



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

**I, HARRY JAMES DUYNHOFEN**, Minister for Transport Safety,

**HEREBY MAKE** the following ordinary rules.

**SIGNED AT** Wellington

This *16<sup>th</sup>* day of *September* 2008

by **HARRY JAMES DUYNHOFEN**

A handwritten signature in black ink, appearing to read 'Harry James Duynhoven', is written over the printed name. The signature is fluid and cursive, with a large initial 'H' and a distinctive ending flourish.

Minister for Transport Safety

**Civil Aviation Rules**

**Part 95 Initial Issue**

**Instrument Flight Procedures—Registration**

*Docket 99/CAR/1333 & 99/CAR/1334*

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## **Rule objective**

The objective of Civil Aviation Rule Part 95 is to prescribe the requirements for instrument flight procedures intended for use by aircraft operating under instrument flight rules (IFR) to be given legal effect for use within the New Zealand civil aviation system.

Part 95 is associated with Part 173 which provides for the certification of organisations involved with the design, certification and maintenance of instrument flight procedures.

The following amendments to other Parts are consequential to the implementation of Part 95:

- Amendment 40 to Part 1
- Amendment 14 to Part 19
- Amendment 4 to Part 71
- Amendment 19 to Part 91
- Amendment 4 to Part 93
- Amendment 19 to Part 121
- Amendment 14 to Part 125
- Amendment 18 to Part 135
- Amendment 6 to Part 172

## **Background**

The original development of Part 95 and its associated Part 173 was commenced in 1998 as part of the original suite of Civil Aviation Rules that were developed under the Civil Aviation Act 1990 to replace the old 1953 Civil Aviation Regulations.

Two notices of proposed rulemaking were published in October 1998 to provide for public consultation on the proposals to certificate air navigation service organisations for the purpose of devolving the design

and certification of instrument flight procedures to appropriate industry organisations.

A number of submissions on the NPRMs were received from industry and other interested persons. However after consideration of the submissions and development of proposed final rules taking into account the submissions, the project was put aside because of a higher priority for other rule development work.

The Part 173/95 rule development project was restarted in 2003 with the proposed final rules being updated to take into account the latest rule drafting styles and standards from the Parliamentary Counsel Office, the changed international standards for instrument flight procedures, and the submissions received during the updating.

### **Extent of consultation**

Two NPRM, 98-7 for Part 95 Visual and Instrument Procedures for Flight Under IFR, and 98-8 for Part 173 Air Navigation Service Organisations – Certification, containing the proposed rules prescribing the criteria and the processes for the establishment of visual and instrument procedures for flight under IFR and prescribing requirements for the certification of organisations providing IFR procedure design services were issued for public consultation under dockets 95/CAR/1107 and 95/CAR/1035 respectively on 23 October 1998.

The publication of these NPRM was notified in the Gazette on 22 October 1998 and advertised in the daily newspapers in the five main provincial centres on 31 October 1998. The NPRM were 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 further letter dated 15 November 1998 was sent to the civil aviation Swedavia Joint Consultative Group seeking their views on the provision of meteorological minima for IFR approaches to alternate aerodromes at the time of flight planning. (The Swedavia Joint Consultative Group was a joint industry/CAA group established to consult initially on the development of the Civil Aviation Act 1990, then on the programme and priorities for the rules re-write project that commenced in 1990, and then

on the development of the various rules under the new Civil Aviation Act 1990.)

A period of 56 days was allowed for comment on the proposed rules.

Five submissions on NPRM 98-8 for Part 173, 9 submissions on NPRM 98-7 for Part 95, and 6 responses to the Swedavia Joint Consultative Group letter were received. The submissions and comments were considered and taken into account in the original draft final rule proposals. The docket numbers were updated in 1998 to 99/CAR/1333 for Part 95 and 99/CAR/1334 for Part 173.

The rule development project for Parts 95 and 173 was recommenced in 2003 under dockets 99/CAR/1333 for Part 95 and 99/CAR/1334 for Part 173. The Part 95 draft final rule proposals from the initial project were, between 2003 and 2007, updated to take into account current legal drafting practices, the amendments that had been made to other rules in the meantime and submissions made between 2003 and 2007.

The original NPRM 98-7 for Part 95 included significant amendments to Part 91 General Operating and Flight Rules regarding operating rules, general flight rules, instrument flight rules, and use of GPS for air navigation including equipment requirements. These amendments originally proposed for Part 91 have in some cases been addressed by other amendments to Part 91, and others may be addressed in a future amendment to Part 91.

The only amendments to Part 91, and other Parts, that are now being processed as part of this Part 95 rule development project are those amendments that are a direct consequence of the implementation of Part 95.

During the finalisation and updating of updating of Parts 95 and 173, drafts of the updated rules were sent for consultation to 40 international and New Zealand organisations and individuals who were known to have, or indicated they had an interest in IFR procedure design. Twenty two of those 40 organisations and individuals responded and this consultation continued during the development of the attached final rules. The respondees who are individuals or representatives of organisations (both from within and outside New Zealand) with experience in, or an interest in, Part 173 and IFR flight procedure

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design, support these proposed final rules. These proposed final rules were also forwarded to those persons who responded to the original NPRM. No comment, except those responding to the redrafting process, was received from this latter group.

