

#### WELLINGTON NEW ZEALAND

**PURSUANT** to Section 28 of the Civil Aviation Act 1990

I, MARK GOSCHE, Minister of Transport,

**HEREBY MAKE** the following ordinary rules.

SIGNED AT Wellington

This

18th day of December

2001

by MARK GOSCHE

Minister of Transport

Civil Aviation Rules

Part 171

Aeronautical Telecommunication Services - Operation and Certification - Re-issue

Docket 99/CAR/1325

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# **Objective**

The objective of Part 171 is to provide the operating and technical standards for aeronautical telecommunication services and facilities, and the rules governing the certification and operation of organisations providing aeronautical telecommunication services in support of IFR flight or an air traffic service.

The re-issue of this Part also requires the repeal of existing provisions to Schedule 1 of the Civil Aviation (Offences) Regulations 1997 and insertion of new provisions.

#### **Extent of consultation**

A review of Part 171 was carried out in 1998, and an informal draft amendment was distributed to the current certificate holders. A period of informal consultation followed.

A Notice of Proposed Rulemaking was issued under Docket 99/CAR/1325 on 25 February 1999.

The publication of this NPRM was notified in the *Gazette* on 11 March 1999 and in the daily newspapers in the five main provincial centres on 11 March 1999. 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 30 days was allowed for comment on the proposed changes to the rule Part.

# Summary of comments

The submissions and verbal comments were considered and where appropriate the proposed rules were amended to take account of the comments made. The rules, as amended, were then referred to and signed by the Minister of Transport.

#### **Examination of comments**

Comments may be examined by application to the Docket Clerk at Aviation House between 8:30 am and 4:30 pm on weekdays except statutory holidays.

#### Re-issue

The re-issue of Part 171 is reflected by the revocation of the existing Part and replacement with the re-issued Part.

#### Effective date of rule

The re-issue of Part 171 comes into force on 24 January 2002.

#### **Availability of rules**

Civil Aviation Rules are available from—

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

or from:

Freephone: 0800 GET RULES (0800 438 785)

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#### Part 171 Re-issue

Part 171 is revoked and the following new Part is inserted.

#### Subpart A — General

# 171.1 Purpose

This Part prescribes—

- (1) operating and technical standards for aeronautical telecommunication services, and facilities; and
- (2) rules governing the certification and operation of organisations providing aeronautical telecommunication services in support of IFR flight or an air traffic service.

#### 171.3 Definitions

In this Part—

**Exposition** means an exposition required by 171.77.

# 171.5 Requirement for certificate

- (a) Except as provided in paragraphs (b) and (c) no person may provide an aeronautical telecommunication service or operate an aeronautical facility except under the authority of, and in accordance with the provisions of, an aeronautical telecommunication service certificate.
- (b) Paragraph (a) does not apply if a person operates an aeronautical facility on an aeronautical radio frequency and—
  - (1) the aeronautical facility—
    - (i) is a radio communication transmitter that does not support an air traffic service; or
    - (ii) is a radio navigation aid that does not support IFR flight or an air traffic service; and

- (2) the aeronautical facility is operated in accordance with—
  - (i) the applicable system characteristics prescribed in ICAO Annex 10, Volume III, Part II, Chapter 2 or Annex 10, Volume I, Chapter 3; and
  - (ii) the applicable communication procedures prescribed in ICAO Annex 10, Volume II; and
- (3) the aeronautical facility does not interfere with any other aeronautical telecommunication service or aeronautical facility; and
- (4) a radio apparatus licence has been granted by the Chief Executive of the Ministry of Economic Development for the aeronautical facility; and
- (5) an identification code or a call sign has been allocated for the aeronautical facility under 171.17.
- (c) Paragraph (a) does not apply if a person operates a ground mobile radio on an aeronautical radio frequency and—
  - (1) the radio is not used to support an air traffic service; and
  - (2) the radio is operated in accordance with the applicable communication procedures prescribed in ICAO Annex 10, Volume II; and
  - (3) the radio transmission does not interfere with any other aeronautical telecommunication service or aeronautical facility; and
  - (4) a radio apparatus licence has been granted by the Chief Executive of the Ministry of Economic Development for the radio.

# 171.7 Application for certificate

An applicant for an aeronautical telecommunication service certificate must complete form CAA 24171/01, and submit it to the Director with—

- (1) the applicant's exposition; and
- (2) if applicable, the application for an identification code or a call sign required by 171.17; and
- (3) if applicable, a payment of the appropriate application fee prescribed by regulations made under the Act.

#### 171.9 Issue of certificate

The Director must in accordance with section 9 of the Act issue an aeronautical telecommunication service certificate to an applicant if the Director is satisfied that—

- (1) the applicant meets the requirements of Subpart B; and
- (2) the applicant and the senior person or senior persons required under 171.51(a)(1) and (2) are fit and proper persons; and
- (3) the granting of the certificate is not contrary to the interests of aviation safety.

