



**PURSUANT** to Sections 28, 29 and 30 of the Civil Aviation Act 1990,  
and having had regard to the matters specified in section 33 of the Act,

**I, GERRY BROWNLEE**, Minister of Transport,

**HEREBY MAKE** the following ordinary rules.

**SIGNED AT** Wellington

This *3rd* day of *February* 2014

by **GERRY BROWNLEE**

Minister of Transport

A large, handwritten signature in black ink, appearing to read 'Gerry Brownlee', is written over the printed name.

**Civil Aviation Rules**  
**Part 91, Amendment 23**  
**General Operating and Flight Rules**  
*Docket 13/CAR/1*

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**Rule objective**

The objectives of amendment 23 to Part 91 are to make editorial amendments to clarify intent of the rules, make editorial corrections and and update the rules in line with modern drafting style.

Amendment 23 to Part 91 is constituent to NPRM 13-02 which contains amendments to the following Parts:

Part 1	Part 106
Part 19	Part 108
Part 43	Part 121
Part 65	Part 141
Part 66	Part 145
Part 77	Part 146
Part 91	Part 172
Part 93	Part 175
Part 101	

**Extent of consultation**

A Notice of Proposed Rulemaking, NPRM 13-02, containing the proposed changes to Part 91 and changes to other rules was issued for public consultation under Docket 13/CAR/1 on 30 May 2013.

The publication of this NPRM was notified in the Gazette, and published on the CAA web site, on 30 May 2013.

A period of 30 days was allowed for comments on the proposed rule.

**Summary of submissions**

A total of 4 written submissions were received on NPRM 13-02 (2 submissions related to Part 1, one related to Part 66, and one related to Part 103). No changes were made to Part 91 as a result of consultation.

A detailed summary of the submission and the resulting CAA comments are provided in the “Consultation Details” section of this document.

The rule was then referred to the Minister of Transport for signing.

**Examination of submissions**

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

**Description of Amendments**

The amendments to this Part are reflected by the revocation and replacement of existing rules.

**Effective date of rule**

Amendment 23 to Part 91 comes into force on 01 April 2014.

**Availability of rules**

Civil Aviation Rules are available from–

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

Freephone: 0800 GET RULES (0800 438 785)

## Part 91 General Operating and Flight Rules

*Rule 91.112 is revoked and replaced by the following rule:*

### **91.112 Daily flight records**

(a) Except as provided in paragraph (c), an operator of an aircraft must keep accurate daily flight records that contain for each flight the following—

- (1) the name of the operator:
- (2) the name of the pilot-in-command:
- (3) the names of other crew members:
- (4) the registration markings of the aircraft:
- (5) the date of the flight:
- (6) the purpose of the flight:
- (7) the time of commencement of the flight:
- (8) the name of the departure aerodrome:
- (9) the flight time.

(b) An operator must retain each daily flight record for a period of 12 months after the date of the flight.

(c) A person required to keep daily flight records under rules 115.455 or 135.857 is not required to comply with paragraphs (a) and (b).

*Rule 91.137 is revoked and replaced by the following rule:*

### **91.137 Volcanic hazard zones**

A pilot must not operate an aircraft within a volcanic hazard zone designated under Part 71—

- (1) during the night; or
- (2) in IMC; or

- (3) in VMC during the day unless the pilot determines that, after considering all of the following, the volcanic hazard will not affect the safety of the flight:
  - (i) relevant meteorological information contained in SIGMET;
  - (ii) NOTAM information;
  - (iii) other information provided for this purpose by an organisation that holds a meteorological service certificate issued by the Director under the Act and Part 174.

*Rule 91.225 is revoked and replaced by the following rule:*

### **91.225 Operations at aerodromes with air traffic services**

- (a) A pilot-in-command of an aircraft on or in the vicinity of an aerodrome with an aerodrome control service in operation must—
  - (1) unless otherwise authorised by ATC, maintain two-way radio communications with that service on the prescribed frequency; and
  - (2) obtain an ATC clearance from that service before—
    - (i) taxiing on any portion of the manoeuvring area; or
    - (ii) landing at or taking-off from any runway or heliport at that aerodrome; or
    - (iii) entering a control zone.
- (b) A pilot-in-command of an aircraft on or in the vicinity of an aerodrome with an aerodrome flight information service in operation must—
  - (1) if the aircraft is equipped with radio, maintain two-way radio communications with that service on the prescribed frequency; and

- (2) advise that service of the intended use of that aerodrome before —
  - (i) taxiing on any portion of the manoeuvring area; or
  - (ii) landing at or taking-off from any runway or heliport at that aerodrome; or
  - (iii) entering the aerodrome traffic circuit at that aerodrome.

