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Flight Test Guide

Powered Parachute

Second Edition

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Please direct your comments, orders and inquiries to:

The Order Desk
MultiMedia Publishing Services
Transport Canada (AARA-MPS)
330 Sparks Street
Ottawa ON K1A 0N8

Telephone: 1-888-830-4911 (in North America) 613-991-4071 (other countries)

Fax: 613-991-1653 E-Mail: MPS@tc.gc.ca

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FLIGHT TEST GUIDE—POWERED PARACHUTE

This flight test guide sets out the techniques, procedures and the marking criteria that will be used by Civil Aviation inspectors and pilot examiners for the conduct of a flight test, observed from the ground, required to demonstrate the skill requirements for the issuance of a passenger-carrying rating and a flight instructor rating—powered parachute.

Flight instructors are expected to use this guide when preparing candidates for flight tests. Candidates should be familiar with this guide and refer to the qualification standards during their training.

DEFINITIONS

"Examiner" means a pilot examiner accredited under section 4.3 of Part 1 of the

Aeronautics Act or a Civil Aviation inspector authorized to conduct this flight

test.

"Flight test item" means a task, manoeuvre or exercise listed on the flight test report.

"Operating manual" is used as a generic term that applies to a document provided by the aircraft

manufacturer or owner that outlines aircraft operating procedures and

limitations. In actual fact, it may be given any number of titles including pilot

operating handbook, aircraft flight manual or aircraft operating manual.

For more information, visit our Web site at:

www.tc.gc.ca/civilaviation/general/flttrain/Planes/menu.htm

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Sample 1: Recommendation for Flight Test—Ultra-light Aeroplane

Sample 2: Recommendation for Partial Flight Test—Ultra-light Aeroplane

GENERAL

ADMISSION TO A FLIGHT TEST

In order to be admitted to a powered parachute flight test, or a complete re-test, and meet the requirements of CAR 421.14, the candidate will present:

- (a) photo identification;
- (b) either a valid:
 - (i) Pilot Permit—Ultra-light Aeroplane,
 - (ii) Pilot Permit—Recreational—Aeroplane,
 - (iii) Pilot Licence, or
 - (iv) Student Pilot Permit—Ultra-light Aeroplane;
- (c) proof of meeting the medical standards for the passenger-carrying rating or flight instructor rating;
- (d) a letter of competency from a qualified flight instructor certifying that:
 - (i) the instructor has personally completed a pre-flight-test evaluation with the candidate of all the training exercises required for the flight test—ultra-light aeroplane or —powered parachute, as applicable,
 - (ii) the candidate is considered to have reached a sufficient level of competency to successfully complete the powered parachute flight test, and
 - (iii) the instructor recommends the candidate for the flight test; and

Following the flight test, the examiner will submit the required fee, the letter of recommendation and a completed form 26-0667 Ultra-light Aeroplane Flight Test Report / Application for Passenger Carrying Rating which indicates that an applicant for a passenger-carrying rating—ultra-light aeroplane has met all of the experience requirements required for and applicable to the passenger-carrying rating.

ADMISSION TO A PARTIAL FLIGHT TEST

A partial flight test must be conducted within 60 days following the date of the failed complete flight test. Prior to admission to a partial flight test, the candidate will provide the requirements of (a), (b) (c) and (e) above, and:

- (a) a copy of the flight test report for the previously failed flight test; and
- (b) a letter, signed by the holder of a valid flight instructor rating—ultra-light aeroplane or a valid flight instructor rating—aeroplane, certifying that the candidate:
 - (i) has received further training on the failed flight test item(s),
 - (ii) is considered to have reached a sufficient level of competency to successfully complete the flight test, and
 - (iii) is recommended by the instructor for the flight test.

LETTERS OF RECOMMENDATION

Letters of recommendation must be dated within 30 days prior to the flight test. In the case of a re-test, the person who conducted the additional training will sign the letter of recommendation.

AIRCRAFT AND EQUIPMENT REQUIREMENTS

The candidate will provide:

A powered parachute that is fit for flight. The powered parachute must be sufficiently well equipped to allow the candidate to perform the manoeuvres required by the flight test and to permit the examiner to evaluate the candidate's performance.

FLIGHT TEST

The pilot examiner will conduct and evaluate the flight test **from the ground**. The candidate will perform the flight in accordance with the directions and instructions communicated by the examiner over a two-way radio communication system.

