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2. Jetpack - Definitions

1. Object
 - 1.1 The object of this section is to define terminology specific to Jetpack operations.

2. Definitions.
 - (a) Levels of Flight Assistance
 - (i) **Assisted Flight** is defined as flight where the Novice Pilot is assisted by two suitably trained ground handlers.
 - (ii) **Unassisted Flight** is defined as flight where the Novice Pilot is not assisted by ground handlers.
 - (b) Flight Time
 - (i) **Flight Time** is defined as the time from which the pilot starts the engine with the intention of conducting flight operations to the time the engine is shut down at the completion of flight operations.
 - (c) Jetpack Technical Terminology
 - (i) **Translation** is defined as forward, backward, left or right movement (in the horizontal plane) of the Jetpack at a constant altitude.
 - (ii) **Translation Pattern** is defined as a series objectivised of slow speed manoeuvres used to increase pilot skill.
 - (d) Flight Experience Operations
 - (i) **Flight Experience Operations** are defined as Novice Pilot Operations undertaken for the specific purpose of exposing potential Jetpack owners/pilots to Jetpack operations.
 - (e) Levels of Supervision
 - (i) **Direct Supervision** is defined as unassisted flight operations where the Instructor remains in direct visual contact and continuous radio contact with the student pilot.
 - (ii) **Indirect Supervision** is defined as unassisted flight operations where the Instructor authorises a flight or series of flights but is not required to maintain direct visual contact nor continuous radio contact with the student pilot .

3. Jetpack - Novice Pilot Certificate

1. Object
 - 1.2 The object of this section is to specify
 - (a) the requirements for issue;
 - (b) the recent experience requirements;
 - (c) the requirements for renewal; and
 - (d) the privileges of the Novice Pilot Certificate.

2. Requirements for issue
 - 2.1 An applicant for the issue of a Novice Pilot Certificate must be a minimum of 16 years of age and complete a medical declaration in accordance with SAC Form 8.2.

3. Recent Experience Requirements
 - 3.1 The holder of a Novice Pilot Certificate must not exercise the privileges of their certificate until he/she has received instruction from a Jetpack Instructor and completed the following exercises:
 - (a) Simulator syllabus of training - Novice Pilot Certificate
 - (i) Simulator safety briefing;
 - (ii) Effects of Controls;
 - (iii) Hover - Maintain;
 - (iv) Hover taxi;
 - (v) Hover - Attain;
 - (vi) Landing;
 - (vii) Take off;
 - (viii) Translation Pattern;
 - (ix) Advanced Translation Pattern (wind, obstacles, objectives);
 - (x) Emergency Procedures.
 - (b) Ground Handling training;
 - (i) Safety Briefing;

- (ii) Flying clothing;
- (iii) Strap in and egress;
- (iv) Hand signals/communication;
- (c) Assisted Flight syllabus of training - Novice Pilot Certificate;
 - (i) Effects of Controls;
 - (ii) Take off;
 - (iii) Hover - Attain and Maintain;
 - (iv) Landing;
 - (v) Hover taxi;
 - (vi) Emergency Procedures.
- (d) Unassisted Flight syllabus of training - Novice Pilot Certificate;
 - (i) Take off;
 - (ii) Hover - Attain and Maintain;
 - (iii) Hover taxi;
 - (iv) Landing;
 - (v) Translation Pattern;

4. Requirements for Renewal

- 4.1 An applicant for the renewal of a Novice Pilot Certificate must satisfy the Sport Aviation Corporation (SAC) that they have current SAC membership and have a current medical declaration.

5. Privileges

- 5.1 A Novice Pilot Certificate authorises the holder to act, under the direct supervision of an instructor, as pilot-in-command of a Jetpack for the purposes of:
- (a) increasing their skill in order to qualify for the issue of a certificate of higher qualification; or
 - (b) engaging in flying practice in order to qualify for a certificate that is no longer valid; or
 - (c) gaining flight experience in a Jetpack.

4. Jetpack - Intermediate Pilot Certificate

1. Object
 - 1.1 The object of this section is to specify:
 - (a) the requirements for issue
 - (b) the recent experience requirements;
 - (c) the requirements for renewal; and
 - (d) the privileges of the Intermediate Pilot Certificate.

2. Requirements for Issue
 - 2.1 An applicant for the issue of an Intermediate Pilot Certificate:
 - (a) Must hold a valid Jetpack Novice Pilot Certificate.
 - (b) Must have received instruction from a Jetpack Instructor and completed the following exercises:
 - (i) Simulator syllabus of training - Intermediate Pilot Certificate;
 1. Transition to flight;
 2. Flight Manoeuvres;
 3. Transition to hover;
 4. Emergency procedures.
 - (ii) Ground Handling syllabus of training - Intermediate Pilot Certificate;
 1. Pre-Flight Inspection;
 2. Ground handling procedures.
 - (iii) Flight syllabus of training - Intermediate Pilot Certificate;
 1. Transition to flight;
 2. Flight Manoeuvres;
 3. Transition to hover.
 - (c) Must demonstrate to an instructor:
 - (i) their knowledge and ability to perform competently those normal and emergency flight manoeuvres applicable to

the type of Microlight Jetpack on which they are being flight tested.

