Australian Government

Civil Aviation Safety Authority

Instrument number CASA 17/15

I, GERARD JOHN CAMPBELL, Executive Manager, Operations Division, a delegate of CASA, make this instrument under subregulation 179A (1) of the *Civil Aviation Regulations 1988* (***CAR 1988***), regulation 11.160 of the *Civil Aviation Safety Regulations 1998* (***CASR 1998***) and subsection 33 (3) of the *Acts Interpretation Act 1901*.

[Signed G.J. Campbell]
Gerard J. Campbell
Executive Manager
Operations Division

10 March 2015

Instructions and exemption — RNAV (RNP-AR) approaches and departures (Jetconnect)

1 Duration

This instrument:

(a) commences on the day of registration; and

(b) expires at the end of February 2018, as if it had been repealed by another instrument.

2 Repeal

Instrument CASA 104/12 is repealed.

3 Dictionary

A dictionary for this instrument is in Schedule 3.

4 Application

The instructions in Schedule 1 apply to an RNAV (RNP-AR) approach or departure in I.M.C. under the I.F.R. by Jetconnect Limited, Aviation Reference Number 590369 (the ***operator***).

5 Instructions

The instructions in Schedule 1 are issued.

6 Exemption

A pilot in command of the operator's aircraft is exempt from compliance with subregulations 178 (1) and (2) of CAR 1988.

7 Approval and specification for CAO 20.7.1B

(1) For the definition of ***RNP-capable aeroplane*** in paragraph 3.1 of CAO 20.7.1B, Boeing 737-800 aeroplanes operated by the operator on RNAV (RNP-AR) IAP and IDP are approved for area navigation (RNAV).

(2) For subparagraph 12.1.1 (b) and paragraph 12A.5 of CAO 20.7.1B:

(a) the operator is approved for RNP operation; and

(b) the appropriate RNP containment is at least 2 times the RNP type specified in an approved aircraft's AFM for the procedure.

8 Conditions

The operator's operations must be conducted in accordance with the conditions in Schedule 2.

Schedule 1 Instructions

1 For an RNAV (RNP-AR) approach or departure, the pilot in command of the aircraft must use the authorised RNAV (RNP-AR) IAP or IDP.

2 The pilot in command may use an authorised RNAV (RNP-AR) IAP or IDP only when conducting an RNAV (RNP-AR) approach or departure.

Schedule 2 Conditions

1 An RNAV (RNP-AR) approach or departure may only be conducted:

(a) by an approved pilot flying in a manner consistent with his or her level of training for the approach or departure being undertaken; and

(b) in an operator's Boeing 737-800 aircraft that is an RNP-AR capable aeroplane for that approach or departure as identified in the AFM; and

(c) in accordance with the operations specification issued by the Civil Aviation Authority of New Zealand (the ***Jetconnect operations specification***).

2 Subject to clause 3, an operation involving an RNAV (RNP-AR) approach or departure must be in accordance with the Jetconnect operations specification and this instrument.

3 The Jetconnect operations specification, and operations in accordance with it, may be amended only with the approval of CASA.

4 Subject to clause 5, an RNAV (RNP-AR) approach must be conducted at no lower than the RNAV (RNP-AR) decision altitude identified on the authorised RNAV (RNP-AR) IAP for the approach.

5 An RNAV (RNP-AR) approach must be conducted at no lower than the RNP limitation identified in the approved aircraft's AFM for the approach being undertaken.

Note Although the authorised RNAV (RNP-AR) IAP for the approach may permit a lower decision altitude under clause 4, the actual altitude must not be lower than the RNP capability of the aircraft at the time of the operation, taking into account unserviceabilities etc.

6 The operator must ensure that all RNAV (RNP-AR) approaches are monitored by its Flight Operations Quality Assurance Program in accordance with section 6.3.7 of Part C of ICAO Doc 9613, *Performance Based Navigation Manual*, in particular the following provisions:

(a) total number of RNAV (RNP-AR) approaches conducted;

(b) number of satisfactory approaches by aircraft/system;

(c) reasons for unsatisfactory approaches, such as:

(i) UNABLE REQ NAV PERF, NAV ACCUR DOWNGRAD, or other RNP messages during approaches; and

(ii) excessive lateral or vertical deviation; and

(iii) TAWS warning; and

(iv) autopilot system disconnect; and

(v) navigation data errors; and

(vi) pilot report of any anomaly;

(d) crew comments.

