



WELLINGTON NEW ZEALAND

PURSUANT to Section 28 of the Civil Aviation Act 1990

I, MAURICE WILLIAMSON, Minister of Transport,

HEREBY MAKE the following ordinary rules.

SIGNED AT Wellington

this *16* day of *December* 1993

by MAURICE WILLIAMSON

Maurice Williamson
Minister of Transport

Civil Aviation Rules

Part 174

**Aviation Meteorological Service
Organisations — Certification**

Docket Nr. 1051

**Civil Aviation Rules
Part 174**

**Aviation Meteorological Service
Organisations — Certification**

RULE OBJECTIVE, EXTENT OF CONSULTATION, AND COMMENCEMENT

The objective of Part 174 is to define a regulatory safety boundary for persons or organisations wishing to provide meteorological services in New Zealand for the New Zealand civil aviation air navigation system and New Zealand's international obligations under the ICAO Regional Air Navigation Plans. The boundary prescribes the minimum organisational requirements for these persons and organisations and the minimum standards for the provision of aviation meteorological services. The provision of meteorological services to meet New Zealand's international obligations under the Regional Air Navigation Plans will be the subject of a separate formal agreement between the Authority and the appropriate certificated meteorological service provider.

In May 1990 the Air Transport Division of the Ministry of Transport published a notice of intention to carry out a complete review of the aviation regulatory system. This notice, in Civil Aviation Information Circular Air 3, listed the areas in which rules would be made and invited interested parties to register their wish to be part of the consultative process. This register was identified as the Regulatory Review Consultative Group. Some 13 organisations and individuals registered their wish to be consulted in the development of rules for aviation meteorological organisations.

A draft document was developed by the rules rewrite team in consultation with the members of the consultative group. An informal draft was published and distributed to over 60 organisations and individuals, including the consultative group, for comment in February 1992.

A period of informal consultation followed. This consultation included some written comments, telephone discussions and a seminar was held with the consultative group in March 1992 to discuss the informal draft. The informal consultative process culminated in the issue of Notice of Proposed Rule Making 93-2 under Docket number 1051 NR on 17 February 1993. The publication of this notice was advertised in the daily newspapers in the five main provincial centres on 20 February 1993.

The notice was mailed to all members of the Regulatory Review Consultative Group and to other parties, including overseas Aviation Authorities and organisations, who were considered likely to have an interest in the proposal.

A period of 60 days was allowed for comment on the proposed rules. Eleven written submissions were received in response to this notice. Further meetings and discussions were held with some members of the consultative group to address various aspects. These submissions and discussions were considered and where appropriate the proposed rules amended to take account of the concerns raised.

The rules as amended were then referred to and signed by the Minister of Transport.

Part 174 comes into force 28 days after the date of its notification in the New Zealand Gazette.

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Subpart A — General

174.1 *Applicability*

This Part prescribes —

- (1) rules governing the certification and operation of organisations providing meteorological services for aviation; and
- (2) requirements governing the provision of basic weather reports for aviation.

174.3 *Definitions*

In this Part:

“Basic weather report” means a verbal comment, in support of aviation, describing any of the following current weather conditions observed at a particular place or airspace:

- (1) wind direction and strength:
- (2) mean sea level air pressure:
- (3) air temperature:
- (4) weather conditions and cloud cover:

“Erroneous meteorological information” means any meteorological information that is or has the potential to be significantly outside the allowable accuracy or tolerance for that information:

“Facility” means any system or equipment which provides an automatic function that supports a meteorological office or provides meteorological information, and includes any system or equipment for the following:

- (1) electronic data analysis and forecast production:
- (2) remote weather sensing:
- (3) electronic or automatic meteorological information delivery:

“Meteorological information” means any meteorological report, analysis or forecast in support of aviation, and any other statement in support of aviation relating to existing or expected meteorological conditions:

“Meteorological office” means an office providing or supporting a meteorological service or an office where meteorological information is compiled, derived, or disseminated to users:

“Meteorological report” means a statement, in support of aviation, of observed meteorological conditions related to a specific time and location:

“Meteorological service” means any of the following services that provide meteorological information in support of aviation:

- (1) **“Climatology service”**: a service for the development and supply of climatological information for a specific place or airspace:
- (2) **“Forecast service”**: a service for the supply of forecast meteorological information for a specific area or portion of airspace:
- (3) **“Information dissemination service”**: a service for the collection and dissemination of meteorological information:
- (4) **“Meteorological briefing service”**: a service for the supply of written and oral meteorological information on existing and expected meteorological conditions:
- (5) **“Meteorological reporting service”**: a service for the supply of routine meteorological reports:
- (6) **“Meteorological watch service”**: a service for maintaining a watch over meteorological conditions affecting aircraft operations in a specific area.

174.5 Meteorological Services — Certificate Required

(a) No person shall provide a meteorological service except under the authority of, and in accordance with the provisions of, a meteorological service certificate issued under this Part.

(b) The Director may grant a certificate authorising the provision of meteorological services varying from a single meteorological service to a range of meteorological services supported by a network of meteorological offices intended for interacting with the New Zealand air navigation system.

174.6 Basic Weather Reporting

Every person who provides a basic weather report shall —

- (1) utilise equipment that is suitable for the observations being made; and
- (2) employ a system for checking that equipment; and
- (3) be trained to provide accurate basic weather reports.

174.7 Application and Issue

(a) An application for the grant of a meteorological service certificate shall be made on form CAA 24174/01 and submitted to the Director with the exposition required by 174.79.

