

Part 93

**CAA** Consolidation

24 September 2015

**Special Aerodrome Traffic Rules** and Noise Abatement Procedures



#### DESCRIPTION

Part 93 prescribes the following —

- special rules for aerodrome traffic, that are additional to and exceptions from the general operating and flight rules for aerodrome traffic prescribed in Part 91
- rules for the Director to issue a determination regarding the requirement for a right-hand aerodrome traffic circuit
- aerodrome noise abatement procedures.

This document is the current consolidated version of Part 93 produced by the Civil Aviation Authority, and serves as a reference only. It is compiled from the official ordinary rules that have been signed into law by the Minister of Transport. Copies of the official rule and amendments as signed by the Minister of Transport may be obtained from the Civil Aviation Authority or may be downloaded from the official web site at: www.caa.govt.nz

#### Bulletin

This Part first came into force on 1 April 1997 and now incorporates the following amendments:

Amendment	Effective Date
Amendment 1	30 April 1999
Amendment 2	9 January 2004
Amendment 3	11 May 2006
Amendment 4	23 October 2008
Amendment 5	25 March 2010
Amendment 6	1 April 2014
Amendment 7	24 September 2015

#### Summary of amendments:

Amendment 1: (98/CAR/1303)	93.3 definition of <b>aeroplane performance</b> <b>operating limitations</b> revoked and a new definition inserted.
Amendment 2: (3/CAR/2)	The table in Appendix C that lists the aerodromes and runways to which 93.351 applies is revoked and a new table inserted.
Amendment 3 (4/CAR/9)	Subpart H, rules 93.1, 93.155, 93.201, 93.203 and 93.303 are revoked and substituted. Rules 93.55 and 93.105, and Appendix C are revoked and rule numbers reserved. Rules 93.205 and 93.207 are revoked.
Amendment 4 (99/CAR/1333& 99/CAR/1334)	Rule 93.107 is revoked and replaced.
Amendment 5 (9/CAR/1)	Rules 93.5, 93.255, 93.303, 93.305 and 93.353 are revoked and replaced.
Amendment 6 (13/CAR/1)	Rule 93.59 is revoked and replaced.
Amendment 7 (14/CAR/3)	Rule 93.103 is replaced.

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## Subpart A — General

#### 93.1 Purpose

- (a) This Part prescribes—
  - (1) special rules for aerodrome traffic, in addition to the rules for aerodrome traffic prescribed in Part 91; and
  - (2) exceptions from the rules for aerodrome traffic prescribed in Part 91; and
  - (3) aerodrome noise abatement procedures.

(b) Subject to paragraph (c), the following rules also apply to a member of the New Zealand Defence Force and any aircraft operated by the New Zealand Defence Force:

- (1) rule 93.155:
- (2) rule 93.303, 93.305 and 93.307.

(c) This Part does not apply to any member of the New Zealand Defence Force or any aircraft operated by the New Zealand Defence Force acting in connection with—

- (1) any war or other like emergency; or
- (2) the defence of New Zealand and other New Zealand interests; or
- (3) aid to the civil power in time of emergency; or
- (4) the provision of any public service.

#### 93.3 Definitions

In this Part—

#### Aeroplane performance operating limitations means-

(1) for a New Zealand registered turbo-jet or turbo-fan aeroplane performing an air operation, the performance operating limitations prescribed in Part 121, Subpart D; and

- (2) for a foreign registered turbo-jet or turbo-fan aeroplane performing an air operation, the performance operating limitations prescribed by the State of registry; and
- (3) for a turbo-jet or turbo-fan aeroplane performing an operation other than an air operation, the performance operating limitations prescribed in the aircraft flight manual:

**Noise abatement procedures** means inflight procedures prescribed for the purpose of abatement of noise within the vicinity of an aerodrome.

#### 93.5 Abbreviations

In this Part-

TLOF means a touchdown and lift-off area located at a heliport.

