

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

I, CRAIG FOSS, Associate Minister of Transport,

**HEREBY MAKE** the following ordinary rules.

SIGNED AT Wellington

This

day of

2015

by HON CRAIG FOSS

Associate Minister of Transport

#### **Civil Aviation Rules**

# Part 173, Amendment 2

Instrument Flight Procedure Service Organisation – Certification and Operation

Docket 8/CAR/1

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### Rule objective

The objective of amendment 2 to Part 173 is to introduce new rules to improve New Zealand's aviation safety performance in a way that embeds an effective safety culture in aviation organisations; and to ensure New Zealand meets its international obligations as a signatory to the Convention on International Civil Aviation.

#### **Extent of consultation**

This project was originally conceived to have a three stage implementation plan where the safety management provisions would be included in every affected rule. A project working group was formed in 2009 to address stage 1 which included international air operators, their maintainers, international aerodromes, and air traffic control.

Subsequent development shifted the direction to a single stage rule implementation, with 2 different transition times; and the safety management requirements would mostly be contained in a new rule part – Part 100.

As a result, a new policy project developed options for a safety management rule proposal in a risk based regulation environment. This policy was consulted in 2013 and was well received by the industry; and rule development continued as recommended in the policy document.

A Notice of Proposed Rulemaking, NPRM 15-02, containing the proposed new Part 100 and consequential amendments to Parts 19, 115, 119, 121, 125, 135, 137, 139, 141, 145, 146, 148, 149, 171, 172, 173, 174 and 175 was issued for public consultation under Docket 8/CAR/1 on 7 May 2015.

The publication of this NPRM was notified in the Gazette on 7 May 2015. The NPRM was published on the CAA web site and mailed to identified stakeholders including representative organisations who were considered likely to have an interest in the proposal.

A period of 42 days was allowed for comment on the proposed rule.

# Summary of submissions

20 written submissions and 60 oral comments were received on the NPRM. These submissions and comments have been considered and as

a result a number of proposed amendments were removed for reasons of standardisation and the submissions influenced the shape of the transitional provisions. No submissions related specifically to Part 173. See also Consultation Details on page 19.

#### **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 replacing the affected existing rules with the amended rules.

#### Effective date of rule

Amendment 2 to Part 173 comes into force on 1 February 2016.

### Availability of rules

Civil Aviation Rules are available from-

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

Freephone: 0800 GET RULES (0800 438 785)

# **Subpart B — Certification Requirements**

Rule 173.51 is revoked and replaced by the following rule:

#### 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.
- (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.

#### Rule 173.67 is revoked and replaced by the following rule:

### 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 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.

# Rule 173.69 is revoked and replaced by the following rule:

# 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.

# Rule 173.71 is revoked and replaced by the following rule:

# 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—
  - (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
- (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
- (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**

Rule 173.103 is revoked and replaced by the following rule:

### 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.

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- (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.

# **Subpart E — Transition Provisions**

Rule 173.301 is revoked and replaced by the following rule:

# 173.301 Transition for instrument flight procedure service certificate holders and applicants

- (a) This rule applies to each—
  - (1) instrument flight procedure service certificate holder:
  - (2) instrument flight procedure service certificate applicant.
- (b) Before 1 February 2018, an organisation to which this rule applies—
  - (1) is not required to comply with—
    - (i) 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.
    - (ii) 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:
    - (iii) rule 173.71(a)(1A):
    - (iv) rule 173.71(a)(3)(ii):

- (v) rule 173.71(a)(4A); but
- (2) by 30 July 2016 must submit to the Director with the accompanying completed CAA form an implementation plan that—
  - includes a proposed date for implementation of the system for safety management; and
  - (ii) outlines how the organisation plans to implement the system for safety management required under rule 173.69.
- (c) The Director will, if acceptable,—
  - (1) approve the organisation's implementation plan; and
  - set the date for implementation of the system for safety management.
- (d) To avoid doubt, the date for implementation is the date the Director approves the system for safety management.
- (e) In setting the date under rule 173.301(c)(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.
- (f) If the organisation is an applicant for an instrument flight procedure service certificate it must submit its application for such a

certificate together with the plan for implementation of the system for safety management.

(g) This rule expires on 1 February 2018.

#### Insert rule 173.303 after rule 173.301:

# 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—
  - 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
  - (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
  - (7) 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
  - (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

- (3) 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
  - (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

- (2) identify the senior person responsible for the management review; and
- 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 is revoked and replaced by the following Appendix:

# 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.
- (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.

#### **Consultation Details**

(This statement does not form part of the rules contained in Part 173. It provides details of the consultation undertaken in making the rules.)

A Notice of Proposed Rulemaking, NPRM 15-02, Safety Management, containing the proposed rules was issued for public consultation under Docket 8/CAR/1 on 7 May 2015.

20 responses to the NPRM were received. None related specifically to Part 173. Two submissions related to the proposed transition provisions as follows:

#### Transition rules

In regard to the time allowed for transition, most believed that the implementation time allowed was adequate. However, 2 submitters felt that it was too short – both were working in areas that were mainly Part 135 operations, but had a small element of Part 125 operations that would require the shorter transition period. This, they felt was unachievable; and in one case the submitter suggested that Part 125 operations should be allowed the longer transition to match Part 135.

One submitter suggested dropping the transitional rule that requires a transitional plan by a fixed date, as it appears nearly impossible to enforce in a meaningful way. The submitter questioned the CAA's intention if the CAA does not agree with an implementation plan? The submitter was of the view that as long as a plan is submitted, regardless of its content, the rule has been met. The intent of this rule may well be better achieved by other means, such as the anticipated timelines the CAA expects it will take to process an application for an exposition change that includes a SMS.

CAA Response: The CAA has reviewed the proposed transitional provisions and came to the following conclusions:

- The timing of the proposed implementation stages has been examined and found that 1 year for the first group and 3 years for the second group would be unreasonably short considering the following:
  - the number of affected certificates;

- non-validated data on the level of proactive implementation already undertaken by organisations; and
- o an untested SMS certification process.

Therefore, while still under consideration pending further review of information from other States who have already been through this process, the times are expected to be extended.

• The decision by CAA that organisations submit an implementation plan was informed by current best practice and that other States have done likewise. To ensure that the organisation's SMS is properly developed within the required timeframe, some measure of additional oversight is necessary. Therefore, the final rules will be drafted to require that an implementation date is agreed between the organisation and the CAA; and that the implementation plan must be approved.

One of the acknowledged sources of hazards is change in an organisation's operation, and it is one of the reasons that effective change management practices be applied at the outset. Therefore, any changes to the implementation plan and SMS will be documented and submitted to the CAA for approval. If a change is required, the CAA may provide additional guidance to the organisation to ensure that the SMS remains in compliance with the SMS rules and is implemented within the specified period following the effective date of the final rule.

The final draft will also be explicit in requiring that, at the end of the implementation period (i.e. the implementation date), the SMS is acceptable to the Director.