(b) An applicant is entitled to a meteorological service certificate if —

- (1) the applicant and the applicant's senior person or persons required by 174.51(a)(1) and (2) are fit and proper persons; and
- (2) the applicant pays any applicable fees or charges prescribed by regulations made under the Act; and
- (3) the applicant provides an exposition that is acceptable to the Director and the applicant meets all other requirements of Subpart B; and
- (4) the granting of the certificate is not contrary to the interests of aviation safety.

174.9 Scope of Certificate

The meteorological service certificate specifies the meteorological services that the certificate holder is authorised to provide.

174.11 Display of Certificate

The holder of a meteorological service certificate shall display the certificate in a prominent place, generally accessible to the public, at the holder's principal place of operation, and shall produce the certificate to the Director upon request.

174.13 Duration of Certificate

- (a) A meteorological service certificate may be granted or renewed for a period of up to 5 years.
- (b) A meteorological service certificate remains in force until it expires or is suspended or revoked.
- (c) The holder of a meteorological service certificate that expires or is revoked shall forthwith surrender the certificate to the Director.
- (d) The holder of a meteorological service certificate that is suspended, shall forthwith produce the certificate to the Director for appropriate endorsement.

174.15 Renewal of Certificate

- (a) An application for the renewal of a meteorological service certificate shall be made on form CAA 24174/01.
- (b) The application shall be submitted to the Director before the application renewal date specified on the certificate or, if no such date is specified, not less than 30 days before the certificate expires.

174.17 Safety Inspection and Audit

Each holder of a meteorological service certificate is required under the Act to permit persons duly authorised by the Director to carry out inspections and audits of the holder's meteorological offices, facilities, documents and records in accordance with the Act, to determine compliance with this Part.

174.19 Exemptions

The Director may exempt the holder of a meteorological service certificate from any requirement in this Part in accordance with the Act.

Subpart B — Certification Requirements

174.51 Personnel Requirements

(a) Each applicant for the grant of a meteorological service certificate shall engage, employ or contract:

- (1) A senior person identified as the Chief Executive who is acceptable to the Director, and who has the authority within the applicant's organisation to ensure that each meteorological service listed in their exposition can be financed and carried out to meet the operational requirements, and in accordance with the requirements prescribed by this Part:
- (2) A senior person or group of senior persons who are acceptable to the Director, and who are responsible for ensuring that the applicant's organisation complies with the requirements of this Part. Such nominated person or persons shall be ultimately responsible to the Chief Executive:
- (3) Sufficient personnel to plan, operate, supervise, inspect, and certify the meteorological offices and facilities and provide the meteorological services listed in the applicant's exposition.

(b) The applicant shall —

- (1) establish a procedure to assess the competence of those personnel who are authorised by the applicant to —
 - (i) place facilities listed in the applicant's exposition into operational service; and
 - (ii) supervise the production and release of meteorological information; and
- (2) establish a procedure to maintain the competence of those authorised personnel; and
- (3) provide those authorised personnel with written evidence of the scope of their authorisation.

174.53 Site Requirements

Each applicant for the grant of a meteorological service certificate shall establish procedures to ensure that —

- (1) each of the meteorological offices and facilities listed in their exposition is —
 - (i) sited and configured in accordance with security measures designed to prevent unlawful or accidental interference; and
 - (ii) provided with suitable power supplies and means to ensure appropriate continuity of service; and
- (2) each of the remote weather sensing facilities listed in their exposition is installed and maintained in a technically appropriate position to ensure that the facility provides an accurate representation of the local meteorological conditions.

174.55 Communication Requirements

- (a) Each applicant for the grant of a meteorological service certificate shall establish communication systems and procedures to ensure that each of the meteorological offices and facilities listed in the applicant's exposition can provide the meteorological information for which it is intended.
- (b) The communication systems and procedures must be able to handle the volume and nature of the meteorological information being communicated so that no meteorological information is delayed to the extent that the information becomes out-of-date.

174.57 Input Requirements

- (a) Each applicant for the grant of a meteorological service certificate shall establish procedures to obtain input meteorological information appropriate for the meteorological services being provided.
- (b) The procedures shall ensure that —
 - (1) each meteorological office and facility listed in the applicant's exposition that provides a forecast service has continuing access to appropriate historical, real-time, and other meteorological information for the applicant's forecast areas; and
 - (2) each meteorological office and facility listed in the applicant's exposition that provides a meteorological briefing service in person or by any other interactive visual means, has adequate display and briefing resources available for the briefings; and

- (3) each meteorological office and facility listed in the applicant's exposition that provides a meteorological reporting service has adequate observing systems to supply adequate, accurate and timely meteorological reports; and
- (4) each meteorological office listed in the applicant's exposition that provides a meteorological watch service has adequate meteorological information to supply an adequate, accurate and timely meteorological watch service; and
- (5) each meteorological office and facility listed in the applicant's exposition that provides a climatology service has adequate meteorological information for the preparation of climatological information.

174.59 Output Requirements

- (a) Each applicant for the grant of a meteorological service certificate shall —
 - (1) identify the output meteorological information provided by each meteorological service listed in their exposition; and
 - (2) determine the standards and formats for that output meteorological information.
- (b) The applicant shall establish procedures to ensure that the meteorological information supplied by each meteorological office and facility listed in their exposition complies with the standards and formats determined under paragraph (a)(2).

174.61 Facility Requirements

Each applicant for the grant of a meteorological service certificate shall establish procedures to ensure that all electronic data processing facilities used in the acquisition, compilation, computing, access or dissemination of meteorological information are of a nature, configuration and capability to ensure the adequacy, accuracy and timeliness of that meteorological and related information.

