

Part 173

CAA Consolidation

10 March 2017

Instrument Flight Procedure Service Organisation - Certification and Operation

DESCRIPTION

Part 173 prescribes –

- rules governing the certification and operation of organisations that provide services for the design and maintenance of instrument flight procedures; and
- the technical standards for the design of instrument flight procedures.

The Part does not apply to the design of aircraft performance operating limitations or flight paths for critical engine inoperative emergency procedures.

Part 173 aims to ensure that the design, maintenance, and promulgation of instrument flight procedures intended for use by aircraft operating under instrument flight rules (IFR) in the New Zealand Flight Information Region (NZFIR) meet or exceed the International Civil Aviation Organisation (ICAO) standards and recommended practices for instrument flight procedures.

This document is the current consolidated version of Part 173 produced by the Civil Aviation Authority, and serves as a reference only. It is compiled from the official ordinary rules that have been signed into law by the Minister of Transport. Copies of the official rule and amendments as signed by the Minister of Transport may be obtained from the Civil Aviation Authority or may be downloaded from the official web site at: www.caa.govt.nz

10 March 2017 2 CAA of NZ

Bulletin

This Part first came into force on 23 October 2008 and now incorporates the following amendments:

| Amendment | Effective date |
|-------------|-----------------|
| Amendment 1 | 25 March 2010 |
| Amendment 2 | 1 February 2016 |
| Amendment 3 | 10 March 2017 |

Summary of amendment:

| Amendment 1 | Rule 173.53 is revoked and replaced |
|-------------|-------------------------------------|
|-------------|-------------------------------------|

(9/CAR/1)

Amendment 2 Rules 173.51, 173.67, 173.69, (8/CAR/1) 173.71,173.103, 173.301 and

Appendix A are revoked and replaced; and rule 173.303 is

inserted.

Amendment 3 Amending rule 173.301 (the Safety

(16/CAR/1) Management transition rule) to

clarify matters to do with the timing and submission of implementation plans and to correct references to applicants and to remove paragraph

(f) of the existing rule.

List of Rules

| Subpart | A — General | 6 |
|---------|--|----|
| 173.1 | Purpose | 6 |
| 173.3 | (Reserved) | 6 |
| 173.5 | Requirement for certificate | 6 |
| 173.7 | Application for certificate | 6 |
| 173.9 | Issue of certificate | 7 |
| 173.11 | Privileges of certificate | 7 |
| 173.13 | Duration of certificate | 7 |
| 173.15 | Renewal of certificate | 8 |
| • | B — Certification Requirements | 8 |
| 173.51 | Personnel requirements | |
| 173.53 | Resource requirements | |
| 173.55 | Design of instrument flight procedures | |
| 173.57 | Authorisation of persons to certify instrument flight procedures | |
| 173.59 | Certification of instrument flight procedures | |
| 173.61 | Promulgation of instrument flight procedures | |
| 173.63 | Maintenance of instrument flight procedures | |
| 173.65 | Errors in published instrument flight procedures | |
| 173.67 | Management of records | 17 |
| 173.69 | Safety management | 18 |
| 173.71 | Instrument flight procedure service organisation exposition | 18 |
| • | C — Operating Requirements | 21 |
| 173.101 | Continued compliance | |
| 173.103 | Changes to certificate holder's organisation | |
| 173.105 | Cessation of maintenance of an instrument flight procedure | 23 |
| | D — Design criteria—instrument flight procedure | 23 |
| 173.201 | Design | 23 |
| • | E — Transition | 25 |
| 173.301 | Transition for instrument flight procedure service certificate | |
| | holders and applicants | 25 |

10 March 2017 4 CAA of NZ

| 173.303 Transitional safety management system for instrument flight procedure service certificate holders and applicants | |
|--|----|
| Appendix A — Qualifications and experience for senior persons | 30 |
| A.1 Senior person to certify instrument flight procedures | 30 |
| A.2 Senior person responsible for the system for safety management | 31 |

10 March 2017 5 CAA of NZ

Subpart A — General

173.1 Purpose

- (a) This Part prescribes—
 - the rules governing the certification and operation of an organisation that provides services for the design and maintenance of instrument flight procedures; and
 - (2) the technical standards for the design of instrument flight procedures.
- (b) This Part does not apply to the design of aircraft performance operating limitations or flight paths, for critical engine inoperative emergency procedures.

173.3 (Reserved)

173.5 Requirement for certificate

- (a) Except as provided for in paragraph (b) a person must not provide an instrument flight procedure service for—
 - (1) the New Zealand FIR; or
 - (2) the Auckland Oceanic FIR;

except under the authority of an instrument flight procedure service certificate issued in accordance with this Part.