Note: Given the limitations in the use of radio communication systems in powered parachutes, the candidate will explain the procedures that will be used to achieve items 10 and 11 of the flight test (i.e. precautionary landing and forced landing) at the appropriate time during the ground portion of the test.

All of the flight test items listed on the powered parachute flight test report and described in this guide must be completed and the minimum pass mark of **26** (50%) must be achieved.

All flight tests will be conducted when weather permits safe completion of the required items, the powered parachute is ready for flight and the candidate and the aircraft's documents, as required by the *Canadian Aviation Regulations*, are valid. It is the sole responsibility of the examiner to make the final decision as to whether or not any portion or all of the flight test may be conducted.

REPEATED FLIGHT TEST ITEM

A flight test item or manoeuvre will not be repeated unless one of the following conditions applies:

- (a) **Discontinuance:** Discontinuance of a manoeuvre for valid safety reasons; i.e., a go-around, collision avoidance or any other procedure necessary to modify the originally planned manoeuvre, as well as upon specific request from the pilot examiner.
- (b) **Misunderstood Requests:** Legitimate instances when the candidate did not understand an examiner's request to perform a specific manoeuvre. A candidate's failure to understand the nature of a specified manoeuvre being requested is not grounds for repeating an exercise or manoeuvre.
- (c) **Other Factors:** Any condition under which the examiner was distracted to the point that he or she could not adequately observe the candidate's performance of the manoeuvre (radio calls, traffic, etc.).

Note: These provisions have been made in the interest of fairness and do not mean that instruction, practice, or the repeating of an item or manoeuvre, that was unacceptably demonstrated, is permitted during the flight test evaluation process.

INCOMPLETE FLIGHT TEST

If the test is not completed due to circumstances beyond the candidate's control, the subsequent flight test will include the flight test items not completed on the original flight test and will be completed within 30 days of the original letter of recommendation.

The following process will apply:

- a) a copy of the flight test report must be given to the candidate;
- b) the flight test may be completed at a later date;
- c) the test may be completed by the same or another examiner;
- d) the original letter of recommendation remains valid;
- e) flight test items already assessed will not be re-tested, but items already demonstrated during the initial flight, and repeated for the purpose of the second flight, may be re-assessed as "1" if the candidate displays unsafe or dangerous flying;
- f) the original flight test report may be used to complete the test, or two separate reports may be submitted; and
- g) the candidate is permitted to complete additional training while awaiting completion of the test.

If the initial flight test included one or two failed flight test items, the partial flight test for these items may be conducted during the subsequent flight test flight, after the candidate has reviewed all of the required items in flight, provided:

- a) the minimum pass mark has been achieved;
- b) no additional items were failed during the subsequent flight test; and
- c) a letter of recommendation for the partial flight test was received prior to the flight, in which a qualified flight instructor certifies that the item or items that had to be re-tested in a partial test have been reviewed and that the candidate was given additional training on the item or items.

FAILURE OF A FLIGHT TEST

Failure to obtain the minimum pass mark or the failure of any flight test item constitutes failure of the flight test. The failure of one or two air items will require a partial flight test on those items, and the failure of a third item will require a complete re-test.

The examiner will stop a test, assess it "Failed", and a complete re-test will be required if the candidate jeopardizes safety by:

- a) displaying unsafe or dangerous flying; or
- b) demonstrating a pattern of failing to use proper visual scanning techniques to check for traffic before and while performing visual manoeuvres.

Following a failed flight test, the candidate will obtain a copy of the flight test report to meet the requirements for admission to a partial flight test.

If not satisfied with the outcome of the flight test, a candidate may wish to file a written complaint regarding the conduct of a flight test or the performance of an examiner with the Transport Canada regional office responsible for that pilot examiner. In order to succeed with a complaint, the applicant will have to satisfy Transport Canada that the test was not properly conducted. Mere dissatisfaction with the flight test result is not enough. After due consideration of the individual case, the Regional Superintendent—Flight Training may authorize a re-test to be conducted, without prejudice (with a clean record in regard to the disputed flight test), by a Civil Aviation inspector or alternate pilot examiner. Should the complaint not be addressed to the candidate's satisfaction, the procedure to be followed is outlined in the Civil Aviation Issues Reporting System (CAIRS) guide for the public. The document may be found at: http://www.tc.gc.ca/eng/civilaviation/secretariat-cairs-menu.htm

PARTIAL FLIGHT TEST

Provided that the applicable pass mark has been achieved and there are no more than two failed flight test items, the skill requirement may be met by completing a partial flight test of the item or items assessed "1".