174.63 Documentation

- (a) Each applicant for the grant of a meteorological service certificate shall hold copies of meteorological office manuals, facility manuals, technical standards and practices, procedures manuals, and any other documentation that is necessary for the provision of the meteorological services listed in their exposition.
- (b) The applicant shall establish a procedure to control the documentation required by paragraph (a). The procedure shall ensure that —

- (1) the documentation is reviewed and authorised by appropriate personnel before issue; and
- (2) current issues of relevant documentation are available to personnel at all locations where they need access to such documentation for the provision of the meteorological services listed in the applicant's exposition; and
- (3) obsolete documentation is promptly removed from all points of issue or use; and
- (4) changes to documentation are reviewed and approved by appropriate personnel; and
- (5) the current version of each item of documentation can be identified to preclude the use of out-of-date editions.

174.65 Verification, Periodic Inspection, Testing and Calibration

(a) Each applicant for the grant of a meteorological service certificate shall establish procedures for —

- (1) the routine verification of meteorological information obtained and provided by the applicant; and
- (2) the periodic inspection of each meteorological office listed in the applicant's exposition; and
- (3) the periodic inspection, testing and calibration of each facility listed in the applicant's exposition.

(b) The procedures shall ensure that —

- (1) the systems required for the routine verification of meteorological information have the capability and integrity necessary for verifying the meteorological information; and
- (2) appropriate inspection equipment and systems are available to personnel for the inspection of each meteorological office; and
- (3) appropriate inspection, measuring and test equipment and systems are available to personnel for the inspection, testing and calibration of each facility; and
- (4) the inspection, measuring and test equipment and systems have the precision and accuracy necessary for the inspections, measurements and tests being carried out; and

- (5) all meteorological sensing facilities are calibrated and configured so that the environmental sensors fitted or incorporated yield, as far as possible, reliable, accurate and representative meteorological information.

174.67 Release of Meteorological Information

(a) Each applicant for the grant of a meteorological service certificate shall establish procedures for —

- (1) the release of meteorological information from each meteorological office listed in their exposition; and
- (2) the placing of facilities listed in their exposition into operational service.

(b) The procedures shall ensure that persons authorised to supervise the production and release of meteorological information and persons authorised to place meteorological facilities into operational service have been assessed as competent under the procedures required by 174.51(b).

174.69 Notification of Meteorological Office and Facility Status

(a) Each applicant for the grant of a meteorological service certificate shall establish procedures to notify users of the applicant's meteorological services of relevant operational information and of any changes in the operational status of each meteorological office or facility listed in the applicant's exposition.

(b) The procedures shall ensure that —

- (1) the operational information for each of the applicant's meteorological services that support the New Zealand air navigation system or an air traffic service is forwarded to the Aeronautical Information Service for publication in the New Zealand Aeronautical Information Publications; and
- (2) the users of a meteorological office or facility are notified without delay of any change in the operational status of the meteorological office or facility if the change may effect the safety of air navigation. For those meteorological offices and facilities published in the New Zealand Aeronautical Information Publications, the information concerning any change to their operational status shall be forwarded to the Aeronautical Information Service for the issue of a NOTAM.

174.71 Meteorological Information Check after Accident or Incident

(a) Each applicant for the grant of a meteorological service certificate shall establish procedures for checking the adequacy, accuracy and timeliness of any of their meteorological information that may have been used by an aircraft or an air traffic service involved in an accident or incident.

(b) The procedures shall ensure that —

- (1) the checks are carried out as soon as practicable after notification to the applicant's organisation of such an accident or incident; and
- (2) copies of the meteorological information are kept in a secure place for possible use by any subsequent investigation.

174.73 Malfunctions and erroneous information

Each applicant for the grant of a meteorological service certificate shall establish procedures —

- (1) to identify, record, notify, investigate and rectify any report of erroneous meteorological information; and
- (2) to identify, record, notify, investigate and rectify any detected malfunction in the facilities and meteorological services listed in their exposition that may result in the supply of erroneous meteorological information; and
- (3) to notify without delay all users that have received the erroneous meteorological information; and
- (4) to notify the Director, within 12 hours, of those malfunctions that cannot be remedied within 72 hours; and
- (5) for the continuation of malfunction status reports in the event that such reports are required by the Director.

174.75 Records

(a) Each applicant for the grant of a meteorological service certificate shall establish procedures to identify, collect, index, store, maintain and dispose of the records that are necessary for the supply of the meteorological services listed in their exposition.

- (b) The procedures shall ensure that —
- (1) there is a record of the input meteorological information obtained under the procedures required by 174.57; and
 - (2) there is a record of all output meteorological information identified under 174.59; and
 - (3) the records specified in paragraph (b)(1) and (2) are retained for a period of at least 60 days or for such longer period as may be required by the Director; and
 - (4) there is a record for each meteorological office and facility listed in the applicant's exposition, in order to document the performance of each meteorological office and facility and to provide a traceable history of its maintenance, service and product quality, its periodic inspections, and the persons responsible for each of these activities; and
 - (5) there is a record of the equipment and systems used for verification, inspection, testing and calibration under the procedures required by 174.65. The record shall provide a traceable history of the location, maintenance, and calibration checks for the equipment and systems; and
 - (6) there is a record of each occurrence of erroneous meteorological information reported and of each malfunction detected under the procedures required by 174.73. The record shall detail the nature of the erroneous meteorological information or malfunction and the findings of the investigation and the follow-up corrective actions; and
 - (7) there is a record of each internal quality assurance review of the applicant's organisation carried out under the procedures required by 174.77. The record shall detail the part or activity of the organisation that was reviewed, the findings of the review and any necessary follow-up corrective actions; and
 - (8) there is a record for each person who is authorised by the applicant to supervise the production and release of meteorological information and for each person who is authorised by the applicant to place facilities into operational service. The record shall include details of their experience, qualifications, training and current authorisations; and
 - (9) all records are legible, and of a permanent nature; and
 - (10) all records other than those required by paragraph (b)(1) and (2) are retained for at least one year, or for such longer period as may be required by the Director, in order to establish a history of the performance of the meteorological services.