(b) In this Part reference to the Auckland Oceanic FIR excludes those portions of airspace within the Auckland Oceanic FIR where an individual State has an agreement with New Zealand to regulate the State's IFR flight procedures.

173.7 Application for certificate

An applicant for the grant of an instrument flight procedure service certificate must complete form CAA 24173/01, and submit it to the Director with—

(1) the applicant's exposition required by rule 173.71; and

10 March 2017 6 CAA of NZ

(2) if applicable, a payment of the appropriate fee prescribed by regulations made under the Act.

173.9 Issue of certificate

Subject to Section 9 of the Act, an applicant is granted an instrument flight procedure service certificate if the Director is satisfied that—

- (1) the applicant meets the requirements of Subpart B; and
- (2) the applicant and the senior persons required by rule 173.51(a) are fit and proper persons; and
- (3) the granting of the certificate is not contrary to the interests of aviation safety.

173.11 Privileges of certificate

An instrument flight procedure service certificate—

- (1) authorises the holder of the certificate to—
 - (i) design, flight validate, certify, and maintain an instrument flight procedure; and
 - (ii) subject to the requirements of Part 95, make aeronautical information including aeronautical data relating to an instrument flight procedure that has been certified by the certificate holder and notified in the Gazette, available for publication and operational use by an aircraft; and
- (2) specifies the types of instrument flight procedure that the certificate holder is authorised to design, flight validate, certify and maintain.

173.13 Duration of certificate

- (a) An instrument flight procedure service certificate is granted or renewed for a maximum period of 5 years.
- (b) An instrument flight procedure service certificate remains in force until it expires, or is suspended or revoked.

10 March 2017 7 CAA of NZ

173.15 Renewal of certificate

An application for the renewal of an instrument flight procedure service certificate must be made using form CAA24173/01 and be submitted to the Director not less than 90 days before the certificate expires.

Subpart B — Certification Requirements

173.51 Personnel requirements

- (a) An applicant for the grant of an instrument flight procedure service certificate must employ, contract, or otherwise engage—
 - (1) a senior person identified as the chief executive who—
 - (i) has the authority within the applicant's organisation to ensure that the organisation's instrument flight procedure services can be financed and carried out in accordance with the requirements and standards prescribed by this Part; and
 - (ii) is responsible for ensuring that the organisation complies with the requirements and standards prescribed by this Part; and
 - (2) a senior person or persons responsible to the chief executive for—
 - (i) ensuring that the applicant's organisation complies with the organisation's exposition; and
 - (ii) the certification of every instrument flight procedure provided by the applicant's organisation for entry into the NZANR under Part 95 and made available for publication and operational use; and
 - (iii) the system for safety management required under rule 173.69; and
 - (3) sufficient personnel to plan, design, verify, and maintain the instrument flight procedures provided by the applicant's organisation.

10 March 2017 8 CAA of NZ

- (b) An applicant for the grant of an instrument flight procedure service certificate must establish a procedure for initially assessing, training, and for maintaining, the competence of—
 - (1) those personnel involved in the planning, design, verification, and maintenance of instrument flight procedures; and
 - (2) those senior personnel who are authorised to certify instrument flight procedures.
- (c) The senior person or persons responsible for the certification of instrument flight procedures must be authorised in accordance with rule 173.57 to certify the procedures.
- (d) The qualifications and experience for the senior persons referred to in paragraph (a)(2) are specified in Appendix A.

173.53 Resource requirements

- (a) An applicant for the grant of an instrument flight procedure service certificate must—
 - have available equipment that is appropriate for the design, design verification, certification, flight validation, and maintenance of the types of instrument flight procedure that are specified in the applicant's exposition; and
 - (2) have access to relevant and current data including, but not limited to, aeronautical data, land contour data, and obstacle data for the design, design verification, flight validation, and maintenance of the instrument flight procedures certified by, and maintained by, the applicant's organisation; and
 - (3) hold or have ready access to copies of relevant documentation comprising technical standards, practices, and instructions, and any other documentation that may be necessary for the design, design verification, certification, flight validation, and maintenance of the types of instrument flight procedure that are specified in the applicant's exposition.
- (b) An applicant for the grant of an instrument flight procedure service certificate must establish a procedure for ensuring that—

10 March 2017 9 CAA of NZ

- (1) personnel have access to the data referred to in paragraph (a)(2) for the types of instrument flight procedure specified in the applicant's exposition; and
- (2) the data referred to in paragraph (a)(2) is current, traceable, and meets the required level of verifiable accuracy for the design, design verification, flight validation, and maintenance of instrument flight procedures specified in the applicant's exposition.
- (c) An applicant for the grant of an instrument flight procedure service certificate must establish a procedure for controlling all documentation required by paragraph (a)(3) to ensure that—
 - (1) the documentation is reviewed and authorised by an appropriate person before issue and use; and
 - current issues of relevant documentation are available to personnel at every location if they need access to the documentation; and
 - every obsolete document is promptly removed from every point of issue and use; and
 - (4) a change to documentation is reviewed and authorised by an appropriate person before issue and use; and
 - (5) the current version of every item of documentation can be identified to prevent the use of superseded material.

