



**PURSUANT** to Sections 28, 29 and 30 of the Civil Aviation Act 1990

**I, Hon Julie Anne Genter, Associate Minister of Transport,**

**HEREBY MAKE** the following ordinary rules.

**SIGNED AT** Wellington

This 15<sup>th</sup> day of June 2018

A handwritten signature in black ink, which appears to read 'Julie Anne Genter', is written over the printed name.

by Hon Julie Anne Genter

Associate Minister of Transport

Civil Aviation Rules  
**Part 172, Amendment 13**  
**Air Traffic Service Organisations – Certification**  
*Docket 16/CAR/12*

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## **Rule objective**

The objective of amendment 13 to Part 172 is to make consequential amendments resulting from amendment 30 to Part 91. Amendment 30 to Part 91 provides for the transition from secondary surveillance radar to Automatic Dependent Surveillance Broadcast (ADS-B) Out as the primary source of data for surveillance in New Zealand.

Amendment 13 to Part 172 is associated with the following amendments to other rule Parts –

- Amendment 54 to Part 1
- Amendment 15 to Part 43
- Amendment 6 to Part 66
- Amendment 9 to Part 101
- Amendment 8 to Part 103

## **Extent of consultation**

A Notice of Proposed Rulemaking, NPRM 18-02, containing the proposed changes to Parts 91, 1, 43, 66, 101, and 172 was issued for public consultation under docket 16/CAR/12 on 14 September 2017.

The publication of this NPRM was notified in the Gazette on 21 September 2017. The NPRM was published on the website on 14 September 2017.

## **Summary of submissions**

A total of six submitters provided written submissions on the NPRM. There were no oral comments received on the submissions. These submissions have been considered and as a result –

- rule 172.3 is amended by inserting the definition of ‘*air situation display*’:
- rule 172.115(c) is amended by deleting paragraphs (3) and (4) and replacing with a new paragraph (3) which provides – “*all*

*relevant data from ATS surveillance systems used in providing or supporting an ATC service”:*

- rule 172.115 is amended by deleting paragraph (d) which provides for the definition of “*air situation display*”, which has been inserted in rule 172.3:
- rule 172.267(d) is amended by deleting the phrase “*controlled flight using VFR procedures*” with “*controlled VFR flight*”,
- rule 172.401 is amended –
  - by amending the heading to read – “*Verification of transponder level information*”:
  - by replacing the phrase “*Mode C*” with “*transponder*” and “*tower radar*” with “*aerodrome control air situation display*”.

A summary of submissions for this NPRM is available on the CAA website.

### **Examination of submissions**

Submissions may be examined by application to the Docket Clerk at the Civil Aviation Authority between 8:30 am and 4:30 pm on weekdays, except statutory holidays.

### **Insertion of Amendments**

The amendments to the rules in this Part are reflected by –

- amending rule 172.3 to insert the definition of ‘air situation display; and
- revoking and replacing rules 172.57, 172.75, 172.115, 172.155, 172.253, 172.265, 172.267, 172.269, 172.287, 172.293, 172.355, 172.401 and 172.403.

### **Effective date of rule**

Amendment 13 to Part 172 comes into force on 20 July 2018

### **Availability of rules**

Civil Aviation Rules are available from–

CAA web site: <http://www.caa.govt.nz/>

Freephone: 0800 GET RULES (0800 438 785)

## Part 172 Air Traffic Service Organisations – Certification

*Rule 172.3 is amended by inserting the following definition before the definition of ‘Annex 1’.*

**Air situation display** includes any visual presentation of aircraft position.

*Rule 172.57 is revoked and replaced with the following rule.*

### **172.57 Facility requirements**

(a) An applicant for the grant of an air traffic service certificate must establish the following facilities that are appropriate to the air traffic services listed in the applicant’s exposition:

- (1) aerodrome control towers:
- (2) approach control offices:
- (3) area control centres:
- (4) aerodrome flight information offices:
- (5) flight information centres:
- (6) dedicated training and assessment facilities.

