

Civil Aviation Rules



Part 103

CAA Consolidation

10 November 2011

Microlight Aircraft — Operating Rules

DESCRIPTION

Part 103 prescribes rules –

- additional to Part 91, for operation of microlight aircraft
- exceptions from Part 91, for operation of microlight aircraft
- airworthiness and maintenance requirements for microlight aircraft.

This document is the current consolidated version of Part 103 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 11 March 1993 and now incorporates the following amendments:

Amendment	Effective Date
Amendment 1	11 March 1993
Amendment 2	1 July 1995
Amendment 3	8 February 1996
Amendment 4	1 April 1997
Amendment 5	22 June 2006
Amendment 6	1 March 2007
Amendment 7	10 November 2011

Summary of amendments:

Amendment 1

(Docket 1026)

Was incorporated in Part 103 when the Part came into force, and considered as part of the original Part 103 instead of being Amendment 1.

Amendment 2

(Docket 1003/1017)

Rule 103.115 is amended.

Amendment 3

(Docket 1160)

Rules 103.7, 103.9, 103.11, 103.17 and 103.205 are revoked and substituted, rules 103.51, 103.71, 103.99, 103.115 and 103.207 are amended, rule 103.81 is inserted and rule 103.19 is revoked.

Amendment 4

(Docket 1144)

Subparts A, E, F and G are revoked and substituted, Subpart H is revoked, rules 103.5, 103.7, 103.9, 103.15 and 103.17 are revoked, Appendix A is inserted.

Amendment 5

Title of Part 103 is revoked and

(3/CAR/4)	substituted, rules 103.1 and 103.9 are revoked and substituted, Subparts B, C and D are revoked and Subpart letters are reserved, Appendix A is revoked.
Amendment 6 (1/CAR/1357)	Rules 103.201, 103.203, 103.207, 103.213 and 103.217 are revoked and substituted, rule 103.215 is revoked and the rule number is reserved.
Amendment 7 (5/CAR/1)	Rule 103.159 is revoked and replaced.

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Subpart A — General

103.1 Applicability

This Part prescribes—

- (1) rules, additional to Part 91, for the operation of microlight aircraft; and
- (2) exceptions from Part 91, for the operation of microlight aircraft; and
- (3) the airworthiness and maintenance requirements for microlight aircraft.

103.3 Definitions

In this Part—

Certificate, in relation to a microlight, or a personnel qualification required by this Part, means a certificate issued by the holder of a delegation from the Director for that purpose.

103.5 Pilot requirements

- (a) Each person acting as the pilot of a microlight aircraft shall—
 - (1) hold an appropriate current microlight pilot certificate with an appropriate type rating; or
 - (2) hold a current pilot licence issued under Part 61 with an appropriate type rating; or
 - (3) operate under the direct supervision of the holder of a microlight pilot instructor certificate meeting the requirements of 103.7.
- (b) Each pilot shall comply with the privileges and limitations of the licence or certificate, and any applicable ratings.

103.7 Flight instruction

No person shall exercise the privileges of a microlight flight instructor unless that person holds a type rating for the microlight aircraft being used, and holds the qualification being taught, and—

- (1) that person—
 - (i) holds a microlight pilot instructor certificate; and
 - (ii) complies with the procedures established in the exposition of the microlight organisation controlling the operation; or
- (2) that person—
 - (i) holds an instructor rating issued under Part 61; and
 - (ii) has demonstrated competence in the piloting of a microlight aircraft to a microlight pilot instructor specified in paragraph (1).

103.9 Flight radiotelephone operator requirements

A person operating a microlight aircraft must not use an aeronautical radiotelephone transceiver unless the person holds a pass in the flight radiotelephony written examination required under rule 61.153(a)(6)(vi).

Subpart B [Reserved]

Subpart C [Reserved]

Subpart D [Reserved]

Subpart E — Operating Rules

103.101 Registration

(a) Each applicant for the grant of a certificate of registration under Part 47 for a microlight aircraft shall provide the Director with evidence that the aircraft meets—

- (1) basic low performance and momentum parameters that are acceptable to the Director for a microlight aircraft; or
- (2) a type design standard listed in 103.207(a)(1)(ii).

(b) Each operator of a microlight aircraft accepted for registration shall ensure that the aircraft continues to conform to the requirements of paragraph (a).

103.103 Aircraft flight manual

The requirements of 91.109 shall not apply to a person operating a microlight aircraft.

103.105 Documents to be carried

(a) The requirements of 91.111 shall not apply to a person operating a microlight aircraft.