(c) A pilot-in-command of an aircraft that is not equipped with radio and that is on or in the vicinity of an aerodrome with an aerodrome flight information service in operation must advise that service of the intended use of the aerodrome before —

- (1) taxiing on to any portion of the manoeuvring area; and
- (2) entering the aerodrome traffic circuit at that aerodrome.

*Rule 91.229 is revoked and replaced by the following rule:*

### **91.229 Right-of-way rules**

- (a) A pilot of an aircraft—
  - (1) must, when weather conditions permit, regardless of whether the flight is performed under IFR or under VFR, maintain a visual lookout so as to see and avoid other aircraft; and
  - (2) that has the right of way, must maintain heading and speed, but is not relieved from the responsibility of taking such action, including collision-avoidance manoeuvres based on resolution advisories provided by ACAS, that will best avert collision; and
  - (3) that is obliged to give way to another aircraft, must avoid passing over, under, or in front of the other aircraft, unless passing well clear of the aircraft, taking into account the effect of wake turbulence.

(b) A pilot of an aircraft must, when approaching another aircraft head-on, or nearly so, alter heading to the right.

(c) A pilot of an aircraft that is converging at approximately the same altitude with another aircraft that is to its right, must give way, except that the pilot operating—

- (1) a power-driven heavier-than-air aircraft must give way to airships, gliders, and balloons; and
- (2) an airship must give way to gliders and balloons; and
- (3) a glider must give way to balloons; and
- (4) a power-driven aircraft must give way to aircraft that are towing other aircraft or objects; and
- (5) all aircraft must give way to parachutes.

(d) A pilot of an aircraft that is overtaking another aircraft must, if a turn is necessary to avoid that aircraft, alter heading to the right, until the overtaking aircraft is entirely past and clear of the other aircraft.

(e) For the purpose of paragraph (d), an overtaking aircraft is an aircraft that approaches another from the rear on a line forming less than 70 degrees with the plane of symmetry of the latter.

(f) A pilot of an aircraft in flight or on the surface must—

- (1) give way to any aircraft that is on final approach to land or is landing; and
- (2) when the aircraft is one of 2 or more heavier-than-air aircraft approaching an aerodrome for the purpose of landing, give way to the aircraft at the lower altitude; and
- (3) not take advantage of right-of-way under subparagraph (2) to pass in front of another aircraft, which is on final approach to land, or overtake that aircraft.

(g) A pilot of an aircraft must not take off if there is an apparent risk of collision with another aircraft.



(h) A pilot of an aircraft taxiing on the manoeuvring area of an aerodrome must—

- (1) give way to aircraft landing, taking off, or about to take off; and
- (2) when 2 aircraft are approaching head on, or nearly so, stop or, where practicable, alter course to the right so as to keep well clear of the other aircraft; and
- (3) when 2 aircraft are on a converging course, give way to other aircraft on the pilot's right; and
- (4) when overtaking another aircraft, give way and keep well clear of the aircraft being overtaken.

(i) A pilot of an aircraft must give way to any aircraft that is in distress.

*Rule 91.246 is revoked and replaced by the following rule:*

#### **91.246 Operations in RNP designated airspace**

(a) A person must not operate an aircraft in RNP designated airspace in a New Zealand registered aircraft unless—

- (1) there is available in the aircraft a RNP operations procedures manual, incorporating all amendments, approved in accordance with this rule for that aircraft and aircraft navigation system; and
- (2) the operations in RNP designated airspace are performed in accordance with the procedures, instructions, and limitations in the approved manual; and
- (3) the instruments and equipment required by rule 91.519 for a particular RNP operation have been inspected and maintained in accordance with an approved maintenance programme; and
- (4) each flight crew member has adequate knowledge of, and familiarity with—

- (i) the aircraft; and
  - (ii) the aircraft navigation system; and
  - (iii) the procedures to be used, including the applicable contingency procedures; and
- (5) each pilot-in-command ensures that the aircraft and aircraft navigation system are both approved by the Director for RNP operations and that the RNP performance can be met for the planned route and any alternate routes; and
- (6) a flight plan is submitted to the appropriate ATS unit that includes in item 10 of the flight plan—
  - (i) the letter ‘R’ when indicating an aircraft approved for RNP operations; and
  - (ii) the letter ‘G’ when indicating an aircraft equipped with an approved GNSS capability.
- (b) Each operator of an aircraft performing RNP operations must keep a current copy of the RNP operation procedures manual at its principal base of operation and must make it available for inspection upon request by the Director.
- (c) Each applicant for the approval of a RNP operation procedures manual, or an amendment to an approved RNP operation procedures manual, must submit the proposed manual or amendment to the Director.
- (d) The Director may approve a RNP operation procedures manual and any amendment to a RNP operation procedures manual.
- (e) Each RNP operation procedures manual must contain—
  - (1) the name of the operator; and
  - (2) the registration, make, and model of the aircraft to which it applies; and

