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Flight Test Guide
FLIGHT INSTRUCTOR RATING
Aeroplane, Helicopter, Aerobatic

Third Edition

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Canada

Flight Test Guide Flight Instructor Rating Aeroplane, Helicopter, Aerobatic

This reference sets out the skill requirements for the instructor rating flight test. It is intended for anyone who is preparing for such a test, whether it be for the initial issue of an instructor rating, for renewal of an existing rating, or upgrading to a higher rating. It is also intended for Class 1 instructors conducting instructor training.

This publication is available from:

Transport Canada
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Ottawa, Ontario
K1A 0N8

Other references to be used in preparing for an instructor flight test include:

Flight Training Manual (T52-14/1994)
Flight Instructor Guide - Aeroplane (TP975)
Flight Instructor Guide - Helicopter (TP4818)
Human Factors for Aviation series (TP12863, TP12864, TP12865)
Canadian Aviation Regulations
Flight Test Guide, Private Pilot Licence, Aeroplane (TP13723)
Flight Test Guide, Commercial Pilot Licence, Aeroplane (TP13462), or
Flight Test Guide, Private and Commercial Pilot Licence, Helicopter (TP3077)

For more information, visit our web site at www.tc.gc.ca/civilaviation/general/flttrain/menu.htm

Également disponible en français

General

Admission to Flight Test

Initial

Before attempting a flight test for an initial instructor rating, a candidate is required to have:

- ▶ a valid Canadian Commercial, or Airline Transport Pilot Licence in the same category as the rating sought;
- ▶ proof of the required pilot-in-command time
- ▶ a Pilot Training Record (PTR) showing that the required instructor training has been completed; (See note below)
- ▶ proof of having passed the appropriate written examination; and
- ▶ a "Flight Crew Licence - Application for Rating" (Form 26-0083) signed within the preceding 30 days by the holder of a valid Class 1 Flight Instructor Rating - Aeroplane, Helicopter, or Aerobatic, as appropriate, certifying that the candidate has received the required flight and ground instruction and is recommended for an instructor flight test.

Note: A pilot training Record is not required for Canadian Forces Flight Instructors or, in those instances specified in the Personnel Licensing Standards CAR 421, for holders of a Flight Instructor Rating issued by a Contracting State. Candidates for aerobatic flight instructor ratings are not required to maintain Pilot Training Records but must record details of their instructor training in their pilot log book.

Renewal and Upgrade

Valid instructor ratings, and ratings which have expired for not more than 12 months, may be renewed by means of a flight test. Renewals and upgrades conducted up to 90 days before expiry will be issued for a term extending from the original expiry date.

Candidates whose ratings have been expired for more than 12 months, but less than 24 months must submit a completed "Flight Crew Licence - Application for Endorsement" (Form 26-0083) signed within the preceding 30 days by the holder of a valid Class 1 instructor rating - aeroplane, helicopter, or aerobatic, as appropriate - recommending the candidate for an instructor flight test.

Candidates whose ratings have been expired in excess of 24 months must submit a completed "Flight Crew Licence - Application for Endorsement" (Form 26-0083) signed within the preceding 30 days by the holder of a valid Class 1 instructor rating - aeroplane, helicopter, or aerobatic, as appropriate - recommending the candidate for an instructor flight test. They must also have passed the appropriate written examinations within the preceding 12 months.

Re-test After Failed Flight Test

Candidates attempting a re-test after a test in which a mark of **F** was assigned for any of the areas assessed must provide a written recommendation from the holder of a Class 1 instructor rating - aeroplane, helicopter, or aerobatic, as appropriate, certifying that the candidate is considered competent to undertake an instructor flight test.

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, and the resulting flight test report, measures the performance of the candidate for the flight test, the examiner conducting the flight test, the instructor who recommended the flight test, and, through identification of the flight training unit responsible for the training, the performance of the chief flight instructor of that unit. All of these are identified on the flight test report.

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 licence or rating, whether the recommending instructor is performing competently as an instructor, whether the examiner is conducting the test in accordance with the standards, and whether the flight training unit is performing in accordance with the general conditions of the operator certificate.

In accordance with 8(2)(a) of the Privacy Act, a copy of the flight test report shall be given to the candidate for a flight test and a copy shall 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.

Aircraft and Equipment Required for the Flight Test

- ▶ The aircraft used for the flight test must have fully functioning dual controls and it must be equipped:
 - with a serviceable two-way intercom system unless satisfactory voice communication can be maintained between the candidate and the examiner,
 - to carry out all the exercises appropriate to the instructor rating sought and have no operating limitations which prohibit the performance of those exercises
- ▶ Initial applicants for aeroplane instructor ratings must provide an aircraft certified for spins. Except with the concurrence of the examiner, applicants for renewal of an aeroplane instructor rating must also provide an aircraft certified for spins.
- ▶ Initial applicants for helicopter instructor rating must provide a helicopter capable of full-on practice autorotations. Except with the concurrence of the examiner, applicants for renewal of a helicopter instructor rating must also provide a helicopter capable of full-on practice autorotations.
- ▶ A suitable view limiting device must be available

Requirements for Issue of a Rating

Candidates must meet all prerequisites specified in the Personnel Licensing Standards CAR 421 and demonstrate the following performance in each of the seven items assessed on the flight test:

- Class 1 / Assessed as Class 1 in all items.
- Class 2 / Assessed as Class 1 or 2 in all items.
- Class 3 / Assessed as Class 1, 2, or 3 in all items.
- Class 4 / Assessed as Class 1, 2, or 3 in all items.