## Subpart B — Auckland International Airport

#### 93.51 Applicability

This Subpart prescribes-

- (1) special rules for aerodrome traffic operating in the control zone designated under Part 71 for Auckland International Airport; and
- (2) noise abatement procedures for aeroplanes operating in the vicinity of Auckland International Airport for the purpose of landing at or taking off from Auckland International Airport.

#### 93.53 General rules – Auckland control zone

Each pilot-in-command of a powered aircraft with an airworthiness certificate operating under VFR in the control zone shall be the holder of a current pilot licence.

#### 93.55 Reserved

#### 93.57 Restrictions on flight training

No pilot-in-command shall conduct flight instruction in the aerodrome traffic circuit unless the aircraft is—

(1) operated by the holder of—

- (i) an air operator certificate issued under Part 119; or
- (ii) a foreign air operator certificate issued under Part 129; or
- (2) operated by the New Zealand Defence Force; or
- (3) engaged in IFR training or practice for the issue or extension of an instrument rating; or
- (4) a multi-engined aircraft.

#### 93.59 Departure noise abatement procedures

(a) A pilot-in-command of a turbo-jet or turbo-fan powered aeroplane must-

- (1) on departure from runway 23, comply with—
  - (i) the ICAO noise abatement take-off climb Procedure A or B, defined in ICAO Doc 8168–Ops–611, Volume 1; or
  - (ii) the noise abatement departure profile Procedure C, as specified in Appendix D; and
- (2) on departure from runway 05, comply with—
  - (i) the ICAO noise abatement take-off climb Procedure B defined in ICAO Doc 8168–Ops–611, Volume 1; or
  - (ii) the noise abatement departure profile Procedure C, as specified in Appendix D.

(b) A pilot-in-command of a turbo-jet or turbo-fan powered aeroplane on departure from runway 05 must climb on the extended runway centreline to—

- (1) at least 3000 feet QNH prior to turning left; or
- (2) at least 2000 feet QNH prior to turning right; or
- (3) at least 500 feet QNH and turn right at a position abeam of McLaughlins Mountain (cone shaped hill, 250 ft AMSL) at an

angle of bank not less than  $15^{\circ}$  to change direction by not less than  $90^{\circ}$ .

(c) A pilot-in-command of a turbo-jet or turbo-fan powered aeroplane on departure from runway 23 must climb on the extended runway centreline to—

- (1) at least 500 feet QNH prior to turning left; or
- (2) at least 3000 feet QNH prior to turning right.

#### 93.61 Approach noise abatement procedures

(a) Each pilot-in-command of a turbo-jet or turbo-fan powered aeroplane arriving from north of the extended runway centre line and intending to land on runway 23 shall, unless otherwise instructed by ATC—

- (1) when on a visual approach, intercept the extended runway centre line at a height not below 2000 feet QNH; and
- (2) between the hours of 2300 and 0600 local time, intercept the extended runway centre line at a distance of not less that 14 nm from the runway threshold and at an altitude of not less than 4000 feet QNH.

(b) Each pilot-in-command of a turbo-jet or turbo-fan powered aeroplane conducting a right hand aerodrome traffic circuit for runway 23 shall not turn onto the final approach path at a distance of less than 4 nm from the runway threshold.

#### 93.63 Noise abatement area

Except when operating in accordance with an instrument approach procedure, or being radar vectored by ATC, or during take-off climb, or during a visual approach to runway 23, a pilot-in-command of a turbo-jet or turbo-fan powered aeroplane shall not operate over the Auckland noise abatement areas specified in Appendix A at an altitude of less than 5000 feet QNH.

#### 93.65 Noise abatement procedures: use of runway

Each pilot-in-command of a turbo-jet or turbo-fan powered aeroplane shall, between the hours of 2300 and 0600 local time, use runway 23 for take-off and runway 05 for landing unless—

- (1) the tailwind component is more than 5 knots; or
- (2) compliance with the aeroplane performance operating limitations requires the use of the other runway direction; or
- (3) otherwise instructed by ATC.