- (3) the type, manufacturer, and model of the aircraft navigation system to which it applies; and
- (4) a maintenance programme including procedures for the—
  - (i) test and inspection of each instrument and item of equipment required by rule 91.519 for RNP operations at intervals that ensure the RNP performance required for the particular operation is maintained; and
  - (ii) recording in the maintenance records the date, departure aerodrome, destination airport, and reasons for each RNP operation discontinued because of instrument or equipment malfunction; and
- (5) procedures and instructions related to—
  - (i) the mitigation of large navigational errors due to equipment malfunction or operational error; and
  - (ii) in-flight drills that include cross checking procedures to identify navigation errors in sufficient time to prevent inadvertent deviation from ATC cleared routes; and
  - (iii) updating the navigation system to ensure that the required RNP performance is maintained during operations in RNP designated airspace; and
  - (iv) the maximum permissible deviations of the RNP system within the RNP designated airspace; and
  - (v) the calculation of time limits to meet RNP criteria; and
  - (vi) instrument and equipment failure warning systems; and
  - (vii) system failure; and

- (viii) system monitoring and the collection of reliability and performance data; and
  - (ix) other procedures, instructions, and limitations that may be found necessary by the Director.
- (f) The procedures manual required by paragraphs (a), (b), (c), and (e) may be incorporated in the operations procedures required of the holder of an air operator certificate issued under the Act and Part 119.
- (g) Each pilot-in-command must—
- (1) unless authorised by ATC, ensure that 2 independent LRNS are serviceable and accurate—
    - (i) 30 minutes before entry to RNP designated airspace; and
    - (ii) on entry to RNP designated airspace; and
  - (2) when operating in, or within 30 minutes before entry of, RNP designated airspace—
    - (i) notify ATC whenever the aircraft cannot meet RNP criteria; and
    - (ii) notify ATC whenever the aircraft is operating with a single LRNS; and
    - (iii) if unable to communicate with ATC, proceed in accordance with the contingency procedures in ICAO Regional Supplementary Procedures, Document 7030.

*Rule 91.525 is revoked and replaced by the following rule:*

**91.525 Flights over water**

- (a) An aircraft that is operated on a flight over water must be equipped with 1 life preserver for each person on board and stowed in a position that is readily accessible from the seat or berth occupied by the person if—

- (1) the aircraft is a single-engine aircraft and the flight distance to shore is more than gliding distance for the aircraft; or
  - (2) the aircraft is a multi-engine aircraft that is unable to maintain a height of at least 1000 feet AMSL with 1 engine inoperative, and the flight distance to shore is more than gliding distance for the aircraft; or
  - (3) the aircraft is a multi-engine aircraft that is capable of maintaining a height of at least 1000 feet AMSL with 1 engine inoperative and the flight distance to shore is more than 50 nm.
- (b) A single-engine aircraft, or multi-engine aircraft that is unable to maintain a height of at least 1000 feet AMSL with 1 engine inoperative, that is operated on a flight over water that extends to more than 100 nm from shore must be equipped with—
- (1) enough life-rafts with buoyancy and rated capacity to accommodate all the occupants of the aircraft; and
  - (2) a survival locator light on each life-raft; and
  - (3) a survival kit, appropriately equipped for the route to be flown, attached to each life-raft; and
  - (4) at least 1 pyrotechnic signalling device on each life-raft; and
  - (5) 1 ELT(S) or 1 EPIRB.
- (c) A multi-engine aircraft that is capable of continuing flight with 1 or more engines inoperative that is operated on a flight over water that extends to more than 200 nm from shore must be equipped with the equipment specified in paragraph (b).
- (d) An aircraft in excess of 5700 kg MCTOW that is operated on a flight over water that extends to more than 200 nm from shore must be equipped with—
- (1) the equipment specified in paragraph (b); and
  - (2) an additional ELT(S) or EPIRB.

(e) A manned balloon must be equipped with 1 life preserver for each person on board stowed in a position that is readily accessible from the position occupied by the person if—

- (1) the flight crosses or might cross the shore of any lake or sea; or
- (2) the flight takes-off from or intends to land at a site where the takeoff or approach path is so disposed over water that in the event of a mishap there is a likelihood of a ditching; or
- (3) the flight takes-off from a site that is located within 1 nm of water at the ordinary high water mark and the wind is offshore or is less than 5 knots onshore.

