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2. Biennial Flight Review

1 Object

The object of this section is to specify:

- (i) the requirements for the Biennial Flight Review.
- (ii) who can carry out the Biennial Flight Review.

2. Requirements

- (a) Holders of pilot certificates issued by SAC shall not exercise the privileges of that certificate for longer than 2 years from the date of the issue or renewal flight test for that certificate unless the holder has, in accordance with paragraph (b), successfully completed a flight review within the immediately preceding 2 years, and a record to that effect in the form required by paragraph (c) has been endorsed in the holders logbook.

A BFR may be conducted up to 60 days prior to the expiry date and issued for 2 years from the existing expiry date.

- (b) A Biennial Flight Review (BFR) shall be conducted by an appropriately qualified flight instructor and shall consist of:
 - (i) A review of the current general operating and flight rules applicable to the use of the certificate under review, with particular emphasis upon applicable changes introduced within the immediately preceding 2 year period; and
 - (ii) A written refresher exam covering the aircraft's limitations, performance, weight and balance; and
 - (iii) flight instruction to review those manoeuvres and procedures applicable to the use of the certificate under review.
- (c) When a flight instructor is satisfied that a flight review has been successfully completed, the flight instructor shall certify the pilot's logbook to that effect.

3. Procedure

- (a) When a Biennial Flight Review is due, the person holding the flight certificate shall contact a flight instructor and request a Biennial Flight Review.

- (b) The instructor shall carry out the Biennial Flight Review in accordance with para 2, certifying the pilot's logbook, and enter the results into SAC Form 8.4 before returning the signed form to the Secretary/Administrator.

3. Pilots with Other Aviation Experience - Cross Credits

1. Object

- (a) To enable persons holding, or who have held, other aviation Pilots' Licences or Certificates to gain a Pilot Certificate issued by SAC, a degree of recognition for past experience is available.
- (b) Past experience can be cross-credited for certificates with passenger ratings within the following maximum limits:
- (i) Part 61 trained Students — 20 hours credit.
 - (ii) Persons having an invalid part 61 Flight Crew Licence:
 - Licence invalid more than 2 years – 25 hours credit.
 - Licence invalid less than 2 years – 30 hours credit.
 - (iii) Persons holding a current FAI Certificate for Gliding or Glider Pilot Certificate issued through a Glider Association:
 - C' Certificate or above without passenger rating – 10 hours credit.
 - 'C' Certificate or above with passenger rating – 15 hours credit.
 - (iv) Persons holding a current paragliding Rating PG2 issued by a Paragliding Organisation – 10 hours credit.
 - (v) Persons holding a Microlight Certificate previously issued by a Part 103 or Part 149 Organisation – all logged flight time will qualify towards issue of an equivalent certificate providing the applicant satisfactorily completes a flight test for the Certificate applied for.
 - (vi) Persons holding a current Part 61 Flight Crew Licence (PPL or above), Part 67 medical, and rating on the aircraft type – will qualify for a SAC Advanced Pilot Certificate with passenger endorsement after showing evidence of a current BFR, a brief on Part

103 microlight rules and 2 hrs PIC before carrying a passenger.

Notes: A person holding a Part 61 Flight Crew Licence (PPL or above), Part 67 medical, and rated on the aircraft must be a member of a Microlight organisation (SAC) if the rating on the Microlight was issued by a SAC Microlight Instructor under part 103.

A pilot shall not carry another person in a microlight aircraft unless the pilot has been authorised by a microlight organisation to do so –(103.159)(1).

2. Use of Cross Crediting – Examples to Advanced / Pass Cert

- (a) Part 61 trained Student with 10 Hours
Requirement: 35 Hrs
Credit of 10 Hours S.P.L.
25 Hours Microlight Req (Must complete Cross Country syllabus)
35 Hours Minimum for Advanced Cert.
Passenger Rating (Requires 35 hours PIC minimum flight experience).
- (b) Part 61 trained Student with 15 Hours
Requirement: 35 Hours
Credit of 15 Hours S.P.L.
20 Hours Microlight (Must complete Cross Country syllabus)
35 Hours Minimum for Advanced Cert..
Passenger Rating (Requires 35 hours PIC minimum flight experience).
- (c) Part 61 trained Student with 30 Hours
Requirement: 35 Hours
Credit of 20 Hours S.P.L.
15 Hours Microlight (Must include Cross Country syllabus)
35 Hours Minimum for Advanced Cert.
Passenger Rating (Requires 35 hours PIC minimum flight experience).
- (d) P.P.L Invalid for 3 Years
Requirement
Credit of 25 Hours P.P.L.
10 Hours Microlight, Includes a type rating, Stage 3 dual navigation exercise, BFR and 2 hours solo before passenger rating,

- Passenger Rating (Requires 35 hours PIC minimum flight experience).
- (e) P.P.L. Invalid for 1 Year
Requirement:
Credit of 30 Hours P.P.L..
5 Hours Microlight, Includes a type rating, Stage 3 dual navigation exercise, BFR, and 2 hours solo before passenger rating
Passenger Rating (Requires 35 hours PIC minimum flight experience).