### **Summary of submissions**

A total of 20 submissions were received on the original NPRM (5 on NPRM 98-8 Part 173, 9 on NPRM 98-7 Part 95, and 6 on the Swedavia Joint Consultative Group letter). These submissions and other comments received by the CAA were considered and draft final rules were developed from the original NPRM. These draft final rules were further developed into the final rules. During this final development process, the rules and the changes to the rules were distributed to 40 stakeholders, interested parties, and the submitters responding to the original NPRM for their review and comment. Comments, mainly associated with Part 173, were received from 22 of the 40 persons and organisations contacted. The feedback and discussion was considered and taken into account in the final rules submitted for the Minister's signature.

Significant changes have been made to Part 95 from the original proposals contained in NPRM 98-7. A number of the proposed definitions and abbreviations are already contained in Part 1 and other Parts, and the proposed criteria and standards for the design of instrument flight procedures have been moved into Part 173. The requirements prescribed in Part 95 for giving legal effect for an instrument flight procedure have also been amended to reflect the current practices and requirements.

The rules as amended were then referred to Parliament's Regulations Review Committee before being signed by the Minister for Transport Safety.

### **Examination of submissions**

Submissions and comments 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.

**Effective date of rule**

Part 95 comes into force on 23 October 2008.

**Availability of rules**

Civil Aviation Rules are available from—

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

Freephone: 0800 GET RULES (0800 438 785)

## Part 95 Instrument Flight Procedure — Registration

### Subpart A — General

#### 95.1 Purpose

This Part prescribes rules governing the promulgation of instrument flight procedures for use by aircraft operating under instrument flight rules in the New Zealand FIR or the Auckland Oceanic FIR.

### Subpart B — Promulgation and Notification of Instrument Flight Procedures

#### 95.51 Promulgation of instrument flight procedures

(a) Except as provided for in paragraph (b), a person must not promulgate an instrument flight procedure for use by aircraft operating under IFR in the New Zealand FIR or the Auckland Oceanic FIR unless—

- (1) the details of the instrument flight procedure are entered in the New Zealand Air Navigation Register in accordance with this Part; and
- (2) the effective date for the instrument flight procedure is notified in the *Gazette* in accordance with rule 95.55.

(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.

#### 95.53 Entry of details into NZ Air Navigation Register

(a) Subject to paragraph (b) the following details of every instrument flight procedure that is intended for use by aircraft operating under IFR in the New Zealand FIR or the Auckland Oceanic FIR must be entered into the NZANR by the Director:



- (1) the name or other appropriate identifier for the instrument flight procedure:
  - (2) aeronautical data to define and describe the instrument flight procedure:
  - (3) the date that the instrument flight procedure comes into effect:
  - (4) the identity of the holder of the instrument flight procedure service certificate who is responsible for certifying the instrument flight procedure as required by paragraph (b)(1):
  - (5) the identity of the holder of the instrument flight procedure service certificate who is responsible for the maintenance of the instrument flight procedure as required by paragraph (b)(2).
- (b) Before entering aeronautical data into the NZANR that describes an instrument flight procedure, the Director must be satisfied that—
- (1) a person, who is appropriately authorised by the holder of an appropriate and current air navigation service certificate issued in accordance with Part 173, has certified that the instrument flight procedure meets the applicable requirements and standards of Part 173; and
  - (2) a person who represents the holder of an appropriate and current instrument flight procedure service certificate issued in accordance with Part 173, certifies that the instrument flight procedure is to be maintained in accordance with the certificate holder's procedures required by rule 173.63; and
  - (3) during any entry, retrieval or storage processes, any processing or manipulation of the aeronautical data required under paragraph (a) complies with the standards for the manipulation or processing of data specified in RTCA Inc. document number RTCA/DO-200A, or other standards accepted by the Director as an equivalent.

(c) The Director must ensure that any transfer of aeronautical data associated with an instrument flight procedure, from or to the NZANR complies with the standards specified in the Aeronautical Information Transfer Model (AIXM-5) document or other standards accepted by the Director as an equivalent.

### **95.55 Gazette notification**

(a) An instrument flight procedure may not come into effect for use by aircraft operating under IFR unless—

- (1) the details of the instrument flight procedure are entered into the NZANR in accordance with rule 95.53; and
- (2) except as provided in paragraph (b), the Director has notified the following information in the *Gazette*—
  - (i) the name, or other applicable identifier for the instrument flight procedure; and
  - (ii) the date that the instrument flight procedure comes into effect for use by aircraft operating under IFR.

(b) An instrument flight procedure that will be effective for a period of 6 months or less is not required to be notified in the *Gazette* if the information required under (a)(2) is notified in an AIPNZ supplement or NOTAM.