(b) No person shall operate a Class 2 microlight aircraft or a Class 1 microlight helicopter unless the flight permit required by 103.203(b) is carried in the aircraft.

103.107 Placards

(a) Each operator of a Class 2 microlight aircraft shall ensure that a legible placard is installed in clear view of the pilot stating—

- (1) the certificated or design gross weight, whichever is the lesser; and
- (2) the maximum and minimum payload for the aircraft.

(b) Each operator of a Class 2 microlight aircraft shall ensure that a legible placard is installed in clear view of the seated passenger—

- (1) with a title advising that the placard is a passenger warning; and
- (2) stating that the aircraft does not require an airworthiness certificate.

Subpart F — Flight Rules

103.151 Fuel requirements

The requirements of 91.305 shall not apply to the pilot of a microlight aircraft.

103.153 Minimum heights

Notwithstanding 91.311, a pilot of a microlight aircraft may operate a microlight aircraft below 500 feet AGL for the purpose of—

- (1) microlight gyroplane circuit training, provided such operations are not carried out below 200 feet AGL; and
- (2) practice for, and participation in, microlight aircraft competition flying, provided such operations are—
 - (i) conducted with the knowledge and approval of a microlight organisation; and
 - (ii) carried out in accordance with any conditions imposed by a microlight organisation; and
 - (iii) not carried out below 200 feet AGL.

103.155 Flight criteria

- (a) A pilot shall only operate a microlight aircraft—
 - (1) by day; and
 - (2) in VFR meteorological minima equal to or better than those prescribed in 91.301.
- (b) A pilot of a microlight aircraft shall not operate—
 - (1) over any congested area of a city, town, or settlement; or
 - (2) in controlled airspace or within 3 nautical miles (5.5 km) of an aerodrome certificated under Part 139 unless—
 - (i) the pilot has gained a pass in the air law examination required by 61.153(a)(6)(i) or an equivalent examination; or
 - (ii) the pilot is under the direct supervision of the holder of a microlight pilot instructor certificate who meets the requirement of paragraph (b)(2)(i).

(c) A pilot shall not operate in accordance with paragraph (b)(2)(ii), and the supervising instructor shall not permit such an operation, unless—

- (1) the instructor fully briefs the pilot on compliance with the CAR for the applicable airspace in which the aircraft will be operated; and
- (2) a pre flight briefing for the operation is obtained from ATS.

103.157 Towing hang gliders

(a) Each pilot of a microlight aircraft towing a hang glider in flight shall hold at least an advanced microlight pilot certificate or a licence issued under Part 61, and a microlight tow rating issued by a microlight organisation in the form of a statement of competence in their pilot logbook.

(b) The holder of an advanced microlight pilot certificate or a licence issued under Part 61 is eligible for the issue of a microlight tow rating if the pilot—

- (1) has at least 100 hours flight time experience including—
 - (i) at least 80 hours as pilot-in-command of a microlight; and
 - (ii) at least 20 hours as the pilot of the type of microlight aircraft being used; and
- (2) has been briefed on hang glider towing emergencies and procedures by the holder of a hang glider instructor certificate issued by the holder of a delegation from the Director operating within a hang glider organisation; and
- (3) has been briefed on microlight towing emergencies and procedures by the holder of a microlight pilot instructor certificate.

(c) A pilot of a microlight aircraft shall not tow a hang glider in flight unless—

- (1) the towing aircraft is of a type that is capable of controlled flight at speeds below the maximum permissible aero-tow speed prescribed in the specifications of the towed hang glider; and

- (2) the towing aircraft complies with the equipment requirements of 103.223; and
- (3) release mechanisms on both aircraft have been checked for serviceability prior to the first flight of the day.

103.159 Carriage of passengers

A pilot must not carry another person in a microlight aircraft unless—

- (1) the pilot has been authorised by a microlight organisation to do so; or
- (2) the aircraft is operated under the authority of an adventure aviation operator certificate issued by the Director under the Act and Part 115; and
- (3) the aircraft is a Class 2 microlight aircraft; and
- (4) the aircraft has a statement of airworthiness entered in the applicable maintenance record under rule 103.213.

Subpart G — Airworthiness and Maintenance

103.201 Definitions

Class 2 microlight aircraft in this Subpart includes a Class 1 microlight helicopter.

103.203 Requirement for flight permit

- (a) The requirements of rule 91.101(a)(1)(i) do not apply to a person operating a microlight aircraft.
- (b) A person must not fly a Class 2 microlight aircraft unless there is in force for the aircraft, a flight permit or a temporary flight permit issued in accordance with this Part.

