

EDMONTON FLYING CLUB



MULTI-ENGINE RATING

COURSE OUTLINE

Edmonton Flying Club
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Parkland County, Alberta
T7X 3L7

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MULTI-ENGINE RATING COURSE OUTLINE

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WELCOME TO YOUR MULTI-ENGINE RATING

For your information and to meet government regulations, we would ask that you take some time to review this handout, as you will be required to become familiar with it for the duration of your training.

SECTION 1 – RATING REQUIREMENTS (CARS 421.26)

1.1 – AGE: 17 years old

1.2 – MEDICAL: Minimum Category 3 Medical Certificate as determined by Transport Canada.

1.3 – LICENCE: *Private Pilot Licence – Aeroplane or Commercial Pilot Licence – Aeroplane*

1.3 – GROUND SCHOOL REQUIREMENTS:

There is no ground school mandated by Transport Canada; however, you can expect approximately 8 hours of ground briefing with your instructor.

1.4 – FLIGHT EXPERIENCE REQUIREMENTS:

There is no minimum flight time requirement; however, flight training varies between 10 to 15 hours depending on skill level and background.

1.5 – EXAMINATIONS REQUIRED:

For Issue of a Multi-Engine Rating:

- Transport Canada Multi-Engine Flight Test

1.6 – KNOWLEDGE & SKILL REQUIREMENTS:

An applicant must successfully complete a flight test in accordance with the standards outlined in the *Flight Test Guide – Multi-Engine Class Rating – Aeroplane (TP 219)*.

SECTION 2 – FLIGHT TRAINING

The Edmonton Flying Club operates a Piper Seminole (PA44) for Multi-Engine training. The Seminole is a, Low-Wing, T-Tail aircraft. The Engines are 180 horsepower Lycoming engines that run on AVGAS. The aircraft has a cruising speed of approximately 140 knots (KTAS), with a combined fuel consumption of approximately 20 US Gallons per hour.

Upon completion of your training at the Edmonton Flying Club, solo rental of the Seminole may be available. The Edmonton Flying Club is one of the few flight schools that will allow solo rental of its Twin-Engine aircraft.

Multi-Engine Training — Stage 1:

This initial phase of your training provides a foundation for normal Multi-Engine operations. During this stage you will attain proficiency in normal Multi-Engine operations. Basic orientation in the Multi-Engine aircraft is accomplished first, followed by the introduction of more advanced procedures and maneuvers.

In addition, you will learn Multi-Engine aerodynamics, operating procedures, systems and performance considerations. You will learn to compute weight & balance data accurately and to control the weight & balance conditions of the aircraft. You will also learn to analyze Multi-Engine performance factors and derive accurate values from Multi-Engine performance charts.

Multi-Engine Training — Stage 2:

This portion of the training builds upon the skill and knowledge acquired in Stage 1 as a basis for the introduction of Engine-Out operations and other emergency procedures. In this stage, you will reinforce and expand upon the knowledge and skill gained in your initial training regarding the differences between Single Engine and Multi-Engine operations.

Instruction will be conducted so that you obtain maximum benefit from each flight. This is particularly important in a Multi-Engine training program which is of relatively short duration, but generally more expensive per unit of training. Thorough preparation on your part will enhance the productivity of each lesson and help provide an economical training program.

Please note that there is no solo flight training authorized at the Edmonton Flying Club towards the Multi-Engine Class Rating.

SECTION 3– OPERATING MINIMUMS

The weather conditions required for the dual portion of the Multi-Engine Rating are as follows:

3.1 – CEILING & VISIBILITY REQUIREMENTS:

Day

Dual Flight – Minimum ceiling of 1,500' AGL and 3 statute miles visibility.

Night

Dual Flight – Minimum ceiling of 1,500' AGL and 3 statute miles visibility.

3.2 – MAXIMUM WINDS FOR CONDUCTING TAKE-OFFS & LANDINGS:

Dual Flight – Maximum wind of 30 knots and/or cross-wind component not to exceed POH maximum demonstrated.