174.77 Quality Assurance

(a) Each applicant for the grant of a meteorological service certificate shall establish internal quality assurance procedures to ensure compliance with, and the adequacy of, the procedures and systems required by this Part.

(b) The senior person who has the responsibility for internal quality assurance shall have direct access to the Chief Executive on matters affecting the adequacy, accuracy and timeliness of meteorological information.

174.79 Organisation Exposition

(a) An applicant for the grant of a meteorological service certificate shall provide the Director with an exposition which shall contain —

- (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 organisation and demonstrate its means and methods for ensuring ongoing compliance with this Part; and
 - (ii) will be complied with at all times; and
- (2) the titles and names of the senior person or persons required by 174.51(a)(1) and (2); and
- (3) the duties and responsibilities of the senior person or persons specified in paragraph (a)(2) including matters for which they deal directly with the Director or the Authority on behalf of the organisation; and
- (4) an organisation chart showing lines of responsibility of the senior persons specified in paragraph (a)(2); and
- (5) a summary of the applicant's staffing structure at each meteorological office listed under paragraph (a)(7)(i); and
- (6) a list of the meteorological services to be covered by the certificate; and
- (7) a list providing —
 - (i) the location of each meteorological office operated by the applicant; and
 - (ii) the location of each facility operated by the applicant that provides meteorological information directly to the users; and

- (iii) the meteorological services provided by each of those meteorological offices and facilities; and
 - (iv) the locations and airspace covered by such meteorological services; and
 - (8) details of the applicant's output meteorological information identified under 174.59(a)(1) and the standards and formats for that information determined under 174.59(a)(2); and
 - (9) details of the applicant's procedures and systems required by -
 - (i) 174.51(b) regarding competence of personnel; and
 - (ii) 174.53 regarding site requirements; and
 - (iii) 174.55 regarding communication requirements; and
 - (iv) 174.57 regarding meteorological service input requirements; and
 - (v) 174.59 regarding meteorological service output requirements; and
 - (vi) 174.61 regarding facility requirements; and
 - (vii) 174.63 (b) regarding control of documentation; and
 - (viii) 174.65 regarding verifications, inspections, tests and calibrations; and
 - (ix) 174.67 regarding release of meteorological information and the placing of facilities into operational service; and
 - (x) 174.69 regarding notification of meteorological office and facility status; and
 - (xi) 174.71 regarding meteorological information checks after notification of an accident or incident; and
 - (xii) 174.73 regarding malfunctions and erroneous information; and
 - (xiii) 174.75 regarding identification, collection, indexing storage, maintenance and disposal of records; and
 - (xiv) 174.77 regarding internal quality assurance of the organisation; and
 - (10) procedures to control, amend and distribute the exposition.
- (b) The applicant's exposition must be acceptable to the Director.

Subpart C — Operating Requirements

174.101 Continued Compliance

Each holder of a meteorological service certificate shall -

- (1) hold at least one complete and current copy of their exposition at each meteorological office specified in their exposition; and
- (2) comply with all procedures and systems detailed in their exposition; and
- (3) make each applicable part of their exposition available to personnel who require those parts to carry out their duties; and
- (4) continue to meet the standards and comply with the requirements of Subpart B prescribed for certification under this Part.

174.103 Operations Manual

Each holder of a meteorological service certificate shall provide an operations manual for each meteorological office listed in their exposition. The manual shall set out the procedures for the operation and maintenance of the meteorological office and associated facilities and shall include a list of —

- (1) the meteorological information and meteorological services provided; and
- (2) the minimum acceptable operating parameters and standards for facilities; and
- (3) the minimum meteorological inputs required; and
- (4) the minimum performance and quality levels for output meteorological information and meteorological services provided; and
- (5) the test equipment and systems required for the measurement of the minimum levels listed under subparagraph (4); and
- (6) any mandatory check procedures for releasing meteorological information.

174.105 Privileges of Certificate Holder

Subject to 174.107, the holder of a meteorological service certificate may provide the meteorological services listed on the holder's certificate provided that each meteorological service, and the meteorological information supplied for each meteorological service, and the location and airspace covered by each meteorological service is listed in the certificate holder's exposition.

174.107 Limitations on Certificate Holder

The holder of a meteorological service certificate shall not —

- (1) provide meteorological information where the meteorological input information required to provide that meteorological information is not available; or
- (2) provide meteorological information where the operational performance of the meteorological office or facility producing that meteorological information does not meet the applicable requirements; or
- (3) provide meteorological information where any integrity monitoring system associated with that meteorological information is not fully functional; or
- (4) provide meteorological information where any required verification, inspection, test or calibration relating to that meteorological information has not been completed; or
- (5) provide meteorological information where there is any cause whatsoever to suspect the integrity of that meteorological information.

174.109 Changes to Certificate Holder's Organisation

- (a) Each holder of a meteorological service certificate shall ensure that their exposition is amended so as to remain a current description of the holder's organisation and meteorological services provided.
- (b) The certificate holder shall ensure that any amendments made to the holder's exposition meet the applicable requirements of this Part and comply with the amendment procedures contained in the holder's exposition.
- (c) The certificate holder shall provide the Director with a copy of each amendment to their exposition as soon as practicable after its incorporation into the exposition.