### **95.57 Withdrawal of instrument flight procedure from use**

(a) If the Director is notified by the holder of an instrument flight procedure certificate, issued in accordance with Part 173, that the certificate holder intends to discontinue the maintenance of an instrument flight procedure that is entered in the NZANR, the Director must withdraw the instrument flight procedure from use by—

- (1) a notice in the *Gazette* which must identify the instrument flight procedure and specify the date that the procedure is to be withdrawn from use; and
- (2) on the date of withdrawal, remove the details of the instrument flight procedure from the NZANR.

(b) Despite paragraph (a), the Director may, by the most appropriate means, withdraw an instrument flight procedure from use if the Director has reasonable grounds to believe that—

- (1) the instrument flight procedure may be unsafe for use by aircraft operating under IFR; or
- (2) the instrument flight procedure is not being maintained in accordance with the applicable requirements of Part 173.

(c) If the Director withdraws an instrument flight procedure from use under paragraphs (a) or (b), the Director must—

- (1) confirm in writing the withdrawal of the instrument flight procedure with the holder of the instrument flight procedure service certificate listed in the NZANR as being responsible for the maintenance of that instrument flight procedure; and
- (2) take appropriate action to ensure that the instrument flight procedure is removed from the AIPNZ and from operational use; and
- (3) remove the instrument flight procedure and its associated aeronautical data from the NZANR.

### **95.59 Transition**

(a) Subject to paragraph (b), the requirements of rules 95.51 and 95.53(a) do not apply to an instrument flight procedure which is used for IFR flight and is published in the AIPNZ as of the 23 October 2008 until 23 October 2009.

(b) An instrument flight procedure which is published in the AIPNZ as of the 23 October 2008 is deemed to have been notified in the Gazette in accordance with rule 95.55(a)(2).

## Consultation Details

*(This statement does not form part of the rules contained in Part 95. It provides details of the consultation undertaken in making the rules.)*

The consultation for the development of the new rule parts 95 and 173 occurred in 2 stages under 2 NPRM between 1995 and the present. During the consultation the CAA reorganised its docket files and the docket numbers and titles for each project were changed as follows:-

- Docket 95/CAR/1107 NPRM 98-7 Part 95 Visual and Instrument Procedures for Flight Under IFR became Docket 99/CAR/1333 Part 95 Instrument Flight Procedures—Registration.
- Docket 95/CAR/1035 NPRM 98-8 Part 173 Air Navigation Service Organisations – Certification became Docket 99/CAR/1334 Part 173 Instrument Flight Procedure Service Organisation—Certification and Operation.

Notices of proposed rulemaking NPRM 98-08 Docket 95/CAR/1035 and NPRM 98-7 Docket 95/CAR/1107 were notified in the Gazette on 22 October 1998 and advertised in the daily newspapers in the five main provincial centres on 31 October 1998. The NPRM were published on the CAA web site and mailed to identified stakeholders including representative organisations who were considered likely to have an interest in the proposals. In addition a letter on aerodrome meteorological minima was distributed to the civil aviation Swedavia Joint Consultative Group.

The submissions and verbal comments from the NPRM, Swedavia Joint Consultative Group, and internally within the CAA were taken into account in the development of draft final rule proposals.

The draft final rule proposals from this process were, between 2003 and the present, updated to current legislative drafting practices and reformatted in the style of other rules regulating organisations providing services to aviation in New Zealand. The rules were also updated to meet current IFR procedure design standards, safety and quality requirements.

During this updating process drafts of the rules were sent for consultation to 40 organisations and persons who were known to or indicated they had an interest in IFR procedure design. Of the 40 requests for feedback 22 responded and this consultation continued during the development of the attached final rules. The respondents were both within NZ and overseas and were individuals or representatives of organisations who have experience, or an interest in IFR flight procedure design. The draft rules were also forwarded to those who responded to the original NPRM, no submission, other than any included in the 22 above was received from this latter group.

Details of the consultation relating to the Part 95 and 173 rules, are contained in the consultation details and historical information below.

The submissions and all background material used in developing the rules are held on the docket files and are available for public inspection at Aviation House, 10 Hutt Road Petone. Persons wishing to view the dockets should contact the Docket Clerk on Phone +64 560 9603 and ask for dockets 95/CAR/1035, 99/CAR/1334, 95/CAR/1107, and 99/CAR/1333.

### **Consultation detail during the final rule development process 2003 to 2007**

*Final Rules for Parts 173 and 95 were consulted on together.*

#### **Docket 99/CAR/1334 & 99/CAR/1333**

The feedback on the final rules from the external consultation and consultation within the CAA covered both general aspects of the rules and detail of the rules themselves.

Feedback covered:-

- The inclusion of meteorological operating minima as separate rules.
  - *The CAA agreed that meteorological operating minima are an integral part of an IFR flight procedure design and that separate rules are not required.*
- Cessation of service supply and the effect of this on NZ aviation.