103.205 Application for flight permit

Each applicant for a flight permit for a Class 2 microlight aircraft shall submit the information required by 103.207 to the Director with a payment of the appropriate fee prescribed by regulations made under the Act.

103.207 Issue of flight permit

(a) The Director may issue a microlight flight permit in accordance with section 9 of the Act for a Class 2 microlight aircraft if—

- (1) the applicant for the flight permit provides documented evidence that—
 - (i) a microlight flight permit, or equivalent document acceptable to the Director, has been issued for the type by the competent authority of an ICAO Contracting State; or
 - (ii) the aircraft conforms to a type design that complies with 1 of the following standards:
 - (A) British Civil Airworthiness Requirements Section S (CAP 482 dated March 1983 and amended October 1988) issued by the Civil Aviation Authority of the United Kingdom:
 - (B) Civil Aviation Orders 95.32 (Issue 1 dated 28 February 1990 and Amendment 57 dated 1 August 1990) and 101.55 (Issue 1 dated 7 January 1988 and amendment 90 dated 28 August 1991) issued by the Civil Aviation Safety Authority of Australia:
 - (C) Document TP10141E issued by Transport Canada:
 - (D) any other equivalent standard acceptable to the Director; or
 - (iii) 6 or more aircraft of the type have been operated and the aircraft type has achieved a documented satisfactory airworthiness history of at least 150 hours of flight including at least 50 hours of flight on one aircraft; or
 - (iv) a temporary flight permit has been issued for the aircraft under paragraph (b) and the aircraft has completed an endurance test in accordance with rule 103.211; and
- (2) the applicant provides—

- (i) satisfactory evidence that the aircraft complies with every applicable requirement prescribed under Parts 47, 91, and 103; and
 - (ii) a statement of hours flown by the aircraft both in total and since any previous flight permit or equivalent document was issued; and
 - (iii) a statement that any inspection, replacement, overhaul, or other maintenance of the microlight aircraft or its engine or engine components that is considered mandatory by the manufacturer has been complied with; and
- (3) the aircraft has been inspected by a person authorised by the Director and that person has certified in the applicable aircraft maintenance record required by rule 91.617 that the aircraft has no hazardous design features.
- (b) The Director may issue a temporary microlight flight permit for a New Zealand designed and manufactured prototype Class 2 microlight aircraft that does not comply with the requirements in paragraphs (a)(1)(i), (ii), or (iii) if the prototype aircraft has passed a wing static limit load test and a landing gear drop test in accordance with British Civil Airworthiness Requirements Section 'S'.
- (c) A temporary microlight flight permit issued under paragraph (b) must—
- (1) contain operating limitations that the Director considers necessary in the interests of aviation safety; and
 - (2) not be issued for a period of more than 6 months.
- (d) The pilot of a Class 2 microlight aircraft that is operated under the authority of a temporary microlight flight permit must comply with the operating limitations contained in the temporary flight permit.
- (e) A microlight flight permit remains in force until it expires or it is suspended or revoked.

103.209 Modification

Where a Class 2 microlight is modified in any manner that may affect the airworthiness of the aircraft, the operator shall ensure that the aircraft is reinspected and reassessed for compliance with 103.207 before further flight.

103.211 Endurance testing

- (a) An endurance test for a microlight aircraft shall consist of—
- (1) for aircraft constructed from drawings and raw materials, 40 hours of flight; or
 - (2) for series aircraft constructed from a kitset of raw materials, 25 hours of flight; or
 - (3) for series aircraft constructed from a kitset of prefabricated components, 10 hours of flight; or
 - (4) for series aircraft constructed entirely from pre-manufactured factory components and assemblies, 2 hours of flight.
- (b) The endurance test shall be restarted after any modification is made or defect occurs.

103.213 Statement of airworthiness

A pilot-in-command of a microlight aircraft who completes the endurance testing in accordance with rule 103.211, must enter in the applicable maintenance record required by rule 91.617—

- (1) details of every manoeuvre completed during the testing together with details of the demonstrated flight speeds; and
- (2) the following statement (which must include the flight time hours completed) followed by the pilot's name, licence or certificate number, signature and the date of the final test:

I certify that this aircraft has satisfactorily completed hours flight time in compliance with Part 103 and the aircraft has adequate performance, is controllable through its normal range

of speeds and throughout all manoeuvres completed, and is airworthy.