# 171.11 Privileges of certificate holder

- (a) An aeronautical telecommunication service certificate specifies the aeronautical telecommunication services and aeronautical facility types that the certificate holder is authorised to operate in support of IFR flight or an air traffic service.
- (b) Subject to 171.113, the holder of an aeronautical telecommunication service certificate may operate any of the aeronautical facility types specified on the holder's certificate so long as—

- (1) each aeronautical facility operated is listed in the certificate holder's exposition; or
- (2) if the aeronautical facility is not listed in the exposition, its operation is for site test purposes controlled by the procedures required under 171.53(b).

#### 171.13 Duration of certificate

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

#### 171.15 Renewal of certificate

- (a) An application for the renewal of an aeronautical telecommunication service certificate must be made on form CAA 24171/01.
- (b) The application for the renewal must be made 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.

# 171.17 Identification codes and call signs

- (a) No person may operate—
  - (1) a radio navigation aid, unless it has been allocated an identification code by the Director under paragraph (c); or

- (2) a radio communication transmitter on an aeronautical radio frequency other than one operated under 171.5(c), unless it has been allocated a call sign by the Director under paragraph (c).
- (b) An applicant for the allocation of an identification code or a call sign under paragraph (a), must complete form CAA 24171/02 and submit it to the Director with, if applicable, a payment of the appropriate application fee prescribed by regulations made under the Act.
- (c) The Director may allocate an identification code for a radio navigation aid or a call sign for a radio communication transmitting aeronautical facility if the Director is satisfied that the allocation of a code or call sign is not contrary to the interests of aviation safety.

#### 171.19 Notification of aeronautical facility information

A person operating an aeronautical facility must, as soon as practicable—

- (1) forward to the provider of the AIS—
  - (i) information on the operational details of the aeronautical facility, for publication in the New Zealand AIP; and
  - (ii) information concerning any change in the operational status of the aeronautical facility, for the issue of a NOTAM; and
- (2) check, if applicable, that the information forwarded under paragraph (1) has been accurately published.

# 171.21 Information provided by an aeronautical facility

A person operating an aeronautical facility must not permit the facility to continue in operational service if that person suspects or has any cause to suspect that the information being provided by that facility is erroneous.

# Subpart B — Certification Requirements

#### 171.51 Personnel requirements

- (a) An applicant for an aeronautical telecommunication service certificate must employ, contract, or otherwise engage—
  - (1) a senior person identified as the chief executive who—
    - (i) has the authority within the applicant's organisation to ensure that all activities undertaken by the organisation can be financed and carried out to meet applicable operational requirements; and
    - (ii) is responsible for ensuring that the organisation complies with the requirements of this Part; and
  - (2) a senior person or persons responsible to the chief executive for ensuring that the applicant's organisation complies with its exposition; and
  - (3) sufficient personnel to inspect, supervise, and maintain the facilities listed in the applicant's exposition.
- (b) An applicant for an aeronautical telecommunication service certificate must establish procedures for personnel, who are authorised by the holder of the aeronautical telecommunications service certificate to place into operational service any of the facilities listed in the exposition, to—
  - (1) assess the competence of those authorised personnel; and
  - (2) maintain the competence of those authorised personnel; and
  - (3) establish a means to provide those personnel with written evidence of the scope of their authorisation.

#### 171.53 Aeronautical facility requirements

- (a) An applicant for an aeronautical telecommunication service certificate must establish a procedure to ensure that—
  - (1) each aeronautical facility listed in the applicant's exposition—
    - (i) is designed, installed, and commissioned to meet the applicable operational specification for that facility; and
    - (ii) conforms with the applicable system characteristics and specification standards prescribed in ICAO Annex 10, Volumes I, III, and IV; and
    - (iii) conforms with the applicable specifications and requirements of Subpart D; and
    - (iv) has been allocated an identification code or call sign, if a code or call sign is required under 171.17; and
  - (2) information on the operational status of each radio navigation aid listed in the applicant's exposition, that is essential for the approach, landing, and take-off at an aerodrome, is provided to meet the operational needs of—
    - (i) the air traffic control unit providing an aerodrome control service for that aerodrome while that service is being provided; and
    - (ii) the air traffic control unit providing an approach control service for that aerodrome while that service is being provided; and
  - (3) each aeronautical facility listed in the applicant's exposition is installed with suitable power supplies and means to ensure continuity of operation appropriate to the

- needs of the air traffic service or radio navigation service being supported; and
- (4) each aeronautical facility listed in the applicant's exposition is installed in accordance with the security programme required under 171.55 to minimise any risk of destruction, damage, or interference with the operation of the facility; and
- (5) any critical site area of any aeronautical facility listed in the applicant's exposition is—
  - (i) clearly identified on the site drawings for the aeronautical facility; and
  - (ii) physically protected by suitable signposts on the site; and
  - (iii) protected by written agreements with the site owner, aerodrome operator, and air traffic control unit, as appropriate, to ensure that site restrictions are not infringed by buildings, fences, vehicles, machinery, or aircraft.
- (b) An applicant for an aeronautical telecommunication service certificate who intends to operate a temporary aeronautical facility to carry out site tests must establish a procedure for conducting those tests.
- (c) The procedure required under paragraph (b) must require that—
  - (1) the operation of the temporary facility does not cause any interference with any other operating aeronautical facility; and
  - (2) appropriate information regarding the operation of the temporary facility is forwarded to the provider of the AIS

for the issue of a NOTAM, and if appropriate the publication of a Supplement to the AIP; and

(3) an appropriate NOTAM has been published.