- *Agreements for the continuity of supply were investigated and as none could be found the renewal notification times for certificate renewal or cessation of service were extended from 30 days to 90 days.*
- Database integrity.
  - *Data integrity was not covered in the original rule proposals. The CAA has included industry standard requirements for data integrity covering the following 3 areas - the generation of data, the manipulation of data, and the transfer of data.*
- The New Zealand Air Navigation Register.
  - *The NZANR is required by Part 71. The requirements for the entries in the register are dictated by current industry use of the information to provide the automated guidance of aircraft during flight under IFR. The current requirements for flight management systems have been taken into account in the development of the rules*
- Allowance and process for temporary procedures.
  - *Allowances for temporary procedures have been taken into account in the rules.*
- Ability for the Director to withdraw an instrument flight procedure from operational use.
  - *The ability for the Director to withdraw instrument flight procedures for safety reasons has been allowed for in the rules. Constraints have been placed in the rules.*
- Ability for the Director to impose conditions.
  - *This has been allowed for in the rules.*
- Definitions to be refined and included in rules (Part 1).
  - *Definitions of terms used and acronyms have been added to Part 1.*

- Review of Part 12 reporting requirements.
  - *The part 12 reporting requirements associated with incidents involving aeronautical data were reviewed and updated in line with other incident reporting.*
- Concepts and scope of validation, verification, and testing, as applied to procedure design and flight validation.
  - *The concepts of validation, verification, and testing as applied to procedure design and flight validation were clarified and the ICAO use was adhered to. The scope of flight validation was clarified.*
- Scope of the coverage of the rules to include Auckland Oceanic FIR. NZ FIR State responsibilities.
  - *There was clear feedback on this subject which indicated that the rules should clearly show the area of their application and coverage.*
  - *The civil aviation rules cover the New Zealand civil aviation system. New Zealand accepts responsibility for the management of the airspace in the Auckland Oceanic Flight Information Region under the ICAO Asia and Pacific Regions Air Navigation Plan. Under Section 14 of the Civil Aviation Act 1990, the objectives of the Minister are—*
    - *to undertake the Minister's functions in a way that contributes to the aim of achieving an integrated, safe, responsive, and sustainable transport system; and*
    - *to ensure that New Zealand's obligations under international civil aviation agreements are implemented.*
  - *Section 14A(b) of the Act provides that a function of the Minister under the Act is to administer New Zealand's participation in the Convention and any other international aviation convention, agreement, or understanding to which the Government of New Zealand is a party.*

- *Section 99(1) of the Act provides that subject to the Civil Defence Emergency Management Act 2002, Airways Corporation of New Zealand Ltd. is the only person entitled to provide the following aviation services in New Zealand –*
  - *area control services;*
  - *approach control services;*
  - *flight information services.*
- *As a result the CAA has a Memorandum of Understanding with the Airways Corporation covering the provision of international air traffic services in the Auckland Oceanic FIR. This Memorandum calls on the Airways Corporation to provide services in accordance with ICAO requirements and the appropriate Civil Aviation Rules.*
- *The new rule Part 173 will therefore be applicable within the Auckland Oceanic FIR through the memorandum of understanding.*
- **Harmonisation with other regulatory authorities.**
  - *During the development of these rules ongoing discussion with other regulatory authorities has continued. Due to the differing philosophies of the Australian rules (use of manuals of standards incorporated by reference) and a lack of equivalent rules in the FAA system discussion and feedback on the proposed rules was carried out.*
- **Maintenance of IFR procedures.**
  - *The CAA accepts that an instrument flight procedure may be designed by one certificate holder but maintained by a different certificate holder. The current rules were developed to accommodate this situation.*



## **Historical Information 1998 – 2003 - Detail**

### **Docket 95/CAR/1107 Part 95 NPRM 98-7**

#### **Proposed New Rules**

### **Part 95 Visual and Instrument Procedures for Flight Under IFR**

#### **Extent of consultation**

A Notice of Proposed Rulemaking, NPRM 98-7, containing the proposed rule to prescribe requirements for the certification of organisations providing instrument flight rules (IFR) procedure design and the determination of aerodrome operating minima services was issued for public consultation under Docket 1107 on 23 October 1998.

The publication of this NPRM was notified in the Gazette on 22 October 1998 and advertised in the daily newspapers in the five main provincial centres on 31 October 1998. 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 56 days was allowed for comment on the proposed rule.

#### **Summary of Submissions on original Docket 1107 NPRM 98-7**

Nine submissions were received in response to the NPRM and the issues raised were addressed as follows:

#### **General Submissions on original NPRM 98-7**

**1.2** One submitter stated: “I cannot figure out the charting responsibilities under these rules particularly for IFR en route charts. For example where two certificate holders produce a GPS route from an aerodrome to a destination in uncontrolled airspace and the termination of the routes is 2 nm apart, who makes the decision as to which route will be displayed on the chart if any? It appears that there could be

considerable dispute between the charting organisation and the certificate holders. Will there be more than one charting agency as a pilot using an IFR route chart in uncontrolled airspace would be unable to determine the routing of another aircraft if that aircraft was using a different chart with different information. Will the Director have control of this type of information”?