103.215 Reserved

103.217 Maintenance and inspection requirements

- (a) An operator of a microlight aircraft must ensure that—
- (1) the aircraft is maintained in an airworthy condition; and
 - (2) every applicable airworthiness directive is complied with in accordance with the requirements prescribed in Part 39; and
 - (3) between required inspections, every defect is rectified.
- (b) An operator of a microlight aircraft that meets a type design standard listed in rule 103.207(a)(1), must ensure that the aircraft is maintained in accordance with the designer or kitset manufacturer maintenance requirements.
- (c) Subject to paragraphs (d) and (g), a person must not operate a microlight aircraft unless—
- (1) an annual inspection of the conditions of the aircraft has been carried out within the preceding 12 months; and
 - (2) the requirements of rule 103.217(a)(2) are complied with; and
 - (3) except as provided in paragraph (h), any applicable tests and inspections required under the following rules have been complied with:
 - (i) rule 91.605(e)(2) regarding test and inspection of automatic pressure altitude reporting system if the microlight aircraft is equipped with a SSR transponder;
 - (ii) rule 91.605(e)(3) if the microlight aircraft is equipped with a SSR transponder;
 - (iii) rule 91.605(e)(8) if the microlight aircraft is equipped with flotation equipment.

(d) The annual condition inspection required by paragraph (c)(1) must be—

- (1) performed by—
 - (i) a person authorised by a microlight organisation to perform annual condition inspections; or
 - (ii) the Director; or
 - (iii) a person who holds a current aircraft maintenance engineer licence with appropriate aircraft and engine group ratings issued in accordance with Part 66; and
- (2) acceptable to the Director with regard to the items and components inspected.

(e) The person who performs the annual condition inspection required by paragraph (c)(1) must, if the person finds the aircraft to be in an airworthy condition,—

- (1) certify in an inspection form that the aircraft is airworthy; and
- (2) permanently affix the inspection form required under paragraph (e)(1) to the aircraft in a prominent place adjacent to the point of entry; and
- (3) retain a copy of the inspection form required under paragraph (e)(1) as a record of the certification; and
- (4) for a class 2 microlight aircraft, enter the details of the certification in the applicable maintenance record required under rule 91.617.

(f) The aircraft inspection form required under paragraph (e)(1) must include the—

- (1) aircraft registration markings; and
- (2) aircraft type; and
- (3) due date for the next annual condition inspection; and

- (4) date, signature, and licence or certificate number of the engineer or inspector who carried out the annual condition inspection.

(g) If the annual condition inspection that is required under paragraph(c)(1) shows that the aircraft is not airworthy, the operator of the aircraft must not permit the aircraft to be flown until it has been re-inspected and certified as airworthy in accordance with paragraphs (d), (e), and (f).

(h) A person operating a microlight aircraft is not required to comply with—

- (1) the test and inspection requirements in rules 91.605(e)(2) and (3) until the date of the first annual condition inspection that is carried out after 1 March 2007; and
- (2) the test and inspection requirement in rule 91.605(e)(8) until 1 March 2008.

103.219 Construction

A person is not required to comply with Part 148 if they are constructing a microlight aircraft—

- (1) from drawings and raw materials; or
- (2) from a kitset of raw materials; or
- (3) from a kitset of prefabricated components; or
- (4) from pre-manufactured factory components and assemblies.

103.221 Instrument and equipment requirements

(a) Subject to paragraph (b), each operator of a microlight aircraft shall equip the aircraft with—

- (1) instruments and equipment required—
 - (i) to conform with the aircraft type design; and
 - (ii) by the aircraft designer or kit manufacturer; and

- (2) the means of indicating—
 - (i) airspeed; and
 - (ii) altitude in feet; and
 - (iii) magnetic heading.
- (b) The operator of a powered parachute is not required to equip the aircraft with a means of indicating airspeed.
- (c) The following requirements in Part 91, Subpart F shall not apply to a person operating a microlight aircraft—
 - (1) 91.501(1), in respect of the minimum instruments and equipment required by 91.509; and
 - (2) 91.501(2)(i), in respect of the seating standards specified in Appendix A, A.3.

103.223 Hang glider towing aircraft

Each person operating a microlight aircraft towing a hang glider in flight shall, in addition to 103.221, ensure that—

- (1) the aircraft is equipped with—
 - (i) a towing installation enabling the tow pilot to release the tow rope at any time, comprising a tow hook and attachment assembly which meets the aircraft's design standard; and
 - (ii) a rear vision mirror; and
 - (iii) a tow line, which has a weak link incorporated at the tow plane end, with a breaking strength of not more than 100 kg; and
- (2) the hang glider is equipped with a quick release mechanism for hang glider pilot activation with a simple and positive releasing action with tow rope loads of up to 100 kg rearward from the tow hook within a cone of 45 degrees upwards, 30 degrees downwards, and 30 degrees sideways.