#### 171.55 Security programme

- (a) An applicant for the grant of an aeronautical telecommunication service certificate must establish a security programme for the facilities listed in the applicant's exposition.
- (b) The security programme required under paragraph (a) must specify the physical security requirements, practices, and procedures to be followed for the purposes of minimising the risk of destruction of, damage to, or interference with the operation of any aeronautical facility operated under the authority of the aeronautical telecommunication service certificate, if such destruction, damage, or interference could endanger the safety of aircraft.
- (c) The security programme required under paragraph (a) must include such physical security requirements, practices, and procedures as may be necessary—
  - (1) to ensure that each aeronautical facility is subject to positive access control at all times to prevent unauthorised entry; and
  - (2) for personnel to follow in the event of a bomb threat or other threat of damage to an aeronautical facility; and
  - (3) to monitor an unattended aeronautical facility building to ensure that any intrusion or interference is immediately detected.

#### 171.57 Documentation

(a) An applicant for an aeronautical telecommunication service certificate must hold copies of relevant equipment manuals, technical standards, practices, instructions, and any other documentation that

are necessary for the provision and operation of the facilities listed in the applicant's exposition.

- (b) An applicant for an aeronautical telecommunication service certificate must establish a procedure for the control of the documentation required under paragraph (a) and any other applicable Rule Part.
- (c) The procedure required under paragraph (b) must require that—
  - (1) all documentation is reviewed and authorised by an appropriate senior person referred to in 171.51 before issue; and
  - (2) current issues of all relevant documentation are accessible to staff at all locations if required for the provision and operation of aeronautical facilities; and
  - (3) all obsolete documentation is promptly removed from all points of issue or use; and
  - (4) changes to documentation are reviewed and authorised by an appropriate senior person referred to in 171.51; and
  - (5) the current version of each item of documentation can be identified.

#### 171.59 Periodic inspection and testing

- (a) An applicant for an aeronautical telecommunication service certificate must establish a procedure for the periodic inspection and testing of the aeronautical facilities listed in the applicant's exposition to verify that each aeronautical facility meets the applicable operational requirements and performance specifications for that facility.
- (b) The procedure required under paragraph (a) must—

- (1) include ground inspections and tests, and if necessary, flight tests; and
- (2) include the criteria for establishing or changing the interval between the periodic tests for each aeronautical facility listed in the exposition, having regard to—
  - (i) any applicable information published by ICAO; and
  - (ii) any applicable reliability data for the aeronautical facility; and
  - (iii) information on the proven reliability performance of the aeronautical facility, and of other similar aeronautical facilities, and the stability of the aeronautical facility's operating environment; and
- (3) ensure that the grounds for establishing or changing the interval between the periodic tests for each aeronautical facility listed in the exposition are documented.
- (c) An applicant for an aeronautical telecommunication service certificate must establish—
  - (1) a programme of periodic ground inspections for each aeronautical facility listed in the applicant's exposition; and
  - (2) a programme of periodic ground tests for each aeronautical facility listed in the applicant's exposition; and
  - (3) a programme of periodic flight tests for each radio navigation aid listed in the applicant's exposition unless the applicant can establish from the criteria under paragraph (b)(2) that periodic ground tests can replace the periodic flight tests for the aeronautical facility without affecting the safety of air navigation.

- (d) The programmes required by paragraphs (c)(2) and (c)(3) must be based on the criteria required under paragraph (b)(2) and must specify the maximum interval between the tests for each aeronautical facility.
- (e) An applicant for an aeronautical telecommunication service certificate must notify the Director of any radio navigation aid that is not subjected to periodic flight tests.

# 171.61 Aeronautical facility performance

An applicant for an aeronautical telecommunication service certificate must establish a procedure to ensure that no aeronautical facility listed in the applicant's exposition is placed into operational service unless—

- (1) the person placing the aeronautical facility into operational service is assessed as competent and authorised according to the procedures required under 171.51(b); and
- (2) the appropriate checks detailed in the operating and maintenance instructions required under 171.107 have been carried out to verify the performance of the aeronautical facility; and
- (3) the aeronautical facility record has been completed according to the procedures required under 171.71.

# 171.63 Inspection, measuring, and test equipment

- (a) An applicant for an aeronautical telecommunication service certificate must ensure that appropriate inspection, measuring, and test equipment is available for personnel to maintain the operation of each aeronautical facility listed in the applicant's exposition.
- (b) An applicant for an aeronautical telecommunication service certificate must establish a procedure to control, calibrate, and maintain all the inspection, measuring, and test equipment required under paragraph (a) to ensure that each item of equipment has the

precision and accuracy that is necessary for the measurements and tests to be performed.

