

Flight Training Program Outline Private Pilot Licence

Last updated September 2023

Table of Contents

| Introduction: | 2 |
|--|--------------|
| Cost Breakdown | |
| Private Pilot Privileges: | |
| Private Pilot Prerequisites: | |
| Age | |
| Medical Fitness and Validity | |
| Knowledge | |
| Experience | |
| Skill | |
| Credits | 4 |
| Knowledge | 4 |
| Experience | 5 |
| Instrument Flight Time | 5 |
| Training Syllabus | 5 |
| Weather Minimums | 7 |
| Fuel Reserves | |
| Designated Practice Areas | |
| Reporting of Aircraft Defects and Unserviceabilities | |
| Securing of Aircraft When Not in Use | |
| Jecuiniy di Anciail Wilen Nul III U5e | 9 |

Welcome to the Brantford Flying Club!!!

Introduction:

Since 1929 the Brantford Flying Club has been providing quality flight training. As one of the oldest flight training organizations in Canada, we have successfully trained thousands of private, commercial, and Airline pilots over the past 85 years.

This Private flight training program outline is provided to you as reference material to guide you through the training process. The outline is a requirement under the Canadian Aviation Regulations (CARS). This document describes some of the background knowledge regarding the training program that you are undertaking and it contains a selection of our Flight Training Unit policies.

If you have any questions or concerns please ask one of our many Flight Instructor Staff members who would be happy to expand on this program outline.

Thank you for your interest in The Brantford Flying Club!

Cost Breakdown

| Item: | Н | ours: | Rate | e : | Total: |
|--------------------------------|----|-------|----------|------------|------------|
| Ground School | | | | | \$400.00 |
| Course Material | | | | | \$250.00 |
| Dual Instruction – C152 | 30 | Hours | \$245.00 | /hour | \$7,350.00 |
| Solo Practice – C152 | 15 | Hours | \$170.00 | /hour | \$2,550.00 |
| Pre/Post Flight Briefings | 20 | Hours | \$75.00 | /hour | \$1,500.00 |
| Flight Test/Written Exam Fees | | | | | \$370.00 |
| Transport Canada Licensing Fee | | | | | \$85.00 |
| Membership Fee | | | | | \$150.00 |

Grand Total: \$12,655.00

If using C172 add \$1,125

Above hours are minimum required hours. Additional training may be needed. All training is tax deductible and HST will be applicable to all flights.

CARS 421.26

Private Pilot Privileges:

The holder of a valid Private Pilot License may fly:

- Any single engine, piston-powered, non-high performance aero plane
- Carry as many passengers as seats
- Land aircraft
- Day / Good weather flying
- Add additional ratings
 - Night
 - o Floatplane
 - o Multi-Engine
 - Instrument

Private Pilot Prerequisites:

An applicant shall

- 1. be a minimum of fourteen years old by the time of first solo and seventeen years old, when the training is completed.
- 2. hold a Category 1 or 3 medical

Age

An applicant shall be a minimum of seventeen years of age.

Medical Fitness and Validity (amended 2007/12/30; previous version)

1. (a) An applicant shall hold a Category 3 Medical Certificate valid for a

Private Pilot Licence - Aeroplanes:

- (i) where an applicant holds a Category 4 Medical Certificate for the purpose of a Student Pilot Permit, the applicant shall upgrade to a Category 3 Medical Certificate prior to making application for the Private Pilot Licence Aeroplane.
- (b) The licence is maintained by a valid Category 1 or 3 Medical Certificate. (amended 2007/12/30; previous version)

Knowledge

An applicant shall have:

- (a) completed a minimum of 40 hours private pilot aeroplane ground school instruction on the following subjects:
 - (i) Canadian Aviation Regulations,
 - (ii) Aerodynamics and Theory of Flight,
 - (iii) Meteorology,
 - (iv) Airframes, Engines and Systems,
 - (v) Flight Instruments,

- (vi) Radio and Electronic Theory,
- (vii) Navigation,
- (viii) Flight Operations,
- (ix) Licensing Requirements, and
- (x) Human Factors, including pilot decision-making; and

(b) obtained a minimum of 60% in each of the following four mandatory subject areas as well as in the overall written examination Private Pilot License - Aeroplane (PPAER):

- (i) Air Law regulations, rules and orders, air traffic services, practices and procedures, and licensing requirements relevant to the license;
- (ii) Navigation navigation, radio aids and electronic theory;
- (iii) Meteorology;
- (iv) Aeronautics General Knowledge airframes, engines and systems, theory of flight, flight instruments and flight operations.