The candidate will be required to successfully perform the item(s) assessed as "1" on the complete flight test. Flight test items other than the item(s) to be retested, but repeated for the purpose of the second flight, may be re-assessed as "1" if their aim is not achieved or safety is compromised.

The partial flight test must be completed within 60 days of the original complete flight test. No more than one partial flight test will be allowed for each complete flight test.

COMPLETE RE-TEST

A complete re-test will be required in the following situations:

- (a) the required pass mark is not obtained during a complete flight test;
- (b) failure of more than two items during a complete flight test;
- (c) failure of a flight test item during a partial flight test;
- (d) dangerous flying;
- (e) a demonstrated pattern of failing to use proper visual scanning techniques is displayed during the flight test; or
- (f) a partial flight test is not completed within 60 days of the original complete flight test.

PRE-TEST BRIEFING

Pilot examiners are required to brief test candidates on the following details:

- (a) **The sequence of flight test items**. There is no need for the candidate to memorize this sequence, as the examiner will give instructions for each item by two-way radio communications.
- (b) **If in doubt—Ask!** Candidates who do not clearly understand what they are being asked to do should feel free to ask. It may be that the examiner was not clear in giving instructions.
- (c) **Ground references.** Intended touchdown zones and specific touchdown points. For the approach and landing, when the examiner specifies simulated conditions, the examiner must be clear about the simulated conditions, such as surface conditions, obstacles on approach, the position and dimensions of the take-off and landing area.
- (d) **Method of simulating emergencies.** What method will be used? Verbal? Engine failures will only be simulated in accordance with the manufacturer's recommendations or, in their absence, by reducing power to idle.

FLIGHT MANAGEMENT

Flight management refers to the effective use of all available resources, including working with such groups as air traffic controllers. Poor performance of an exercise or task can often be explained by weaknesses in flight management competencies.

Problem Solving and Decision Making

- a) anticipates problems far enough in advance to avoid crisis reaction;
- b) uses effective decision-making process;
- c) makes appropriate inquiries;
- d) prioritizes tasks to gain maximum information input for decisions;
- e) makes effective use of all available resources to make decisions;
- f) considers "downstream" consequences of the decision being considered.

Situational Awareness

- (a) actively monitors weather, aircraft systems, instruments (when equipped), ATC communications;
- (b) avoids "tunnel vision"—it is a well-known fact that factors such as stress can reduce vigilance;
- (c) stays "ahead of the powered parachute" in preparing for expected or contingency situations;
- (d) remains alert to detect subtle changes in the environment.

Communication

- (a) provides thorough briefings;
- (b) asks for information and advice;
- (c) communicates decisions clearly;
- (d) asserts one's position appropriately.

Workload Management

- (a) organizes powered parachute flight resources well;
- (b) recognizes overload in self;
- (c) eliminates distractions during high workload situations;
- (d) maintains ability to adapt during high workload situations.

AIRMANSHIP

The candidate's airmanship will be assessed along with other factors in determining the mark awarded for each item. Items such as looking out for other aircraft, consideration for other aircraft on the ground and in the air, choice of run-up areas and take-off and landing areas, and clearing the engine during prolonged glides will be assessed. The candidate will be expected to demonstrate good airmanship.

ERRORS

Error: an action or inaction by the flight crew that leads to a variance from operational or flight crew intentions or expectations.

Minor Error

An action or inaction that is inconsequential to the completion of a task, procedure, or manoeuvre, even if certain elements of the performance vary from the recommended best practices.

Major Error

An action or inaction that can lead to an undesired aircraft state or a reduced safety margin, if improperly managed; or an error that does not lead to a safety risk, but that detracts measurably from the successful achievement of the defined aim of a sequence or item.

Critical Error

An action or inaction that is mismanaged and consequently leads to an undesired aircraft state or compromises safety, such as:

- Non-compliance with the Canadian Aviation Regulations (CARs); or
- Repeated improper error management or uncorrected and unrecognized threats, which risk putting the aircraft in an undesired state; or
- Repeated major errors or the non-performance of certain criteria prescribed in the *Performance Criteria** that are essential to achieve the *Aim** of a test sequence or item.

DEVIATIONS

Deviation: a variance in precision with respect to a specified tolerance published for a manoeuvre within a test item or sequence, which is a result of pilot error or faulty handling of the aircraft.

Minor Deviation

A deviation that does not exceed a specified tolerance.

Major Deviation

A deviation that exceeds a specified tolerance or repeated minor deviations without achieving stability.