- (d) Where a certificate holder proposes to make a change to any of the following prior notification to and acceptance by the Director is required:
- (1) the Chief Executive:
 - (2) the listed senior persons:
 - (3) the meteorological services the holder provides:
 - (4) the locations and airspace covered by each of the meteorological services the holder provides.
- (e) The Director may prescribe conditions under which a certificate holder may operate during or following any of the changes specified in paragraph (d).
- (f) Where any of the changes referred to in this rule require an amendment to the certificate, the certificate holder shall forward the certificate to the Director as soon as practicable.
- (g) The certificate holder shall make such amendments to the holder's exposition as the Director may consider necessary in the interests of aviation safety.

Appendix 1 — Transitional Arrangements

Approvals under regulation 84A of the Civil Aviation Regulations 1953 for the provision of meteorological reports or forecasts will no longer be given after the date Part 174 comes into force.

After Part 174 comes into force any organisation that holds an approval under regulation 84A and which is required under Part 174 to hold a Meteorological Services Certificate may continue their service under the regulation 84A approval (without Part 174 certification) until the expiry of a period of 15 months. At the expiry of **15 months** from the date that Part 174 commences, all such organisations must be operating under a Part 174 certificate. At the end of that period all approvals under regulation 84A will become invalid.

CONSULTATION DETAILS

*(This statement does not form part of the rules contained in Part 174.
It provides details of the consultation undertaken in making the rules.)*

Background to the Rules

In April 1988 the Swedavia McGregor Report on civil aviation regulation in New Zealand was completed. Following the recommendations contained in that report, the Air Transport Division of the Ministry of Transport commenced a complete review and rewrite of all existing civil aviation legislation and where necessary initiated new legislation for the areas not previously covered.

Considerable research was carried out to determine the format for the new legislation. It was decided that the most suitable legislative framework should incorporate the advantages of the system being developed by the European Joint Aviation Authorities and published as Joint Aviation Requirements (JAR), and of the Federal Aviation Administration (FAA) of the United States of America. The JAR are structured in a manner similar to the FAA's Federal Aviation Regulations (FAR) and aim to achieve maximum harmonisation while allowing for national variations.

New Zealand's revised legislation will be published as Civil Aviation Rules (CAR) divided into Parts. Each Part will convey a series of individual rules which relate to a particular aviation activity.

Accompanying each Part of the CAR will be, at least, one associated Advisory Circular (AC) which will expand, in an informative way, specific requirements of the CAR and describe an acceptable means of compliance. For example an AC may contain the minimum acceptable practice or standard which would be necessary to meet a rule.

The CAR numbering system is based on the FAR system. As a general principle the subject matter of a Part will be the same or similar to the FAR although the title may differ to suit New Zealand terminology. Where a CAR does not readily equate with a FAR number code, a number has been selected that does not conflict with any existing FAR Part.

The FAR has been used as the starting point for the development of many CAR but there are likely to be significant differences in the content of the rule. It should be noted however, that neither the FAR nor JAR systems presently include the equivalent of a Part 174.

The objective of the new rules system is to strike a balance of responsibility between the State authority and those who provide services and exercise privileges in the civil aviation system. This balance must enable the State authority to maintain continuing regulatory control and supervision while providing the maximum flexibility for participants to develop their own means of compliance.

Section 7 of the Civil Aviation Act 1990 (the Act) provides for the requirement to hold an aviation document for carrying out particular civil aviation activities. Section 12 of the Act requires the holders of such documents to carry out their activities safely and in accordance with the relevant prescribed safety standards and practices.

Notice of Proposed Rule Making

To provide public notice of, and opportunity for comment on the proposed new rules, the Authority, on 17 February 1993, issued Notice of Proposed Rule Making 93-2 under Docket Number 1051 NR. This Notice proposed the introduction of Civil Aviation Rules Part 174 to provide a regulatory safety boundary for the certification of organisations wishing to provide aviation meteorological services. The notice also included provisions for persons wishing to provide basic weather reports without an aviation document.

Supplementary information

All comments made on the Notice of Proposed Rule Making are available in the rules docket for examination by interested persons. A report summarising each substantive contact with the Civil Aviation Authority contact person concerning this rule making has been filed in the docket.

Availability of the document

Any person may view a copy of these rules at Aviation House, 1 Market Grove, Lower Hutt. Copies may be obtained from the Civil Aviation Authority of New Zealand, PO Box 31-441, Lower Hutt.

Summary of comments to docket Number 1051 NPRM

1. General Comments on the NPRM

From the eleven submissions received, nine issues were raised relating to the rule making process and the introductory sections of the NPRM. These are discussed as follows:

1.1 Meteorological Service of New Zealand Limited (MetService) expressed concern about the need for the rule making process in the light of the existing international standards of ICAO and WMO. They were concerned that the obligations required of them by the proposed rule were complex and onerous and would

unnecessarily duplicate their ISO 9000 quality programme. Considering no other nation had constructed a similar rule or requirement, MetService was concerned that New Zealand would be out of step and that such a situation would be financially disadvantageous to them.

CAA response: The CAA did not accept these concerns and took a number of opportunities to work through the rules with MetService personnel to explain the particular intent of each section. The ICAO Annex 3 and relevant WMO publications are presently minimum acceptable means of technical compliance with the rule.

Present international standards are not binding on domestic meteorological operations and although MetService generally adheres to those international standards there was no legal mechanism to ensure they continue to do so or that other meteorological service organisations would necessarily do so.