(b) Except as provided in paragraph (h), an applicant for an aerodrome control service, or an aerodrome flight information service, must establish procedures for ensuring that any aerodrome control tower or aerodrome flight information office, including any temporary tower or office, listed in the applicant’s exposition, is—

- (1) constructed and situated to provide—
  - (i) the maximum practicable visibility of aerodrome traffic; and
  - (ii) protection from glare and reflection; and
  - (iii) protection from noise; and

- (2) safeguarded from any development that would affect the requirements of paragraph (b)(1); and
- (3) at solo watch locations, provided with—
  - (i) toilet facilities that ensure the minimum possible interruption to, or degradation of, air traffic services; and
  - (ii) storage and preparation facilities for food and drink in the visual control room; and
- (4) provided with equipment for two-way voice communication with—
  - (i) any aircraft, in or adjacent to airspace for which the applicant has responsibility; and
  - (ii) any aircraft, vehicle, and person, on, or adjacent to, the manoeuvring area; and
- (5) provided with the following minimum equipment:
  - (i) a display system or systems designed to show the disposition of current and pending aerodrome traffic together with ancillary information for individual aircraft:
  - (ii) a power supply:
  - (iii) appropriate and current maps and charts:
  - (iv) binoculars:
  - (v) clocks:
  - (vi) log keeping system:
  - (vii) outside temperature indicator:
  - (viii) QNH display:
  - (ix) signal lamp with green, red, and white functions:

- (x) telephone communications:
  - (xi) status monitors for approach and landing aids and any road or rail signalling equipment affecting the use of a runway:
  - (xii) visibility and cloud height checkpoints:
  - (xiii) voice and, if applicable, data recording equipment:
  - (xiv) wind direction and wind speed display:
  - (xv) an audible emergency alerting system:
  - (xvi) an AFTN terminal or, if provided for in an ATS letter of agreement, an alternative means of reception and transmission of information normally conveyed by AFTN:
  - (xvii) if applicable, airfield lighting controls panel; and
- (6) provided with 2 independent sources of the current altimeter setting, at least 1 of which must be an aneroid barometer or barometric altimeter situated in the visual control room.
- (c) The applicant must establish procedures for ensuring that an area control centre, a flight information centre, and an approach control office is—
- (1) provided with equipment enabling—
    - (i) to the fullest extent practical, two-way voice communication; and
    - (ii) if applicable, data communication with any aircraft in, or adjacent to, airspace for which the applicant has responsibility; and
  - (2) provided with the following minimum equipment:

- (i) a display system or systems designed to show the disposition of current and pending flights together with ancillary information for individual aircraft:
  - (ii) a power supply:
  - (iii) appropriate and current maps and charts:
  - (iv) clocks:
  - (v) log keeping system:
  - (vi) status monitors as appropriate for navigation, approach, and landing aids:
  - (vii) telephone communications:
  - (viii) voice recording equipment and, if applicable, data recording equipment:
  - (ix) an AFTN terminal:
  - (x) for an approach control operating position, an ILS/MLS status monitor at the approach control procedural or approach control surveillance operating position for the aerodrome concerned:
  - (xi) for an approach control operating position responsible for aircraft on final approach, or aircraft landing or taking-off, a wind direction and wind speed display fed from the same source as the corresponding equipment in the aerodrome control tower.
- (d) The applicant must establish procedures for ensuring that the aeronautical telecommunications equipment required by paragraphs (b) and (c) are operated as specified under Part 171.
- (e) The applicant must establish procedures for ensuring that any visual display unit used by an air traffic service is positioned with due regard to the relative importance of the information displayed and ease of use by the staff concerned.

(f) The equipment required by paragraphs (b)(4) and (5), and (c)(1) and (2), must have a level of reliability, availability, and redundancy, that minimises the possibility of failure, non-availability, or significant degradation of performance.

(g) The applicant must establish procedures for ensuring that the status monitors required by paragraph (b)(5)(xi) and paragraphs (c)(2)(vi) and (x) are fitted with—

- (1) an aural signal to indicate a change of status; and
- (2) a visual indication of the current status.