Assessment Standards

Class 1 Aeroplane, Helicopter and Class 1 Aerobatic

- Learning factors and techniques of instruction are utilized in a manner that would set an example for a student instructor
- Teaching method obtains a high degree of student involvement
- Able to readily identify errors in the performance of flight manoeuvres and suggest a variety of effective strategies for improvement
- Technical information presented to the student must be accurate
- Demonstrates a very good understanding of training and testing standards
- Performance of flight manoeuvres predominantly involves ideal performance under existing conditions
- Demonstrates knowledge and skill necessary to train new instructors

Class 2 Aeroplane and Helicopter

- Presentation may include very few minor errors in the application of the learning factors and techniques of instruction
- Teaching method obtains good student involvement
- Technical information presented to the student must be accurate
- Demonstrates knowledge of training and testing standards appropriate for supervising a staff of instructors
- Able to readily identify errors in the performance of flight manoeuvres and suggest effective strategies for improvement
- Performance of flight manoeuvres predominantly involves very few minor errors

Class 3 Aeroplane, Helicopter and Class 2 Aerobatic

- Presentation may include frequent minor and even some major errors in the application of the learning factors and techniques of instruction, provided that the student would still be deemed to reach a satisfactory level of understanding
- Teaching method obtains some student involvement
- Presentation may include some minor errors in the accuracy of technical information presented to the student
- Able to identify common errors in performance of flight manoeuvres and suggest some strategy for improvement
- Knowledge of training and testing standards acceptable
- Performance of flight manoeuvres safely accomplished but includes frequent minor errors

Fail - All

- Performance on any flight manoeuvre in which the aim of the manoeuvre was not safely accomplished, or in which the manoeuvre was completed with major errors
- Any action or lack of action by the candidate that requires corrective intervention by the examiner to maintain safe flight.
- Failure to maintain proper and effective lookout
- Teaching, on the ground or in the air, that would, in the judgement of the examiner, result in a lack of understanding or in a misunderstanding which could lead to a dangerous flight situation
- Aim of any of the areas of this test not accomplished
- Acceptable level of knowledge not demonstrated
- Ineffective instructional technique
- Control of aircraft in doubt

Conduct of the Flight Test

The flight test for the flight instructor rating consists of three phases titled - *Pre-flight*, *In-flight* and *Post-flight*. The test, which should not normally take more than half a day to complete, is intended to simulate a realistic training session with a student. Skill as an instructor will be assessed in the following areas:

Pre-flight

- Overall Planning and Organization of Lesson
- Preparatory Ground Instruction
- Pre-flight Briefing

In-flight

- Flight Proficiency
- Teaching Proficiency
- Analysis of Student Performance

Post-flight

- Post-flight De-briefing

The privileges sought will determine the nature of the test. For example, the test for upgrading to a Class 2 rating, aeroplane or helicopter, will include assessment of supervisory skills. The test for upgrading to a Class 1 rating will include assessment of ability to train instructors. Renewal flight tests for these ratings will, at the discretion of the examiner, include assessments related to any of the privileges of the rating as specified in the Personnel Licensing Standards.

Although the candidate must be prepared to demonstrate the ability to instruct effectively any of the applicable exercises, the test is a sampling of performance designed to permit completion of the test in a reasonable time. The examiner will have the candidate teach in flight an exercise for which preparatory ground instruction has been given in the pre-flight phase of the test, and choose other exercises to be taught. For these exercises, it will be assumed that all necessary preparatory instruction has been given.

The test for an aeroplane or helicopter instructor rating will sample the exercises required for training toward a private or commercial pilot licence, night rating, or Class 4 instructor rating, as appropriate. The test for an aerobatic instructor rating will sample the aerobatic manoeuvres listed in the Personnel Licensing Standards CAR 421.91 (3).

After the flight test is completed, the examiner will conduct a de-briefing of the candidate's performance. Where the candidate has been recommended for the test, the recommending instructor is urged to be present at the de-briefing.

Details of the three phases of the flight test are given under the headings *Aim*, *Description*, and *Assessment Considerations*. For any assessment other than FAIL, the stated aim must be met and, in the judgement of the examiner, the candidate's action would be expected to result in a satisfactory level of understanding by a student. The "Assessment Considerations" section provides guidelines for the examiner - not all items listed need be completed.

Overall Planning and Organizing of a Lesson

Aim

To determine that the candidate can evaluate the training needs of a student and prepare a lesson to meet those needs.