Critical Deviation

A major deviation that is repeated, excessive or not corrected, such as:

- Repeated non-adherence to specified tolerance limits; or
- Not identifying and correcting major deviations; or
- More than doubling the specified value of a tolerance limit.

^{*} Defined in the *Flight Test Guide*.

FOUR-POINT MARKING SCALE

When applying the four-point scale, award the mark that best describes the weakest element(s) applicable to the candidate's performance of the particular test sequence or item demonstrated.

Performance is well executed considering the existing conditions:

- Aircraft handling is smooth and with a high level of precision.
- Technical skills indicate a thorough knowledge of procedures, aircraft systems, limitations and performance characteristics.
- Situational awareness is indicated by continuous anticipation and vigilance.
- Flight management skills are exemplary and threats are consistently anticipated, recognized and well managed.
- Safety margins are maintained through consistent and effective management of aircraft systems and mandated operational protocols.

Performance is observed to include minor errors:

- Aircraft handling with appropriate control input includes minor deviations.
- Technical skills indicate an adequate knowledge of procedures, aircraft systems, limitations and performance characteristics to successfully complete the task.
- Situational awareness is adequately maintained as the candidate responds in a timely manner to cues and changes in the flight environment to maintain safety while achieving the aim of the sequence or item.
- Flight management skills are effective. Threats are anticipated and errors are recognized and recovered.
- Safety margins are maintained through effective use of aircraft systems and mandated operational protocols.

Performance is observed to include major errors:

- Aircraft handling is performed with major deviations and/or an occasional lack of stability, over/under control or abrupt control input.
- Technical skills reveal deficiencies either in depth of knowledge or comprehension of procedures, aircraft systems, limitations and performance characteristics that do not prevent the successful completion of the task.
- Situational awareness appears compromised as cues are missed or attended too late or the candidate takes more time than ideal to incorporate cues or changes into the operational plan.
- Flight management skills are not consistent. Instrument displays, aircraft warnings or automation serve to avert an undesired aircraft state by prompting or remedying threats and errors that are noticed late.
- Safety margins are not compromised, but poorly managed.

Performance is observed to include critical errors or the Aim of the test sequence or item is not achieved:

- Aircraft handling is performed with critical deviations and/or a lack of stability, rough use of controls or control of the aircraft is lost or in doubt.
- Technical skills reveal unacceptable levels of depth of knowledge or comprehension of procedures, aircraft systems, limitations and performance characteristics that prevent a successful completion of the task.
- Lapses in situational awareness occur due to a lack of appropriate scanning to maintain an accurate mental model of the situation or there is an inability to integrate the information available to develop and maintain an accurate mental model.
- Flight management skills are ineffective, indecisive or noncompliant with mandated published procedures and/or corrective countermeasures are not effective or applied.
- Safety margins are compromised or clearly reduced.

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FLIGHT TEST RESULTS

The *Privacy Act* protects the privacy of individuals with respect to personal information about themselves held by a government institution. A flight test measures the performance of the candidate for the flight test, the examiner conducting the flight test and the instructor who recommended the candidate. All of these are identified on the Flight Test Report along with the flight training unit responsible for the training.

Personal information may be disclosed in accordance with section 8(2)(a) of the Act, which allows disclosure "...for the purpose for which the information was obtained or compiled by the institution or for a use consistent with that purpose". The purpose for which flight test information is obtained is to ensure the safety of aviation in Canada. The specific purposes are to measure whether the candidate meets the minimum skill standard for the rating, whether the recommending instructor is performing competently as an instructor and whether the examiner is conducting the test in accordance with the standards.

In accordance with section 8(2)(a) of the *Privacy Act*, a copy of the flight test report will be given to the candidate for a flight test and a copy will be retained by the examiner who conducted the flight test. A copy may also be given to the instructor who recommended the candidate for the flight test and to the chief flight instructor responsible for the quality of flight training at the flight training unit where the training was conducted. Specific information about the results of a flight test will not be given by Transport Canada to anyone but the individuals named on the flight test report, except in accordance with the *Privacy Act*.

ASSESSMENT OF FLIGHT TEST PERFORMANCE

The *Performance Criteria* section of each flight test item prescribes the marking criteria. These criteria assume no unusual circumstances as well as operation of the aircraft in accordance with the manufacturer's specifications, recommended speeds and configurations as outlined in the operating manual.