7 The operator must ensure that:

(a) the flight crew utilise its Operational Occurrence Reporting systems to report any issues while operating RNAV (RNP-AR) approaches; and

(b) any occurrence mentioned in clause 6 during an RNAV (RNP-AR) approach into an Australian airport is immediately reported to CASA.

8 The operator must immediately report to CASA any matter concerning an RNAV (RNP-AR) approach that relates to the safety of such approaches.

9 Before commencing an RNAV (RNP-AR) approach, the pilot in command must ensure that:

(a) both of the approved aircraft GNSS receivers are operational; and

(b) updating of the FMS by VOR is inhibited; and

(c) the RNP approach is loaded from the current approved navigation database and validated by the flight crew.

10 At all times during an RNAV (RNP-AR) approach, the pilot in command must ensure that:

(a) the approach is flown by the autopilot in final approach if the RNP is below 0.30; and

(b) the approach is flown in accordance with the current approved navigation database setting out that approach; and

(c) navigation performance scales showing the L/DEV and V/DEV are displayed to the pilot in command and the co-pilot.

11 Operational approval for the operator to conduct RNAV (RNP-AR) approaches is extended only to the destinations documented in the operator's AOC operations specification.

12 A Flight Operational Safety Assessment must be completed for the associated aerodrome and procedures for RNAV (RNP-AR) approach operations below 0.30.

Schedule 3 Dictionary

In this instrument:

AFM means aircraft flight manual.

ANP means the actual navigation performance of the aircraft as displayed to the flight crew by the FMS.

approved aircraft means an RNP-capable Boeing 737-800 aeroplane operated by the operator.

approved navigation database means a navigation database:

(a) on a medium approved by the manufacturer of an approved aircraft as suitable for use with the aircraft; and

(b) incapable of modification by the operator or flight crew of the approved aircraft in which it is installed.

approved pilot means a pilot, employed by the operator, who has been trained by the operator's approved training and checking organisation to conduct RNAV (RNP-AR) approaches and departures in accordance with the operator's Operations Manual.

authorised RNAV (RNP-AR) IAP, for this instrument, means an RNAV (RNP-AR) instrument approach procedure designed by a certified designer under Part 173 of CASR 1998, with charts clearly marked "FOR CASA APPROVED OPERATORS ONLY".

authorised RNAV (RNP-AR) IDP, for this instrument, means an RNAV (RNP-AR) instrument departure procedure designed by a certified designer under Part 173 of CASR 1998, with charts clearly marked "FOR CASA APPROVED OPERATORS ONLY".

CAO 20.7.1B means Civil Aviation Order 20.7.1B.

FMS means the flight management system (of an aeroplane).

RNAV means an Area Navigation System.

RNAV (RNP-AR) approach means an RNAV (RNP-AR) instrument approach in I.M.C. under the I.F.R. for which authorisation is required in Australia.

RNAV (RNP-AR) departure means an RNAV (RNP-AR) instrument departure in I.M.C. under the I.F.R. for which authorisation is required in Australia.

RNP means the required navigation performance as displayed to the flight crew by the FMS.

RNP-capable aeroplane means an aeroplane:

(a) that is approved for area navigation (RNAV); and

(b) that meets the RNP capability necessary for an approved RNP operation in accordance with the aeroplane's flight manual; and

(c) whose FMS permits the RNP type to be selected and displayed to the flight crew.

RNP type means a level of navigation performance capability expressed in nautical miles and specified in the approved aircraft's AFM to indicate the minimum navigation system requirements needed to operate in an area, on a route or in a procedure.

Example RNP 0.30.

XTK error means the cross-track difference between the indicated position of the approved aircraft and the planned position as displayed to the flight crew by the FMS.