## Subpart C — Wellington International Airport

#### 93.101 Applicability

This Subpart prescribes—

- (1) special rules for aircraft operating in the control zone designated under Part 71 for Wellington International Airport; and
- (2) noise abatement procedures for aircraft operating in the vicinity of Wellington International Airport.

#### 93.103 General rules – Wellington control zone

A pilot-in-command of a powered aircraft with an airworthiness certificate operating under VFR in the control zone must be—

- (1) the holder of a current pilot licence; or
- (2) authorised by the chief flying instructor of a pilot-training organisation based on the aerodrome.

#### 93.105 Reserved

#### 93.107 Noise abatement procedures

(a) Except as provided in paragraph (b), a pilot-in-command of an aircraft must—

(1) not operate over the Wellington noise abatement area specified in Appendix B at an altitude lower than the minimum heights for VFR flight prescribed in rule 91.311 or 1500 feet QNH, whichever is the higher; and

(2) except when climbing after take-off from runway 34, not operate at an altitude lower than 1500 feet QNH within a distance of 0.50 nm of the Miramar peninsula or Point Jerningham.

(b) A pilot-in-command of an aircraft may operate over the Wellington noise abatement area below the altitude prescribed in paragraph (a) in any of the following circumstances:

- when descending north of a line joining Point Gordon and Shelley Bay to land on runway 16:
- (2) when descending from the VFR airport holding pattern indicated in Appendix B to land:
- (3) when conducting an IFR procedure published in the AIPNZ:
- (4) when operating a helicopter—
  - (i) conducting an operation under Part 133; or
  - (ii) conducting an operation under rule 137.205; or
  - (iii) engaged on a police operation that is authorised by the Commissioner of Police; or
  - (iv) performing a take-off or landing at a heliport within the noise abatement area.

#### 93.109 Departure noise abatement

Each pilot-in-command of an aircraft on departure from runway 34 shall climb between the centre and eastern side of Evans Bay to—

- (1) 1000 feet QNH prior to turning by visual reference to the right; or
- (2) 1500 feet QNH prior to turning by visual reference to the left; or
- (3) a height for commencing a turn in accordance with an ATC IFR clearance; or

(4) a height for commencing a turn in accordance with a prescribed standard IFR departure procedure.

## Subpart D — Christchurch International Airport

#### 93.151 Applicability

This Subpart prescribes special rules for aircraft operating in the control zone designated under Part 71 for Christchurch International Airport.

#### 93.153 General rules – Christchurch control zone

(a) Each pilot-in-command of a powered aircraft with an airworthiness certificate operating under VFR in the control zone shall be—

- (1) the holder of a current pilot licence; or
- (2) authorised by the holder of an instructor rating issued under Part 61.

#### 93.155 Aerodrome traffic circuit

A pilot-in-command of an aircraft must, unless otherwise authorised by ATC, conduct that part of the aerodrome traffic circuit where the aircraft is not climbing after take-off or descending to land—

- (1) at or below an altitude of 900 feet QNH when landing at or taking off from grass runways; and
- (2) at or above an altitude of 1400 feet QNH when landing at or taking off from paved runways.

## Subpart E — Paraparaumu Aerodrome

#### 93.201 Purpose

This Subpart prescribes noise abatement procedures for an aircraft operating in the vicinity of Paraparaumu aerodrome for the purpose of landing at or taking-off from Paraparaumu aerodrome.