Experience

- (a) An applicant shall have completed a minimum of 45 hours private pilot flight training in aeroplanes under the direction and supervision of the holder of a Flight Instructor Rating Aeroplane. A maximum 5 of the 45 hours may be conducted on an approved aeroplane simulator or flight training device.
- (b) The flight training shall include a minimum of:
 - a. 17 hours dual instruction flight time, including a minimum of 3 hours cross-country flight time and 5 hours of instrument time of which a maximum of 3 hours may be instrument ground time; and
 - b. 12 hours solo flight time, including 5 hours cross-country flight time with a flight of a minimum of 150 nautical miles which shall include 2 full stop landings at points other than the point of departure.

Skill

Within the 12 month preceding the date of application for the license, an applicant shall successfully complete a flight test to the standard outlined in the *Flight Test Standard Private and Commercial Pilot Licences - Aeroplanes* (TP2655E).

Credits

Knowledge

(i) An applicant who holds a Pilot Permit - Gyroplane or a private or higher type pilot license for helicopters may, when applying for the issue of Private Pilot License - Aeroplane have the 40 hour ground instruction requirement reduced to 20 hours.

(ii) An applicant who holds a Pilot Permit - Gyroplane or a private or higher type pilot license for helicopters shall in lieu of completing the written examination PPAER obtain a minimum of 60% in the written examination Private Pilot Aeroplane Rating - Alternate Category (PARAC).

Experience

(i) The total flight time must include a minimum of 30 hours in aeroplanes.

Instrument Flight Time

An applicant who holds a private or higher type license in another category shall be credited with instrument flight time acquired in the other category towards meeting the instrument experience requirements provided that the instrument flight time acquired in the other category is not credited towards the 17 hours of dual instruction flight time or the 12 hours solo flight time.

Training Syllabus

| # | EXERCISES | DUAL | SOLO | GB | √ |
|----|--|------|------|-----|---|
| 1 | Familiarization Flight **Book Medial Appointment** | 0.5 | | | |
| 2 | A/C Familiarization, Prep for Flight, Ancillary Controls, Taxiing, Attitudes and Movements | 1.0 | | 1.0 | |
| 3 | Straight and Level Flight, Turns | 1.0 | | 1.0 | |
| 4 | Climbs, Descents | 1.0 | | 1.0 | |
| 5 | Normal Takeoff and Landing | 1.0 | | 1.0 | |
| 6 | Range and Endurance | 1.0 | | 1.0 | |
| 7 | Slow Flight | 1.0 | | 1.0 | |
| 8 | Stalls | 1.0 | | 1.0 | |
| 9 | Advanced Stalls, Spins ** Radio License should be completed** | 1.0 | | 1.0 | |
| 10 | Steep Turns & Spiral Dives | 1.0 | | 1.0 | |
| 11 | Continuous Takeoffs, Circuits and Landings | 1.0 | | 1.0 | |
| 12 | Continuous Takeoffs, Circuits and Landings & Overshoots | 1.0 | | 0.5 | |
| 13 | Continuous Takeoffs, Circuits and Landings & Bounce and Ballooning Recovery | 1.0 | | 0.5 | |
| 14 | Continuous Takeoffs, Circuits and Landings & Runway Changes, Communications Failures | 1.0 | | 0.5 | |
| 15 | Continuous Takeoffs, Circuits and Landings**PSTAR should be completed** | 1.0 | | | |
| 16 | Illusions Created by Drift, Slipping & Crosswind Takeoffs and Landings | 1.0 | | 1.0 | |
| 17 | Slipping & Crosswind Takeoffs and Landings | 1.0 | | | |
| 18 | Circuits at Another Airport (CYTB, CYSA, CYXU) Navigation Familiarization | 1.0 | | 0.5 | |
| 19 | Review of Steep Turns, Spiral Dives, Slow Flight, Stalls and Spins | 1.0 | | 0.5 | |
| 20 | Engine Failure in the Circuit, Takeoffs and Landings | 1.0 | | 0.5 | |
| 21 | Emergencies (Critical, Non-Critical & Ground) Instrument Failures in the Circuit | 1.0 | | 1.0 | |
| 22 | Final review/Supervisory Flight Takeoffs, Circuits, Landings | 1.0 | | | |
| 23 | First Solo (One circuit) | 0.5 | 0.3 | | |
| 24 | Dual Circuit Check, Solo Practice of Takeoffs, Circuits and Landings (Stop & Go's) | 0.5 | 1.0 | | |
| 25 | Dual Circuit Check, Solo Practice of Takeoffs, Circuits and Landings (Touch & Go's) | 0.5 | 1.0 | | |
| 26 | Solo Practice of Takeoffs, Circuits and Landings (Touch and Go's) | | 1.0 | | |
| 27 | Short Field Takeoff and Landing, Obstacle Clearance | 1.0 | | 0.5 | |
| 28 | Short Field Takeoff and Landing, Obstacle Clearance | | 1.0 | | |
| 29 | Soft/Rough Field Takeoff and Landing | 1.0 | | 0.5 | |
| 30 | Soft/Rough Field Takeoff and Landing | | 1.0 | | |
| 31 | Forced Approaches | 1.0 | | 1.0 | |
| 32 | Forced Approaches | | 1.0 | | |
| 33 | Precautionary Landings | 1.0 | | 0.5 | |

