



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 7th day of Dec 2015

by **HON CRAIG FOSS**

A handwritten signature in black ink, appearing to read 'C. Foss', is written over the printed name 'HON CRAIG FOSS'.

Associate Minister of Transport

Civil Aviation Rules

Part 146, Amendment 3

Aircraft Design Organisations – Certification

Docket 8/CAR/1

Contents

| | |
|--|-----------|
| Rule objective..... | 3 |
| Extent of consultation..... | 3 |
| Summary of submissions..... | 3 |
| Examination of submissions..... | 4 |
| Insertion of Amendments | 4 |
| Effective date of rule..... | 4 |
| Availability of rules..... | 4 |
| Subpart B — Certification Requirements | 5 |
| 146.51 Personnel requirements..... | 5 |
| 146.65 Safety management | 6 |
| 146.67 Design organisation exposition..... | 6 |
| Subpart C — Operating Requirements | 8 |
| 146.105 Changes to certificate holder's organisation..... | 8 |
| 146.107 Revoked..... | 10 |
| Subpart D – Transition Provisions | 10 |
| 146.151 Transition for design organisation certificate holders and applicants..... | 10 |
| 146.153 Transitional internal quality assurance for design organisation certificate holders and applicants..... | 12 |
| Consultation Details | 14 |
| Personnel requirements | 14 |
| Transition rules..... | 15 |

Rule objective

The objective of amendment 3 to Part 146 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. One submission related to Part 146. Having considered this

submission the status quo was retained in relation to certain amendments; however, the transition provisions were revised. Refer also to *Consultation Details* on page 14.

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 3 to Part 146 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 146.51 is revoked and replaced by the following rule:

146.51 Personnel requirements

(a) An applicant for the grant of a design organisation certificate must employ, contract, or otherwise engage—

- (1) a senior person identified as the chief executive who has the authority within the applicant's organisation to ensure that all activities undertaken by the organisation can be financed and carried out in accordance with the requirements and standards prescribed by this Part; and
- (2) a senior person or persons who is or are responsible for ensuring that the applicant's organisation complies with the requirements of this Part. Such nominated person or persons must be ultimately responsible to the chief executive for the following functions:
 - (i) design control;
 - (ii) inspection and testing;
 - (iii) the system for safety management; and
- (3) if design approval functions are required by the organisation, a senior person who holds a delegation to approve design changes in accordance with rule 21.73; and
- (4) sufficient personnel to plan, perform, supervise, inspect, and certify the design activities listed in the applicant's exposition.

(aa) The senior person required by paragraph (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.

(b) The applicant must—

- (1) establish a procedure for initially assessing, and for maintaining, the competency of personnel involved in

planning, performing, supervising, inspecting, or certifying the design activities performed by the applicant's organisation; and

- (2) provide those personnel with written evidence of the scope of their authorisation.

Rule 146.65 is revoked and replaced by the following rule:

146.65 Safety management

An applicant for the grant of a design organisation certificate must establish, implement and maintain a system for safety management in accordance with rule 100.3.

Rule 146.67 is revoked and replaced by the following rule:

146.67 Design organisation exposition

(a) An applicant for the grant of a design organisation 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—
 - (i) define the design organisation and demonstrate its means and methods for ensuring ongoing compliance with this Part; and
 - (ii) are to be complied with at all times; and
- (1A) in relation to the system for safety management required by rule 146.65,—
 - (i) all of the documentation required by rule 100.3(b); and
 - (ii) for an applicant that is not applying for a renewal of a design organisation 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 rules 146.51(a)(1),(2), and (3); and
- (3) the duties and responsibilities of the senior person or persons required by rules 146.51(a)(1), (2), and (3), including—
 - (i) matters for which the person has the responsibility to deal directly with the Director or the Authority on behalf of the organisation; and
 - (ii) responsibilities for safety management; and
- (4) an organisation chart showing lines of responsibility of the senior person or persons required by rules 146.51(a)(1), (2), and (3); and
- (4A) information identifying the lines of safety responsibility within the organisation; and
- (5) details of all locations where the applicant conducts design activities and testing, and the facilities at those locations; and
- (6) details of the applicant's provision of satisfactory environmental conditions at each of the locations listed under paragraph (a)(5); and
- (7) details of the applicant's staffing structure at each of the locations listed under paragraph (a)(5); and
- (8) a detailed description of the scope of work to be undertaken by the applicant; and
- (9) a detailed description of the applicant's design control system; and
- (10) details of any authorisations made by the organisation to other persons for design work and testing; and
- (11) details of the organisation's procedures required by—
 - (i) rule 146.51(b) regarding the competence of personnel; and

- (ii) rule 146.51(b) regarding the on-going training of personnel; and
- (iii) rule 146.55(2) regarding the control and calibration of tools and test equipment; and
- (iv) rule 146.55(2) regarding the confirmation of design data; and
- (v) rule 146.59(b) regarding the operation of the design control system; and
- (vi) rule 146.61(a) regarding the collecting, investigating, analysing, and distributing of information relating to defects and occurrences; and
- (vii) rule 146.61(b) regarding the Instructions for Continued Airworthiness of any type certificated product they design; and
- (viii) rule 146.63(a) regarding the identification, collection, indexing, storage, maintenance and disposal of records; and
- (ix) rule 146.63(b) regarding the content and retention of records; and
- (x) [*revoked*]

(12) procedures to control, amend, and distribute the exposition.

(b) The applicant's exposition must be acceptable to the Director.

Subpart C — Operating Requirements

Rule 146.105 is revoked and replaced by the following rule:

146.105 Changes to certificate holder's organisation

(a) A holder of a design organisation certificate must ensure that the exposition for the holder's organisation is amended so that it remains a current description of the holder's organisation.

