

## **CHAPTER 10 MATTERS TO BE CHECKED BEFORE TAKE-OFF**

### **10.01 Purpose**

For subregulation 91.245 (1), this Chapter prescribes the checks to be carried out before take-off.

### **10.02 Matters to be checked before take-off**

The prescribed checks are the following:

- (a) a check to confirm that each aerodrome, air route and airway facility that the pilot plans to use for the flight will be available for use;
- (b) a check of the following:
  - (i) all Head Office and FIR NOTAMs applicable to the en route phase of the flight;
  - (ii) all location-specific NOTAMs for relevant aerodromes;
- (c) a check to confirm the availability of GNSS integrity if required by section 11.03 or 14.06;
- (d) a check to confirm that:
  - (i) all equipment required to be fitted to, or carried on, the aircraft by or under the civil aviation legislation is available and functioning properly; and
  - (ii) emergency and survival equipment carried on the aircraft is readily accessible;
- (e) a check to confirm that each crew member is fit to perform the crew member's duties;
- (f) a check to confirm that:
  - (i) the aircraft's hatches, access ports, panels and fuel tank caps are secured; and
  - (ii) the control locks, covers and ground safety devices and restraints have been removed;
- (g) if the aircraft is an Australian aircraft — a check to confirm that there is either:
  - (i) a certificate of release to service for the most recent maintenance carried out on the aircraft; or
  - (ii) a maintenance release for the aircraft;
- (h) a check to confirm that the aircraft's flight controls have been tested and are functioning correctly;
- (i) for each system fitted to the aircraft for measuring and displaying pressure altitude, a check of the system's accuracy in accordance with the procedures mentioned in this Chapter;
- (j) if an amount of supplemental oxygen or protective breathing equipment is required by or under the civil aviation legislation to be carried on the aircraft for a flight crew member for the flight — checks to ensure the following (as the case requires):
  - (i) that the required amount of supplemental oxygen is available;
  - (ii) that the protective breathing equipment is operative;
  - (iii) that the oxygen mask is connected to the supply terminal;
  - (iv) that each communication system associated with the oxygen mask is operative;

- (v) if the oxygen mask is adjustable — that the mask fits the flight crew member correctly.

### 10.03 Checking systems for measuring and displaying pressure altitude — general

- (1) For paragraph 10.02 (i), this section sets out the requirements for checking aircraft systems for measuring and displaying pressure altitude (*pressure altitude systems*).
- (2) If:
  - (a) an aircraft is at a known elevation (the *site elevation*); and
  - (b) an accurate QNH is available;

then, before take-off, the pilot in command of the aircraft must check the accuracy of each of the aircraft's pressure altitude systems in accordance with this section.

*Note* For accurate QNH and site elevation — see section 10.06.

### 10.04 Checking pressure altitude systems — IFR flight

- (1) The pilot in command of an IFR flight must consider any pressure altitude system with an error in excess of  $\pm 75$  ft to be inoperative for the flight.
- (2) If 2 pressure altitude systems are required for the category of operation, then:
  - (a) at least 1 system (the *first system*) must read the site elevation to within 60 ft; and
  - (b) if the other system (the *second system*) has an error between 60 ft and 75 ft — the pilot in command may conduct a flight to the first point of landing where the accuracy of the second system can be rechecked; and
  - (c) if, on rechecking, the second system shows an error in excess of 60 ft — the pilot in command must consider the second system to be inoperative for further IFR flight.
- (3) If 1 pressure altitude system is required for the category of operation, but 2 are fitted, then:
  - (a) the pilot in command is permitted to conduct a flight if at least 1 system (the *first system*) reads the site elevation to within 60 ft; and
  - (b) if the other system (the *second system*) has an error in excess of 75 ft — the pilot in command must consider the second system to be inoperative for further IFR flight.
- (4) If 1 pressure altitude system is required for the category of operation, and 1 is fitted, then:
  - (a) if the system has an error between 60 ft and 75 ft — the pilot in command is permitted to conduct a flight to the first point of landing where the accuracy of the system can be rechecked; and
  - (b) if, on rechecking, the system shows an error in excess of 60 ft — the pilot in command must consider the system to be inoperative for further IFR flight.

### 10.05 Checking pressure altitude systems — VFR flight

- (1) A pressure altitude system with an accurate QNH is operative for a VFR flight only if the system reads site elevation to within:
  - (a) 100 ft; or
  - (b) at test sites above 3 300 ft — 110 ft.
- (2) If an aircraft that is fitted with 2 pressure altitude systems continues to conduct a flight under the VFR with 1 of the systems erroneously reading more than 100 ft (or 110 ft

as the case may be), the pilot in command must consider the erroneous system to be inoperative for further VFR flight.

- (3) For an aeroplane operation conducted under the VFR involving flight above FL 200, the pressure altitude system used must be checked against the accuracy requirements for such system usage under the IFR.

#### **10.06 Accurate QNH and site elevation**

- (1) In this Chapter, a QNH is to be considered accurate only if it is provided by 1 of the following:
  - (a) AAIS;
  - (b) ATC;
  - (c) ATIS;
  - (d) AWIS;
  - (e) CA/GRS;
  - (f) WATIR.
- (2) QNH contained in an authorised weather forecast must not be used for checking the accuracy of a pressure altitude system.
- (3) Site elevation must be derived from aerodrome survey data that is:
  - (a) authorised in writing (as the case requires):
    - (i) by CASA; or
    - (ii) by an NAA; or
  - (b) supplied in writing by the relevant aerodrome operator.