173.55 Design of instrument flight procedures

- (a) An applicant for the grant of an instrument flight procedure service certificate must establish procedures for ensuring that every instrument flight procedure certified under the authority of the applicant's certificate in accordance with rule 173.59, is—
 - designed or amended using methods ensuring that the procedure meets the applicable requirements and standards prescribed in Subpart D; and

10 March 2017 10 CAA of NZ

- (2) independently verified, before certification, by a qualified person who is independent of the person directly responsible for the design; and
- (3) except as provided in paragraph (b), flight validated in accordance with the procedures required under paragraph (c), to ensure that—
 - the instrument flight procedure allows aircraft using the procedure to manoeuvre consistently within safe operating practices and pilot workloads for the categories of aircraft that the procedure is intended for; and
 - (ii) the instrument flight procedure provides azimuth and distance information, and vertical guidance information for a precision approach, in accordance with ICAO or other standards for the operation of aircraft to ensure that an aircraft using the procedure remains clear of obstacles; and
 - (iii) the instrument flight procedure is not affected by any radio frequency interference; and
 - (iv) visual guidance systems and cues for the runway are appropriate for the instrument flight procedure and are not confused by lighting, laser sky displays, or any other visual distraction.
- (b) The following instrument flight procedures do not require flight validation if it can be shown that current obstacle data meets the design requirements of the instrument flight procedure:
 - (1) an en-route or an instrument arrival procedure unless—
 - (i) there is doubt about the coverage of the navigation system supporting the requirements of the procedure; or
 - (ii) the procedure limits the flyability and performance characteristics of the class of aircraft the procedure is designed for:

10 March 2017 11 CAA of NZ

- (2) an instrument departure procedure unless the procedure limits the flyability and performance characteristics of the class of aircraft the procedure is designed for:
- (3) an amendment of a previously flight validated instrument approach procedure if
 - the design change can be verified during the design process; and
 - (ii) a safety assessment of the proposed amendment has been completed and confirms that no additional risks to the safety of the procedure are introduced by the amendment.
- (c) An applicant for the grant of an instrument flight procedure service certificate must establish procedures for conducting the flight validation of an instrument flight procedure as required by paragraph (a)(3).
- (d) The flight validation procedures required under paragraph (c) must include the use of equipment that—
 - has the precision, and accuracy traceable to appropriate standards, that are necessary for the validation being performed; and
 - (2) has known measurement uncertainties including, but not limited to, the software, firmware and crosswind uncertainties; and
 - (3) records the actual flight path of the validation aircraft, and
 - (4) is checked before being released for use, and at intervals not exceeding the calibration intervals recommended by the manufacturer, to establish that the system is capable of verifying the integrity of the instrument flight procedure, and
 - (5) is operated in accordance with flight validation system procedures and criteria by persons who are competent and current on the system used.
- (e) An applicant for the grant of an instrument flight procedure service certificate must establish procedures for justifying the application of paragraph (b) to an instrument flight procedure.

10 March 2017 12 CAA of NZ

- (f) An applicant for the grant of an instrument flight procedure service certificate must establish procedures for ensuring that during the processes of design, maintenance, or transfer of data of an instrument flight procedure—
 - the applicable aeronautical data and aeronautical information complies with the standards specified in RTCA Inc. document number RTCA/DO-201A Standards for Aeronautical Information; and
 - (2) manipulation or processing of aeronautical data complies with the standards specified in RTCA Inc. document number RTCA/DO-200A Standards for Processing Aeronautical Data; and
 - (3) any transfer of aeronautical information within the certificate holder's organisation, or to or from external entities, complies with the standards specified in the Aeronautical Information Transfer Model (AIXM-5).
- (g) An applicant for the grant of an instrument flight procedure service certificate may use alternative standards equivalent to the standards specified in paragraph (f).