**CAA response:** *Charting is a CAA responsibility that is being done by contract by another organisation. As such there will be only one organisation conducting this function and only one source for promulgating aeronautical information which will ensure that pilots will not be using any other chart for the likes of IFR route information.*

One submitter stated: “there is some inconsistency in Part 91 regarding speed. Some references are in knots (or kts) whereas some are knots IAS. Consistent usage within the rule should be introduced”.

**CAA response:** *The final rule will be edited for consistency as suggested by the submitter.*

One submitter noted that NPRM 98-7 uses appendices whereas the recent amendment to Part 172 has done away with the appendices in favours of subparts.

**CAA response:** *At the time of the NPRM there was no recorded response to this comment. Current policy is to use both subparts and appendices to Rules. Generally the appendices contain technical standards and the subparts the requirements.*

One submitter stated: “Part 95 introduces some significant changes to the meaning of terms that have been in use in New Zealand for some significant period of time, and are ingrained into the New Zealand aviation psyche. This is alluded to in the preamble page 4 and pages 7 and 8. We consider that CAA must ensure the industry is prepared for the changes when they become effective sometime this year or early new year”.

**CAA response:** *The CAA agrees and is taking measures to educate pilots on the changes.*

## Specific comments on original NPRM 98-7

### 95.1 Applicability

One submitter stated: “the rule prescribes a whole lot of stuff that is very specific in detail on routes, altitudes, change over points and reporting points etc. However this rule does not include any of the details that it says it does”. The submitter indicated they could only assume that there would be further proposed rules introduced under this Part.

*CAA response: This rule simply states the applicability and purpose of the rule part. The actual procedures are established when they are entered into the New Zealand Air Navigation Register by the Director, and for pilot use presented in a diagrammatic form in the AIP.*

One submitter stated: “it would seem appropriate that, with the introduction of Part 95, an opportunity is taken to establish procedures with respect to the identification of way-points, significant points, arrival procedures, instrument approach procedures, and ATS routes. At present guidance is available within the appendices of Annex 11, and within Document 8168. They believe that the CAA should develop policy on the above, taking into account domestic and international requirements, and insert this policy into the rule. They do however suggest that this policy should be subject to further consultation with various users to ensure it encompasses all domestic and international options and should there be a reference to this detail being officially available from the New Zealand Air Navigation Register, similar to statements in Parts 71 and 73”?

*CAA response: The CAA agrees and is establishing policy and procedures in accordance with ICAO recommended practices to coincide with the establishing of procedures under Part 95.*

### 95.3 Definitions and abbreviations

One submitter stated: “minimum en route safety altitude is described in vertical dimension of m (metres). This is in contravention of ICAO Annex 5 which specifies inter-alia non-SI units for permanent use. Those units applicable to New Zealand include altitudes, elevations and heights in feet. They suggest the removal of references to metres”.

**CAA response:** *These are not rules of the air and the use of metres is derived from ICAO Doc 8168, Volume II, construction of visual and instrument flight procedures which is incorporated by reference under Part 173.*

One submitter stated: “the definition of sole-means navigation system is rubbish. Sole-means is one type of navigation unit which references no other means such as VOR only, or NDB only, or GPS only”.

**CAA response:** *The CAA does not agree. The definition of sole-means navigation is only used with regard to the use of GPS and is the definition used by ICAO.*

One submitter stated: “MSA has always meant minimum safe altitude. There is no need to change this definition as it is in common use. Also the abbreviation MESA becomes superfluous as this also has the same meaning as MSA, i.e. any lower altitude (at this point) is not safe”.

**CAA response:** *The term MSA is changed to align it with ICAO definition and in particular as used in procedure design. The term MESA is used for the same reason and in addition will be the same as that used by most other countries.*

One submitter stated: “the definition of racetrack procedure be deleted as it is included in the definition of reversal procedure”.

**CAA response:** *The CAA does not agree as both terms are used and defined in ICAO Doc 8168, Volume II which is incorporated by reference under this rule.*

One submitter suggested: “with regard to compulsory reporting point, there should be a comma after the second word *point*”.

**CAA response:** *There was no response recorded at the time of the NPRM.*

One submitter suggested: “with regard to Fix, a fix may be established within a procedure that uses other than a navigation aid i.e. it may require use of GPS or RNAV. The word *radio* should be deleted”.

**CAA response:** *The CAA does not agree as locations defined by other navigation aids are termed as waypoints.*

One submitter suggested: “for Minimum radar vector altitude it would be more correct for the word *vector* to be *vectoring*”.

**CAA response:** *The CAA does not agree. This definition is as adopted by other countries and using the word *vectoring* does not add any value or significance to the definition.*

One submitter suggested: “Minimum en-route altitude. Minimum sector altitude, minimum radar vectoring altitude and minimum VOR/DME altitude definitions do not take into account the 3000 feet vertical requirement over Volcanic Hazard Areas that are at level one activity as is presently done”.

**CAA response:** *The comment is correct in that the minimum levels in Volcanic Hazard Areas are established by other procedures and criteria and have no relevance to the terms used for IFR flight.*

One submitter suggested: “radio navigation aid facility paragraph (2) should include reference to VORTAC and TACAN, and paragraph (3) should have a colon after (SSR)”.