3. Foreign Certificate Holders – Cross Crediting

Persons holding Microlight (Ultralight) Pilot Certificates (Licences) issued by a foreign authority, agency or organisation may be eligible for these to be validated for flight in New Zealand or for the issue of a SAC Microlight Pilot Certificate providing they meet certain parameters.

- (a) Short Term validation – is available to pilots are visitors or tourists who can produce their:
- valid foreign pilot certificate indicating the level of attainment and privileges;
 - valid foreign medical certificate;
 - pilot's logbook.

The pilot will be required by SAC to:

- become a SAC client paying the standard fee in Section 1 Para 12;
- be briefed by a SAC instructor on Part 91 and 103 Rules pertaining to the rules of the air, the local airspace, and the operation of Microlight Aircraft in New Zealand; and
- successfully complete a Flight assessment to BFR standard with a SAC instructor.
- An appropriately qualified and experienced foreign pilot who for the purpose of test flying a new aircraft may be exempt from the BFR requirement. The SAC Operations officer will consider the application as long as they can provide proof to SAC that they are rated and current on type, have the appropriate overseas equivalent qualification and comply with all other SAC foreign pilot requirements. Passengers must not be carried by the foreign pilot until a flight test is carried out by a SAC Instructor.

The SAC Instructor will then:

- make a logbook entry giving a validation period of not more than one calendar month or the expiry date on the medical certificate whichever is the soonest; and

 - forward the Client Application, fees, and competed flight assessment, copies of the foreign documentation, with comments to SAC Head Office.
- (b) Conversion of Foreign Certificates to SAC Microlight Pilot Certificates may be carried out to the following procedure providing the pilots can produce their:
- valid foreign pilot certificate indicating the level of attainment and privileges;
 - valid foreign medical certificate;
 - pilot's Logbook.

The pilot will be required by SAC to:

- become a SAC client paying the standard fee in Section 1 Para 12;
- sit and pass the SAC Aviation Law examination; and
- present a valid SAC medical declaration and certificate; and
- successfully complete a Flight assessment with an ATO to BFR standard to the level equating with the foreign certificate.

The ATO will then:

- forward the Client Application, fees, copies of the medical declaration and certificate and foreign documents, and competed flight assessment to SAC Head Office.
- Make a recommendation as to which level within the SAC system a certificate should be issued; and
- Make a recommendation as to whether any further examination (written, oral, of flight assessment) should be carried out prior to certificate issue.

4. Type Ratings

1 **Object**

The object of this section is to specify:

- (i) the requirements for issue
- (ii) the recent experience requirements
- (iii) the privileges of the Type Rating.

2. **Requirements for Issue**

- (a) Type ratings are required for all High Performance Microlights, by type, as defined in Sec. 1 – 5, Definitions.
- (b) If the High performance Microlight is the first Tail Wheel Type Rating sought, then dual instruction on tail wheel aircraft is required. A new type rating is required if the Microlight is a tail wheel version of a tricycle landing gear type on which a rating is already held.
- (c) For a new type of aircraft where a type rating has never been issued before, an ATO or microlight Instructor, holding a Test Pilot Rating, may self-rate him/herself providing he/she has satisfactorily completed a test flight programme on the aircraft type.
- (d) A full briefing and logbook endorsement is required for first Microlight flown with Variable Pitch, Constant Speed Unit Propeller, Retractable Undercarriage or Turbocharged/Supercharged Engines.
- (e) For issue of a type rating, an instructor with a high performance type rating in the group for which the rating is sought shall ensure that:
 - (i) A full briefing on the operating requirements and limitations of the type is carried out;
 - (ii) Satisfactory operational and technical knowledge of the aircraft type is demonstrated by oral and written examination (SAC Form 8.19);

- (iii) The ability to perform competently manoeuvres appropriate to the aircraft type is demonstrated;
- (iv) For Class 2 Microlights a dual check flight with an instructor with a High Performance Type Rating in the group for which the rating is sought;
- (vii) An appropriate log book endorsement is made.