- (c) The procedure required under paragraph (b) must require that each item of test equipment required for the measurement of critical performance parameters is—
  - (1) calibrated before use or at prescribed intervals with the calibration traceable to an appropriate national standard; and
  - (2) identified with a suitable indicator to show its calibration status; and
  - (3) controlled to—
    - (i) safeguard against adjustments that would invalidate the calibration setting; and
    - (ii) ensure that the handling, preservation, and storage of the test equipment are such that its accuracy and fitness for use is maintained.
- (d) If hardware and software systems are used for the performance testing of any aeronautical facility, the procedures under paragraph (b) must require the functions of those testing systems to be checked—
  - (1) before being released for use; and
  - (2) at prescribed intervals—

to establish that those testing systems are capable of verifying the true performance of the aeronautical facility.

# 171.65 Notification of aeronautical facility information

(a) An applicant for an aeronautical telecommunication service certificate must establish a procedure to ensure that the requirements

of 171.19 are met for each applicable aeronautical facility listed in the applicant's exposition.

- (b) The procedure required under paragraph (a) must include a means to confirm that—
  - (1) the operational details of the aeronautical facility as notified to AIS have been accurately published in the AIP; and
  - (2) any change to the operational status of the aeronautical facility has been published by NOTAM.

# 171.67 Aeronautical facility check after accident or incident

- (a) An applicant for an aeronautical telecommunication service certificate must establish a procedure to check and accurately record the operating condition of any aeronautical facility operated under the authority of the certificate that may have been used by an aircraft, or an air traffic service, that is involved in an accident or incident.
- (b) The procedure required under paragraph (a) must require that—
  - (1) the check of the aeronautical facility's operating condition is carried out as soon as practicable after notification to the holder of the aeronautical telecommunication certificate of the accident or incident; and
  - (2) the record of that check, and the recorded history of the aeronautical facility, is kept in a secure place for possible use by any subsequent accident or incident investigation; and
  - (3) the records required to be secured under paragraph (b)(2) are retained for 3 years from the date of the last entry made on that record.

# 171.69 Facility malfunction incidents

An applicant for the grant of an aeronautical telecommunication service certificate must establish procedures—

- (1) to notify, investigate, and report facility malfunction incidents in accordance with the requirements of Part 12; and
- (2) to implement corrective actions to eliminate the cause of a facility malfunction incident and prevent its recurrence.

#### 171.71 Records

- (a) An applicant for an aeronautical telecommunication service certificate must establish procedures to identify, collect, index, store, maintain, and dispose of the records that are necessary to record—
  - (1) the safe provision of the aeronautical telecommunication services; and
  - (2) the safe operation of each aeronautical facility listed in the applicant's exposition.
- (b) The procedures required under paragraph (a) must require that accurate records of the following are maintained:
  - (1) for each aeronautical facility, a record—
    - (i) documenting the operating performance of the aeronautical facility; and
    - (ii) providing a history of the maintenance, and the periodic inspections and tests of the aeronautical facility, that are traceable to the person or persons responsible for each of the recorded activities; and
  - (2) for each aeronautical facility, a record of the establishment of, or a change in, the periodic tests required under 171.59(a); and

- (3) for each item of test equipment required under 171.63(a) that is used for the measurement of an aeronautical facility's critical performance parameters, a record that includes a traceable history of the location, maintenance, and the calibration checks for the item of test equipment; and
- (4) for each facility malfunction incident reported under Part 12, a record that includes—
  - (i) details of the nature of the malfunction; and
  - (ii) the findings of the investigation; and
  - (iii) the follow up corrective actions; and
  - (iv) if applicable, a copy of the report submitted to the Authority under Part 12; and
- (5) a record of each internal audit required under 171.73(b)(5), and of each management review required under 171.73(b)(6); and
- (6) for each person who is authorised in accordance with 171.51(b) to place aeronautical facilities into operational service, a record that includes details of the person's experience, qualifications, training, competence assessments, and current authorisations.
- (c) The procedures required under paragraph (a) must require—
  - (1) all records to be legible and of a permanent nature; and
  - (2) all aeronautical facility records required under paragraph (b)(1) to be retained for a period of at least three years unless a longer period is required—
    - (i) by the Director; or

(ii) to establish a performance history for the aeronautical facility.

