GUIDANCE NOTES FOR MICROLIGHT IMPORTERS, ASSEMBLERS AND BUILDERS

This guide has been developed to assist with the preparation and presentation of microlight aircraft under Part 103 into the New Zealand system.

The guide has been written as a checklist requiring positive input to each question to satisfy the Part 103 and Part 47 Rules for Microlights and Registration.

DOES THE AIRCRAFT I INTEND TO PURCHASE/CONSTRUCT, MEET THE NEW ZEALAND MICROLIGHT AIRCRAFT CATEGORY SPECIFICATIONS?

Class 1 Microlight: Class I microlights are 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 II Microlight: These aircraft are 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 II microlight category.

TYPE ACCEPTANCE –

Does the aircraft qualify as a Class 2 Microlight?

1. Does the aircraft type meet any of the following Airworthiness Standards:

Airworthiness Authority	Airworthiness Standard
UK Civil Aviation Authority	BCAR Sections S (Aeroplanes), & T (Gyroplanes)
Transport Canada	Document TP10141 E
Australian Civil Aviation Authority	ANO 95.32, 91.55 and 101.55
Federal Aviation Administration exemptions	FAR Part 103 (and including 3784E and 4274D)
French Direction Generale de l'Aviation Civile	Category I or II U.M.L. (ultra-léger motorisé) dated 7 June 1986 as amended

Or any other standard acceptable to the Director as an equivalent?

What is this Standard? (Please state): ……..

YES/NO

2. In the absence of certification to the above standards, an aircraft that meets the specifications below may still be defined as a Class 2 Microlight:

a. If 6 or more aircraft of the type 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

b. If the aircraft is a New Zealand designed prototype, a temporary flight permit has been issued for the aircraft and the aircraft has satisfactorily completed the required endurance test.

Ref. 103.207(a)

c. Performance and Weight Limitations

A one or two seat aircraft whose stall speed, in the landing configuration, at maximum gross weight does not exceed 45 knots, and having a maximum gross weight of:

- *544 kg for landplanes;*
- *579 kg for a single-place seaplane or amphibian;*
- *614 kg for a two-place seaplane or amphibian*.

Does it meet this criteria?

YES/NO (if NO, the aircraft cannot be accepted as a microlight under Part 103)

Note: New Zealand designed and manufactured two Seat (Class 2) prototype aircraft that do not comply with accepted design standards must undergo wing and landing gear load tests to BCAR Section ‘S’ before acceptance and endurance testing.

Ref. 103.207(b)(1)

REGISTRATION Ref. 103.101

1.Have you applied to CAA for (optional) reservation of special registration letters and paid the reservation fee? ($30)

2.Have you applied for Aircraft registration on CAA 24047/01 (Copy from CAA Web)

3. Have you completed a Fit and Proper Person form CAA 24047/02 (Copy from CAA Web)

4. Have you paid the Registration fee? ($171)

Once the aircraft has been registered:-

5. Have you fitted a fireproof plate to the aircraft near the point of entry with the aircraft registration letters ZK- …. stamped/etched/engraved on it?

Ref.47.119

6. Have you placed the registration marks (250mm minimum height) on the aircraft?
(Refer to Part 47 Subpart C for specification, location and display of markings)

Ref. 47.117(c)

ISSUE OF MICROLIGHT FLIGHT PERMIT

Have you applied for Issue of a Microlight Flight Permit (Class 2 microlights only) CAA 24103/01 (copy from CAA Web)

Ref. 103.203(b)

MAINTENANCE RECORDS (Logbooks)

1. Have you raised maintenance records (logbooks) (Class 2 microlights only) for the:

- aircraft, CAA 2101
- engine, CAA 2158
- propeller, CAA 2110
- airworthiness directives CAA 1464

(These can be ordered on 0800 438 785)

Ref. 91.627 and 103.217(e)(3)

2. Have you entered all Safety Directives, Aircraft Service Bulletins, Engine Service Bulletins applicable to your aircraft?

3. Have you checked the CAA Web Site for any applicable Microlight, Engine, Component or Avionic Airworthiness Directives which may be applicable to your aircraft?

Ref. 103.215

4. Have you entered the assembly details, control movements, maintenance, and weight and balance details in the aircraft logbook?

5. Has an ‘Annual Condition Inspection’ been entered and signed for in the aircraft maintenance record?

Ref. 103.217(c)

AIRCRAFT EQUIPMENT & MAINTENANCE

1. Have you fixed the following placards in clear view of the passenger and pilot (Class 2 Microlights only);

- **'Passenger Warning – This Aircraft does not require an Airworthiness Certificate'**
- Minimum and maximum payload and certificated or design gross weight of the Microlight.

Ref. 103.107

2. Has the aircraft, meeting an accepted Type Design Standard, been maintained to the designer or kitset manufacturer's maintenance requirements?

Ref. 103.217(b)

3. For all microlights, has an 'Annual Condition Inspection' been carried out by a Microlight Inspector or a LAME and a valid 'Annual condition Inspection' sticker been attached near the point of entry.

Ref. 103.217(e)(1)

4. Does the aircraft have the instruments and equipment required by the aircraft type design and by the aircraft designer or kitset manufacturer and;

A means of indicating

- Airspeed (powered parachutes exempt)
- Altitude in feet
- Magnetic heading

Ref. 103.221

5. Has the aircraft been modified in any manner that may affect the airworthiness?

Ref. 103.209

ENDURANCE TESTING

1 All microlights are required to complete an endurance test to establish airworthiness on initial flights when new or after re-inspection after modification. The endurance test shall be restarted after any modification or defect occurs.

2. Endurance tests are determined on a sliding scale dependant on the depth and nature of construction. This figure can be as high as 40 hours of flight for an aircraft constructed from drawings and raw materials to 2 hours of flight for series aircraft constructed entirely from pre-manufactured factory components and assemblies.

Ref. 103.211

3. On satisfactory completion of endurance testing the pilot is required to make an entry in the applicable maintenance record (logbook), the following statement, signed, dated, with licence or certificate number;

'I hereby 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'.

Ref 103.213

Notes:

All references are to the applicable Civil Aviation Rule.

All CAA Forms, Fees, Rules, and Airworthiness Directives can be accessed on the CAA Website www.caa.govt.nz free of charge.

Documents such as logbooks may be ordered through Freephone 0800 438 785 with payment by credit card.

Microlight classification basics:

Class 1, single seat – requires registration and Annual Condition Inspection.

Class 2, two seat, requires registration, Microlight Flight Permit, and Annual Condition Inspection.