Throughout the flight test, the candidate is evaluated on the use of an appropriate checklist. Proper use is dependent on the specific task being evaluated and the aircraft configuration. The situation may be such that the use of the written checklist, while accomplishing the elements of the *Aim*, would be either unsafe or impractical. It is acceptable for certain checks to be conducted by memory. When a checklist is used, division of attention and proper visual scanning techniques should be considered.

Consideration will be given to unavoidable deviations from the published criteria due to weather, traffic or other situations beyond the reasonable control of the candidate. To avoid the need to compensate for such situations, tests should be conducted under normal conditions whenever possible.

How to Pass the Flight Test

Instructors prepare their students for the flight test with every training trip. They do this by helping the student master all the flight test exercises, but they also let the student take more and more responsibility for decision-making with each lesson, so the student will be fully ready to make **all** the decisions during the flight test.

Here are some tips on how to pass the flight test:

- (a) Review the flight test guide with your instructor before the flight test.
- (b) An instructor will do a pre-test evaluation, during a simulated flight test, before recommending you for the real test.
- (c) Be rested.
- (d) Arrive early.
- (e) The test measures your skill, item by item. If you think you did poorly on one item, try very hard to focus on the immediate task and don't let yourself be pre-occupied with an item you already completed. Besides, you may have done better than you thought.
- (f) Don't be afraid to ask the examiner if you are unsure of what is expected of you. The examiner will either tell you what you need to know or tell you that you have to work with the information you have. You can't lose by asking.
- (g) Tell the examiner what you are planning to do before you do it.
- (h) The flight test is not a race. Don't put additional pressure on yourself by rushing.
- (i) "Visualize" the flight test in advance by thinking through all the manoeuvres you will perform and developing mental pictures of what you are going to be doing.

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FLIGHT TEST ITEMS

1. DOCUMENTS

Aim

To determine that the candidate can correctly assess the validity of documents required on board and, from these documents, determine that the aircraft is ready for flight.

Description

The candidate will be required to determine the validity of all documents required to be carried on board the aircraft and determine that any required maintenance certifications have been completed.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) determine if the documents required on board are valid;
- (b) determine the number of flying hours remaining before the next service or maintenance task; and
- (c) determine the impact of deferred defects on aircraft operations for the proposed flight.

2. AIRCRAFT PERFORMANCE AND LIMITATIONS/WEIGHT

Aim

To determine that the candidate can demonstrate a practical knowledge of the recommended operating procedures, performance capabilities and limitations for the aircraft being used for the flight test; and that the candidate can correctly complete weight calculations for the aircraft used for the flight test.

Description

The candidate will be required to describe the recommended operating procedures, performance capabilities and limitations for the powered parachute to be used on the flight test. Other performance data may be determined from the powered parachute-operating manual.

The candidate will be required, using actual weights, to complete accurate computations for practical loading situations applicable to the powered parachute to be used in the test. The candidate will be required to correct a situation that is described by the examiner, for example, the maximum permissible take-off weight has been exceeded or is below the minimum load recommended by the canopy manufacturer.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) determine from the powered parachute operating manual, the operational data and limitations for the powered parachute used for the flight test;
- (b) determine if the take-off weight is within permissible limits for the intended flight;
- (c) demonstrate practical knowledge of how to correct a situation of overloading or one in which the load is below the limits of the canopy's minimum load.

3. Pre-Flight Inspection

Aim

To determine that the candidate can complete checks of the powered parachute in accordance with the operating manual and demonstrate practical knowledge of the model of powered parachute.

Description

The candidate will be required to determine that the powered parachute is ready for the intended flight.

All required equipment and documents will be located and, so far as can be determined by pre-flight inspection, the aircraft will be confirmed to be ready for flight. Visual checks for proper fuel/oil quantity and grade will be carried out in accordance with the operating manual. Checks for fuel contamination will also be made whenever possible.

Candidates will be required to verify that the canopy, rigging lines, riser system, brakes and trim are laid out properly and in condition for inflation.

After the candidate has completed the pre-flight inspection, questions relating to the flight test powered parachute will be asked. The candidate will be expected to explain what appropriate action would be taken if an unsatisfactory item were detected or described by the examiner during the pre-flight inspection. The candidate will be expected to demonstrate knowledge of the consequences if such items were undetected.

Note: The powered parachute checks must at least cover all the items specified by the manufacturer.