(h) A temporary aerodrome control tower and a temporary aerodrome flight information office are not required to be provided with the equipment required under paragraphs (b)(5)(xi), (xvi) and (xvii) if it is impracticable to do so and other appropriate measures are taken, as the case may be, to—

- (1) provide the person providing the air traffic service from the temporary tower or office with the information that would be available from the equipment required under paragraphs (b)(5)(xi) and (xvi); and
- (2) control the airfield lighting if applicable.

***Rule 172.75 is revoked and replaced with the following rule.***

### **172.75 Area and approach control services**

(a) An applicant for the grant of an air traffic service certificate in respect of an area or approach control service must establish systems and procedures for —

- (1) determining from information received, the positions of known aircraft relative to each other; and
- (2) providing for the issue of ATC clearances, instructions, and information in accordance with the airspace classification and type of flight for the purpose of preventing collisions between

aircraft under the control of the unit, and for expediting and maintaining a safe and efficient flow of traffic; and

- (3) co-ordinating clearances with other ATC units as necessary; and
- (4) displaying information on aircraft movements together with a record of clearances issued, in a manner that permits ready analysis of such information.

(b) Except as provided in paragraph (d) and rule 172.91, the procedures required by paragraph (a)(2) must specify that vertical or horizontal or composite separation under paragraph (c) must be provided between—

- (1) all flights in classes A and B airspace; and
- (2) IFR flights in classes C, D, and E airspace; and
- (3) IFR flights and VFR flights in class C airspace; and
- (4) IFR flights and Special VFR flights in classes B, C, and D airspace; and
- (5) Special VFR flights in classes B, C, and D airspace when the flight visibility is reported to be less than 5 km.

(c) The separation required by paragraph (b) must be in accordance with the applicable criteria and minima prescribed by—

- (1) Subpart E; or
- (2) Annex 11; or
- (3) Document 4444; or
- (4) Document 7030.

(d) In Class D or E airspace, the ATC separation required by paragraph (b)(2) does not apply to a flight using IFR if the pilot has been cleared to maintain own separation from other flights using IFR. The clearance must not be issued unless—

- (1) the clearance is in response to a specific request from the pilot of the aircraft; and
- (2) the flight is during the day and visual meteorological conditions exist; and
- (3) an ATS surveillance control service is not available; and
- (4) the clearance is for a specific portion of the flight; and
- (5) the pilots of all flights that will be essential traffic agree with the application of the procedure; and
- (6) essential traffic information is passed to the pilots of all affected flights; and
- (7) the flights concerned are on the same ATC frequency.

***Rule 172.115 is revoked and replaced with the following rule.***

**172.115 Records**

(a) An applicant for the grant of an air traffic service certificate must establish systems and procedures for identifying, collecting, indexing, filing, storing, securing, maintaining, accessing, and disposing of, records necessary for—

- (1) the operational provision of air traffic services; and
- (2) the purpose of assisting with any accident or incident investigation.

(b) The records referred to in paragraph (a) must include—

- (1) telephone communications; and
- (2) radio broadcasts and communications; and
- (3) air-ground digital data exchanges; and
- (4) ATS surveillance system data; and
- (5) filed flight plans including standard and repetitive plans; and

- (6) flight progress strips; and
  - (7) staff duty rosters; and
  - (8) appropriate meteorological and aeronautical information, except where the information is retained for an equivalent period by a meteorological or AIS organisation; and
  - (9) [revoked]
  - (10) a record for every person who is required to be trained under rule 172.165, including details of—
    - (i) each segment of training that is undertaken; and
    - (ii) knowledge testing or competency assessment as appropriate for the training conducted.
- (c) The applicant must establish systems and procedures for ensuring the electronic recording of—
- (1) all ATS radio and telephone communications; and
  - (2) all high-frequency air-ground communications; and
  - (3) all relevant data from ATS surveillance systems used in providing or supporting an ATC service; and
  - (4) for any equipment coming into service after the date this Part comes into force, any transfer and acceptance of control process not conducted by telephone.
- (d) The applicant must establish systems and procedures for ensuring that electronic records referred to in paragraph (c)—
- (1) include time recording, correct to within 5 seconds of UTC, as determined by reference to a standard time station or GPS time standard; and
  - (2) either—