#### 171.73 Internal quality assurance

- (a) An applicant for an aeronautical telecommunication service certificate must establish an internal quality assurance system to ensure compliance with, and the adequacy of, the procedures required under this Part.
- (b) The internal quality assurance system must include—
  - (1) a safety policy and safety policy procedures, including the procedure required under 171.69 for investigating facility malfunction incidents; and
  - (2) a procedure to ensure quality indicators, including equipment availabilities, malfunctions, faults, and personnel and customer feedback, are monitored to identify existing problems or potential causes of problems within the internal quality assurance system; and
  - (3) a procedure for corrective action to ensure existing problems that have been identified within the internal quality assurance system are corrected; and
  - (4) a procedure for preventive action to ensure that potential causes of problems that have been identified within the internal quality assurance system are remedied; and
  - (5) an internal audit programme for the applicant's organisation to ensure conformity with the procedures in the applicant's exposition and to achieve the goals set in the safety policy; and
  - (6) management review procedures, that should include the use of statistical analysis if appropriate, to ensure the continuing suitability and effectiveness of the internal

quality assurance system in satisfying the requirements of this Part.

- (c) The procedure required under paragraph (b)(3) for corrective action must specify how—
  - (1) to correct an existing quality problem; and
  - (2) to follow up a corrective action to ensure the action is effective; and
  - (3) to amend any procedure required under this Part as a result of a corrective action; and
  - (4) management will measure the effectiveness of any corrective action taken.
- (d) The procedure required under paragraph (b)(4) for preventive action must specify how—
  - (1) to correct a potential quality problem; and
  - (2) to follow-up a preventive action to ensure the action is effective; and
  - (3) to amend any procedure required under this Part as a result of a preventive action; and
  - (4) management will measure the effectiveness of any preventive action taken.
- (e) The internal audit programme required under paragraph (b)(5) must—
  - (1) specify the frequency and location of the audits taking into account the nature of the activity to be audited; and

- (2) measure the effectiveness of any preventative or corrective action taken by the personnel responsible for the activity being audited since the last audit; and
- (3) require preventative or corrective action to be taken by the personnel responsible for the activity being audited if problems are found by the audit; and
- (f) The procedure for management review required under paragraph (b)(6) must—
  - (1) specify the frequency of management reviews of the internal quality assurance system taking into account the need for the continuing effectiveness of the system; and
  - (2) identify the senior person responsible for the management reviews referred to in paragraph (f)(1); and
- (g) The senior person responsible for the internal quality assurance system must—
  - (1) ensure that the safety policy and the safety policy procedures are understood, implemented, and maintained at all levels of the aeronautical telecommunication service certificate holder's organisation; and
  - (2) ensure that the audits are performed by trained auditing personnel who are independent of those having direct responsibility for the activity being audited; and
  - (3) ensure that the results of the audits are reported to the personnel responsible for the activity being audited; and
  - (4) ensure that all corrective and preventative actions are followed up to review the effectiveness of those actions; and
  - (5) ensure that the results of the management review are evaluated and recorded; and

(6) have direct access to the chief executive on matters affecting the integrity of the facilities operated under the authority of the aeronautical telecommunications service certificate.

#### 171.75 Communication procedures

An applicant for an aeronautical telecommunication service certificate must ensure that the procedures for operating the facilities listed in the applicant's exposition are in accordance with the applicable communication procedures prescribed in ICAO Annex 10, Volume II.

#### 171.77 Organisation exposition

- (a) An applicant for an aeronautical telecommunication service certificate must provide the Director with an exposition containing—
  - (1) a statement signed by the chief executive, on behalf of the applicant's organisation confirming that—
    - (i) the exposition defines the organisation and demonstrates its means and methods for ensuring ongoing compliance with this Part; and
    - (ii) the exposition, and all associated manuals, operating, and maintenance instructions, must be complied with by the organisation's personnel at all times; and
  - (2) the titles and names of the senior person or persons required under 171.51(a)(1) and (2); and
  - (3) the duties and responsibilities of the senior person or persons in paragraph (a)(2), including matters for which they have responsibility to deal directly with the Director on behalf of the organisation; and

- (4) an organisation chart showing lines of responsibility of the senior persons in paragraph (a)(2) and covering each location listed under paragraph (a)(7); and
- (5) a summary of the organisation's staffing structure at each location listed under paragraph (a)(7); and
- (6) a list of each type of aeronautical facility to be operated under the authority of the aeronautical telecommunication service certificate; and
- (7) a summary of the scope of activities at each location where the organisation's personnel are based for the purpose of providing or maintaining the types of facilities listed under paragraph (a)(6); and
- (8) a summary of the operational details of each aeronautical facility associated with each location listed under paragraph (a)(7); and
- (9) details of the security programme required under 171.55; and
- (10) the detailed procedures required under 171.73 regarding internal quality assurance; and
- (11) the detailed procedures, or an outline of the procedures including information that identifies the documentation that contains the detailed procedures, that are required under—
  - (i) 171.51(b)(1) and (2) regarding the competence of personnel; and
  - (ii) 171.53(a) regarding the design, installation, and commissioning of facilities; and
  - (iii) 171.53(b) regarding the operation of temporary facilities for site tests; and

- (iv) 171.57(b) regarding the control of documentation; and
- (v) 171.59(a) regarding periodic inspections and testing of facilities; and
- (vi) 171.61 regarding facility performance; and
- (vii) 171.63 regarding the control, calibration, and maintenance of inspection, measuring, and test equipment; and
- (viii) 171.65(a) regarding the notification of facility information; and
- (ix) 171.67(a) regarding facility checks after notification of an accident or incident; and
- (x) 171.69 regarding facility malfunction incidents; and
- (xi) 171.71(a) regarding the identification, collection, indexing, storage, maintenance, and disposal of records; and
- (xii) 171.75 regarding the communication procedures; and
- (12) Detailed procedures to control, amend, and distribute the exposition.
- (b) The Director may not grant an aeronautical telecommunication service certificate unless the Director is satisfied that the applicant's exposition complies with this Part.