The candidate will be required to conduct an oral passenger safety briefing. Should the candidate omit the passenger safety briefing the examiner will ask the candidate to provide one.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) use an orderly procedure to inspect the aircraft including at least those items listed by the manufacturer or aircraft owner;
- (b) confirm that there is sufficient fuel and oil for the intended flight;
- (c) verify that the aircraft is in condition for safe flight;
- (d) describe the appropriate action to take for any unsatisfactory item detected or described by the examiner:
- (e) identify and verify the location and security of baggage and required equipment;
- (f) organize and arrange equipment in a manner that makes the items readily available; and
- (g) perform an effective passenger safety briefing that will include:
 - (i) smoking limitations;
 - (ii) use of harnesses and seat belts;
 - (iii) items specific to the aircraft type being used;
 - (iv) action to take in the event of an emergency landing;
 - (v) the location of the emergency locator transmitter and fire extinguisher, if applicable; and
 - (vi) other items for use in an emergency.

4. Engine Starting and Run-up, Use of Checklists

Aim

To determine that the candidate can complete engine start, warm-up, run-up, and systems checks in accordance with the checklists or placards provided by the aircraft manufacturer or owner, completing at least those items recommended in the operating manual.

Description

The candidate will be required to use recommended procedures in engine starting, warm-up, run-up and check aircraft systems and equipment to determine that the aircraft is ready for flight. The candidate will be asked to demonstrate or explain how to correct any unsatisfactory condition encountered or specified by the examiner.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) demonstrate an awareness of other persons and property before and during engine start and run-up, as well as, for aircraft equipped with a clutch system, when the propeller begins rotating;
- (b) use the appropriate checklist provided by the manufacturer or aircraft owner for engine start and warm-up procedures;
- (c) accurately complete the engine and powered parachute systems checks;
- (d) check flight controls for freedom of operation and correct movement; and
- (e) take appropriate action with respect to unsatisfactory conditions.

5. ANCILLARY CONTROLS AND SYSTEMS

Aim

To determine that the candidate can operate ancillary controls/aircraft systems in accordance with the operating manual.

Description

The candidate will be required to demonstrate practical knowledge of the operation of ancillary controls and systems installed on the aircraft being used for the flight test. Use of these ancillary controls and systems will be evaluated both on the ground and in the air, if applicable.

Performance Criteria

The candidate will be expected to operate the ancillary controls in accordance with the operating manual and explain the operation of at least one of the following systems, as specified by the examiner:

- (a) primary flight controls and trim;
- (b) powerplant;
- (c) fuel system;
- (d) electrical system;
- (e) communication system;
- (f) any other systems unique to the aircraft.

6. CANOPY INFLATION

Aim

To determine that the candidate can safely inflate the powered parachute's canopy and check that it is working properly, in accordance with the canopy manufacturer's operating manual. To determine that the candidate can manoeuvre safely on the ground and avoid unnecessary interference with the movement of other traffic.

Description

Candidates will be required to demonstrate a practical knowledge of canopy inflation, and of how to check that the rigging lines and other control cables are in the proper position.

The candidate will be required to taxi the aircraft to and from the take-off area in use and as otherwise required during the test.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) safely manoeuvre the powered parachute, considering other traffic;
- (b) adhere to local taxi rules, procedures and ATC clearances and instructions;
- (c) use flight controls correctly;
- (d) identify and correctly interpret airport, taxiway, and runway signs, markings and lighting;
- (e) inflate the canopy while maintaining stability, and visually check the proper position of the rigging lines and the brakes.

7. TAKEOFF

Aim

To determine that the candidate can takeoff safely using the correct procedure and technique for wind conditions, and for the condition and dimension of the take-off area.

Description

The candidate will be required to demonstrate a takeoff, appropriate to the conditions that exist, or those specified by the examiner. For the purpose of this exercise, the examiner may specify simulated conditions for the takeoff, such as take-off area surface conditions, obstacles to be cleared or avoided and the length of take-off area available. ATC instructions and clearances must be complied with, where they are applicable.

Candidates will be required to confirm, before takeoff, that the canopy is fully inflated and suspension lines are straight with no twists or tangles.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) complete appropriate checks;
- (b) configure the aircraft for the existing conditions;
- (c) check for traffic, taxi into the take-off position, and line up in the direction that is most favourable for takeoff;
- (d) check that there is no traffic on the base leg or on final;
- (e) check the canopy to ensure that all end cells are fully inflated and in condition for takeoff;
- (f) advance the throttle smoothly to take-off power;

- (g) maintain take-off power to a safe height, then, where applicable, set climb power;
- (h) wait until reaching a safe height prior to sitting in the harness;
- (i) demonstrate a safe procedure for releasing the controls in order to sit in the harness.