- (i) replicate the voice communications, and, if applicable, an air situation display presentation applying at the particular operating position; or
  - (ii) are accompanied by a statement fully describing the differences between the recording supplied and a recording under paragraph (i).
- (e) The option provided by paragraph (d)(2)(ii) only applies to equipment that was in service on 1 January 1998.
- (f) The applicant must establish systems and procedures for ensuring that all records, except where replication is required by paragraph (d)(2)(i), are sufficiently clear to convey the required information.
- (g) The applicant must establish procedures for ensuring that the records referred to in paragraph (b) are retained for 31 days from the date of entry, except for—
- (1) staff duty rosters which must be retained for 2 years; and
  - (2) written records associated with the requirements of rules 172.121(a)(2) and (3) which must be retained for 2 years; and
  - (3) training records which must be retained for a period of 3 years from the date the affected person ceases to work or be associated with the air traffic service organisation.

### **Subpart C — Operating Requirements**

*Rule 172.155 is revoked and replaced with the following rule.*

#### **172.155 Trials**

- (a) Upon application in writing from the holder of an air traffic service certificate, the Director may approve, subject to such conditions as the Director considers necessary in the interests of aviation safety, the conduct of trials regarding—
- (1) separation minima; or
  - (2) standard phraseology; or

(3) ATS surveillance service procedures.

(b) A trial may be approved by the Director for a single period of not more than 3 months, and upon further application in writing by the certificate holder, be extended by the Director for a single period of not more than 3 months.

(c) A trial approved under this rule may be terminated by the Director at any time.

### **Subpart E — Separation criteria and minima**

*Rule 172.253 is revoked and replaced with the following rule.*

#### **172.253 Composite visual separation**

An aerodrome controller may apply a composite of geographical and visual separation, provided instructions are issued as necessary to maintain adequate separation, between—

- (1) an aircraft continuously in sight of the controller, and within 10 NM of the aerodrome; and
- (2) an aircraft not in sight of the controller, but whose current position has been determined by approved use of an ATS surveillance system or a pilot position report.

*Rule 172.265 is revoked and replaced with the following rule.*

#### **172.265 Reduced separation when providing an ATS surveillance service**

The Director may, in accordance with paragraph 8.7.4.2 of Document 4444, approve a reduction of the standard 5 NM minimum separation prescribed in paragraph 8.7.4.1 of Document 4444.

*Rule 172.267 is revoked and replaced with the following rule.*

#### **172.267 Separation from an unidentified controlled flight by ATS surveillance service**

- (1) A minimum separation of 5 NM may be applied in any of the following circumstances –

- (i) between an identified aircraft and an unidentified controlled flight entering or about to enter ATS surveillance system coverage under Document 4444 Part VI paragraph 7.3.7 a) and b); or
- (ii) between a previously identified aircraft which has since passed out of ATS surveillance system cover, and a following identified aircraft, provided the following aircraft can achieve the appropriate vertical separation before the position at which the preceding aircraft passed out of ATS surveillance system cover; or
- (iii) between aircraft on reciprocal tracks, when an identified aircraft is at least past the position at which a previously identified aircraft passed out of ATS surveillance system cover; or
- (iv) using an ATS surveillance system may be applied between an identified aircraft and the cleared route of an unidentified controlled VFR flight.

*Rule 172.269 is revoked and replaced with the following rule.*

**172.269 Separation from holding aircraft in the ATS surveillance service**

A minimum separation of 5 NM using an ATS surveillance system may be applied between an identified aircraft that is not holding, and other identified aircraft that are holding, despite that individual identity of the holding aircraft may be lost.