- (b) The certificate holder must—
- (1) ensure that any amendment made to its exposition meets the applicable requirements of this Part; and
 - (2) complies with the amendment procedures contained in its exposition.
- (c) Subject to paragraph (d), the certificate holder must forward to the Director for retention a copy of each amendment to its exposition as soon as practicable after the amendment is incorporated into its exposition.
- (d) Before a certificate holder changes any of the following, prior acceptance by the Director is required:
- (1) the chief executive;
 - (2) the listed senior persons;
 - (3) the scope of the design activities the certificate holder undertakes;
 - (4) the location at which work is carried out;
 - (5) the system for safety management, if the change is a material change.
- (e) The Director may impose conditions under which the certificate holder must operate during or following any of the changes specified in paragraph (d).
- (f) The certificate holder must comply with any condition imposed by the Director under paragraph (e).
- (g) If any change referred to in this rule requires an amendment to the design organisation certificate, the certificate holder must forward the certificate to the Director for endorsement of the change as soon as practicable.
- (h) The certificate holder must amend its exposition as the Director may consider necessary in the interests of aviation safety.

146.107 Revoked**Subpart D – Transition Provisions**

Insert rule 146.151 after rule 146.105:

146.151 Transition for design organisation certificate holders and applicants

- (a) This rule applies to each—
- (1) design organisation certificate holder:
 - (2) design organisation certificate applicant.
- (b) Before 1 February 2021, an organisation to which this rule applies—
- (1) is not required to comply with—
 - (i) rule 146.51(a)(2)(iii), if instead of a senior person responsible for the system for safety management, the organisation has a senior person responsible for internal quality assurance:
 - (ii) rule 146.65, if instead of establishing, implementing, and maintaining the system for safety management, the organisation has established an internal quality assurance system that complies with rule 146.153:
 - (iii) rule 146.67(a)(1A):
 - (iv) rule 146.67(a)(3)(ii):
 - (v) rule 146.67(a)(4A); but
 - (2) by 30 July 2018 must submit to the Director with the accompanying completed CAA form an implementation plan that—
 - (i) 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 146.65.
- (c) The Director will, if acceptable—
 - (1) approve the organisation’s implementation plan; and
 - (2) 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 146.151(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 2021.
- (f) If the organisation is an applicant for a design organisation 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 2021.

Insert rule 146.153 after rule 146.105 and following rule 146.151:

146.153 Transitional internal quality assurance for design organisation certificate holders and applicants

(a) The internal quality assurance system required by rule 146.151(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 internal quality assurance system must include—

- (1) a safety policy and safety policy procedures that are relevant to the applicant's organisational goals and the expectations and needs of its customers; and
- (2) a procedure to ensure quality indicators, including defect and incident reports, and personnel and customer feedback, are monitored to identify existing problems or potential causes of problems within the system; and
- (3) a procedure for corrective action to ensure that existing problems that have been identified within the system are corrected; and
- (4) a procedure for preventive action to ensure that potential causes of problems that have been identified within the system are remedied; and
- (5) an internal audit programme to audit the applicant's organisation for conformity with its safety policy; and
- (6) management review procedures to ensure the continuing suitability and effectiveness of the internal quality assurance system in satisfying the requirements of this Part.

(c) The safety policy procedures must ensure that the safety policy is understood, implemented, and maintained at all levels of the organisation.

(d) The procedure for corrective action must specify how—

- (1) existing problems are to be corrected; and

- (2) corrective action are to be followed up to ensure the action is effective; and
 - (3) any procedure required for this Part is to be amended as a result of corrective action; and
 - (4) management will review the effectiveness of any corrective action taken.
- (e) The procedure for preventive action must specify how—
 - (1) potential problems are to be corrected; and
 - (2) preventive action is to be followed up to ensure the action is effective; and
 - (3) any procedure required for this Part is to be amended as a result of preventive action; and
 - (4) management will review the effectiveness of any preventive action taken.
- (f) The internal quality audit programme must—
 - (1) specify the frequency and location of the audits taking into account the nature of the activity to be audited; and
 - (2) ensure audits are performed by trained auditing personnel who are independent of those having direct responsibility for the activity being audited; and
 - (3) ensure the results of audits are reported to the personnel responsible for the activity being audited and the manager responsible for internal audits; and
 - (4) 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
 - (5) ensure follow up audits to review the effectiveness of any preventive or corrective action taken.

- (g) The procedure for management review must—
- (1) specify the frequency of management reviews of the quality assurance system taking into account the need for the continuing effectiveness of the system; and
 - (2) identify the manager who is responsible for the review of the quality assurance system; and
 - (3) ensure the results of the review are evaluated and recorded.
- (h) The senior person who has the responsibility for internal quality assurance must have direct access to the chief executive on matters affecting safety.
- (i) This rule expires on 1 February 2021.

Consultation Details

(This statement does not form part of the rules contained in Part 146. 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. One related to Part 146 as follows:

Personnel requirements

Two submitters commented that proposed rule 145.51(b) separates “personnel authorisations” and “safety management” unless otherwise accepted by the Director; and notes that currently the function of internal audit may be undertaken concurrently with other functions by one person. Other submitters made the same comment on rules 19.317, 115.51, 146.51, and 148.51. One of those submitters suggested qualifying the requirement by referring to the size of the organisation.

CAA Response: The introduction of the proposed requirement was intended to standardise that requirement across all certificate types

– most of which have had that provision since the original issue of those rule parts (including rule 115.51(b)(1) which is unchanged in this proposal). There was no intent to change any existing structure. However, in light of the concerns raised, the CAA will recommend restoring the status quo in rules 145.51(b), 146.51(b), and 148.51(b).

Two submissions related to the 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*
 - *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.