#### Subpart C — Operating Requirements

# 171.101 Continued compliance

The holder of an aeronautical telecommunication service certificate must—

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- (1) continue to meet the standards and comply with the requirements of Subpart B prescribed for certification under this Part; and
- (2) comply with all procedures referred to in its exposition; and
- (3) hold at least one complete and current copy of its exposition at each location listed in its exposition where a senior person is based; and
- (4) make each applicable part of its exposition available to personnel who require those parts to carry out their duties; and
- (5) notify the Director on form CAA 24171/01 of any change of address for service, telephone number, or facsimile number within 28 days of the change.

#### **171.103 Reserved**

#### **171.105** Reserved

# 171.107 Operating and maintenance instructions

- (a) The holder of an aeronautical telecommunication service certificate must—
  - (1) have operating and maintenance instructions that set out the requirements for operating and maintaining each aeronautical facility listed in its exposition; and
  - (2) provide the operating and maintenance instructions required under paragraph (1) for the use and guidance of its personnel.
- (b) The operating and maintenance instructions required under paragraph (a)(1) must include—

- (1) details of the critical performance parameters for each aeronautical facility; and
- (2) the associated minimum performance levels for those critical performance parameters referred to in paragraph (b)(1); and
- (3) details of the test equipment required for the measurement of those critical performance parameters referred to in paragraph (b)(1); and
- (4) details of the mandatory inspections and test procedures for the operational service; and
- (5) details of the mandatory inspection and test procedures for the operation and maintenance of each aeronautical facility.

#### 117.109 Deviations

- (a) If an emergency necessitates immediate action for the protection of life or property, and the action involves an aircraft operation, the holder of an aeronautical telecommunication service certificate may, subject to 171.113(a), deviate from any requirement of this Part.
- (b) The holder of an aeronautical telecommunication service certificate who deviates from a requirement of this Part under paragraph (a) must—
  - (1) provide a written report to the Director as soon as practicable, but in any event not later than 14 days, after the emergency; and
  - (2) include in the report required under paragraph (b)(1) the nature, extent, and duration of the deviation.

# 171.111 Temporary aeronautical facility

If a temporary aeronautical facility is operated for the purpose of a site test, the holder of an aeronautical telecommunication service certificate is not required to comply with any requirements of Subpart B, except for 171.53(b) and (c).

#### 171.113 Limitations on certificate holder

- (a) Except for the operation of a temporary aeronautical facility for site tests according to the procedures required under 171.53(b), the holder of an aeronautical telecommunication service certificate may not permit an aeronautical facility to continue in operational service under the authority of the certificate if the holder has any cause to suspect the integrity of the information being provided by the facility.
- (b) The holder of an aeronautical telecommunication service certificate may not operate a radio transmitting aeronautical facility on an aeronautical radio frequency except under a radio apparatus licence granted by the Chief Executive of the Ministry of Economic Development for the facility.
- (c) Except if a deviation is required under 171.109(a) or a site test is carried out according to the procedures required under 171.53(b), the holder of an aeronautical telecommunication service certificate may not operate an aeronautical facility under the authority of that certificate unless—
  - (1) the aeronautical facility is listed in the certificate holder's exposition; and
  - (2) the performance of the aeronautical facility meets the applicable information published for that facility under 171.19; and
  - (3) the performance of the aeronautical facility meets the applicable requirements in 171.53(a); and

- (4) any integrity monitoring system for the aeronautical facility is fully functional; and
- (5) all the periodic tests for the aeronautical facility are completed according to the programmes established under 171.59(c)(2) and (3); and
- (6) the aeronautical facility is included in the certificate holder's security programme required under 171.55(a) if the destruction, damage, or interference with the aeronautical facility is likely to endanger the safety of an aircraft in flight; and
- (7) if paragraph (c)(6) applies, the requirements of the security programme for the aeronautical facility are being complied with.

#### 171.115 Changes to certificate holder's organisation

- (a) The holder of an aeronautical telecommunication service certificate must—
  - (1) ensure that its exposition is amended, as required, to remain a current description of the certificate holder's organisation, aeronautical telecommunication services, and facilities; and
  - (2) ensure that any amendments made to its exposition meet the applicable requirements of this Part; and
  - (3) comply with the exposition amendment procedure contained in its exposition; and
  - (4) provide the Director with a copy of each amendment to its exposition, immediately after the amendment is incorporated into the exposition; and
  - (5) make such amendments to its exposition as the Director may consider necessary in the interests of aviation safety.