The CAA has designed the rules so they reflect and compliment ISO 9000 quality management systems. Caution is appropriate in relation to the use of ISO quality management systems to manage safety. ISO 9000 Quality standards do not adequately address aspects of safety risk management. This is why the CAA has not simply accepted certification to the ISO 9000 standard as an effective means of regulatory compliance.

Part 174 is a "customised" ready to use organisational template for organisations wishing to supply meteorological services to aviation. This objective aspect of the rule system and procedures is common to the ISO 9000 management system. The ISO 9000 programme may be pursued by any organisation and the rule does not preclude them from doing so.

Of the eleven written submissions on the NPRM only one other organisation expressed the concern that there may be no practical need for a meteorological service rule.

1.2 MetService submitted that given certification under the Part and ISO 9000 certification, audits required by both systems would be best accomplished simultaneously and in co-operation.

CAA Response: The CAA does not object to working in such a manner providing such an approach can be accommodated without additional cost or any scheduling inconvenience to other aviation organisations. However it should be noted that the CAA has the right to conduct any audits or inspections as it sees fit.

1.3 Two commenters expressed the concern that there is only one integrated supplier of meteorological information in New Zealand and should that supplier lose certification there would be significant impact on operational aviation in New Zealand.

CAA response: Given the contestable nature of meteorological services it is likely that other offshore and domestic organisations would provide alternative services (after having been certificated).

1.4 A number of commenters took exception to a statement in the economic assessment of the NPRM. The statement presented the view that aircraft operators were generally not in a position to be fully aware of inadequacies in meteorological information and the aircraft operators could not be relied upon to influence the quality of meteorological information supplied.

CAA response: The CAA is aware that there is a high level of feedback to meteorological suppliers at present. However, given market contestability and the opportunities that exist for new meteorological suppliers to operate, the CAA does not accept that such feedback will necessarily take place in every case or that such feedback necessarily influences the overall quality of the meteorological information made available.

1.5 Airways Corporation of New Zealand Limited (ACNZ) expressed concern that the style of the rule and associated Advisory Circular (AC) was too specific to organisations solely in the meteorology business.

CAA response: The CAA appreciates the ACNZ concern and has endeavoured to clarify and broaden the explanatory material contained within the AC. However, there is little scope within the rule to do the same given that only one sixth of the content is meteorology specific.

1.6 One commenter was particularly scathing in his criticism of the rule. He saw the rule as bureaucratic, economically unjustified, anti-competitive, costly, poorly conceived, critiqued by unqualified people and suitable only for foreign totalitarian regimes.

The commenter also said the CAA was conniving with MetService in the development of the rule in order to entrench a MetService monopoly.

One other commenter was concerned to a lesser extent that the rule was bureaucratic.

CAA response: Part 174 is unique only in its application to meteorological services. The general principle contained within the rule construction are those being applied to all organisations required to be certificated within the civil aviation system. These principles are based upon the recommendations contained within the Swedavia McGregor report 1988.

The CAA has taken every avenue open to it to consult interested parties during the development of the rule. The rule is considered to be straightforward and quite workable.

1.7 The New Zealand Airline Pilots Association Industrial Union of Workers Inc. (NZALPA) is concerned the aims of the rules as stated in the NPRM contradict the functions of the CAA as expressed in the Act. Particular concern is expressed over the aims to reduce cost, international barriers and unnecessary regulation.

NZALPA also considers that the Part itself should contain direct reference to the relevant ICAO and WMO standards in those areas where standards are mentioned.

CAA response: The CAA does not share NZALPA's concern with either aspect. On the first point the CAA is satisfied that the aims of the rules are consistent with Government policy, the Civil Aviation Act 1990, and the policy of CAA.

Compliance with ICAO and WMO standards are considered to be the minimum requirement for continued certification, however, the CAA accepts that they may not be the only acceptable domestic standards. A meteorological service organisation must be able, if it so wishes, to develop its own standards. Such new standards must be assessed by the CAA as equal to or better than those of ICAO or WMO to be acceptable. For these reasons it is imperative that the minimum compliance standards be defined outside the rule in the AC. The CAA will retain effective control of those standards in the AC through the process of organisation certification.

1.8 NZALPA believed that the purpose of the rule is to ensure the meeting of New Zealand's obligations under Annex 3 to the Chicago convention.

CAA response: The CAA does not agree with this view. As the Meteorological Authority for New Zealand under Annex 3, the CAA has other means of ensuring that New Zealand's obligations under that Annex are met.

1.9 Global Watch Limited submitted that the requirement for providers of climatological information to aviation to be certificated should be removed as they saw little relevance with the safety objectives.

CAA response: The CAA is aware that many of the aerodromes in New Zealand have had climatologies compiled for them and that such aerodrome climatologies are used as a planning tool by aviation. There continue to be proposals for new aerodromes and the planning for these requires climatological information. The CAA is also aware of the growing need for historical meteorological information for domestic and international route planning.

The CAA is concerned that accuracy and adequacy of aviation targeted climatological information is established. The CAA therefore does not see the supply of climatological information to aviation as any different to the supply of forecast meteorological information in terms of safety risk and therefore rejects the commenters call for the requirement to be removed.

2. General Requirements

Ten issues relate to the general requirements (Subpart A) of Part 174. These are discussed as follows:

2.1 174.1(b)

Great concern was expressed by MetService at the potential of this clause to influence the meteorological market in New Zealand, specifically the prospect of an offshore supplier serving domestic aviation without certification under the Part. MetService interprets the clause as the Director having the power to let an uncertificated meteorology supplier operate in New Zealand.