**CAA response:** *VORTAC and TACAN IFR procedures are not authorised for use by civil aircraft and as such are not included as radio navigation aid facilities in ICAO Doc 8168. Consequently VORTAC and TACAN are not included in the definition of radio navigation aid facility.*

## **95.11 Designing visual and instrument flight procedures**

One submitter stated: “additional requirements are required in this rule requiring the permission of the appropriate Part 171 certificate holder to be obtained and in the case of an instrument approach procedures the agreement of the aerodrome operator”.

**CAA response:** *The CAA agrees with this comment and the rule is amended accordingly. The provision for the Part 171 certificate holder is required, as they are responsible under Part 171 for the ongoing integrity of the facility for the purpose it is being used. Likewise the*

*agreement of the aerodrome operator is required, as the operator is then responsible for obstacle control associated with an instrument approach procedure.*

One submitter stated: “paragraph (a)(2) requires the person designing the procedures to flight-test to ensure compliance with Annex 10”.

The submitter asked, “who is responsible for ongoing flight checks to determine whether the nav aids continue to provide the standards required and is this the responsibility of the certificate holder or the Part 171-certificate holder? If it is the latter surely there should be a requirement for the procedure designer to advise the Part 171-certificate holder of the nav aid requirements for the procedure. An example of changed requirements could be where the procedure design is to ILS Cat 2 standards where the previous use has been to standard ILS minima and the change could affect the tolerances for maintenance of the ILS”.

**CAA response:** *The applicable Part 171 certificate holder is responsible for the ongoing periodic inspection and testing of a radio navigation aid facility which includes flight test under rule 171.59.*

One submitter stated “with regard to paragraph (a)(5), IFR procedures inevitably conflict with each other. IFR routes that cross at right angles conflict as do departure procedures from a runway conflict with instrument approach procedures to the reciprocal of that runway. I am not sure what the intent of the rule is but perhaps it could read that the IFR departure, arrival and instrument procedures to an aerodrome in uncontrolled airspace must not conflict with the procedures at another aerodrome. However that situation could exist provided appropriate warnings were on the charts. A suggestion could be ‘where the procedures conflict with the flight paths of any other procedures established within the airspace the certificate holder shall be required to demonstrate that the procedures can operate without creating a hazardous situation’”.

**CAA response:** *The CAA agrees that as written this paragraph is restrictive and the rule is amended by replacing the word conflict with inhibit the use of. Any conflict that may arise with the establishment of a new procedure will need to be resolved by the CAA in consultation*

*with the parties concerned prior to entering that procedure in the navigation register.*

One submitter stated: “paragraph (a)(6)(ii) is unreasonable as there are no standards for the certificate holder to apply. Provided the certificate holder takes account of (a)(6)(i) then that should be sufficient. If the procedures cause undue noise then the noise abatement procedures will inevitably change and the certificate holder will need to amend the procedures to comply. Subparagraph (a)(6)(ii) should be deleted”.

**CAA response:** *The CAA does not agree with this comment. Aircraft noise is a sensitive issue to the public and if possible visual and instrument flight procedures should be designed to minimise aircraft noise over congested areas. If aircraft noise is ignored, the chances are that subsequently the public will demand the establishment of noise abatement procedures which may not be in the best interest of aircraft operators.*

### **95.13 Establishing visual and instrument flight procedures.**

One submitter stated: “it appears that the Director establishes minimum flight altitudes and the procedures to achieve these altitudes by physically entering the procedures received from a certificate holder in to the Air Navigation Register. Surely the Director must conduct a thorough audit of the procedures before entry as it could be considered negligent if errors in the procedures were entered by the Director without check”.

**CAA response:** *The CAA does not agree with this comment. Part 173 is a standard certification rule and as with other certificated activities, once the certificated is granted, the holder is subject to ongoing audit by the Director. The audit of each procedure submitted by a Part 173 certificate to the Director would negate the purpose of certification and add considerable cost and time to the process.*

## Historical Information 1998-2003

### **Civil aviation Swedavia Joint Consultative Group Letter 15 November 1998 Civil Aviation Rule Part 95 — IFR Aerodrome Alternate Minima**

One submitter stated: “we believe that the determination of alternate minima should be left to the pilot-in-command based on 91.405(b)”.

One submitter stated: “in their opinion the current practice of prescribing aerodrome alternate minima be continued and that this information be contained within Part 95 and the IFG. This continues a procedure which has proved satisfactory to date and has the added advantage of requiring any ambiguity or potential for miscalculations in future” (*sic*).

One submitter stated: “it is probably appropriate that the determination of aerodrome alternate minima should be transferred to Part 91 as an operational consideration and left to the pilot-in-command to make the decision. Such a move would be consistent with the concept of providing more flexibility to participants in the aviation system and requiring them to take more responsibility for their actions”.

One submitter stated: “his preference would be to rely on the pilot-in-command to calculate alternate minima rather than prescribing such minima under Part 95”.

One submitter stated: “they would prefer that the present system is continued, in that aerodrome alternate minima are prescribed under Part 95. This is far simpler than requiring these to be calculated each time”.