Aircraft type rating experience

Aircraft are listed in Groups as follows:

1. **Multi-engined microlight**; initial issue — 5 hours dual, 3 hours solo. Subsequent types — 1 hour dual, 1 hour solo.
2. **Multi-engined centreline-thrust microlight**; — 2 hours dual, 1 hour solo.
3. **Single engined microlight operating on land only**; 1 hour dual, 1 hour solo, except that persons appointed as SAC ATOs are exempt from this experience requirement and may self rate.
4. **Single engined microlight ski-plane**; using snow as the sole take-off and landing medium — 3 hours dual, 2 hours solo.
5. **Single engined microlight seaplane**; using water as the sole take-off and landing medium, initial issue — 5 hours dual, 2 hours solo. Subsequent types — 2 hours dual, 1 hour solo.

Notes:

1. The solo requirements are only required before carrying passengers or instructing.
2. With the exception of single engined microlights operating on land only, SAC ATO and Instructors must hold or have held a rating in the group under Part 61 or Part 149 before issuing a type rating.
3. The hourly limitations for dual shown above are **minimums** only and dual conversion may take longer dependant on the pupil's performance and the instructor's judgement.

3. *Privileges of the Type Rating*

A Type Rating permits a pilot-in-command to:

- (a) Fly solo in a high performance microlight, of the type the rating is held for;
- (b) Carry passengers in a high performance microlight, of the type the rating is held for, providing the person holds an Intermediate Pilot Certificate endorsed for passenger carrying, or an Advanced Pilot Certificate endorsed with a Passenger Rating.

5. Test Pilot Certificate

1. **Object**

- (a) The object of this section is to specify:
 - (i) the requirements for issue
 - (ii) the recent experience requirements
 - (iii) the requirements for renewal; and
 - (iv) the privileges of the Test Pilot Certificate.

2. **Requirements for issue**

An applicant seeking a Test Pilot Certificate.

- (i) Should be the holder of a Microlight Instructor Certificate; or
- (ii) Should be the holder of a Microlight Advanced Pilot Certificate;
- (iii) Should have a minimum of 150 hours Pilot in Command for the Group Rating of the Microlight Aircraft that the Certificate is to be endorsed for; or
- (iv) Should hold or have held a test pilot approval issued by CAA for testing amateur-built aircraft or have a test pilot certificate issued by an equivalent overseas organisation.

2.1 Prior to issue of a Test Pilot Certificate an applicant is required:

- (a) To attend a test pilot course run by an approved SAC representative with the appropriate test pilot endorsement;
- (b) To pass a written and practical examination on principles of flight, air and airflow, air resistance, aerofoils, lift and drag, thrust, level flight, gliding, climbing, manoeuvres, stability, control, flutter, performance, and weight and balance;
- (c) To satisfactorily demonstrate test flight procedures in flight (based on the SAA Flight Test Schedule CAA Form 2118);

- 2.2 The detailed syllabus of examination in the above subject is set out below:
- (a) Basic Aircraft design
 - (b) Basic Aircraft structures
 - (c) Applied aerodynamics – airfoils – M.A.C.
 - (d) Principles of aircraft stability
 - (e) Aircraft performance measurements
 - (f) Weight and balance
 - (g) Flutter
 - (h) Powerplant systems
 - (i) Instrument systems
 - (j) Fuel systems
 - (k) Preparation of aircraft for test flight.
 - (l) Safety precautions ground/air
 - (m) Pilot preparation for test flight

- 2.3 Prior to demonstrating flight test procedures for a Test Pilot Certificate an applicant must have completed:–

Fixed Wing

(a) not less than 130 hours in Microlight Aircraft which must include at least 10 hours of cross-country flying, if all experience has been in Microlight Aircraft; or

(b) 150 hours flight time in aircraft of which 20 hours must be in Microlight Aircraft.

Rotorcraft

Helicopters - Refer Section 6.2 Training - Helicopter

Gyroplanes - Refer Section 6.3 Training - Gyroplanes

- 2.4 Fixed Wing

Where the applicant **is the holder** of a valid Flight Instructor Rating - Aeroplane Category A, B or C, they must complete a minimum of 5 hours flight time in Microlight Aircraft before undertaking Microlight Test Flying.