| # | EXERCISES | DUAL | SOLO | GB | √ |
|----|---|------|------|------|----------|
| 34 | Precautionary Landings | | 1.0 | | |
| | Short Cross Country Planning (Ground) | | | 2.0 | |
| 35 | Short Cross Country (Stratford & Tillsonburg or Stratford & St. Thomas) | 1.5 | | 0.5 | |
| 36 | Short Cross Country (Stratford & Tillsonburg or Stratford & St. Thomas) | | 1.5 | | |
| 37 | Review Slow Flight, Stalls, and Forced Approaches (Introduce Flight Test Standards) | 1.2 | | 0.5 | |
| 38 | Solo Practice of Slow Flight, Stalls, and Forced Approaches | | 1.2 | | |
| 39 | Review Spiral Dives, Steep Turns and Precautionary Landings (Introduce Flight Test Standards) | 1.2 | | 0.5 | |
| 40 | Solo Practice Steep Turns & Precautionary Landings (Additional solo's as Necessary) | | 1.0 | | |
| 41 | Instrument Flying – Introduction, Human Factors & Basic Maneuvers | 1.2 | | 1.0 | |
| 42 | Instrument Flying - Limited Panel | 1.2 | | 0.5 | |
| 43 | Instrument Flying - Unusual Attitudes | 1.2 | | 0.5 | |
| 44 | Instrument Flying - Radio Navigational Aids (VOR/ADF) | 1.2 | | 0.5 | |
| 45 | Diversions | 1.2 | | 0.5 | |
| 46 | Diversions | | 1.2 | | |
| | Long Cross Country Planning (Ground Brief) | | | 1.5 | |
| 47 | Long Cross Country (St. Catharines, Port Dover, London) | 3.0 | | 1.0 | |
| 48 | Long Cross Country (St. Catharines, Port Dover, London) | | 3.0 | | |
| 49 | Cross Country to St. Thomas (If necessary for solo cross country time) | | 1.5 | | |
| | Review Flight Test Guide (Ground) | | | 2.0 | |
| 50 | DUAL REVIEW | 1.2 | | 0.5 | |
| 51 | SOLO REVIEW | | 1.2 | | |
| 52 | DUAL REVIEW | 1.2 | | 0.5 | |
| 53 | SOLO REVIEW | | 1.2 | | |
| 54 | SIMULATED FLIGHT TEST | 1.6 | | 1.0 | |
| 55 | PRIVATE PILOT FLIGHT TEST | 1.6 | | 1.0 | |
| | APPOX. TOTAL | 45.5 | 19.1 | 31.5 | |

Note: All above times are approximate and will vary from person to person and depend greatly on frequency of flying, weather and individual student progress.

