-passive automatic landing system and an automatic go-around capability.
 - 7 For a CAT III B landing, the aircraft must have and use a fail-operational automatic landing system with roll-out control guidance and an automatic go-around capability.
 - 8 For take-offs, the following runway lighting and markings are required:
 - (a) with RVR or RV at 350 m or more — high-intensity runway edge lights (HIRL) spaced at not more than 60 m and either runway centreline lighting (RCLL) or runway centreline markings (RCLM) are required;
 - (b) with less than 350 m RVR — HIRL spaced at not more than 60 m, RCLL spaced at not more than 15 m and RCLM are required.
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