- (b) The holder of an aeronautical telecommunication service certificate must apply and obtain prior acceptance by the Director if the certificate holder proposes to change any of the following—
  - (1) the chief executive:
  - (2) the listed senior persons:
  - (3) the security programme:
  - (4) the types of aeronautical facility operated under the authority of the certificate.
- (c) An application to make any of the changes under paragraph (b) must be made by the certificate holder on form CAA 24171/01.
- (d) The Director may impose any conditions, that the Director considers necessary in the interests of aviation safety, on the holder of an aeronautical telecommunications service certificate while any changes under paragraph (b) are occurring or as a consequence of those changes.
- (e) The holder of an aeronautical telecommunication service certificate must comply with any conditions imposed by the Director under paragraph (d).
- (f) If any of the changes under paragraph (b) requires an amendment to the aeronautical telecommunication service certificate, the certificate holder must forward the certificate to the Director as soon as practicable.

# Subpart D — Facility Specifications and Requirements 171.201 Additional Specifications and Requirements

The following specifications and requirements are applicable to the aeronautical facilities referred to in 171.53(a)(1)—

- (1) each NDB listed in an aeronautical telecommunication service certificate holder's exposition must conform to the following specification standards, in addition to the specification standards prescribed in ICAO Annex 10, Volume I, section 3.4:
  - (i) the radiated signal must be either, an uninterrupted carrier amplitude modulated by the on/off keying of a 1020 Hz plus or minus 50 Hz tone, or an uninterrupted carrier identified by the on/off keying of a second carrier separated 1020 Hz plus or minus 50 Hz from the continuous carrier:
  - (ii) the monitoring functions recommended in paragraphs 3.4.8.2 and 3.4.8.4 of ICAO Annex 10, Volume I are mandatory specification requirements for each NDB aeronautical facility:
  - (iii) the monitoring system for each NDB aeronautical facility must transmit a warning to a control point and switch off the NDB upon detection of any of the conditions detailed in paragraphs 3.4.8.1 and 3.4.8.2 of ICAO Annex 10, Volume I; and
- (2) each UHF DME listed in an aeronautical telecommunication service certificate holder's exposition must conform with the following requirements, in addition to the specifications prescribed in section 3.5 of ICAO Annex 10, Volume I:
  - (i) the beacon code identity signal prescribed in paragraph 3.5.3.6.3 (a) of ICAO Annex 10, Volume I must be transmitted at least once but not more than twice every 40 seconds with the code groups equally spaced:
  - (ii) the monitor function recommended in paragraph 3.5.4.7.2.3 of ICAO Annex 10, Volume I, is a

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mandatory specification requirement for each DME aeronautical facility; and

- (3) each radio navigation aid listed in an aeronautical telecommunication service certificate holder's exposition must be provided with a monitoring system that will remove the aeronautical facility from operational service and transmit a warning to an appropriate control point upon detection of any of the following conditions:
  - (i) navigation information outside the prescribed tolerance for the facility:
  - (ii) failure of the identification signal:
  - (iii) failure of the monitoring system.

#### **CONSULTATION DETAILS**

(This statement does not form part of the rules contained in the reissue of Part 171. It provides details of the consultation undertaken in making the rules.)

#### **Notice of Proposed Rule Making**

To provide public notice of, and the opportunity for comment on the proposed amendment to Part 171, the Authority issued Notice of Proposed Rule Making 99–1 under Docket 99/CAR/1325 on 25 February 1999. This Notice proposed the revisions and updates to the operating and certification rules relating to the aeronautical telecommunication services in Part 171, and the consequential changes to Part 12.

# Summary of Comments on Docket 99/CAR/1325 NPRM Specific comments on the NPRM

Specific written comments were received from one submitter, and verbal comments from two others. These comments are discussed as follows:

# **Civil Aviation Rules, Part 171**

#### 171.3 Definitions

1. One commenter proposed that paragraph (4) of the definition of the word "Facilities" should include the appropriate reference to Annex 10 of the Convention as this service is defined in Annex 10.

**CAA response:** CAA does not agree, as the definitions for the four Annex 10 services of aeronautical fixed, mobile, radio navigation, and broadcasting are provided in paragraphs (1), (2), and (3), and paragraph (4) provides for systems such as PSR, PAR, SSR, LAAS. The word is now defined more specifically

as 'aeronautical facility' and paragraph (5) has been included to provide for other services that operate in the aeronautical radio frequency band that are not defined in Annex 10.

2. One commenter suggested adding a definition of *Certificate* or *Telecommunications service certificate* means an Aeronautical telecommunications service certificate issued by CAA in compliance with Civil Aviation Rules Part 171.

**CAA response:** CAA agrees with the addition of a definition for certificate but with a slight change in the text to conform to rules requirements.