173.57 Authorisation of persons to certify instrument flight procedures

- (a) Subject to paragraphs (b), (c), and (d), an applicant for the grant of an instrument flight procedure service certificate must establish a procedure for authorising a senior person or persons to certify that an instrument flight procedure has been designed in accordance with and meets, every applicable standard and requirement prescribed by Subpart D.
- (b) An authorisation must not be issued to a person unless the person meets the applicable training and experience requirements specified in Appendix A.1.
- (c) Every authorisation that is issued to a person must be in writing and must specify the types of instrument flight procedure that the person is authorised to certify.

10 March 2017 13 CAA of NZ

(d) An instrument flight procedure type that is specified on an authorisation must not be inconsistent with the types of instrument flight procedures specified on the instrument flight procedure service certificate.

173.59 Certification of instrument flight procedures

- (a) Subject to paragraphs (b) and (c) an applicant for the grant of an instrument flight procedure service certificate must establish a procedure for the certification of every instrument flight procedure that the applicant's organisation proposes to design, make available for operational use, and publish in the Aeronautical Information Publication New Zealand.
- (b) The procedure required by paragraph (a) must include—
 - (1) details of the checks to be carried out by a senior person, who is authorised to certify the particular type of instrument flight procedure, to ensure that the instrument flight procedure meets the applicable requirements and standards prescribed by this Part; and
 - (2) the means for providing the Director with the information specified in rule 173.61(c) for the entry of the instrument flight procedure into the NZANR.
- (c) A person who is authorised in accordance with rule 173.57 to certify an instrument flight procedure must not certify an instrument flight procedure that the person has designed.

173.61 Promulgation of instrument flight procedures

- (a) In accordance with rule 95.51, an applicant for the grant of an instrument flight procedure service certificate must establish a procedure ensuring that—
 - (1) the information required in paragraph (c) is provided to the Director; and
 - (2) an instrument flight procedure is not published or made available for operational use unless the Director has notified the holder of the instrument flight procedure service certificate that the instrument flight procedure has been entered into the NZANR, and the date for operational use of the instrument flight

10 March 2017 14 CAA of NZ

- procedure has been notified in the *Gazette* in accordance with rule 95.55.
- (b) The procedure required by paragraph (a) must include—
 - (1) details of the means for coordinating with the aeronautical information service provider the publishing of the instrument flight procedure in the AIPNZ; and
 - (2) details of the means to check that the initial publication of, or any change to, an instrument flight procedure published under paragraph (a) has been accurately published in the AIPNZ.
- (c) The following information is required by the Director for every entry of an instrument flight procedure into the NZANR:
 - (1) the name or other appropriate identifier that is acceptable to the Director to uniquely identify the instrument flight procedure:
 - (2) aeronautical data that is acceptable to the Director to define and describe the instrument flight procedure:
 - (3) the date that the instrument flight procedure is intended to come into effect:
 - (4) a statement signed by the senior person referred to in rule 173.59(b)(1), certifying that the instrument flight procedure meets the applicable standards and requirements prescribed by this Part:
 - (5) a statement signed by a senior person, of an appropriate instrument flight procedure service organisation certifying that the instrument flight procedure is to be maintained in accordance with the organisation's procedures required by rule 173.63.
- (d) For the purpose of paragraph (c)(5), an appropriate instrument flight procedure organisation is an organisation that is certificated in accordance with Part 173 and whose certificate authorises the design, flight validation, certification, and maintenance of the particular type of instrument flight procedure.

10 March 2017 15 CAA of NZ

173.63 Maintenance of instrument flight procedures

- (a) An applicant for the grant of an instrument flight procedure service certificate must establish a procedure for maintaining, in accordance with the requirements of this Part, every instrument flight procedure that, in accordance with the statement required under rule 173.61(c)(5), is maintained under the authority of the certificate.
- (b) The procedure required by paragraph (a) must include details for every instrument flight procedure to be reviewed, and flight validated if necessary,—
 - on a periodic basis ensuring that the instrument flight procedure continues to meet the applicable standards and requirements of this Part; and
 - (2) if there is a change in any of the data referred to in rule 173.53(a)(2) that may affect the integrity of the instrument flight procedure.
- (c) The procedure required under paragraph (a) must include and document the grounds and criteria for establishing or changing the interval between the periodic maintenance reviews for each instrument flight procedure.

