King Schools Online
Internet Learning Programs

HIGH-ALTITUDE AERODYNAMICS

Flight Crew Certification Course

SYLLABUS

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HIGH-ALTITUDE AERODYNAMICS

INTRODUCTION

The King Schools Online High-Altitude Aerodynamics course helps you meets the initial and transition pilot training requirements for general pilot competency, FAR §135.345(a)(8); aircraft performance, §135.345(b)(2); and recurrent training, §135.351. The relevant Part 91K regulation is §91.1065 for initial and recurrent training. This course:

- Includes instruction in high-altitude aerodynamics
- Includes instruction in aircraft performance at high altitude
- May be used for both initial and recurrent training in Part 91 or Part 135 operations
- Is offered only through individual Internet study
- Is efficient and practical

COURSE ELEMENTS AND STRUCTURE

The King Schools Online High-Altitude Course contains five major subject areas (Lessons). Following each Lesson's study materials, the pilot sees a quiz containing multiple-choice and/or True/False questions. There are approximately 10 questions in the course. Most pilots will require an hour to complete this course.

COMPLETION STANDARDS

Pilots complete the course when all five Lessons checked off with a completion date on the course main menu. Lesson completion requires accessing each lesson page of study materials and correctly answering all questions in the quiz associated with that lesson.

CERTIFICATE OF COMPLETION

A Completion Certificate individualized for the pilot enrolled in the Course may be accessed at the "Print Your Course Complete Materials and Endorsement" icon/link on the main menu onlyafter the entire course has been completed. Pilots clicking the "Print Your Course Complete Materials and Endorsement" icon/link before the Course has been completed receive a message saying that the certificate will be available after the entire course is completed.

ENROLLMENT PROCEDURES

A pilot may individually order and enroll in the King Schools Online High-Altitude Aerodynamics course or flight departments may order multiple courses receiving a "key" for each course ordered. The flight department then assigns a key to each pilot requiring training. Each pilot registers individually at *https://ilearn.kingschools.com* for the course(s) assigned.

COURSE STUDY

The pilot first enrolls in the course, and then logs in to access the course. If the pilot has insufficient time to complete the course in one session, the pilot may log out. The program records all Lesson completions and every question answered. When returning to the course, the pilot may resume at the last point of progress.

COURSE OUTLINE

LAB 1

Understanding Airspeeds

Lesson Number	Lesson Title
1	Determining True Airspeed
2	Understanding Your Speed Limits

LAB 2

Why Flying the Right Airspeed at High Altitude Matters

Lesson Number	Lesson Title
3	Why You Should Respect the M_{MO}
4	How Aircraft Design Is Used to Minimize High Mach Effects
5	Converging Stall Speed and Mach Number—The Coffin Corner