



Transport  
Canada

Transports  
Canada

TP 2810E  
(08/2005)

# **Study and Reference Guide**

Flight Instructor Rating

## **Aeroplane and Helicopter**

Fifteenth Edition  
August 2005

**Canada**

Please direct your comments, orders and inquiries to:

Transport Canada  
Civil Aviation Communications Centre (AARC)  
Place de Ville  
Tower C, 5th Floor  
330 Sparks Street  
Ottawa ON K1A 0N8

Telephone: 1 800 305-2059  
Fax: 613 957-4208  
E-mail: [services@tc.gc.ca](mailto:services@tc.gc.ca)

© Her Majesty the Queen in Right of Canada, represented by  
the Minister of Transport 2005.

This publication may be reproduced without permission provided the  
source is fully acknowledged.

TP 2810E  
(08/2005)

TC-1001619

You may reproduce this guide as required and it can be found at  
<http://www.tc.gc.ca/civilaviation/general/exams/guides/menu.htm>

## **GENERAL**

### **KNOWLEDGE REQUIREMENTS**

This Study and Reference Guide provides a syllabus for the knowledge requirements for the Flight Instructor Rating. It should be used in conjunction with Study and Reference Guide TP 12881E for Aeroplanes or TP 2476E for Helicopters. Written examinations for the instructor ratings sample topics taken from these guides.

All flight instructors must have a comprehensive knowledge of subject areas required for the Commercial Pilot Licence. It is also essential to be a good teacher, and as experience is gained, administrative duties must also be assumed. Accordingly, the written examination for the flight instructor ratings include sections relating to three general areas:

1. Training Procedures,
2. Administration and Licensing Procedures, and
3. Aeronautical Knowledge.

The relative emphasis on each section will depend upon the class of Flight Instructor Rating.

A Class 4 instructor must have sufficient knowledge of training and licensing procedures, and aeronautical knowledge to guide students to obtain a recreational permit, private licence, commercial licence, VFR over-the-top rating, and night rating.

A Class 2 instructor must demonstrate knowledge of administrative and licensing procedures involved with the supervision of instructors and operation of flight training units. A Class 2 flight instructor's understanding of training and licensing procedures, and aeronautical knowledge is expected to be greater than that of a Class 4 instructor.

A Class 1 instructor must possess the knowledge to teach others to use instructional techniques. A Class 1 flight instructor's understanding of training procedures, administration and licensing procedures, and aeronautical knowledge is expected to be greater than that of a Class 2 instructor.

There is no Class 3 Flight Instructor Rating examination.

## EXAMINATIONS

Applicants for Class 1, 2 and 4 flight instructor ratings are required to write the appropriate Transport Canada multiple choice examination on subjects contained in this guide. As well, **aeroplane** candidates are to refer to the knowledge requirements in reference guide TP 12881E, and **helicopter** candidates are to refer to reference guide TP 2476E.

### Aeroplane:

Class	Examination	Questions	Time Limit	Pass Mark
4	AIRAF	100	3 hours	70%
2	AIRAT	100	3 hours	70%
1	AIRAT	100	3 hours	80%

### Helicopter:

Class	Examination	Questions	Time Limit	Pass Mark
4	HIRAF	75	3 hours	70%
4	FIREN	40	2 hours	70%
2	HIRAT	100	3 hours	70%
1	HIRAT	100	3 hours	80%

Applicants for a Class 4 Flight Instructor Rating – Helicopter are required to write the FIREN examination on instrument instruction in addition to the HIRAF examination.

Class 2 and Class 1 candidates write the same examination, however, a mark of 80% or higher is required to meet Class 1 standards.

## **EXAMINATION RESULTS: FEEDBACK STATEMENTS**

Feedback statements on the results letter will inform the candidate where questions were answered incorrectly.

### **Example of a Feedback Statement**

Identify the atmospheric conditions favorable for thunderstorm formation.