3. One commenter states the following terms need to be defined in Part 1, specifically in Part 171, or in Annex 10

Operator

**Applicant** 

Radio Apparatus Licence

Safety Policy

**Temporary Facility** 

**CAA response:** CAA disagrees. Definitions as given in the Act or the Concise Oxford Dictionary would not normally be included unless a different definition is intended. In addition the CAA considers that the meaning of these words or terms in the rule are self evident in the context in which they are used.

# 171.19 Notification of facility information

1. One commenter suggested amending 171.19 (a) to read: "Each person operating a facility, as required to be certificated in 171.5, shall establish a procedure—"

This suggested amendment endeavours to clarify which facilities require information to be notified to AIS. It suggests limiting notification to certified facilities thus eliminating the requirement to notify services that are required to have a radio frequency licence and call sign but are not in support of an ATC service. The issue that they are concerned about is the services that provide aircraft operational control (AOC) services either through HF data link or HF radio and are not in support of an ATS or Air Navigation service.

**CAA response:** CAA disagrees as 171.19 needs to be able to include the requirement for operators of non-certificated facilities such as UNICOM and AWIB broadcasts to provide the appropriate facility notification. Furthermore the AOC services that the commenter is concerned about are not covered by the definition of an aeronautical facility and are therefore not affected by 171.19.

# 171.53 Facility requirements

1. One commenter suggested adding Volumes I, III and IV of Annex 10 to 171.53(a)(1) (ii) so that surveillance radars are included.

**CAA response:** CAA agrees, and the addition has been made.

2. One commenter suggested that "without delay" in 171.53(a)(2) be amended to "to meet the operational needs of".

**CAA response:** CAA agrees and the change has been made.

#### 171.57 Documentation

1. One commenter suggested a format correction is needed for paragraph (c).

**CAA response:** CAA agrees and the correction has been made.

#### 171.69 Incident reporting

 One commenter agrees that incident reporting should be in accordance with Part 12 and therefore all rules relating to incident reporting should be taken from Part 12, to avoid confusion and duplicity.

Section (a) (2) should be deleted, as it is included in Part 12.

Section (b) should be deleted, as it is included in Part 12. Furthermore the reporting time of 10 days should be amended to be consistent with the requirements of Part 12.

If (a)(2) is not deleted, then the wording facility malfunction needs to be changed to "Facility Malfunction Incident".

**CAA response:** CAA agrees with the deletion of (a)(2). The heading will also be changed to Facility Malfunction Incidents. A paragraph will be added requiring the implementation of a corrective action to eliminate the cause of the facility malfunction incident and to prevent its recurrence.

# 171.73 Internal quality audit

1. One commenter suggested that the word *audit* in (f)(6) be replaced by *procedures*.

**CAA response:** CAA agrees that *audit* should be deleted, but not replaced by *procedures*, as "follow up" is already a procedure. This requirement is now included in paragraph (g)(4).

# 171.75 Communication procedures

1. One commenter suggested amending "Each Holder" to "Each applicant", to be consistent with subpart B requirements for certification.

**CAA response:** CAA agrees and the appropriate change has been made.

#### **Civil Aviation Rules Part 12**

#### 12.3 Definitions

 One commenter suggested deleting the definition "Telecommunication Hazard" as it is already covered by serious incident.

**CAA response:** CAA agrees and "Telecommunication Hazard" will be deleted. Also amended will be Facility malfunction incident to "Facility malfunction incident means an incident that involves an aeronautical telecommunications facility that—

- (a) had been operating outside allowable tolerances; or
- (b) had the potential to operate outside allowable tolerances; or
- (c) appeared to have a recurring cause of malfunctions."

#### 12.55 Notification of incident

1. One commenter indicated that a minor typographical error requires correction, in 12.55(a).

**CAA response:** Agrees.

 One commenter stated that he agrees with the separation of the 171 requirement out of subsection (a) but suggested the deletion of Telecommunications Hazard under 12.55(b)(2) because it is covered by a serious incident if the failure is of a serious nature.

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As defined a telecommunication hazard could be describing a natural event that occurs within the designed parameters of Annex 10. An example would be an aircraft on an ILS approach when the LLZ failed; the monitor correctly identified the failure, the LLZ changed to standby within the prescribed changeover time, or the VHF main transmitter failed but the alternate was immediately available.

Even a total failure of, for example, a navaid cannot be described as hazardous in the context that the design features under Annex 10 that require that a failure of an aid be fail safe.

**CAA response:** CAA agrees, and with the amended definition for facility malfunction incident, and no changes are required to the existing 12.55.

#### Conclusion

The Authority concludes from the initial consultation on the development of this amendment and from this formal consultation that the principal industry participants of Airways Corporation, Radiola, and Serco, agree with the rule amendments. Specific issues that were identified in the comments received from the consultative group have been addressed. The comments and all the background material used in the rule amendment are held on the docket file and are available for public scrutiny. Persons wishing to view the docket should call at Aviation House, 1 Market Grove, Lower Hutt and ask for Docket 99/CAR/1325.