

Stage III - Instrument Rating

Ground Lesson 20

Leading Edge Aviation
Version 2012

Note: Students should read Chapter 9, Section A and B prior to Ground Lesson 20.

Lesson Objective:

- Become familiar with the factors affecting weather patterns and weather hazards related to flight operations.

Academic Content:

Section A - Weather Factors

- The Atmosphere
- Atmospheric Circulation
- Pressure and Wind Patterns
- Moisture, Precipitation, and Stability
- Types of Clouds
- Airmass
- Fronts
- High Altitude Weather

Section B - Weather Hazards

- Thunderstorms
- Thunderstorm Avoidance
- Low Level Turbulence
- Turbulence
- Wake Turbulence
- Clear Air Turbulence
- Mountain Wave Turbulence
- Reporting Turbulence
- Wind Shear
- Low Visibility
- Volcanic Ash
- Icing
- Hydroplaning
- Cold Weather Operations

Date Completed _____

Time _____

Completion Standards:

- Demonstrate understanding of weather factors and weather hazards during oral quizzing by the instructor at completion of lesson.
- Student completes Chapter 9 questions for Section A and B with a minimum passing score of 80%, and the instructor reviews incorrect responses to ensure complete understanding before the student progresses to Ground Lesson 21.

I certify that the aforementioned training has been conducted and/or received in accordance with Leading Edge Aviation Standards and the current 141 approved Jeppesen Private Pilot Syllabus.

Instructor _____

Date _____

Student _____

Date _____