8. STALL

This item is not required for the powered parachutes.

9. PILOT NAVIGATION

This item is not required for the powered parachutes.

10. Precautionary Landing

Aim

To determine that the candidate can carry out the procedure for evaluating an unfamiliar airstrip or a landing area where the suitability of the landing surface is unknown.

Description

The examiner will assign a potential landing area. The candidate will be required to determine whether or not the site would be suitable for a landing, using an organized procedure to assess factors such as obstacles, softness or hardness of the surface, slope, roughness, length, width, wind direction or other factors affecting a landing.

Note: The candidate will explain to the examiner, when they are on the ground, what procedure he or she intends to follow in order to successfully complete this flight test item. The touchdown area will also be specified.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) establish circuits at an appropriate distance from the runway or landing area;
- (b) overfly the landing area in stabilized flight that will permit an effective assessment of surface conditions and maintain a safe obstacle clearance altitude;
- (c) maintain appropriate altitude and heading;
- (d) select the most suitable touchdown zone considering wind conditions, landing surface and obstructions;
- (e) prepare the passenger for landing; and
- (f) complete appropriate checks.

11. FORCED LANDING

Aim

To determine that the candidate can, in event of an engine failure, select a suitable landing surface, in a given field, and fly a successful approach.

Description

Engine failure will be simulated on command of the examiner, without prior notice, from a height appropriate for powered parachutes. The candidate will be expected to select a suitable landing surface in a given field, and, using an organized procedure, fly a successful approach while using the required emergency procedures. The overshoot will be carried out when requested by the examiner at an operationally safe altitude.

Note: The candidate will explain to the examiner, when they are on the ground, what procedure he or she intends to follow in order to successfully complete this flight test item. The touchdown area will also be specified.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) select a suitable landing surface;
- (b) plan the approach, considering the initial altitude, the wind, the field, the terrain, and other existing factors, if applicable,
- (c) select a touchdown zone;
- (d) vary the flight profile, as necessary, to safely achieve a successful approach to the selected touchdown zone;
- (e) prepare the passenger for landing;
- (f) complete appropriate checks; and
- (g) prepare for overshoot, if requested by the examiner.

Note: The candidate will be expected to demonstrate good airmanship by clearing the engine at appropriate intervals during the descent.

12. OVERSHOOT

Aim

To determine that the candidate can use the correct procedures to execute a safe overshoot.

Description

The examiner may request the overshoot from the landing approach, the forced landing or elsewhere during the test. The candidate will be required to use the procedures specified in the operating manual.

Performance Criteria

Assessment will be based on the candidate's ability to conduct an overshoot in accordance with the procedures specified in the operating manual. If no procedure is specified, the candidate will:

- (a) promptly and smoothly apply maximum allowable power;
- (b) establish a positive rate of climb;
- (c) control direction; and
- (d) complete the appropriate checks.

13. EMERGENCY PROCEDURES

Aim

To determine that the candidate can react promptly and correctly to emergencies.

Description

The examiner will specify an emergency situation. The candidate will be required to describe or demonstrate the appropriate procedures to respond to the emergency. Assessment may be carried out during any portion of the flight test. Some of the items may be tested using questions on the ground.

Performance Criteria

Assessment will be based on the candidate's ability to recognize and describe the recovery procedures and techniques to be used for each of the following five manoeuvres, which will be dealt with orally on the ground:

- (a) stall—recognition and recovery procedure;
- (b) spiral dive—recognition and recovery procedure;
- (c) spin—recognition and recovery procedure;
- (d) parachute phase—recognition and recovery procedure;
- (e) use and execution of a manoeuvre called "Tip Fold".

Additionally, the candidate will be evaluated on any one (1) of the following emergency situations specified by the examiner. The candidate's ability to analyze the situation, take appropriate action and follow the appropriate list of procedures or memory item will be evaluated:

- (a) partial power loss;
- (b) rough engine operation or overheat;
- (c) fuel starvation;
- (d) electrical fire;
- (e) electrical failures;
- (f) emergency descent;
- (g) high sink rate, due to a downdraft; or
- (h) any other emergency particular to the aircraft.

14. THE CIRCUIT

Aim

To determine that the candidate can operate the aircraft in a safe manner in the vicinity of and in an aerodrome circuit.