Description

For an aeroplane or helicopter instructor rating, the examiner will play the part of a student training for a private pilot licence, a night rating, a commercial pilot licence, or a flight instructor rating, as appropriate. For an aerobatic instructor, the examiner will play the part of a student being trained to perform aerobatic manoeuvres or to obtain an aerobatic instructor rating, as appropriate. Details of the student, such as background, flight experience, and ability, will be given. This can be done by describing the student or by providing an actual or sample Pilot Training Record or log book.

The candidate will be requested to determine an appropriate range of activities for approximately one hour of flight instruction with this student and identify exercises needing preparatory ground instruction.

Assessment Considerations

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

- assess training records to determine a student's competency
- identify a student's training needs
- match preparatory instruction to the proposed training flight
- develop a lesson to meet the student's training needs

Preparatory Ground Instruction

Aim

To determine that the candidate can present preparatory ground instruction relevant to the flight lesson planned and organized in the first part of the test.

Description

The candidate will be asked to present preparatory ground instruction appropriate for the planned flight lesson. It may be assumed that necessary ground school topics have been completed. When the lesson includes several exercises, preparatory instruction will normally be requested for only one of them. For the Class 1 instructor rating, the activities here will normally sample preparatory ground instruction appropriate for the training of instructors.

Assessment Considerations

Assessment will be based on the candidate's ability to apply the techniques for good instruction listed in the Flight Instructor Guide, including, but not limited to:

- identifying main teaching points for the student
- starting new material at the student's level of understanding
- presenting new material in stages
- involving the student in the lesson
- using correct questioning techniques
- using visual support effectively
- confirming student learning at the end of each stage and at the end of the lesson

Pre-Flight Briefing

Aim

To determine that the candidate can brief the student immediately before the flight so that the student will understand how the flight lesson planned and organized in the first part of the test will be conducted.

Description

The candidate will be asked to present a pre-flight briefing appropriate to the planned flight lesson. It will be assumed that all necessary preparatory ground instruction has been completed.

Assessment Considerations

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

- briefly outline the proposed flight
- involve the student in assessment of local weather conditions
- question the student to determine that there is sufficient knowledge to proceed with the flight lesson
- review applicable safety considerations
- call attention to some of the decision-making situations expected during the flight lesson

Flight Proficiency

Aim

To determine the candidate's level of skill in manoeuvres to be taught to students.

Description

The candidate's flight proficiency, including pre-flight procedures, will be observed throughout the test. In addition, the examiner may request that the candidate perform certain manoeuvres during the flight test.

Assessment Considerations

Assessment of Class 3, aeroplane and helicopter, and Class 2, aerobatic, will be made when flight manoeuvres predominantly involves frequent minor errors.

Assessment of Class 2, aeroplane and helicopter will be made when the performance of flight manoeuvres predominantly involves very few minor errors.

Assessment of Class 1, aeroplane, helicopter and aerobatic, will be made when the performance of flight manoeuvres predominantly involves ideal performance under existing conditions.

Teaching Proficiency

Aim

To determine that the candidate can conduct effective in-flight instruction.

Description

The candidate will be required to teach the planned flight lesson, or an agreed-upon portion of it, with the examiner simulating the role of the student. The examiner may terminate this phase of the test once an assessment has been made of the candidate's competency.

In addition to the planned flight lesson, an impromptu exercise may be requested by the examiner in order to obtain a wider sample of teaching proficiency. This lesson is to be presented on the assumption that preparatory instruction and a pre-flight briefing have been completed. Exercises unrelated to the ones covered in the planned flight lesson will normally be requested.

Assessment Considerations

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

- briefly review the main points of each manoeuvre
- communicate clearly and effectively
- give an effective demonstration
- divide a complex manoeuvre into simple elements
- make efficient use of the time available
- assign appropriate student practice

Analysis of Student Performance

Aim

To determine that the candidate can recognize, analyse, and correct errors commonly encountered in the flight exercises.

Description

The examiner, acting as a student with specified flight experience, will perform or describe various flight manoeuvres. The candidate will be asked to assess this performance, analyse any errors, and direct appropriate corrective actions. This analysis may involve the manoeuvres in the planned flight lesson or the impromptu exercises.

Assessment Considerations

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

- identify strengths
- identify major and minor errors
- correct major faults
- correct minor errors as appropriate
- apply appropriate standards for individual flight lessons
- apply appropriate standards through all phases or blocks of training
- integrate knowledge of flight test standards in training

Post-Flight Debriefing

Aim

To determine that the candidate can conduct effective post flight debriefings.

Description

The candidate will be required to present a post-flight debriefing to the student, based on the exercises conducted during the flight. The candidate must inform the student of strengths and weaknesses and explain how to remedy weaknesses. Assignment of home study material will show the instructor's familiarity with the contents of the Flight Training Manual, Flight Instructor Guide, and Human Factors for Aviation Handbooks.

Assessment Considerations

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

- help the students assess their own performance
- assess student performance, including strengths and weaknesses
- make specific suggestions for improvement
- answer any questions the student may have
- assign study subject