#### 93.203 Noise abatement procedures

(a) A pilot-in-command of an aeroplane must—

- (1) except when performing a touch and go manoeuvre, commence each take-off—
  - (i) from the threshold of the runway to be used; or
  - (ii) if required to meet aircraft operational performance requirements, from the start of the starter extension if the runway is provided with a starter extension; and
- (2) climb to 500 feet QNH before commencing a turn, unless the aeroplane is towing a glider and—
  - (i) a turn is required to clear an obstruction; or
  - (ii) a turn is required to avoid flying over residential areas; and
- (3) if operating under VFR, conduct the part of the aerodrome traffic circuit where the aeroplane is not climbing after take-off or descending to land, at an altitude of at least 1000 feet QNH, unless a lower height is required to maintain distance from cloud; and
- (4) when approaching to land on a paved runway, except runway 16, not descend below 50 feet AGL until the aeroplane is over the displaced runway threshold.

(b) A pilot-in-command of a helicopter must ensure approach and takeoff flight paths do not descend below 500 feet AGL over any residential area.

## Subpart F — Matamata Aerodrome

#### 93.251 Applicability

This Subpart prescribes special rules for aerodrome traffic at Matamata aerodrome.

#### 93.253 Reserved

#### 93.255 Operation of gliders

A pilot-in-command of a glider must not launch by winch unless-

- (1) the winch is positioned to the northern side of runway 10 and 28; and
- (2) the crosswind component on the runway in use is less than 15 knots; and
- (3) the launch is under the direct supervision of a glider instructor who is authorised by a gliding organisation; and
- (4) a row of cone markers are positioned along the centreline of runway 10 and 28 and take-off and landings are—
  - (i) for gliders, conducted on the northern side of the cone markers; and
  - (ii) for powered aircraft, conducted on the southern side of the cone markers; and
- (5) the winch is equipped with a flashing amber light and that light is activated and functioning; and
- (6) the winch launch can be conducted without conflict with other aerodrome traffic.

## Subpart G — Ardmore Aerodrome

#### 93.301 Applicability

This Subpart prescribes special rules for aerodrome traffic operating at Ardmore aerodrome in the—

- (1) control zone designated under Part 71; and
- (2) aerodrome traffic circuit.

#### 93.303 Aerodrome traffic circuit

(a) A pilot-in-command of an aircraft must conduct that part of the aerodrome traffic circuit where the aircraft is not climbing after take-off or descending to land—

(1) for operations in aeroplanes by day, at or above an altitude of 1100 feet QNH; and

- (2) for operations in aeroplanes by night, at or above an altitude of 1300 feet QNH; and
- (3) for operations in helicopters by day, at or below an altitude of 800 feet QNH; and
- (4) for operations in helicopters by night, at or below an altitude of 1000 feet QNH.

(b) A pilot-in-command of a helicopter landing at or taking off from a TLOF must conduct —

- (1) left-hand circuits using the Western TLOF when runway 03 is in use; and
- (2) right-hand circuits using the Western TLOF when runway 21 is in use; and
- (3) left-hand circuits using the Eastern TLOF when runway 07 is in use; and
- (4) right-hand circuits using the Eastern TLOF when runway 25 is in use; and
- (5) an aerodrome traffic circuit to keep clear of the aeroplane flight paths when runway 03 or 21 is in use.

#### 93.305 Restrictions on use of TLOF

A pilot-in-command of a helicopter, must-

- (1) not use the Eastern TLOF when runways 03 or 21 are in use; and
- (2) not use the Western TLOF when runways 07 or 25 are in use.

#### 93.307 Speed restrictions

Unless otherwise authorised by ATC, a pilot-in-command of an aeroplane operating in the control zone shall—

(1) not exceed 120 knots indicated airspeed unless the aircraft flight manual requires a higher minimum safe speed; and

(2) maintain an approach speed of not less than 70 knots indicated airspeed above 500 feet QNH.

## Subpart H—Right-Hand Aerodrome Traffic Circuits

#### 93.351 Purpose

This Subpart prescribes rules to allow the Director to issue a determination regarding the requirement for a right-hand aerodrome traffic circuit to be published for a runway at an aerodrome, if in the interests of aviation safety or security, a standard left-hand aerodrome traffic circuit is not practicable.