*Rule 172.287 is revoked and replaced with the following rule.*

**172.287 Separation of successive departures using IFR**

A following IFR aircraft may be cleared for take-off when—

- (1) the initial departure track differs by at least 30 degrees from the departure track of the leading aircraft, and visual observation by the aerodrome controller confirms that the leading aircraft—

- (i) has turned to clear the departure track of the following aircraft; or
  - (ii) has reached a point where adequate separation will exist from the following aircraft, or
- (2) the initial departure track differs by at least 20 degrees from the departure track of the leading aircraft; and
- (i) identification using an ATS surveillance system will be established within 1 NM of the end of the runway used for take-off; and
  - (ii) the leading aircraft is 1 NM ahead of the following aircraft, and confirmed by visual or observation using an ATS surveillance system as having turned to clear the departure track of the following aircraft.

***Rule 172.293 is revoked and replaced with the following rule.***

**172.293 Separation from active special use airspace**

- (a) Except as provided in paragraph (b), when applying the separation required by rule 172.79, the minimum separation must be—
- (1) when aircraft within the active special use airspace may be operating in IMC—
    - (i) 1000 feet vertical separation up to FL290; or
    - (ii) 2000 feet vertical separation above FL 290; or
    - (iii) 5 NM separation in the provision of an ATS surveillance service; or
  - (2) when aircraft within the active special use airspace are operating in VMC—
    - (i) 500 feet vertical separation up to FL290; or
    - (ii) 1000 feet vertical separation above FL290; or

- (iii) separation of 1 NM plus the accuracy tolerance of the ATS surveillance system in the provision of a surveillance service; or
- (3) achieved by the use of minima or instrument flight procedures—
  - (i) approved by the holder of an instrument flight procedure service certificate issued under the Act and Part 173; or
  - (ii) approved under rule 19.155(b) that was in force before 23 October 2009; or
  - (iii) when no separation minimum or procedure is specified under paragraphs (a)(1), (2), or (3), separation must be achieved by keeping controlled flights clear of active special use airspace.

***Rule 172.355 is revoked and replaced with the following rule.***

**172.355 ATS co-ordination phraseology**

**(a) Release instructions to aerodrome control**

- (1) When there are no restrictions:  
*“RELEASED”*
- (2) When the aircraft is to be held on the ground:  
*“HOLD”*
- (3) When a release is based on clock time:  
*“CLEARANCE VALID/EXPIRES AT (time)”*
- (4) When a release is based on time interval:  
*“RELEASED (number of minutes) MINUTES BEHIND (leading aircraft)”*
- (5) When a release is based on the application of vertical separation:

*“RELEASED AFTER (leading aircraft call sign) HAS PASSED (level)”*

- (6) When a release is subject to aerodrome control providing separation from specified traffic, where *RYS* means *“Released, your separation”*:

*“RYS (call sign of conflicting traffic) (details of conflicting traffic, if not already passed)”*

**(b) Clarification of responsibility for providing separation**

When assigning or clarifying who is providing separation, and to acknowledge the arrangement:

*“MY SEPARATION/YOUR SEPARATION (call sign of conflicting traffic)”*

**(c) Co-ordination between surveillance controllers**

- (1) When effecting a transfer of control:

*“RELEASE (details)”*

- (2) When identity only is being transferred:

*“IDENT (details)”*

**(d) Negotiation of revised estimate messages**

- (1) Invitation by transferring controller:

*“WILL YOU ACCEPT (details)”*

- (2) Refusal by accepting controller:

*“NEGATIVE, WILL ACCEPT (alternative details)”*

*The title of Subpart G is revoked and replaced with the following title.*

**Subpart G —ATS surveillance procedures**

*Rule 172.401 is revoked and replaced with the following rule.*

**172.401 Verification of transponder level information**

(a) Subject to paragraph (b), aerodrome control may verify the transponder level information of a departing aircraft when the aerodrome control air situation display indicates a positive rate of climb from the aerodrome elevation.

(b) Transponder level information must not be used when the displayed level varies by more than 300 feet from the aerodrome elevation during the take-off roll.

*Rule 172.403 is revoked and replaced with the following rule.*

**172.403 Speed control**

Speed control must not be applied or continued after a point 4 NM from the runway threshold on final approach.