



# Cessna 421A&B Recurrent Training

Course MAS 421A-101R Syllabus

Cessna 421A&B Recurrent training provided (MAS 421A-101R) assumes that the student has a multi-engine rating with a minimum of 75 Hours of multi-engine time, 25 hours of Cessna 421A or B time, and has completed initial 421A or B training. The student must possess an instrument rating, a current medical, a high-altitude endorsement, and must have a current BFR.

## Day 1

### **Class Introduction** **0.5 Hours**

- Instructor & Student Introductions, Class description, expectations, and questions specific to the student's mission

### **Introduction & Engines** **1.5 Hours**

- Construction, Interior, Passenger Compartment, Ground Handling, Engines, Engine Operation & Instruments, Servicing, Turbocharger, Fuel System, Propeller

### **Limitations** **0.5 Hours**

- V-Speeds, Engine Operational Limitations, Markings, CG and Weight Limitations
- Indicators

### **Fuel Systems** **1.0 Hours**

- Description, Capacity, Operation, Usage, and Malfunctions

### **Environmental Systems** **1.0 Hours**

- Oxygen System Operation, Pressurization System Description & Operation, Controls

### **Electrical System** **1.0 Hours**

- Battery, Alternator, Power Distribution, Main Bus, Hot Bus, Avionics Bus, Operation, Protection Systems, Lighting, Electrical Anti-Ice

### **Simulator - Normal Procedures** **2.0 Hours**

- Using our flight simulator, the student will be taken through normal procedures associated with takeoff, cruise, and landing.

## Day 2

### **Anti-Ice / Deice Systems** **1.0 Hours**

- Known Icing Requirements, System Components & Description, System Testing, Inspection, Limitations

**Performance & Flight Planning** **1.5 Hours**

- CG, CG Limits, Weight & Balance, Performance Charts, Range, Examples, Classroom Examples

**Emergency Procedures** **2.0 Hours**

- Safe Operation Envelope, Various Engine and System Failures, Feathering, Restarting, Electrical Failures, Pressurization Failures, Emergency Decent

**Simulator - Emergency Procedures** **3.5 Hours**

- Simulator scenarios incorporating engine failures, electrical failures, pressurization failures, during takeoff, cruise, landing, Vmc Demonstration in VFR and IFR conditions

**Day 3**

**Federal Aviation Regulations** **1.0 Hours**

- A review of new/updated FARs

**Single Engine Operations** **1.5 Hours**

- Detail discussion of single engine operation failures, Case Studies, Outcomes

**Emergency Procedures Review** **1.5 Hours**

- Specific Review of 421A&B emergency procedures and operation

**Course Review** **2.5 Hours**

- A review of all non-emergency elements of the 421A&B course

**Final Exam** **1.0 Hours**

- Written Exam

**Day 4**

**Flight Review** **8.0 Hours**

- Optional In-Flight operational review using student supplied aircraft (an additional fee applies) Takeoff, Cruise Ops, & Landing