**TRAINING PROCEDURES****FLIGHT TEST GUIDES**

- 1 Flight Test Exercises – Performance Criteria

**INSTRUCTIONAL TECHNIQUES/LEARNING**

- 1 Learning Process
- 2 Learning Factors
- 3 Memory/Forgetting
- 4 Listening
- 5 Motivation
- 6 Student/Instructor Relationship
- 7 Lesson Preparation
- 8 Training Aids
- 9 Questioning
- 10 Lecturing
- 11 Demonstration-performance
- 12 Developmental Teaching
- 13 Group Activities
- 14 Student Teaching
- 15 Self Study
- 16 Critiquing/Feedback
- 17 Student Progress
- 18 Evaluation
- 19 Integrating Human Factors

**GROUND INSTRUCTION**

- 1 Ground School
- 2 Preparatory Ground Instruction
- 3 Pre-flight Briefing
- 4 Post-flight Briefing

**IN-FLIGHT INSTRUCTION**

- 1 Planning
- 2 In-flight Teaching – techniques/air exercises

## **ADMINISTRATION AND LICENSING PROCEDURES**

### **ISSUE, PRIVILEGES, REVALIDATION OF FLIGHT CREW LICENCE, PERMITS, ENDORSEMENTS AND RATINGS**

- 1 General Conditions
- 2 Written Examination Procedures
- 3 Flight Testing Procedures
- 4 Student Pilot Permit
- 5 Recreational Pilot Permit
- 6 Private Pilot Licence
- 7 Commercial Pilot Licence
- 8 Aeroplane Class Ratings
- 9 Aircraft Type Ratings
- 10 Night Rating
- 11 VFR Over-The-Top Rating
- 12 Instrument Rating
- 13 Flight Instructor Rating
- 14 Transport Canada Forms
- 15 Medical Certificate

### **REGULATIONS AND STANDARDS FOR FLIGHT TRAINING**

- 1 General
- 2 Flight Training Program
- 3 Personnel and Aircraft
- 4 Flight Training Operations

### **REGULATIONS AND STANDARDS FOR FLIGHT TRAINING UNITS**

- 1 General Information
- 2 Certification
- 3 Personnel
- 4 Aircraft
- 5 Flight Training Operations

### **REGULATIONS FOR SYNTHETIC FLIGHT TRAINING EQUIPMENT**

- 1 CAR 606.03

### **AERONAUTICAL KNOWLEDGE**

Refer to Study and Reference Guide TP 12881E – Aeroplanes or TP 2476E – Helicopters.

- Air Law and Procedures
- Navigation and Radio Aids
- Meteorology
- Airframes, Engines and Systems
- Theory of Flight
- Flight Instruments
- Flight Operations
- Human Factors

**RECOMMENDED STUDY MATERIAL**

- Flight Test Guide Recreational Pilot Permit TP 12475E
- Flight Test Guide Private Pilot License - Aeroplane - TP 13723E
- Flight Test Guide Commercial Pilot License - Aeroplane - TP 13462E
- Private and Commercial Pilot Licence - Helicopters TP 3077E
- Flight Instructor Guide (Revised 1998) TP 975E
- Helicopter Flight Instructor Guide (Revised 1995) TP 4818E
- Study and Reference Guide Recreational Pilot Permit - Aeroplane (TP 12467E)
- Study and Reference Guide Private Pilot Licence, including Helicopter to Aeroplane Pilot Licence - Aeroplane (TP 12880E)
- Study and Reference Guide Commercial Pilot Licence, including Helicopter to Aeroplane Pilot Licence - Aeroplane (TP 12881E)
- Study and Reference Guide Private and Commercial Pilot Licence, including Aeroplane to Helicopter Pilot Licences - Helicopter (TP 2476E)
- Human Factors for Aviation - Basic Handbook (TP 12863E)
- Human Factors for Aviation - Advanced Handbook (TP 12864E)
- Human Factors for Aviation - Instructor's Guide (TP 12865E)
- Instrument Procedures Manual (TP 2076E)

Information on textbooks and other publications produced by commercial publishers can be obtained through local flying training organizations and bookstores.

**ENQUIRIES**

Information concerning the location of pilot training organizations and matters pertaining to flight crew licensing may be obtained by contacting the appropriate Regional Offices. A complete listing may be found at: <http://www.tc.gc.ca/CivilAviation/General/Exams/Centres.htm>