- (ii) The applicant must be briefed by the examiner to carry out the various manoeuvres to a sequence and in an area in the examiners field of view.

2.2 The Syllabus for the flight test is set out in Section 6.5, Appendix 1 (Yet to be issued).

2.3 Prior to undertaking the flight test for an Intermediate Pilot Certificate an applicant will be required to pass a written examination in the following subjects:

- (a) Aviation Law;
- (b) Microlight Air Navigation;
- (c) Meteorology;
- (d) Aircraft Technical Knowledge - Microlight Aircraft (Jetpacks).

2.4 When the applicant for the issue of an Intermediate Pilot Certificate is the holder of a valid and current NZCAA Pt 61 License or Intermediate/Advanced Microlight Pilot Certificate (any other Group) they will be exempt the requirement to pass written examinations in Aviation Law, Microlight Air Navigation and Meteorology.

2.5 The detailed syllabus of examination for Jetpack Technical Knowledge is set out in Section 6.5, Appendix 2 (Yet to be issued).

2.6 Prior to undertaking a flight test for a Jetpack Intermediate Pilot Certificate an applicant must:

- (a) have completed at least (25) hours flight time in a Jetpack; or
- (b) have completed at least (25) hours total flight time where no less than (5) hours has been in a Jetpack.

3. Recent Experience Requirements

3.1 With respect to single seat Jetpacks there are no recent experience requirements.

4. Requirements for Renewal

4.1 An applicant for the renewal of an Intermediate Pilot Certificate must satisfy the Sport Aviation Corp. that they have current SAC membership and have a current medical declaration.

- 4.2 An applicant for the renewal of an Intermediate Pilot Certificate must submit certification that, within 60 days preceding the date of renewal, he/she has successfully demonstrated competency in accordance with the flight test requirements set out in Section 6.5, Appendix 1 (Yet to be issued), to a person designated by the Sport Aviation Corporation for this purpose.
- 4.3 The Intermediate Pilot Certificate will be valid for two years.
5. Privileges
- 5.1 An Intermediate Pilot Certificate permits the holder to fly within 10nm of his/her original takeoff point at his/her own discretion. For greater distances he/she is required to be under the indirect supervision of an instructor.

5. Jetpack - Advanced Pilot Certificate

1. Object
 - 1.1 The object of this section is to specify:
 - (a) the requirements for issue;
 - (b) the recent experience requirements;
 - (c) the requirements for renewal; and
 - (d) the privileges of the Advanced Pilot Certificate.

2. Requirements for Issue
 - 2.1 An applicant for the issue of an Advanced Pilot Certificate:
 - (a) Must hold a valid and current Jetpack Intermediate Pilot Certificate; and
 - (b) must complete the cross-country as set out in section 6.5, Appendix 3 (Yet to be issued); and
 - (c) must demonstrate to a person approved for the purpose:
 - (i) his/her general knowledge and ability to perform competently such normal and emergency flight manoeuvres as may be considered necessary for the issue of an Advanced Pilot Certificate.
 - 2.2 When the applicant for the issue of an Advanced Pilot Certificate is the holder of a valid and current NZCAA Pt 61 License or Advanced Microlight Pilot Certificate (any other Group) they will be exempt the requirement to complete the cross-country.
 - 2.3 Prior to undertaking a flight test for a Jetpack Advanced Pilot Certificate an applicant must:
 - (a) have completed at least (35) hours flight time in a Jetpack; or
 - (b) have completed at least (35) hours total flight time where no less than (15) hours has been in a Jetpack.

3. Recent Experience Requirements
 - 3.1 With respect to single seat Jetpacks there are no recent experience requirements.

4. Requirements for Renewal
 - 4.1 An applicant for the renewal of an Advanced Pilot Certificate must satisfy the Sport Aviation Corp. that they have current SAC membership and have a current medical declaration.
 - 4.2 An applicant for the renewal of an Advanced Pilot Certificate must submit certification that, within 60 days preceding the date of renewal, he/she has successfully demonstrated competency in accordance with the flight test requirements set out in Section 6.5, Appendix 4 (Yet to be issued) to a person designated by the Sport Aviation Corporation for this purpose.
 - 4.3 The Advanced Pilot Certificate will be valid for two years.

5. Privileges
 - 5.1 An Advanced Pilot Certificate authorises the holder to operate, but not for remuneration, as pilot-in-command of a Microlight Jetpack totally independent of an instructor.