Rotorcraft

Helicopters - Refer Section 6.2 Training - Helicopters

Gyroplanes - Refer Section 6.3 Training - Gyroplanes

- 2.5 Fixed Wing

An applicant who **does not hold** a current or Valid Flight instructor Rating - Aeroplane Category A, B or C but who has previously held such a rating will be required to complete 10 hours flight time in Microlight Aircraft before undertaking Microlight Test Flying

Rotorcraft
Helicopters - Refer Section 6.2 Training - Helicopters
Gyroplanes - Refer Section 6.3 Training - Gyroplanes

3. *Recent Experience Requirements*

- 3.1 The holder of the Test Pilot Certificate must not exercise the privileges of their certificate to act as a test pilot in a Microlight unless:
- (a) Within the immediate preceding 90 days they have carried out at least three takeoffs and landings in a microlight aircraft of the same group, and
 - (b) Within the immediate preceding 24 months he/she has demonstrated to an authorised testing officer designated by the Sport Aviation Corp. their competency to carry out duties appropriate to a Test Pilot Certificate in accordance with the syllabus set out in Sec.6.0 – 5 - 2.2

4. *Privileges*

- 4.1 A Test Pilot Certificate authorises the holder to test fly any Microlight that the certificate holder has a group rating for.

5. *Test Pilot Certificate - Ratings*

- 5.1 All Test Pilot Certificates shall be endorsed with group ratings in accordance with the schedule below.
- (a) Group A: Valid for the operation of Weight Shift Microlight Aircraft only.
 - (b) Group B: Valid for the operation of Three Axis Control Microlight Aircraft only.
 - (c) Group C: Valid for the operation of Combined Control Microlight Aircraft only.
 - (d) Group G: Valid for the operation of Microlight Gyroplanes only.

- (e) Group H: Valid for the operation of Microlight Helicopters only.
- (f) Group P: Valid for the operation of Powered Paragliders only.
- (g) Group J: Valid for the operation of Microlight Jet Packs only.
- (h) High performance Microlights of all the above groups are subject to type ratings. Refer Sec. 6.0 - 4.

6. *Test Pilot Certificate – Validity*

6.1 Test Pilot Certificates shall be valid for 2 years from date of issue and renewed automatically providing the recent experience requirements remain valid.

6. Flight Radiotelephone Operator Certificate

1. Object

- (a) The object of this section is to specify:
 - (i) the requirements for issue
 - (ii) the privileges of the Flight Radiotelephone Operator Certificate.

2. Requirements for issue

An applicant seeking a Flight Radiotelephone Operator Certificate should have a current Flight Crew Certificate issued by a Part 149 Aviation Recreation Organisation.

2.1 Prior to issue of a Flight Radiotelephone Operator Certificate an applicant is required:

- (a) To pass a written and practical examination based on the curriculum in 2.2;
- (b) To demonstrate competency in the use of aircraft radiotelephones and radiotelephone procedures.

2.2 The detailed curriculum for a Flight Radiotelephone Operator Certificate is set out below:

- (a) Controls – Correct manipulation and adjustment of the controls of an aeronautical radiotelephone transceiver.
- (b) Communication – Transmission and reception of spoken messages competently and in accordance with prescribed procedures.
- (c) Practices – Knowledge of approved aeronautical radiotelephone practices and procedures.
- (d) Rules – Knowledge of rules which are pertinent to the duties, responsibilities and privileges of the flight radiotelephone rating.
- (e) General radiotelephony procedures – Language to be used, word spelling, transmission of numerals, procedure words and phrases, time system, establishment of communications, frequencies to be used, failure of communications, identification of service, radiotelephony call signs of aircraft, procedures for exchange of messages, corrections and repetitions tests, readability scale.

- (f) Distress and urgency communications – Definitions, distress and urgency signals; distress communications; action by the aircraft in distress, imposition of silence, action by all other stations, termination of distress communications, urgency communications; action by aircraft reporting an urgency condition.
- (g) Phraseology and procedures – Standard radiotelephony phraseologies and procedures for all VFR operations, take-off, approach, and landing, at both Air Traffic Controlled Aerodromes and Flight Service Aerodromes, and en route.

Note;

Where the applicant is the holder of a Flight Radio Telephone Operator (FRTO) rating then this is acceptable as a pass in the SAC flight radiotelephony written examination.

(Reference: AC61-1.3 Page 21)

3. Recent Experience Requirements

A Flight Radiotelephone Operator Certificate will remain current as long as the Flight Crew Certificate issued by a Part 149 Aviation Recreation Organisation also remains current.