173.65 Errors in published instrument flight procedures

- (a) An applicant for the grant of an instrument flight procedure service certificate must establish a procedure for recording, investigating, correcting, and reporting in accordance with Part 12, any identified error, and any identified non-conformance or suspected non-conformance with the standards and requirements of this Part, in an instrument flight procedure that is certified or maintained under the authority of the certificate.
- (b) The procedure required by paragraph (a) must require that—
 - (1) an instrument flight procedure is immediately withdrawn from operational use if the error or non-conformance referred to in paragraph (a) affects, or may affect, the safety of an aircraft operation; and

10 March 2017 16 CAA of NZ

- (2) the error or non-conformance is corrected, and certified by a senior person who is appropriately authorised in accordance with rule 173.57; and
- (3) the correction required by paragraph (2) is clearly identified and promulgated by the most appropriate means relative to the operational significance of the error or non-conformance; and
- (4) the source of the error or non-conformance is identified, and—
 - (i) if possible, eliminated to prevent a recurrence; and
 - (ii) preventive action is taken to ensure that the source of the error or non-conformance has not affected the integrity of any other instrument flight procedure; and
- (5) the Authority is notified, in accordance with Part 12, of a promulgated information incident relating to an error or non-conformance referred to in paragraph (a).

173.67 Management of records

- (a) An applicant for the grant of an instrument flight procedure service certificate must establish a procedure for the management of records that are required for the applicant organisation's functions relating to the design, certification and maintenance of instrument flight procedures.
- (b) The management of records under paragraph (a) includes the identification, collection, indexing, storage, safekeeping, accessibility, maintenance and disposal of records.
- (c) The procedure required by paragraph (a) must provide for the following to be recorded for every instrument flight procedure that is certified in accordance with rule 173.59 and every instrument flight procedure that is maintained in accordance with rule 173.63—
 - (1) the details required by rule 173.61(c) for the instrument flight procedure; and
 - (2) details of the instrument procedure design carried out in accordance with rule 173.55, including but not limited to design

10 March 2017 17 CAA of NZ

- verification, amendment, validation, justification for not validating, and certification activities; and
- (3) details of the promulgation and checking activities; and
- (4) details of any actions taken under rule 173.65 regarding errors and non-conformances in an instrument flight procedure; and
- (5) details of every maintenance review and flight validation carried out, in accordance with the procedures required by rule 173.63.
- (d) The procedure required by paragraph (a) must also provide for the following—
 - (1) a record, that includes details of the qualifications, experience, training, assessments, and authorisations if applicable, for—
 - (i) every senior person required by rule 173.51(a)(2); and
 - (ii) personnel required by rule 173.51(a)(3); and
 - (2) [*revoked*]
 - (3) the records required by paragraphs (c) and (d) to be legible, accurate, permanent, and retrievable in a legible format; and
 - (4) the records required by paragraph (c) to be retained for at least 5 years after the associated instrument flight procedure is withdrawn from use.

173.69 Safety management

An applicant for the grant of an instrument flight procedure service certificate must establish, implement, and maintain a system for safety management in accordance with rule 100.3.

173.71 Instrument flight procedure service organisation exposition

(a) An applicant for the grant of an instrument flight procedure service certificate must provide the Director with an exposition that contains—

10 March 2017 18 CAA of NZ

- (1) a statement signed by the chief executive on behalf of the applicant's organisation confirming that the exposition and any included manuals—
 - define the organisation and demonstrate its means and methods for ensuring ongoing compliance with this Part;
 and
 - (ii) are to be complied with by the applicant's organisation's personnel at all times; and
- (1A) in relation to the system for safety management required by rule 173.69,—
 - (i) all of the documentation required by rule 100.3(b); and
 - (ii) for an applicant that is not applying for a renewal of an instrument flight procedure service certificate, an implementation plan that describes how the system for safety management will be implemented; and
- (2) the titles and names of the senior person or persons required by rule 173.51(a)(2); and
- (3) details of the duties and responsibilities of the senior person or persons required by rules 173.51(a)(1) and (2) including—
 - (i) matters for which they have responsibility to deal directly with the Director or the Authority on behalf of the organisation; and
 - (ii) responsibilities for safety management; and
- (4) if there is more than one senior person listed under paragraph(2), an organisation chart showing the lines of responsibility of those persons; and
- (4A) information identifying the lines of safety responsibility within the organisation; and
- (5) the name of every senior person who is authorised in accordance with rule 173.57 to certify instrument flight procedures; and

