



**Australian Government**  
**Civil Aviation Safety Authority**

**CONSULTATION DRAFT (12 September 2022)**

I, PHILIPPA JILLIAN SPENCE, Director of Aviation Safety, on behalf of CASA, make this instrument under regulation 172.022 of the *Civil Aviation Safety Regulations 1998*.

**[DRAFT ONLY — NOT FOR SIGNATURE]**

Pip Spence  
Director of Aviation Safety

[MONTH TO BE CONFIRMED] 2022

**Part 172 (Air Traffic Service Providers) Amendment Manual of Standards 2022**

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**1 Name of instrument**

This instrument is the *Part 172 (Air Traffic Service Providers) Amendment Manual of Standards 2022*.

**2 Commencement**

This instrument commences on the day after it is registered.

**3 Amendment of the Manual of Standards Part 172**

Schedule 1 amends the Manual of Standards (MOS) – Part 172.

**Schedule 1 Amendment**

**Chapter 3**

*substitute*

**CHAPTER 3: ATS FACILITIES AND EQUIPMENT**

**3.01 Scope of Chapter 3**

This Chapter:

- (a) is made for regulation 172.095 of CASR; and

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- (b) sets out standards for facilities and equipment used to provide an air traffic service.

## 3.02 Definitions

In this Chapter:

**ICAO Doc. 4444** means *Procedures for Air Navigation Services — Air Traffic Management* (Doc 4444, PANS-ATM) approved and published by decision of the Council of the International Civil Aviation Organization, as in force from time to time, subject to the differences mentioned in Gen 1.7 of Part 1 of the AIP.

**visual surveillance system** has the same meaning as in ICAO Doc. 4444.

## 3.03 Control towers

### Visibility standards

- (1) A control tower for a controlled aerodrome must enable a controller to maintain visual observation, achieved through direct out-of-the-window observation, or indirect observation using a visual surveillance system that meets the requirements of section 3.05, of:
  - (a) all parts of the manoeuvring area at the aerodrome for which the controller has responsibility; and
  - (b) the runway strips associated with the areas mentioned in paragraph (a); and
  - (c) the parts of any service roads that are within 150 m of the areas mentioned in paragraph (a); and
  - (d) any other parts of the aerodrome movement area for which the controller has responsibility; and
  - (e) the airspace for which the controller has responsibility, including flight operations on and in the vicinity of the aerodrome.

<p><b>Note</b> See the definition of <i>manoeuvring area</i> in the Act and the Part 139 Manual of Standards. The terms <i>runway strip</i> and <i>movement area</i> are defined in the CASR Dictionary.</p>
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### Glare, reflection and noise

- (2) The control tower must be designed, oriented and equipped to minimise glare, reflection and noise.

### Signal lamp

- (3) The control tower must have a signal lamp with white, red and green functions.

<p><b>Note</b> Also, subregulation 172.095 (3) of CASR provides that equipment and facilities mentioned in Chapter 6 of Annex 11 to the Chicago Convention must meet the standards of that chapter.</p>
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## 3.04 Detecting movement of departing aircraft

- (1) Subsection (2) applies in relation to a control tower for a controlled aerodrome, if:
  - (a) the control tower was first commissioned after 1 July 2000; or
  - (b) a runway at the aerodrome was commissioned after 1 July 2000; or
  - (c) both of the following apply:
    - (i) a runway at the aerodrome was modified after 1 July 2000;
    - (ii) as a result of the modification, a controller's ability to maintain visual observation of the runway, or to detect the movement of a departing aircraft after the aircraft has commenced its take-off run, has been degraded.
- (2) The control tower must enable a controller to detect the movement of a departing aircraft:
  - (a) as soon as possible after the aircraft has commenced its take-off run; but
  - (b) no later than 5 seconds after the take-off run commences.

## 3.05 Visual surveillance systems providing aerodrome control service

An ATS provider may use a visual surveillance system, in the provision of aerodrome control service, to perform a function listed in Section 7.1 of ICAO Doc. 4444, only if the visual surveillance system meets the standards mentioned in Chapter 7.12 of ICAO Doc. 4444.

<p><b>Note 1</b> Section 7.1 of ICAO Doc. 4444 lists functions of aerodrome control towers. Under subregulation 172.075 (1) of CASR, an ATS provider must ensure that any traffic service that it provides is provided in accordance with the procedures and rules set out in ICAO Doc. 4444, as varied by Gen 1.7 of Part 1 of the AIP.</p> <p><b>Note 2</b> The term <i>aerodrome control service</i> has the same meaning as in Annex 11 (see the definition of the term in the CASR Dictionary).</p> <p><b>Note 3</b> As a system that processes or displays air traffic control data, a visual surveillance system is a <i>telecommunication service</i> as defined in regulation 171.012 of CASR. A visual surveillance system therefore is also regulated under Part 171 of CASR as a telecommunication service, including how CASA approves a person to be a provider of the service, and obligations of providers.</p>
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## 3.06 Displays for control towers

- (1) A control tower must have the following displays:
  - (a) flight data displays (for example, flight progress boards);
  - (b) meteorological displays which provide at least the following information:
    - (i) surface wind;
    - (ii) barometric pressure;
    - (iii) temperature;
    - (iv) if the aerodrome has runway visual range equipment—the current runway visual range values;

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- (c) operational data displays for the following:
  - (i) other significant weather information;
  - (ii) NOTAMs;
  - (iii) handover/takeover;
  - (iv) essential aerodrome information;
  - (v) relevant maps and charts;
- (d) a time display at each operational position.
- (2) For the purposes of subparagraph (1) (b) (i), if more than one surface wind sensor is used at the aerodrome, the displays must identify the sensor being used for the observation.

## 3.07 Control towers—requirements about aerodrome equipment and navigation aids

### Switching, monitors and controls for aerodrome equipment

- (1) A control tower for a controlled aerodrome must have appropriate switching, monitors and controls for lighting equipment at the aerodrome, including for the following equipment:
  - (a) runway lighting;
  - (b) approach lighting;
  - (c) taxiway lighting;
  - (d) visual approach slope indicator systems;
  - (e) stop bars;
  - (f) obstacle lighting;
  - (g) illuminated wind direction indicator;
  - (h) aerodrome beacon.

### Navigation aids

- (2) The control tower must also have a means to readily recognise the failure of any navigation aid being used for the control of aircraft.

<b>Note</b> Subsection (2) covers both ground-based and space-based navigation aids.
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## 3.08 Area and approach control units

- (1) Area control centres and approach control units must have the following facilities:
  - (a) time display at each operational position;
  - (b) flight data displays;
  - (c) operational data displays;

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- (d) appropriate maps and charts.

**Note** Annex 11 also contains provisions regulating facilities in relation to area and approach control units. Subregulation 172.095 (3) of CASR requires that equipment and facilities mentioned in Chapter 6 of Annex 11 that an ATS provider uses in providing an air traffic service must comply with the standards of that chapter.

- (2) Area control centres and approach control units must have a means to readily recognise the failure of any navigation aid being used for the control of aircraft.

**Note 1** Also, subregulation 172.095 (3) of CASR provides that equipment and facilities mentioned in Chapter 6 of Annex 11 to the Chicago Convention must meet the standards of that chapter.

**Note 2** Subsection (2) covers both ground-based and space-based navigation aids.

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