Weather Minimums

The following minimum weather standards are required for any Brantford Flying Club aircraft flight.¹

| | | SOLO ² | DUAL | RECREATIONAL VFR | REC IFR | | |
|------------------|----------------------------|---------------------------|----------------------------|--|------------|--|--|
| Practice | Ceiling | 3,000' AGL | Instructor's Discretion | 1,500′ AGL | | | |
| Area | Visibility | 5SM | 3SM | 3SM | See 0 | | |
| Circuits | Ceiling | 1,500′ AGL | Instructor's Discretion | 1,500′ AGL | below | | |
| | Visibility | 4 SM | 3SM | 3SM | | | |
| | Maximum | Instruc | tor's Discretion | 30 kts | | | |
| Winds | Crosswind Component | 6 kts | POH Max Demonstrated | POH Max Demonstrated ³ | | | |
| Cross Country | Ceiling | 5,000 ASL ⁴ | 2,500′ AGL | 2,500′ AGL | See 0 | | |
| | Visibility | 8 SM | 5 SM | 5 SM | below | | |
| Min. Groun | d Temperature ⁵ | -15°C | -18°C | -15°C | -15°C | | |
| CRFI | | | 0.25 5kts | No Crosswind S Max Crosswind S Max Crosswind | | | |

IFR Flights – Dual or Recreational

Take-offs are not to be commenced if the ceiling and visibility are below the landing minima for the airport of departure.

Landing minima as published in Canada Air Pilot.

¹ The weather as reported by METAR, averaged from surrounding METARS or observed by the PIC before takeoff

² Solo flying is always at the authorizing instructor's discretion

³ Recreational flying is always at the BFC staff member's discretion

⁴ 5000' ASL gives the student the availability to fly at proper cruising altitudes on the trip – 3,500/4,500 – aiming to have a cruising altitude 1000' above MEF (all obstacles) at a minimum

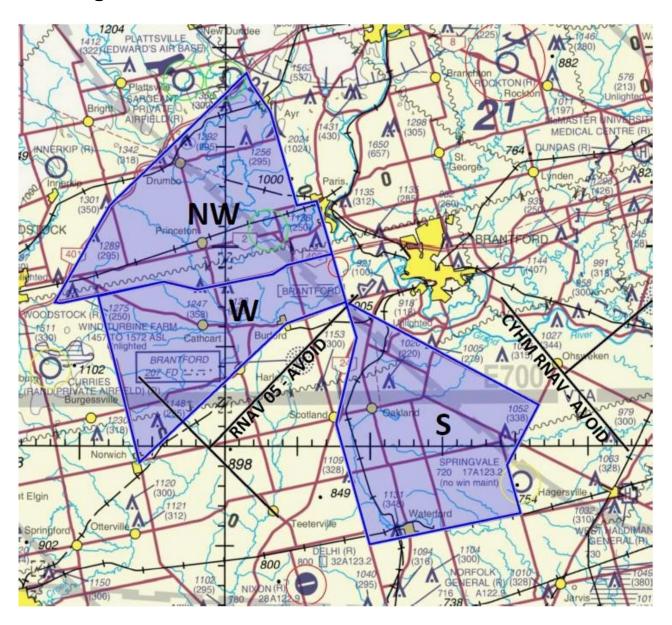
⁵ The air temperature as measured on the ground before takeoff – not wind chill

Fuel Reserves

The maximum fuel carried is dependant on the weight and balance of the aircraft

For any cross country flights, maximum fuel must be carried. A minimum 1 hour reserve shall be used. Any local flights must have greater than ½ full tanks.

Designated Practice Areas



The Brantford Flying Club has 3 areas outlined for practice, the South, West and North West Practice area. These areas are outlined on a map in the flight office and are part of the Flight Training Program Outlines provided to students. Except for solo cross country flights, students are limited to the above practice areas for their solo practice. While using these practice areas, students are expected to make position reports on the practice area frequency: 122.925

Reporting of Aircraft Defects and Unserviceabilities

Upon finding any aircraft defect, report to flight instructor and refer to the Brantford Flying Club's Aircraft Defect Procedures.

Securing of Aircraft When Not in Use

When a pilot lands at any aerodrome, the aircraft shall be parked into wind, if possible. Chocks and control locks shall be used in gusty/windy conditions.

When leaving the aircraft at other aerodromes, for any length of time, the keys shall be removed from the ignition and all the doors shall be locked. The pilot will keep the keys on their person.