10 March 2017 19 CAA of NZ

- (6) details of the scope of the authorisation issued to every person listed under paragraph (5); and
- (7) a list of the types of instrument flight procedure to be designed, certified, or maintained by the applicant's organisation; and
- (8) details of the applicant's means of meeting the requirements of rule 173.53(a) regarding—
 - (i) equipment; and
 - (ii) access to relevant and current data; and
 - (iii) access to copies of relevant documentation; and
- (9) details of the applicant's means of meeting the requirements of rule 173.53(b) regarding instrument flight procedures not requiring flight validation; and
- (10) details of the applicant's procedures as required by—
 - (i) rule 173.51(b) regarding assessment and competence of personnel; and
 - (ii) rule 173.53(b)(1) regarding access to data; and
 - (iii) rule 173.53(b)(2) regarding currency and accuracy of data; and
 - (iv) rule 173.53(c) regarding control of documentation; and
 - (v) rule 173.55(a) regarding design, verification and flight validation of instrument flight procedures; and
 - (vi) rule 173.55(c) regarding flight validation of instrument flight procedures; and
 - (vii) rule 173.55(e) regarding the justification for instrument flight procedures not requiring flight validation; and
 - (viii) rule 173.55(f) or (g) regarding the compliance with standards; and

10 March 2017 20 CAA of NZ

- (ix) rule 173.57 regarding authorisation of senior persons; and
- (x) rule 173.59 regarding certification of instrument flight procedures; and
- (xi) rule 173.61 regarding promulgation of instrument flight procedures and the means to provide details of each procedure to the Director; and
- (xii) rule 173.63 regarding maintenance of instrument flight procedures; and
- (xiii) rule 173.65 regarding errors in published instrument flight procedures; and
- (xiv) rule 173.67 regarding management of records; and
- (xv) [revoked]
- (11) procedures for controlling, amending, and distributing the exposition.
- (b) The applicant's exposition must be acceptable to the Director.

Subpart C — Operating Requirements

173.101 Continued compliance

The holder of an instrument flight procedure service certificate must—

- (1) hold at least one complete and current copy of the certificate holder's exposition required by rule 173.71 at the certificate holder's principal location; and
- (2) comply with every procedure and standard detailed in the exposition; and
- (3) make each applicable part of the exposition available to personnel who require the applicable part to carry out their duties: and

10 March 2017 21 CAA of NZ

- (4) continue to meet the standards and comply with the requirements of Subpart B prescribed for certification under this Part; and
- (5) notify the Director of any change of the certificate holder's postal address, address for service, telephone number, or facsimile number within 28 days of the change.

173.103 Changes to certificate holder's organisation

- (a) A holder of an instrument flight procedure service certificate must—
 - (1) subject to paragraph (b), ensure that the holder's organisation's exposition is amended so that it remains a current description of the holder's organisation; and
 - (2) ensure that any amendment made to its exposition meets the applicable requirements of this Part; and
 - (3) comply with the amendment procedures contained in its exposition; and
 - (4) forward to the Director for retention a copy of each amendment that the certificate holder makes to its exposition as soon as practicable after the amendment is incorporated into its exposition; and
 - (5) amend its exposition as the Director considers necessary in the interests of aviation safety.
- (b) Before a holder of an instrument flight procedure service certificate changes any of the following, prior acceptance by the Director is required:
 - (1) the person identified as the chief executive:
 - (2) the title or name of any senior person specified in the exposition required by rule 173.71(a)(2):
 - (3) the types of instrument flight procedure specified on the holder's certificate:
 - (4) the system for safety management, if the change is a material change.

10 March 2017 22 CAA of NZ

- (c) The Director may impose conditions under which the holder of the instrument flight procedure certificate must operate during or following any of the changes specified in paragraph (b).
- (d) The holder of an instrument flight procedure certificate must comply with any condition imposed by the Director under paragraph (c).
- (e) If any of the changes under paragraph (b) requires an amendment to the instrument flight procedure certificate, the holder of the certificate must forward the certificate to the Director for endorsement of the change as soon as practicable.

173.105 Cessation of maintenance of an instrument flight procedure

If the holder of an instrument flight procedure service certificate proposes to discontinue the maintenance of an instrument flight procedure as required by rule 173.63, the certificate holder must notify the Director in writing of the proposal to discontinue the maintenance at least 90 days before the maintenance ceases.

Subpart D — Design criteria—instrument flight procedure

173.201 Design

- (a) Every instrument flight procedure must be designed in accordance with the requirements of this Part and in accordance with the appropriate design processes, standards, guidelines, and aeronautical data quality requirements contained in the following:
 - (1) ICAO Documents—
 - (i) Doc 8168, Procedures for Air Navigation Services Aircraft Operations — Volume I Flight Procedures, and Volume II, Construction of Visual and Instrument Flight Procedures:
 - (ii) Doc 8697, Aeronautical Chart Manual:
 - (iii) Doc 9365, Manual of All-Weather Operations:

