



MALDIVES CIVIL AVIATION AUTHORITY
Republic of Maldives

MALDIVES CIVIL AVIATION REGULATIONS

MCAR 103
MICRO-LIGHT AIRCRAFT

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SUBPART A — GENERAL

103.1 Applicability

This Regulation prescribes:

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

Micro-lights shall be

- (i) *conducted with the knowledge and approval of an Aviation Recreation Organisation; and*
- (ii) *carried out in accordance with any conditions imposed by an Aviation Recreation Organisation;*

103.3 Definitions

In this Regulation:

Aviation Recreation Organisation means an organisation in possession of a valid certificate issued by CAA

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

Class 1 Microlight: Class I Microlight is a single seat aircraft with a design gross weight of 544 kg (landplanes) or 579kg (seaplanes or amphibians), or less, and a stall speed, in the landing configuration of 45 knots or less.

Class 2 Microlight: Class 2 Microlight is a two seat aircraft that have a design gross weight of 544kg (landplanes) or 614 kg (seaplanes or amphibians), or less, and a stall speed of 45 knots or less in the landing configuration. Aircraft that meet the type acceptance criteria below are also eligible for the Class 2 microlight category.

Microlight: A microlight aeroplane is one designed to carry not more than two persons which has a Maximum Total Weight Authorised (MTWA) not exceeding:

- 300 kg for a single seat landplane.
- 390 kg for an amateur built single seat landplane
- 450 kg for a two seat landplane
- 330 kg for a single seat amphibian or floatplane
- 495 kg for a two seat amphibian or floatplane
- 315kg for a single seat landplane equipped with an airframe mounted total recovery parachute system
- 472.5kg for a two-seat landplane equipped with an airframe mounted total recovery parachute system

A microlight must also have a stalling speed at the maximum weight authorised not exceeding 35 knots calibrated speed. All CAA registered aeroplanes falling within these parameters are Microlight aeroplanes.

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 MCAR FCL 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 Aviation Recreation Organisation controlling the operation; or
- (2) that person:
 - (i) holds an instructor rating issued under MCAR FCL; 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 MCAR-AIRCREW.

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 MCAR-47 for a microlight aircraft shall provide the CAA with evidence that the aircraft meets:
 - (1) basic low performance and momentum parameters that are acceptable to the CAA for a micro-light 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 aircraft flight manual limitations shall not apply to a person operating a micro-light aircraft.

103.105 Documents to be carried

- (a) The requirements of documents to be carried in an aircraft 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 fuel requirements MCAR AIR OPERATIONS for flight under VFR shall not apply to the pilot of a microlight aircraft.

103.153 Minimum heights

Notwithstanding the minimum heights for VFR flights, 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 an Aviation Recreation Organisation; and
 - (ii) carried out in accordance with any conditions imposed by an Aviation Recreation 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 the VFR meteorological minima.
- (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 15 nautical miles of an aerodrome unless:
 - (i) the pilot has gained a pass in the air law examination required 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 MCARs 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 and a microlight tow rating issued by an Aviation Recreation Organisation in the form of a statement of competence in their pilot logbook.
- (b) The holder of an advanced microlight pilot certificate 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 CAA, operating within an Aviation Recreation 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 shall not carry another person in a microlight aircraft unless:

- (1) the pilot has been authorised by an Aviation Recreation Organisation approved in accordance with MCAR-149 to do so; and
- (2) the aircraft is a Class 2 microlight aircraft; and
- (3) the aircraft has a statement of airworthiness entered in the applicable maintenance record in accordance with 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 Permit to Fly

- (a) The requirements of a current airworthiness certificate 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 Permit to Fly or a temporary Permit to Fly issued in accordance with this Regulation.

103.205 Application for Permit to Fly

Each applicant for a Permit to Fly for a Class 2 microlight aircraft shall submit the information required by 103.207 to CAA with a payment of the appropriate fee prescribed by MCAR 187.

103.207 Issue of Permit to Fly

- (a) CAA may issue a microlight Permit to Fly for a Class 2 microlight aircraft if:
 - (1) the applicant for the Permit to Fly provides documented evidence that:
 - (i) a microlight Permit to Fly, or equivalent document acceptable to CAA, 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;
 - (iii) Reserved.
 - (iv) Reserved.
 - (2) the applicant provides:
 - (i) satisfactory evidence that the aircraft complies with every applicable requirement prescribed under MCAR-47, MCAR AIR OPERATIONS, MCAR-M, MCAR 2, and MCAR-103; and
 - (ii) a statement of hours flown by the aircraft both in total and since any previous Permit to Fly 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 MCAR-149 Aviation Recreation Organisation and that person has certified in the applicable aircraft maintenance record that the aircraft has no hazardous design features.
- (b) Reserved
- (c) Reserved.
- (d) Reserved.
- (e) A microlight Permit to Fly issued in accordance with this regulation shall remain 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:

- (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 MCAR-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 MCAR-21; 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) rules regarding test and inspection of automatic pressure altitude reporting system if the microlight aircraft is equipped with a SSR transponder;
 - (ii) rules if the microlight aircraft is equipped with a SSR transponder;
 - (iii) rules 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 Aviation Recreation Organisation to perform annual condition inspections; or

- (ii) a person who holds a current aircraft maintenance engineer licence with appropriate aircraft and engine group ratings; and
- (2) acceptable to CAA 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.
- (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).

103.219 Reserved.

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 shall not apply to a person operating a microlight aircraft:
 - (1) in respect of the minimum instruments and equipment required; and
 - (2) in respect of the seating standards.

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.