6. Jetpack - Flying Instructor Endorsement

1. Object
 - 1.1 The object of this section is to specify the requirements relating to the Jetpack Instructor Endorsement. It must be noted that a Microlight Flight Instructor Certificate differs from a Jetpack (Group J) Flight Instructor Endorsement in that the former is a pre-requisite to holding the latter. In this context it would be a requirement for a person wishing to be endorsed as a Jetpack instructor to first have been certificated as a Microlight Instructor or rated as an NZCAA Pt 61 Flight Instructor.
 - 1.2 With respect to the Jetpack Flight Instructor Endorsement, this section will specify:
 - (a) the requirements for issue;
 - (b) the recent experience requirements;
 - (c) the requirements for renewal; and
 - (d) the privileges of the Instructor Endorsement.
2. Requirements for Issue
 - 2.1 An applicant for the issue of a Jetpack Flying Instructors Endorsement:
 - (a) must hold a valid Jetpack Advanced Pilot Certificate,
 - (b) must hold a valid Microlight Instructor Certificate in accordance with Section 6.1 or a valid NZCAA Pt61 Flight Instructor Rating.
 - 2.2 Prior to undertaking a flight test for a Jetpack Flight Instructor Endorsement an applicant must have completed:
 - (a) not less than (200) hours flight time in a Jetpack; or
 - (b) not less than (200) hours total flight time of which (25) hours must be in a Jetpack.
 - 2.3 Authorised Testing Officers (ATO's)
 - (a) ATO's require a minimum of (500) hours flight time in a Jetpack; or
 - (b) not less than (500) hours total flight time of which a (50) hours must be in a Jetpack.

3. Recent Experience Requirements
 - 3.1 The Holder of a Jetpack Instructor Endorsement must not exercise the privileges of the endorsement to act as a Jetpack Instructor unless:
 - (a) the recent experience requirements with respect to his/her Microlight Instructor Certificate or NZCAA Pt61 Instructor Rating is maintained.

4. Requirements for Renewal
 - 4.1 An applicant for the renewal of a Jetpack Flight Instructor Endorsement must:
 - (a) Ensure the renewal requirements with respect to his/her Jetpack Advanced Pilot Certificate is maintained and,
 - (b) ensure that the renewal requirements with respect to his/her Microlight Instructor Certificate or NZCAA Pt61 Instructor Rating is maintained.

5. Privileges
 - 5.1 A Jetpack Flight Instructor Endorsement authorises the holder to give instruction on all aspects of Jetpack operations.

7. Jetpack - Test Pilot Certificate

1. Object
 - 1.1 The object of this section is to specify:
 - (a) the requirements for issue;
 - (b) the recent experience requirements;
 - (c) the requirements for renewal; and
 - (d) the privileges of the Test Pilot Certificate.

2. Requirements for Issue.
 - 2.1 Yet to be issued.

3. Recent Experience Requirements.
 - 3.1 Yet to be issued.

4. Requirements for Renewal.
 - 4.1 Yet to be issued.

5. Privileges.
 - 5.1 Yet to be issued.

8. Jetpack - Transition Rules

1. Object.
 - 1.1 The object of this section is to specify:
 - (a) the Authority;
 - (b) the powers of the Authority;
 - (c) eligibility;
 - (d) the period of review.

2. Authority.
 - 2.1 The Sports Aviation Corporation has the authority to introduce into service:
 - (a) the Martin Jetpack prototype P-12.1;
 - (b) any subsequent prototype Martin Jetpacks;
 - (c) production Martin Jetpacks.

3. Powers of the Authority.
 - 3.1 Notwithstanding any previously detailed requirements relating to Group J operations, the Sports Aviation Corporation has the power to;
 - (a) Appoint personnel to act as;
 - (i) Group J Microlight Pilots;
 - (ii) Group J Microlight Instructors;
 - (iii) Group J Microlight Test Pilots.
 - (iv) Group J Microlight Authorised Testing Officer(s).
 - (b) Set and manage the currency of the personnel so appointed in terms of;
 - (i) recent experience requirements; and
 - (ii) requirements for renewal.

4. Eligibility.
 - 4.1 To be eligible for appointment all personnel must:

- (a) be employees of the Martin Aircraft Company either as full time, part time or on contract;
 - (b) be current members of the Sports Aviation Corporation;
 - (c) be in possession of a current medical declaration;
 - (d) hold as a minimum for pilots;
 - (i) a Group B SAC Intermediate Pilot Certificate; or
 - (ii) a valid and current Pt 61 license.
 - (e) hold as a minimum for Instructors;
 - (i) a Group B SAC Instructor Certificate; or
 - (ii) a valid and current Pt61 Instructors Rating.
- 4.2 For Test Pilots; given that under these Transition Rules, the majority of Jetpack flying operations will be for the sole purpose of testing, all pilots appointed under these Transition Rules will be permitted to act as Test Pilots.
5. Period of Review
- 5.1 These rules will be reviewed annually or at any lesser interval as may be deemed necessary.