3.3 – MINIMUM TEMPERATURES FOR FLIGHT TRAINING OPERATIONS:

Dual Flight – - 25° C

Note:

Engine-Out procedures shall be kept brief in duration when temperatures are below - 20° C

3.4 – FUEL RESERVES NECESSARY FOR TRAINING FLIGHTS:

Dual Flight – 1 hour

SECTION 4 – EDMONTON FLYING CLUB REGULATIONS

4.1 – LOCAL PRACTICE AREAS:

Please familiarize yourself with the location of our practice area, which is CYA 209(T) – located approximately 15 NM west of the Parkland airport. This advisory area is listed on both the Edmonton VNC and the Edmonton VTA. There is also the East Practice area which is located approximately 45 NM to the east of the Parkland airport.

4.2 – REPORTING OF DEFECTS:

Reporting of defects and un- serviceability's is as follows: The pilot-in-command will enter the defect or unserviceability in the Aircraft Journey Log, and notify Club Dispatch Staff as per Edmonton Flying Club Maintenance Control Manual.

Any defect or unserviceability that happens away from home base is to be reported by phone to the Club (collect calls accepted). ***Under no circumstance shall any maintenance be performed on club aircraft without the express, written permission from the director of maintenance at the Edmonton Flying Club.***

4.3 – AIRCRAFT PARKING:

During regular hours of operation, aircraft are generally parked on the ramp in designated parking areas and chocked. No aircraft should be left unattended without chocks; and during days with high winds, without tie-downs and control locks secured.

All of our aircraft are generally hangared for the night. Where that is not possible because of a late arrival, the pilot-in-command is required to check that all switches are off, control locks are in place, doors closed, and that at least two wheels are chocked. The aircraft should be placed in the lee of the building to avoid any wind gusts.

When away from the club, plans should be made for tie-downs. Tie-down kits are available from the club. Payment of landing and parking fees, if applicable, are the responsibilities of the renter during cross-country training.

4.4 – UNSCHEDULED OR FORCED LANDINGS:

In the event of an unscheduled or forced landing the pilot-in-command is required to shut all systems down, and determine if there are any injuries to themselves or any passengers.

As safety allows, if radios are non-operational, attempt to maximize the possibility of the ELT functioning by visually inspecting the switches and aerial. If an overnight stay appears imminent, take shelter, build a fire, stay with the aircraft and wait for rescue.

Prior to attempting to takeoff contact the CFI or General Manager. The numbers can be found in the documents bag.

4.5 – REQUIRED CLOTHING:

Students and staff are reminded that it is mandatory to wear long pants while in the training aircraft as a precaution in the event of a forced landing. We would also remind you that for winter operations, appropriate clothing needs to be worn in case you have to walk out or are forced to overnight in the bush.

4.6 – FLIGHTS OVER WATER:

Flight over water is prohibited except when conducted within such a distance wherein the aircraft could glide to shore in the event of an engine failure. Flight may be conducted beyond this distance if a life preserver, individual flotation device or personal flotation device is carried for each person on board.

SECTION 5 – COURSE MATERIALS

5.1 – RECOMMENDED FOR MULTI-ENGINE RATING COURSE:

Texts:

- EFC Multi-Engine Training Manual – Edmonton Flight College*
- Piper Seminole Information Manual – Edmonton Flight College*
- Guided Flight Discovery, Multi-Engine – Jeppesen Sanderson, Inc.

Charts:

- Edmonton VFR Navigation Chart – Nav Canada (AIR 5015)
- Edmonton VFR Terminal Area – Nav Canada (AIR 1904)

Misc. Items

- Pilot Training Record (PTR) – VIP Pilot Centre Inc.

5.2 – SUPPLEMENTARY ITEMS:

While not required, or even necessarily recommended, the items listed below are available from the Edmonton Flying Club's Pilot Shop, and can serve to provide additional insight into the topics discussed in ground briefings or utility in the aircraft during practical flight training:

Misc. Items

- ASA Tri-Fold Kneeboard KB-3 or KB-3L – Aviation Supplies & Academics Ltd.
- ASA Metal E6-B Flight Computer – Aviation Supplies & Academics Ltd.
- ASA CX-2 Electronic Flight Computer – Aviation Supplies & Academics Ltd.
- DC H10-13.4 Aviation Headset – David Clark Company Inc.

**specified items are printed and bound by The Edmonton Flying Club*

SECTION 6 – STUDY & REFERENCE GUIDES

Please ensure you acquire a current *Flight Test Guide – Multi-Engine Class Rating – Aeroplane (TP 219)***.

***Included in the EFC Multi-Engine Training Manual or available online at Transport Canada's website. (Google search publication number. eg. "TP 219")*

