



# Australian Government

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## Civil Aviation Safety Authority

Instrument number CASA EX71/15

I, GERARD JOHN CAMPBELL, Executive Manager, Operations Division, a delegate of CASA, make this instrument under regulation 11.160 of the *Civil Aviation Safety Regulations 1998*.

**[Signed G.J. Campbell]**

Gerard J. Campbell  
Executive Manager  
Operations Division

27 April 2015

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

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**1 Duration**

This instrument:

- (a) commences on 1 May 2015; and
- (b) expires at the end of April 2018, as if it had been revoked by another instrument.

**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.

*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 touchdown 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, 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 the *Civil Aviation Regulations 1988 (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, section 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**

- 3 Take-off minima with TDZ and either MID or END RVR measurements available for A330, A340, B747-400, B747-8, B777-200, B777-300 and B777-300ER aircraft are:
  - (a) 150 m RVR TDZ and 150 m RVR MID or, if RVR MID is not available, then 150 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**

- 4 CAT II minima for A330, A340, B747-400, B747-8, B777-200, B777-300 and B777-300ER aircraft are:
  - (a) visibility: 350 m RVR TDZ and 350 m RVR MID or, if MID RVR is not available, then 350m RVR END; and
  - (b) DH: 100 feet.
- 5 CAT III A minima for A330, A340, B747-400, B747-8, B777-200, B777-300 and B777-300ER aircraft are:
  - (a) visibility: 200 m RVR TDZ and 200 m RVR MID or, if MID RVR is not available, then 200 m RVR END; and
  - (b) DH: 50 feet.
- 6 CAT III B minima for A330 and A340 aircraft are:
  - (a) visibility: 75 m RVR TDZ and 75 m RVR MID and 75 m RVR END; and
  - (b) DH: No DH.

- 7 CAT III B minima for B747-400, B747-8, B777-200, B777-300 and B777-300ER 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 TDZ 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 TDZ 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 (**HIREL**) 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 — HIREL spaced at not more than 60 m, RCLL spaced at not more than 15 m and RCLM are required.
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