#### 93.353 Determination for a right-hand aerodrome traffic circuit

The Director may issue a determination for a right-hand aerodrome traffic circuit to be published for a runway at an aerodrome that is published in the AIPNZ if the Director considers that in the interest of aviation safety or security, a standard left-hand aerodrome traffic circuit is not practicable.

#### 93.355 Application for a right-hand aerodrome traffic circuit

(a) An operator of an aerodrome that is published in the AIPNZ may apply to the Director for a right-hand aerodrome traffic circuit determination for a runway at the aerodrome.

(b) An applicant for the issue of a right-hand aerodrome traffic circuit determination must provide the Director with the following:

- (1) the name and contact details of the applicant:
- (2) the name of the aerodrome:
- (3) details of the runway that is the subject of the application including the runway designation, surface type, and any associated instrument procedures:
- (4) details of any other runway on the aerodrome:
- (5) details of any other aerodrome or heliport that is within 10 nm of the aerodrome:
- (6) the reasons for having a right-hand aerodrome traffic circuit:

(7) any other applicable information that is requested by the Director.

(c) An application for a right-hand aerodrome traffic circuit determination must be submitted to the Director with the payment of any applicable charge prescribed by regulations made under the Act.

(d) The application specified in paragraph (c) must be submitted not less than 90 days before the date on which the right-hand aerodrome traffic circuit is to come into force, unless a shorter period is acceptable to the Director.

#### 93.357 Procedures for issue of a determination for a righthand aerodrome traffic circuit

(a) Before issuing a determination that a right-hand aerodrome traffic circuit is required for a runway at an aerodrome that is published in the AIPNZ, the Director must consult with such persons and organisations as the Director considers appropriate in each case.

(b) Upon issuing a determination that a right-hand aerodrome traffic circuit is required for a runway at an aerodrome that is published in the AIPNZ the Director must—

- (1) notify the issue of the determination in the *Gazette*; and
- (2) enter the details of the right-hand aerodrome traffic circuit in the New Zealand Air Navigation Register; and
- (3) notify the aerodrome operator of the issue of the determination.

(c) The gazette notice required under paragraph (b)(1) must specify the date on which the right-hand aerodrome traffic circuit comes into force.

(d) A right-hand aerodrome traffic circuit for a runway does not come into force until the date specified in the gazette notice.

(e) An aerodrome operator who is notified by the Director under paragraph (b)(3) of the issue of the determination must ensure that the applicable details for the runway and aerodrome are published in the AIPNZ.

#### 93.359 Withdrawal of right-hand aerodrome traffic circuit

(a) An operator of an aerodrome that is published in the AIPNZ may apply to the Director to withdraw a right-hand aerodrome traffic circuit determination for a runway at the aerodrome, if the aerodrome operator considers that the right-hand aerodrome traffic circuit is no longer required.

(b) If after considering aviation safety and security requirements, the Director is satisfied that a right-hand aerodrome traffic circuit is no longer required for a runway at an aerodrome that is published in the AIPNZ, the Director may withdraw the determination for the right-hand aerodrome traffic circuit.

(c) After withdrawing a right-hand aerodrome traffic circuit determination for a runway at an aerodrome that is published in the AIPNZ the Director must—

- (1) notify the withdrawal and date of the withdrawal of the righthand aerodrome traffic circuit in the *Gazette*; and
- (2) amend the details of the aerodrome and the runway in the New Zealand Air Navigation Register; and
- (3) notify the aerodrome operator of the withdrawal of the determination.

(d) The withdrawal of a right-hand aerodrome traffic circuit comes into force on the date specified in the gazette notice.

(e) An aerodrome operator who is notified under paragraph (c)(3) that the Director has withdrawn a determination for a right-hand aerodrome traffic circuit for a runway at the aerodrome, must ensure that the details for the aerodrome and the runway published in the AIPNZ are appropriately amended.