Similarly a situation was also of concern whereby foreign aircraft operators could be provided with meteorological services in their base country to fly to and from New Zealand, thereby not necessarily using New Zealand approved meteorology within New Zealand territory.

CAA response: Whilst the CAA disagrees with MetService's interpretation of 174.1(b), the rule has been deleted in order to remove any confusion in this regard.

It is the CAA's intention to enforce the requirement for all individuals and organisations supplying meteorological services in New Zealand for aviation to be certificated under Part 174.

2.2 174.3

2.2.1 The definition of "basic weather report" was considered to be inadequate by a number of commenters. Although commenters were happy with the concept they believed the definition caused some confusion when compared to the defined term "meteorological report" and the ICAO term "plain language report".

ACNZ submitted that there were inconsistencies between the definition and explanatory information in the AC which seemed to suggest that basic weather reports could not be supplied at attended aerodromes.

Air Nelson submitted that the use of the word "verbal" should be reviewed because basic weather reports can be communicated internally by electronic means.

CAA response: The CAA accepts these comments and has endeavoured to clarify the meaning of "plain language report", "basic weather report" and "meteorological report" in the Part.

Insofar as the ACNZ comment is concerned, it is intended that a basic weather report can be provided at an attended aerodrome by their personnel. On Air Nelson's comment, the CAA accepts that basic weather reports will be passed by electronic means from time to time.

Explanation and examples will be inserted in the AC to assist in the differentiation of the terms.

2.2.2 Air New Zealand National (ANZN), a trading division of Air New Zealand Limited, submitted that their electronic internal dissemination of meteorological information sourced from an approved supplier should not constitute a "facility" as defined thereby requiring ANZN to be certificated. Similarly they considered that the "Information Dissemination" and "Meteorological Briefing" services internal to ANZN operations should not require certification.

Other commenters shared the concern that some of their air traffic services, airline flight operations or loader work could be construed as one of the types of meteorological service defined.

CAA response: The CAA agrees with the ANZN and ACNZ interpretations and has endeavoured to make this clearer in Part 174 and the AC (refer also 2.3 below).

2.2.3 ACNZ suggested that the ICAO explanation of "meteorological watch" service be incorporated in the AC.

CAA response: The CAA has accepted this suggestion.

2.2.4 NZALPA made the recommendation that a definition of "erroneous meteorological information" be inserted in 174.3.

CAA response: The CAA has accepted this recommendation.

2.2.5 Explanatory information and examples on all of the remaining meteorological terms used in the rule will be included in the AC.

2.3 174.5(c)

2.3.1 There were a number of commenters that were concerned with the direct applicability of the Part in certain circumstances. In particular, the commenters submitted that some grey areas existed in relation to internal airline and air traffic operations.

CAA response: The CAA has amended the definitions in 174.3 and expanded the AC to make it clear that any work that is done in conjunction with a certificated supplier will not necessarily require certification of the other party concerned. The CAA views the meteorological supplier as being responsible for the meteorology even if aspects of that meteorology or information dissemination is undertaken on a sub contract basis by another party. The Part 174 rule concept provides for the organisation to source services or information from second parties on a contractual basis. The certificated organisation must retain responsibility for ensuring the quality of the contracted service and formal arrangements must exist to define such relationships.

Basic weather reports made and used entirely internally by an organisation do not constitute a requirement for certification under the Part.

2.3.2 Three airlines and ACNZ were concerned at the requirement for providers of basic weather reports to meet basic equipment and training standards when the practical situation did not warrant certification under the Part. Air Nelson submitted that it was inconsistent to prescribe requirements (for providers of basic weather reports) outside direct application of the requirement for certification.

CAA response: Because the provision of basic weather reports does have some impact on aviation safety, the CAA requires the supply of such reports to be of good quality. The CAA accepts that, in the case of aircraft operators, such reports usually form part of their operational support and therefore will be documented under the appropriate operating rule Part.

Not all such reports are necessarily provided by people within the aviation industry. It is for this reason that 174.5(c) remains an essential part of the rules relating to meteorological services. However, to make a clear distinction between the requirement for certification and the wider scope being allowed for making basic weather reports without the need for certification, 174.5(c) has been amended and relocated as 174.6.

2.3.3 ACNZ and Air Nelson were concerned that the training standards as set out in the AC were wider than what is practically required to provide basic weather reports.

CAA response: The CAA agrees that the stated acceptable means of compliance with 174.5(c)(3), now 174.6(3) was onerous in some cases. To rectify this, amendments will be made and further explanation and examples included in the AC showing what appropriate portions of the overall stated means of compliance will be acceptable (refer also 3.1).

The CAA intends to produce a separate AC clarifying basic weather reporting to assist those who intend to undertake such reporting.

2.4 174.17

NZALPA submitted that 174.17 does not necessarily reflect the Act and introduces a level of requirement that may be confusing. They submitted that 174.17 and 174.19 should be deleted from the rule.

CAA response: The CAA does not accept this view as Part 174 is consistent with other rules relating to the certification of organisations.

3. Certification Requirements

Ten issues relate to the certification requirements (Subpart B) of Part 174. These are discussed as follows:

3.1 174.51

3.1.1 Concern was expressed by ACNZ and MetService that the hierarchical inference of 174.51(a) could not be adhered to. ACNZ submitted that only a small part of their operation was concerned with the supply of meteorology and that there was no fixed centre of responsibility for meteorological services. NZALPA submitted that the senior person requirement should be deleted.