One submitter stated: “with regard to your letter, it offers good potential for operations. My view of the best way to handle it would be for ease of planning of flights the State continues to publish alternate aerodrome minima which would be adequate for most planning, but in the operating rules permit an operator to determine alternate minima with regard to an approach to a runway that there is certainty to be used, and to promulgate those minima in manuals. An example of benefit would be a runway with a straight-in approach at 600 feet/2000m and the other end being a circling approach at 1000 feet/4000m. While the State alternate minima would be 1200 feet/6000m if the operator was certain that the straight-in approach would be used the alternate minima would



be 800 feet/4000m if included in the operator’s manual. For non-precision there is a further benefit in that the current alternate minima are based on the highest minima which inevitably is the non DME minima. The proposal would allow the determination to be based on the straight-in approach with DME. The main value can be when trying to locate a handy alternate when the destination weather is quite good. For example slightly below the criteria of the 1000 feet addition to the minima at destination and obviously no problem in a positive operation. The problem could be that the higher State alternate weather prevents the alternate fuel being based on a nearby alternate when the operator straight in assessment could allow the use”.

**CAA response:** *The responses are evenly divided between those wishing to establish their own alternate minima to the criteria specified under 91.405 and those wishing to apply alternate minima as prescribed under Part 95. On this basis it is decided to amend 91.405 to allow a pilot-in-command to establish alternate minima in accordance with the criteria specified in the rule or comply with the alternate minima prescribed under Part 95.*

## **Docket 95/CAR/1035 NPRM 98-8 Proposed New Rules Part 173 Air Navigation Service Organisation—Certification**

### **Summary of Submissions and CAA responses on original NPRM**

Five submissions were received in response to the NPRM and the issues raised were discussed as follows.

#### **Proposed Rule Part 173**

##### **173.1 Purpose**

One submitter stated: “this rule part mentions IFR flight only. However many of the procedures applicable to IFR flight also apply to VFR flight, especially within class B and C airspace where, from an ATC point of view, the only difference is that the VFR flight must maintain VMC. Many separations within control zones apply equally to both IFR and VFR flights, and this rule should recognise that fact. ATC prefers to use the term *controlled flights*”.

**CAA response:** *The CAA does not agree. IFR procedures do not apply to VFR flights. As stated by the submitter aircraft operating under VFR must operate within VMC flight conditions and be responsible for compliance with the applicable Part 91 rules for the avoidance of collision with other aircraft. ATS may very well provide separation between VFR and IFR aircraft within controlled airspace but this does not mean that the aircraft operating under VFR is conducting IFR procedures.*

### **173.51 Personnel requirements**

One submitter, referring to paragraph (a)(1)(i), questioned the need for the inclusion of *can be financed* in this section at all. They indicated that: “provided the applicant can demonstrate that any service provided meets operational requirements and is provided in accordance with Part 173 it should not be necessary for the applicant or the Authority to become involved in the financial aspects of the operation”. Their primary concern was: “that by including this requirement in the rule an applicant is open to scrutiny of the financial aspects of the operation when, provided the other requirements are met, finances have little or no direct relation to safety”.

**CAA response:** *The CAA does not agree. This provision is prescribed in all the organisational certification rules to ensure that the applicant has sufficient resource available to conduct the function associated with the certificate. [Safety can be affected by an organisation that is financially restricted.]*

One submitter considered that it is important that the CEO is aware of the principles of aircraft operation on visual and instrument procedures and that the Senior Persons responsible for certification of the procedure design and associated minima has qualifications in the design aspects and aircraft operations. They suggested:

- (a) “CEO has at least 2 years experience in an operational management of a Part 121 airline or equivalent operation.
- (b) Senior Persons hold or have held an ATPL licence with 2000 hours as a pilot on Part 121 or equivalent operations. Have a minimum of 2 years experience in visual and instrument procedure design. If there is formal training available then that also should be a requirement”.

NOTE: They would consider military pilot experience in the equivalent of a Part 121 aircraft as being equivalent operation.

“A Senior Person Quality Assurance should be required.”

**CAA response:** *The CAA does not consider that experience and qualifications applicable to personnel can be prescribed as suggested. Organisations vary in size and structure and the CAA assessment for the issue of a Part 173 certificate will ensure that the organisation concerned has sufficient expertise to undertake the intended function.*

One submitter referring to paragraph (a)(3) stated: “if certification of procedure design is required then a Senior Person will be required while in Docket Nr 95/CAR/1107 Purpose it states that the organisation must have such a person. It appears to me that if an organisation is to produce procedures then a Senior Person for certification must be mandatory”.