4. Privileges

A Flight Radiotelephone Operator Certificate authorises the holder to operate an aeronautical radiotelephone transceiver while operating an aircraft under their Part 149 Flight Crew Certificate.

7. Microlight Aerobatic Rating

1. **Object**

(a) The object of this section is to specify the:

- (i) requirements for issue
- (ii) recent experience requirements
- (iii) privileges of the Microlight Aerobatic Rating
- (iv) instructor qualifications

2. **Requirements for issue**

An applicant seeking a Microlight Aerobatic Rating should have a current Microlight Flight Crew Certificate to Intermediate or Advanced standard issued by a Part 149 Aviation Recreation Organisation.

2.1 Prior to issue of a Microlight Aerobatic Rating an applicant is required:

- (i) To receive a course of ground training in the theory of aerobatics;
- (ii) To pass a written and practical examination based on the curriculum in 2.2;
- (iii) To receive flight training in a dual controlled aeroplane certificated for aerobatic manoeuvres;
- (iv) To demonstrate competency in performing basic aerobatic manoeuvres.

Note: It is strongly recommended that all microlight aircraft carrying out aerobatics be fitted with a G meter and a ballistic recovery parachute.

2.2 The detailed curriculum for a Microlight Aerobatic Rating is set out below:

- (a) Aeroplane Limitations – Understand the concept of design load limitations and the safety factor applied (G limits), the high speed stall, maximum manoeuvring speed, aircraft weight and balance.
- (b) Aerobatic Terminology – Understand the basic terminology used in aerobatic flight.
- (c) Practices – Knowledge, and performance, of basic aerobatic manoeuvres practices and procedures including the:
 - (i) Loop
 - (ii) Stall turn
 - (iii) Roll
 - (iv) Spin

- (d) Civil Aviation Rules – Knowledge of Rules which are pertinent to the performance, responsibilities, and privileges of the Microlight Aerobatic Rating.
- (e) Demonstrate knowledge of the structural, flight, and handling limitations of the aircraft being used for the microlight aerobatic rating.

Note;

A Microlight Aerobatic Rating may be issued by SAC where the applicant can show proof of previous aerobatic training, or hold a current Aerobatic Rating issued under Part 61, subject to a satisfactory dual check.

3. *Recent Experience Requirements*

A Microlight Aerobatic Rating will remain current as long as the Flight Crew Certificate issued by a Part 149 Aviation Recreation Organisation also remains current. Competency for carrying passengers while carrying out aerobatic manoeuvres will be checked at the biennial flight review.

4. *Privileges*

A Microlight Aerobatic Rating authorises the holder to perform aerobatic manoeuvres in a microlight aircraft while carrying a passenger over 3000ft ASL or down to 1500ft ASL solo, under their Part 149 Flight Crew Certificate.

5. *Instructor Requirements*

- (a) Persons giving instruction for the microlight aerobatic rating shall be either;
 - (i) a Part 61 Instructor with a Part 61 Aerobatic Rating holding a Part 149 microlight Instructor certificate; or
 - (ii) a Part 149 Instructor with a Microlight Aerobatic Rating.

6. *Authority*

Part 61 Subpart L - Aerobatic Flight Rating

61.551(a)(1)(ii), 61.551(a)(2)(ii), 61.551(a)(3)(ii),
61.551(c)(1), 61.553, 61.555, 61.557

8. Towing of Hang Gliders

1. **Object**

The object of this section is to specify:

- (i) the requirements for issue;
- (ii) the privileges of hang glider towing.

2. **Requirements for issue**

An applicant seeking the issue of a Microlight tow rating shall hold at least a current SAC Microlight pilot certificate or a license issued under part 61, and a microlight tow rating issued by a Microlight organisation in the form of a statement of competence in the pilots logbook.

The holder of the Advanced Microlight pilot certificate or part 61 license may be eligible for the issue of the Microlight tow rating only if the pilot:

- (1) has at least 100 hours flight time experience including;
 - (i) at least 80 hours PIC of a Microlight and;
 - (ii) at least 20 hours as the pilot of the aircraft type being used and;
- (2) has been briefed on hang gliding emergencies and procedures by the holder of a hang glider Instructor certificate issued by the delegated hang glider organisation and
- (3) has been briefed on Microlight towing emergencies and procedures by the holder of a Microlight Pilot Instructor certificate.

3. **Equipment Criteria**

A pilot of a Microlight aircraft shall not tow a hang glider in flight unless;

- (1) the towing aircraft is of a type capable of controlled flight at speeds below the max 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.