Description

The candidate will be required to demonstrate correct circuit procedures at the aerodrome where the test is conducted, while maintaining separation from other aircraft.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) fly an accurate circuit maintaining correct position and separation from other aircraft;
- (b) comply with published circuit entry and departure procedures;
- (c) comply with published and established traffic patterns;
- (d) correct for wind drift to maintain proper ground track;
- (e) remain oriented with the runway or landing area in use;
- (f) maintain circuit altitude; and
- (g) complete appropriate checklists.

15. Approach and Landing

Aim

To determine that the candidate can approach and land safely using the correct procedure and technique for the actual wind conditions, landing area surface and length (or those specified by the examiner) and to assess the possibility of such further conditions such as wake turbulence.

Description

The candidate will be required to demonstrate a landing appropriate to the conditions that exist, or those specified by the examiner. When the examiner specifies simulated conditions such as field conditions, obstacles on approach and the landing area available to the candidate, they will be clearly specified prior to commencing the exercise.

Assessment of approaches and landings will be based on the candidate's ability to select the proper approach profile for the actual or simulated conditions.

Performance Criteria

Assessment will be based on the candidate's ability to:

- (a) use procedures appropriate to the wind conditions, landing surface and obstructions;
- (b) establish the recommended approach and landing configuration;
- (c) maintain directional control throughout the approach and landing;
- (d) make smooth, timely, and correct control applications during the approach and landing;
- (e) touch down smoothly for existing conditions, within the specified touchdown zone;
- (f) complete appropriate checks;
- (g) after landing, clear the landing area;
- (h) park the aircraft properly, considering the safety of nearby persons or property.

16. SLIPPING

This item is not required for the powered parachutes.

Intentionally left blank.



Recommendation for Flight Test — Ultra-light Aeroplane Recommandation au test en vol — Avion ultra-léger

Name of Candidate (print) Nom du candidat (en lettres moullées)	Permit Number N° de permis
Flight Experience Expérience du vol Dual — Double commande Solo	Flight Training Unit ID Number N° unité de formation au pilotage
I, the undersigned instructor: certify that the above named candidate meets the minimum experience requirements to be admitted to the flight test,	Je, soussigné, instructeur agréé, déclare que le candidat respecte les exigences minimales d'expérience pour pourvoir être admis au test en vol.
certify that I have personally conducted a pre-test evaluation of all required flight test items with the candidate,	De plus, je déclare avoir personnellement effectué avec le candidat une évaluation pré-test en vol de tous les éléments du test.
consider the candidate to have reached a sufficient level of competency to complete the ultra-light flight test and hereby recommend the candidate for the flight test, and	Je considère que le candidat a atteint un niveau de compétence suffisant pour réussir au test en vol sur avion ultra-léger, et je recommande donc le candidat au test en vol.
certify that I am qualified through the privileges of my pilot permit or licence to make this recommendation.	Je certifie également que les avantage de ma licence de pilote m'autorisent à faire cette recommandation.
Name of Instructor Recommending Test (print) Nom de l'instructeur qui recommande le test (en lettres moullées)	Permit/Licence Number N* de permis/licence
Signature Date (yyyy-mm-dd) Date (aaaa-mm-jj)	Flight Training Unit Unité de formation au pilotage





Recommendation for Partial Flight Test — Ultra-light Aeroplane Recommandation au test en vol partiel — Avion ultra-léger

Name of Candidate (print) Nom du candidat (en lettres moullées)	Licence/Permit Number N° de licence/permis
Flight Experience Expérience du vol Dual — Double commande Solo	Flight Training Unit ID Number N° unité de formation au pilotage
I have conducted a review of the flight test item(s) and have completed additional training with this candidate. I consider the candidate to have reached a sufficient level of competency to successfully complete the ultra-light aeroplane flight test and hereby recommend the candidate for the partial flight test. I certify that I am qualified through the privileges of my pilot permit or ticence to make this recommendation.	J'ai procédé à une révision du ou des éléments de test suivants et j'ai donné une formation complémentaire au candidat. Je considère que le candidat a atteint un niveau de compétence suffisant pour réussir au test en vol sur avion ultra-lèger, et je recommande donc le candidat au test en vol partiel. Je certifie également que les avantages de ma licence de pilote m'autorisent à faire cette recommandation.
Name of Instructor Recommending Test (print) Nom de l'instructeur qui recommande le test (en lettres moullées)	Permit/Licence Number N* de permis/licence
Signature Date (yyyy-mm-dd) Date (aaaa-mm-jj)	Flight Training Unit Unité de formation au pilotage