(f) The life preservers, life-rafts, signalling devices, ELT(S), and EPIRB required under any of paragraphs (a) to (e) must be installed in conspicuously identified locations and must be easily accessible in the event of a ditching of the aircraft.

*Rule 91.605 is revoked and replaced by the following rule:*

### **91.605 Maintenance programmes and schedules**

(a) Subject to paragraphs (b), (c), and (d), the operator of an aircraft must maintain the aircraft under—

- (1) a maintenance programme approved under Part 115; or
- (2) a maintenance programme approved under Part 119; or
- (3) a maintenance programme approved under rule 91.607; or
- (4) the manufacturer's maintenance schedule; or
- (5) if the aircraft is powered by a piston engine and has a MCTOW of 2730 kg or less, a maintenance programme that is acceptable to the Director and includes at least the following:

- (i) details of the responsibilities and standards for maintenance of the aircraft in accordance with the applicable rule requirements:
  - (ii) details of pre-flight checks:
  - (iii) details of scheduled maintenance checks and inspections.
- (b) The operator of an aircraft that is—
- (1) used for air operations under the authority of an air operator certificate issued by the Director under the Act and Part 119 must maintain the aircraft under the maintenance programme that is required by Part 119 for the issue of the air operator certificate; or
  - (2) used for adventure aviation operations under the authority of an adventure aviation operator certificate issued by the Director under the Act and Part 115 must maintain the aircraft under the maintenance programme that is required by Part 115 for the issue of the adventure aviation operator certificate; or
  - (3) issued with a special category airworthiness certificate must maintain the aircraft under a valid maintenance programme approved under rule 91.607 for the holder of the certificate of registration for the aircraft.
- (c) If the manufacturer's maintenance schedule referred to in paragraph (a)(4) does not provide for an aircraft that operates for less than 100 hours of time in service per year, the operator must ensure that the manufacturer's 100-hour inspection or an equivalent inspection is completed within the preceding 12 months.
- (d) If the Director determines that a manufacturer's maintenance schedule referred to in paragraph (a)(4) is deficient, the Director may require the operator to submit a maintenance programme for approval under rule 91.607.

- (e) Except as provided in paragraph (f) and rule 91.611, the operator of an aircraft must not operate the aircraft unless—
- (1) every aircraft radio station that is required to be installed in the aircraft under Subpart F for operations under IFR has been tested and inspected under Part 43, Appendix B within the preceding 24 months; and
  - (2) every static pressure system, altimeter instrument, or automatic pressure altitude reporting system that is required to be installed in the aircraft under Subpart F, or required for an SSR transponder installed in the aircraft, has been tested and inspected under Part 43, Appendix D—
    - (i) within the preceding 24 months; and
    - (ii) following any opening and closing of the static pressure system, except for the use of system drain and alternate static pressure valves, or where self-sealing disconnect coupling is provided; and
    - (iii) following installation of, or maintenance on, the automatic pressure altitude reporting system where data correspondence error could be introduced; and
  - (3) every SSR transponder that is required to be installed in the aircraft under Subpart F has been tested and inspected, under Part 43, Appendix E within the preceding 24 months; and
  - (4) every ELT that is required to be installed in the aircraft under Subpart F—
    - (i) has been tested and inspected under—
      - (A) Appendix F of Part 43 within the previous 12 months or 100 hours of aircraft time in service, whichever is the sooner, or
      - (B) for an aircraft maintained under a maintenance programme required by rule 119.63, the scheduled intervals, which must not be more



- than 12 months, as described in the approved maintenance programme; and
- (ii) has been tested in accordance with the manufacturer's instructions within the previous 24 months; and
  - (iii) has the battery replaced in accordance with the manufacturer's instructions, when the life of the battery, as established by the manufacturer, has expired; and
- (5) every compass that is required to be installed in the aircraft under Subpart F has been calibrated—
- (i) within the preceding 24 months; and
  - (ii) following any out of phase event that may affect the calibration of the compass unless the aircraft manufacturer specifies otherwise; and
- (6) every first aid kit that is required to be installed in the aircraft under Subpart F has been inspected—
- (i) within the preceding 12 months to ensure that appropriate quantities of items are included and time-expired items are replaced; and
  - (ii) after every reported use to ensure that appropriate quantities of items are included; and
- (7) every portable fire extinguisher that is required to be installed in the aircraft under Subpart F has been inspected for condition and tested in accordance with the manufacturer's instructions or other equivalent instructions acceptable to the Director within the preceding 12 months; and
- (8) all flotation equipment that is required to be installed in the aircraft under Subpart F has been inspected for condition and tested in accordance with the manufacturer's instructions or