10 March 2017 23 CAA of NZ

- (iv) Doc 9613 Performance Based Navigation Manual Volume I Concept and Implementation Guidance, and Volume II Implementing RNAV and RNP:
- (v) Doc 9881, Guidelines for Electronic Terrain, Obstacle and Aerodrome Mapping Information:
- (2) ICAO Annexes—
 - (i) Annex 4, Aeronautical Charts:
 - (ii) Annex 6, Operation of Aircraft:
 - (iii) Annex 11, Air Traffic Services:
 - (iv) Annex 14, Volumes I & II Aerodromes:
 - (v) Annex 15, Aeronautical Information Services:
- (3) Any other guideline or standard that is applicable to a particular type of instrument flight procedure and is acceptable to the Director.
- (b) For the purposes of paragraph (a), if there is a conflicting difference between any of the applicable design processes, standards, guidelines, or aeronautical data quality requirements, the particular design process, standard or guideline to be used must be acceptable to, or specified by, the Director.
- (c) The design of an instrument flight procedure must—
 - be coordinated with all appropriate air traffic service providers;
 and
 - (2) be compatible with any air traffic service and associated procedure that is provided within the area or areas of airspace where the instrument flight procedure is intended to be established; and
 - (3) take into account—
 - (i) any noise abatement procedure prescribed by Part 93; and

10 March 2017 24 CAA of NZ

- (ii) any bylaws or other legislation restricting aircraft operations; and
- (iii) the classification and any associated designation of the airspace in which the instrument flight procedure is to be established and any adjacent airspace that may be affected by the procedure; and
- (iv) the effect that the proposed instrument flight procedure may have on any other instrument flight procedure established in the airspace.
- (d) An instrument flight procedure must not be designed for an aerodrome or heliport unless the operator of the aerodrome or heliport agrees in writing that the aerodrome or heliport may be used for IFR operations using the intended instrument flight procedure.
- (e) An instrument flight procedure must not be designed on or use a ground based aeronautical facility unless—
 - (1) the aeronautical facility is operated under the authority of an aeronautical telecommunication service certificate issued in accordance with Part 171: and
 - (2) the holder of the aeronautical telecommunication service certificate agrees in writing that the aeronautical facility can be used for the intended instrument flight procedure.

Subpart E — Transition

173.301 Transition for instrument flight procedure service certificate holders and applicants

- (a) This rule applies to each—
 - (1) holder of an instrument flight procedure service certificate:
 - applicant for the grant of an instrument flight procedure service certificate.

10 March 2017 25 CAA of NZ

- (b) Before the date for implementation set in accordance with subparagraph (e)(2), an organisation to which this rule applies is not required to comply with—
 - (1) rule 173.51(a)(2)(iii), if instead of a senior person responsible for the system for safety management, the organisation has a senior person responsible for the safety management system.
 - (2) rule 173.69, if instead of establishing, implementing, and maintaining the system for safety management, the organisation has established a safety management system that complies with rule 173.303:
 - (3) rule 173.71(a)(1A)(i):
 - (4) rule 173.71(a)(3)(ii):
 - (5) rule 173.71(a)(4A).
- (c) A completed CAA form and implementation plan must be submitted to the Director—
 - (1) after 1 February 2016 for an applicant for the grant of an instrument flight procedure service certificate under subparagraph (a)(2); and
 - (2) by 30 July 2016 for a holder of an instrument flight procedure service certificate under subparagraph (a)(1).
- (d) The implementation plan referred to in paragraph (c) must—
 - include a proposed date for implementation of the system for safety management; and
 - (2) outline how the organisation plans to implement the system for safety management required under rule 173.69.
- (e) The Director will, if acceptable,—
 - (1) approve the organisation's implementation plan; and

10 March 2017 26 CAA of NZ

- (2) set the date for implementation of the system for safety management.
- (f) In setting the date under subparagraph (e)(2), the Director must have regard to the following:
 - (1) the capability of the organisation:
 - (2) the complexity of the organisation:
 - (3) the risks inherent in the activities of the organisation:
 - (4) the date of any certificate renewal:
 - (5) any resource or scheduling impacts on the organisation or the Authority or both:
 - (6) the date for implementation must not be later than 1 February 2018.
- (g) A holder of an instrument flight procedure service certificate under subparagraph (a)(1) does not have to submit an implementation plan with its certificate renewal application.
- (h) This rule expires on 1 February 2018.