**CAA response:** *The CAA agrees with this submission and the rule is amended accordingly.*

### **173.53 Resource requirements**

One submitter stated: “the requirement to *establish premises* could perhaps be refined or elaborated upon. Given the somewhat technical nature of the establishment of flight procedures and the abundance of computer capability these days it is not beyond the realms of possibility that a Part 173 certificated provider could in fact be an individual operating out of a vehicle with a laptop computer and a cell phone”. They submitted that: “sufficient latitude should be written into this rule to permit such providers to gain and retain Part 173 certification, and that an analogy in this area could perhaps be the provision of Annual Review of Airworthiness services by a person holding an Inspection Authorisation”. They also indicated that while the matter of *car boot* maintenance of aircraft is being attacked by many engineering firms throughout the country they believe that: “the availability of a service where an operator can select an appropriately qualified engineer who has appropriate maintenance documentation, and is able to perform maintenance in an appropriate location is a great leap forward for both cost effective maintenance and aviation safety”. It is their belief that a similarly equipped and qualified individual should be able to provide

Part 173 services to operators and airports throughout the country in a similar cost effective manner, with an improvement in aviation safety accruing.

**CAA response:** *The CAA does not agree that the term establish premises needs refinement or elaboration. The suitability of premises will be dependent on the size and structure of a particular organisation seeking Part 173 certification as is the case with other organisation certification requirements. The situation may very well be as described by the submitter and could be acceptable.*

### **173.55 Visual and instrument flight procedure requirements**

One submitter asked: “should the reference to 95.11(b) and (c) in paragraphs (a)(1) and (2) also refer to 95.11 (a)”?

**CAA response:** *The CAA agrees and the rule is amended accordingly.*

### **173.57 Error correction in promulgated information**

One submitter stated: “this should be written to require when an error is discovered after promulgation that the procedure be immediately withdrawn from use and that the certification holder establishes procedures to promulgate corrected procedures with a minimum of delay. There must be a prohibition on hand amendments to aeronautical charting”.

**CAA response:** *The CAA does not agree that the rule should state that after discovery of an error in the promulgated information the procedure must be immediately withdrawn for use. This may be the action required but in other cases may not be the appropriate means for all occasions. The rule requires the applicant for a certificate to establish procedures for error correction and these procedures will be assessed by the CAA for appropriateness with respect to the situations that may arise.*

One submitter stated: “there needs to be a requirement that the certificate holder makes available the procedural drawings for instrument procedures to aircraft operators so that obstacle clearance related to aircraft performance can be established”.

**CAA response:** *The CAA does not agree with this suggestion. This is a certification rule addressing the requirements applicable to an organisation establishing visual and instrument procedures for IFR flight. The provision of procedural drawings to operators for obstacle clearance purposes is not related to procedure design and therefore outside the scope of this rule. This is a matter between the aircraft operator and a Part 173 certificate holder to reach agreement for the provision of the drawings referred to.*

### **173.59 Records**

One submitter stated: “the requirement for records to be of a permanent nature requires some clarification. It is essential that records retained on computer are deemed to be acceptable under this rule as a unilateral requirement to keep paper records is costly, time consuming, and of little benefit to aviation safety”.

**CAA response:** *Records may be kept electronically but such systems should ensure the security, integrity, and retrieval of the information. A system of backing up electronic data would be considered to be appropriate. Procedures for electronic record and data keeping should be documented in the exposition and subject to quality system control.*

### **173.63 Internal quality assurance**

One submitter suggested: “the requirement of paragraph (f)(2) for internal audits to be performed by trained audit personnel is a little excessive. It should be left to the organisation to decide on what level of experience they deem appropriate to carry out an internal audit of the operation. In an operational situation (Part 135) it is in many cases more beneficial to have an internal auditor who is not formally trained in auditing but instead has a clear understanding of what is involved in the operation”.

**CAA response:** *The CAA does not agree with this submission. The conduct of an audit is a specific function and a certain amount of training is required for a person to effectively conduct this function.*

### 173.65 Organisation exposition

One submitter stated: “the exposition must include the criteria to be applied by the certificate holder for establishing the visibility to be declared for the minimum decent altitude (MDA) and decision altitude (DA) for instrument approaches”.

**CAA response:** *The CAA agrees that the visibility to be declared for the MDA and DA for instrument approaches must be stated. However it is more appropriate for the values to be provided in Part 95, either in the rule or the Advisory Circular.*

One submitter stated that the rule should require an applicant to fully detail the training requirements for a procedure designer with the full syllabus in the exposition. Overseas courses should be allowed.

**CAA response:** *The CAA does not agree as the training, experience and qualifications of the personnel used will vary depending on the size and structure of the organisation. Some personnel in a large organisation for example could be working under supervision with a planned progression of skill allied with experience and training. This will be addressed under 173.51 when The CAA assesses the organisation of each applicant for a Part 173 certificate. Overseas training could be acceptable and an assessment of such courses would be conducted by The CAA on a case by case basis.*

### 173.105 Transition

One submitter stated: “given the shift from regulations based operation to the rules environment, it may be worth considering an extension to the transition period of this rule. No doubt this is going to be dependent upon how many entities are subject to transition provisions, and how long they feel is required to become Part 173 compliant”.

**CAA response:** *The transition period in this rule is being reviewed and will be established on the assurance that at that time, all the present IFR procedures are entered into the New Zealand Air Navigation Register and the authority of 95.11 is no longer required.*