- other equivalent instructions acceptable to the Director within the preceding 12 months; and
- (9) the aircraft's empty weight and centre of gravity is re-established if—
- (i) changes have been made to the aircraft that could affect the empty weight and centre of gravity; or
  - (ii) the operator has any reason to suspect that the information in the aircraft's flight manual is no longer accurate; and
- (10) for a powered aircraft with a maximum certificated seating capacity of 4 or more seats, the aircraft has been weighed within the preceding 10 years.
- (f) The operator of an aircraft that is maintained under a maintenance programme referred to in paragraphs (a)(1) or (a)(2) is not required to comply with any particular requirement in paragraph (e) if the maintenance programme for the aircraft includes a test, inspection, or other action that is equivalent to the particular requirement in paragraph (e).
- (g) The operator of an aircraft must—
- (1) identify in the maintenance logbook for the aircraft which maintenance option under paragraph (a) is to be used for the aircraft; and
  - (2) if the maintenance programme is one that is approved under Part 119 or approved under rule 91.607, identify in the maintenance programme the person who is responsible for scheduling the maintenance that is required in the programme; and
  - (3) if changing from the maintenance programme or option identified under paragraph (1) to another programme or option under paragraph (a), schedule the inspections required by the new programme or schedule, to provide for the continued airworthy condition of the aircraft; and

- (4) provide a copy of the applicable maintenance programme or schedule to the person who performs maintenance on the aircraft, and upon request to the Director.
- (h) The tests and inspections required by paragraphs (e)(1), (e)(2)(i), (e)(3), and the 12 month test and inspection requirement in paragraph (e)(4)(i)(A) do not need to be performed if—
- (1) the aircraft has been inspected for the grant of an airworthiness certificate under section 9 of the Act and Part 21 within the preceding 12 months; and
  - (2) the applicable equipment was installed in the aircraft when the inspection specified in paragraph (1) was performed.

*Rule 91.709 is revoked and replaced by the following new rule:*

### **91.709 Towing gliders**

- (a) A person must not tow a glider in flight unless that person holds a glider tow rating issued under Part 61.
- (b) A person must not tow a glider in flight unless—
  - (1) the aircraft used for towing is operated at airspeeds below the maximum airspeed specified for aero-tow in the glider flight manual; and
  - (2) the towing load does not exceed the maximum load specified in the aircraft flight manual; and
  - (3) the person has checked the operation of the tow hook of the aircraft to be used before the flight; and
  - (4) the person uses the take-off, glider release, airspeed, and emergency signals established by a gliding organisation for the pilots of tow aircraft and gliders; and
  - (5) the take-off distance to clear a 50 foot obstacle with the glider in tow does not exceed 85% of the take-off run available; and

- (6) the aircraft is capable of maintaining a rate of climb of at least 200 feet per minute at 1000 feet above the aerodrome with the glider in tow.
- (c) A person must not operate an aircraft to tow a glider in flight unless—
- (1) the aircraft to be used is equipped with—
    - (i) a tow hook and attachment assembly; and
    - (ii) a pilot-activated quick release capable of releasing the tow line from the tow hook with the glider in tow and while the tow aircraft is in flight; and
  - (2) the tow line to be used meets the requirements of Appendix A.26; and
  - (3) if more than one glider is being towed, the tow lines to be used are—
    - (i) one for each glider; and
    - (ii) of a length that provides a distance of not less than 50 m between any glider and the towing aircraft; and
    - (iii) of a length that provides a trailing separation of not less than 30 m between each glider; and
    - (iv) attached by a single tow ring to the aircraft, and capable of separation on release from the aircraft.
- (d) Paragraphs (a), (b), and (c) do not apply to the towing of a hang glider in flight.

**Consultation Details**

*(This statement does not form part of the rules contained in Part 91. It provides details of the consultation undertaken in making the rules.)*

A Notice of Proposed Rulemaking, NPRM 13-02 Omnibus 2013, containing the proposed rule amendments for Part 91, and other proposed rule amendments in various Parts, was issued for public consultation under Docket 13/CAR/1 on 30 May 2013.

A period of 30 days was allowed for comment on the proposed rule. A total of 4 responses to the NPRM were received; none related to Part 91.

The purpose of NPRM 13-02 was to make minor editorial and minor technical amendments to various Parts of the Civil Aviation Rules (CAR). The proposed amendments included the correction of spelling and grammatical errors, the updating of various rules in accordance with current International Civil Aviation Organization (ICAO) standards, definitions and abbreviations, and the revocation of specific transitional arrangements that have expired.