## 93.361 Savings provision for existing right-hand aerodrome traffic circuits

Every right-hand aerodrome traffic circuit for a runway at an aerodrome that is published in the AIPNZ immediately before 11 May 2006 continues to have effect on or after 11 May 2006 as if it were a right-hand aerodrome traffic circuit determined in accordance with this Subpart as in force on or after 11 May 2006.



## Appendix A — Auckland Noise Abatement Area

# Appendix B — Wellington Aerodrome Traffic Circuit and Noise Abatement Area

#### APPENDIX B



## Appendix C Reserved

## Appendix D — Noise Abatement Departure Profiles

#### Noise abatement departure profile – procedure c

Each pilot-in-command of an aircraft shall—

- (1) from take-off to an altitude of not less than 800 feet above aerodrome elevation—
  - (i) use take-off power; and
  - (ii) use takeoff flap; and
  - (iii) climb at  $V_2$  plus 10 to 20 knots; and
- (2) at or above 800 feet—
  - (i) reduce thrust by manual throttle reduction or by automatic means; and
  - (ii) for aeroplanes not equipped with an operating automatic thrust restoration system, achieve and maintain not less than the thrust level necessary after thrust reduction to maintain, for the flaps-slats configuration of the aeroplane, the take-off flight path engine-inoperative climb gradients specified in FAR 25.111(c)(3) in the event of an engine failure; and
  - (iii) for aeroplanes equipped with an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary after thrust reduction to maintain, for the flaps-slats configuration of the aeroplane, a take-off path engine inoperative climb gradient of zero percent, provided that the automatic thrust restoration system will, at least, restore sufficient thrust to maintain the take-off path engine-inoperative climb gradients specified in FAR 25.111(c)(3) in the event of an engine failure; and

- (iv) during the thrust reduction, co-ordinate the pitchover rate and thrust reduction to provide a decrease in pitch consistent with allowing indicated airspeed to decay no more that 5 knots below the all engine target climb speed and, in no case, to less than  $V_2$  for the aeroplane configuration; and
- (v) maintain the speed and thrust requirements specified in (i) through (iv) to the higher of 3000 feet above the aerodrome elevation, or until the aeroplane has been fully transitioned to the en-route climb configuration, then transition to normal en-route climb procedures.

#### Noise abatement departure profile – procedure d

Each pilot-in-command of an aircraft shall—

- (1) from take-off to an altitude of not less than 800 feet above aerodrome elevation—
  - (i) use take-off power; and
  - (ii) use takeoff flap; and
  - (iii) climb at  $V_2$  plus 10 to 20 knots.
- (2) at or above 800 feet—
  - (i) initiate flaps and/or slats retraction; and
  - (ii) reduce thrust by manual throttle reduction or by automatic means; and
  - (iii) for aeroplanes not equipped with an operating automatic thrust restoration system, achieve and maintain not less than the thrust level necessary after thrust reduction to maintain, for the flaps-slats configuration of the aeroplane, the take-off flight path engine-inoperative climb gradients specified in FAR 25.111(c)(3) in the event of an engine failure; and

- (iv) for aeroplanes equipped with an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary after thrust reduction to maintain, for the flaps-slats configuration of the aeroplane, a take-off path engine inoperative climb gradient of zero percent, provided that the automatic thrust restoration system will, at least, restore sufficient thrust to maintain the take-off path engine-inoperative climb gradients specified in FAR 25.111(c)(3) in the event of an engine failure; and
- (v) during the thrust reduction, co-ordinate the pitchover rate and thrust reduction to provide a decrease in pitch consistent with allowing indicated airspeed to decay no more that 5 knots below the all engine target climb speed and, in no case, to less than  $V_2$  for the aeroplane configuration; and
- (vi) maintain the speed and thrust requirements specified in (i) through (iv) to the higher of 3000 feet above the aerodrome elevation, or until the aeroplane has been fully transitioned to the en-route climb configuration, then transition to normal en-route climb procedures.