173.303 Transitional safety management system for instrument flight procedure service certificate holders and applicants

- (a) The safety management system required by rule 173.301(b)(1)(ii) must be established to ensure the organisation's compliance with, and the adequacy of, the procedures required by this Part.
- (b) The safety management system must include—
 - (1) a safety policy incorporating the development of a safety culture and safety procedures, including a procedure for reporting and investigating an occurrence conducted in accordance with Part 12; and
 - a procedure for establishing and monitoring safety indicators;
 and

10 March 2017 27 CAA of NZ

- (3) a procedure for identifying an existing or potential problem within the organisation's systems and processes; and
- (4) a procedure for controlling and mitigating risks within the organisation that may affect the integrity of instrument flight procedures; and
- (5) a procedure for corrective action to ensure that an identified problem is investigated and analysed, and the cause of the problem is remedied; and
- (6) a procedure for preventive action to ensure that a cause of an identified potential problem is remedied; and
- an internal audit programme to audit the applicant's organisation for conformity with its exposition, safety policy, and procedures; and
- (8) a management review procedure that may, if appropriate, include the use of statistical analysis ensuring the continuing suitability and effectiveness of the safety management system in satisfying the requirements of this Part; and
- (9) a safety management manual documenting the operation of the safety management system and providing relevant information on the risks and how they are managed (including the procedures required in paragraphs (b)(1) to (b)(8)), and a register of significant hazards for the organisation and how those hazards are controlled.
- (c) The safety management procedures must include a means for ensuring that the safety policy is understood, implemented, and maintained at all levels of the organisation.
- (d) The procedure required by paragraph (b)(5) for corrective action must provide for the following—
 - (1) how to correct an existing problem; and

10 March 2017 28 CAA of NZ

- (2) how to ascertain whether or not the problem has affected or potentially affected the integrity of any instrument flight procedure; and
- (3) how to follow up a corrective action to ensure that the action is effective; and
- (4) how to amend any procedure that is required by this Part as a result of a corrective action; and
- (5) how management is to measure the effectiveness of any corrective action taken.
- (e) The procedure required by paragraph (b)(6) for preventive action must provide for the following—
 - (1) how to correct a potential problem; and
 - (2) how to ascertain what other effects the cause of an identified potential problem may have; and
 - how to follow up a preventive action to ensure the action is effective; and
 - (4) how to amend any procedure, required by this Part, as a result of a preventive action; and
 - (5) how management measures the effectiveness of any preventive action taken.
- (f) The internal audit programme required by paragraph (b)(7) must—
 - (1) specify the frequency and location of the audits, taking into account the nature of the activity to be audited; and
 - (2) require audits to be performed by trained personnel who are independent of those with direct responsibility for the activity being audited; and
 - (3) require the results of audits to be reported to the personnel responsible for the activity being audited and to the manager responsible for internal audits; and

10 March 2017 29 CAA of NZ

- (4) measure the effectiveness of any preventive or corrective action taken by the personnel responsible for the activity being audited since the last audit; and
- (5) require preventive or corrective action to be taken by the personnel responsible for the activity being audited if problems are found by the audit; and
- (6) provide for follow-up audits to be undertaken to review the effectiveness of any preventive or corrective action taken.
- (g) The procedure for management review required by paragraph (b)(8) must—
 - (1) specify the frequency of management reviews of the safety management system, taking into account the need for the continuing effectiveness of the system; and
 - identify the senior person responsible for the management review; and
 - (3) require the results of the review to be evaluated and recorded.
- (h) The senior person who is responsible for the safety management system must have direct access to the chief executive on matters affecting the integrity of any instrument flight procedure for which the organisation is responsible.
- (i) This rule expires on 1 February 2018.

Appendix A — Qualifications and experience for senior persons

This appendix specifies the qualifications and experience for the senior person or persons required by rule 173.51(a)(2).

A.1 Senior person to certify instrument flight procedures

(a) **Training** — have successfully completed an ICAO PANS-OPS training course, or a training course accepted by the Director as an equivalent, for the design of instrument flight procedures.

10 March 2017 30 CAA of NZ

- (b) **Experience in application of instrument flight procedures** have at least 10 years' experience in the application of instrument flight procedures through experience gained in air traffic control, as a flight crew member on IFR operations, in operational control of IFR operations, or other experience accepted by the Director as equivalent.
- (c) **Experience in design of instrument flight procedures** at least 2 years' experience designing instrument flight procedures which must include—
 - (1) under supervision by a procedure designer whose qualifications are accepted by the Director, the design of at least 3 instrument flight procedures of the type that the person is to be authorised to certify; or
 - (2) for a new instrument flight procedure type, experience accepted by the Director in designing or certifying similar instrument flight procedure types.

A.2 Senior person responsible for the system for safety management

The senior person or persons required by rule 173.51(a)(2)(iii) must be able to demonstrate competency and experience relevant to the management of safety systems and the activities of the certificate holder.

10 March 2017 31 CAA of NZ