CAA response: The concept of clearly identifying responsibilities within an organisation is fundamental to the new rules. The CAA finds it difficult to accept that this should not be the case. The Chief Executive of the organisation supplying meteorological services, or a person nominated as the “Chief Executive” of the nominal part of an organisation that supplies meteorological services, under Part 174 is ultimately responsible for that meteorological services operation and must be listed as required by 174.51(a).

Similarly, any organisation wanting to be certificated under the Part must list a senior person or persons responsible for the meteorological service operations on a day to day basis. These basic organisational principles formed a major part of the Swedavia McGregor Report 1988 recommendations. Such listed senior personnel must be ultimately responsible to the Chief Executive.

3.1.2 Both Hodgson and ACNZ commented on the competency requirements of 174.51(b). One part of their concern was the level of competency required when personnel carried out partial meteorological operations as opposed to fully trained staff as contemplated in the AC. Their secondary concern was who would initially assess the competence of personnel before certification could be granted.

CAA response: The CAA accepts that there are situations where personnel do not need full WMO qualification to particular grades (or equivalent) as could be inferred from the AC in the NPRM. The AC has been amended to allow for partial qualification. Initial competence assessment procedure should be documented in the meteorological suppliers exposition. Competence should be assessed by a person qualified in the area as outlined in the AC.

The CAA considers that the documented assessment of personnel competence is a vital component of effective organisational management.

3.2 174.53

MetService was concerned that 174.53(2) required the ideal siting of meteorological sensing facilities regardless of expense or other technical logistics.

CAA response: Rule. 174.53 requires “technically appropriate” siting and not “the most technically appropriate siting”. However, the concern is accepted by CAA and the AC has been amended accordingly.

3.3 174.57(b)

MetService had some concerns on the geographic extent of the requirement for adequate data, considering large areas of responsibility (New Zealand oceanic FIR) were inherently data sparse. Concern was also expressed at the possibly onerous requirement for validating information over such a wide area.

CAA response: It is not the intention of the CAA to require meteorological suppliers of forecast information to access information which is not directly pertinent to their operations. The AC has been amended giving the reasonable and appropriate levels of information for compliance with the Part.

3.4 174.59

The Guild of Air Pilots & Navigators (GAPN) and NZALPA were concerned that the absence of specific output criteria in 174.59 (such as that promulgated by ICAO or WMO), allows the provision of meteorological services with unacceptably flexible standards.

CAA response: The CAA does not share this view. The AC provides for minimum acceptable standards as promulgated by ICAO and WMO. These standards have not been incorporated by reference in the rule in order to allow alternative means of compliance to be presented to the CAA for acceptance. In no case will the CAA accept standards less than those promulgated by ICAO and WMO.

3.5 174.63

ACNZ was concerned that a discrete set of documents would be required outside their overall operational manuals.

CAA response: The CAA only requires documentation of meteorological operations. Incorporation of such manuals in a larger set of documentation is acceptable as long as such documentation is readily accessible for operational and audit purposes.

A discrete set of documents relating to certification under part 174 represents an ideal situation. However an adequate master cross-reference matrix for existing manual contents can be accepted.

3.6 174.71

MetService had some concern as to who notifies the certificate holder that an accident or incident has occurred so that the certificate holder can take appropriate and required action.

CAA response: The CAA has the responsibility of officially notifying relevant certificate holders of accidents or incidents that may require information or action by the certificate holder. This is covered in Part 3.

3.7 174.75(b)3

3.7.1 MetService submits that in light of experience of requests for meteorological records the requirement to keep such records for 30 days may be inadequate. MetService suggested that the period be extended to 60 days.

CAA response: The CAA accepts this recommendation and has amended the rule accordingly.

3.7.2 ACNZ was concerned that the required documentation had to be on paper where much of what ACNZ presently keeps is in electronic form.

CAA response: The use of electronic medium to store documentation is acceptable to the CAA and the AC has been amended to reflect the acceptability of any accessible permanent archive regardless of nature.

3.8 174.77

MetService is concerned that 174.77 requires the person responsible for quality assurance to have direct access to the Chief Executive. MetService submits that this may be impracticable in an organisational sense.

CAA response: The CAA considers that it is in the interest of the Chief Executive (refer also to CAA Response in 3.1.1 above) to be directly linked to the internal quality assurance function. This would enable the Chief Executive to fulfil the CEO's responsibilities under 174.51(a)(1).

This is a fundamental component of modern organisational management and a key link in all rules requiring organisations to have certification. It will provide for a more effective system of safety management than has existed in the past.

4. Advisory Circular

4.1 AC 174.65

MetService submitted that the inspection intervals listed were not necessarily practical in the area of meteorological equipment and not representative of accepted methodologies and operations in the computing (software operation) or communications fields.

CAA response: The CAA agrees that the means of compliance were too specific and has rewritten part of AC 174.65 to more accurately reflect operational and technical realities.

4.1 AC 174.79

MetService was concerned that they would have to make available information on product formats and content that were confidential between themselves and particular clients.

CAA response: Concerns about confidentiality are accepted. The CAA will take all reasonable precautions to ensure information clearly marked confidential remains so.

5. Conclusion

The Authority believes that Part 174 meets New Zealand's international obligations and is consistent with the recommendations of the Swedavia - McGregor Report of 1988. Specific issues that have been identified in the comments have been addressed and, where appropriate, changes have been made to meet the concerns raised. The comments and all background material used in formulating the rules are held on the docket file and are available for public scrutiny. Persons wishing to view the docket file should call at Aviation House, 1 Market Grove, Lower Hutt and ask for Docket file No: 1051.