



Instrument Ground School

Introduction

Introduction

Who's Who?

Please share a little about yourself with the class.

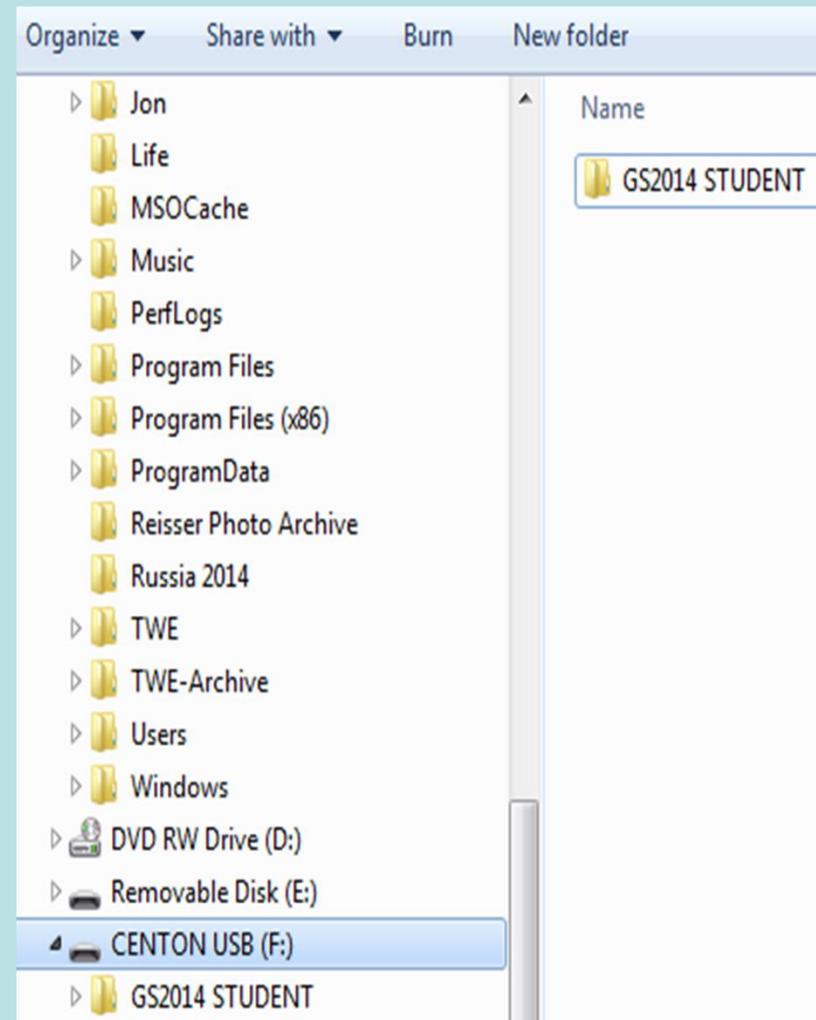
- What is your name?
- Where you live?
- What is your experience flying?
- What do you want to do after you get an instrument rating? (recreation, business, commercial, military prep, just want to see if you can?)

I am Steve Reisser, Advanced Ground Instructor; stevereisser@yahoo.com

Class Material

I have prepared a flash drive for use on your laptop/home computer. Put the flash drive in your PC USB port, open Windows Explorer (Start, All Programs, Accessories, Windows Explorer). Click on your flash drive. Copy and Paste the folder to your computer. **RETURN THE FLASH DRIVE AT THE NEXT CLASS.**

You need to have the capability to read PDF files (Adobe Reader – if you don't have it, it is a free download) . You also need the ability to view Microsoft PowerPoint Slideshows which can also be downloaded free from Microsoft.



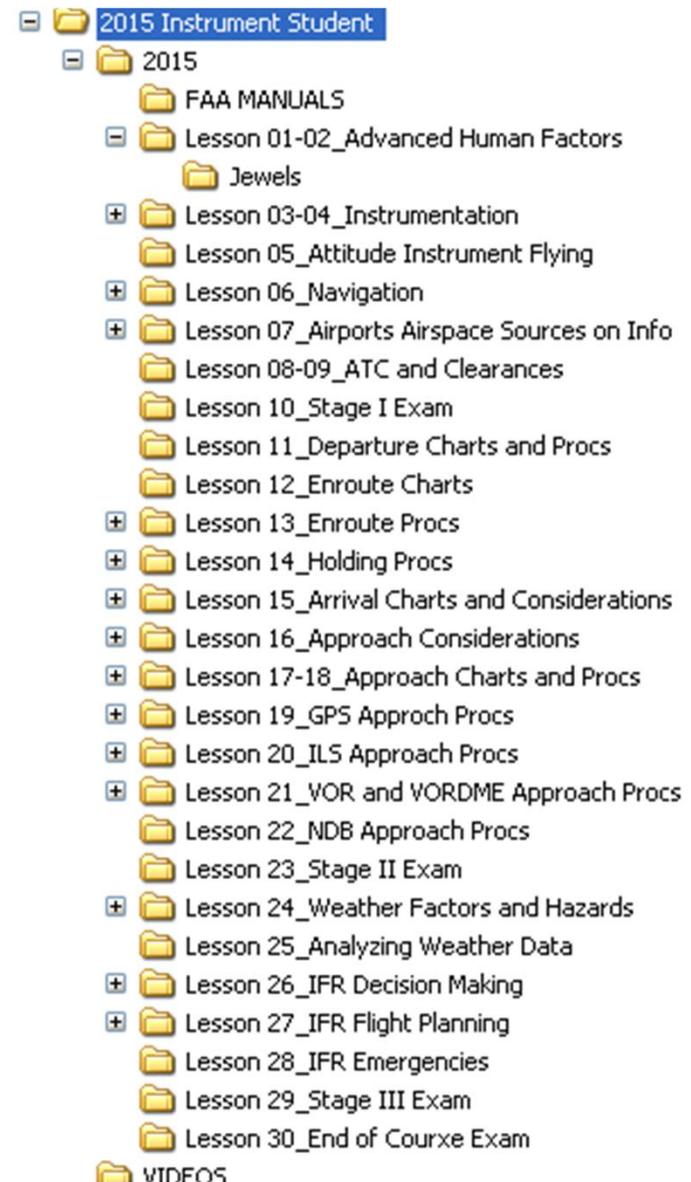
Class Material

There are **26 Lessons** to cover in the Instrument Ground School (30 shown but that is because there are 4 examinations).

Each lesson contains a “pdf” file with an overview of materials (6 slides per page). Many find it useful to print and bring to class to make notes from our class study. The section also contains a “pps” program that presents the material as you will observe in class.

Almost every lesson has a “Jewel Box” with great training aids and supplemental section study materials.

Many lessons will be covered in a week, sometimes more than one lesson, some more depending on the progress of the class.



Introduction

Basic Rules for Success

ATTEND every class (3 strikes and you are out) and please be on time – class starts 9 A.M.

INQUIRE if you are not sure of anything

REVIEW materials before and after class

COMMIT to achieve. It is hard work but well worth your effort.

Introduction

www.sportys.com/pilotshop

[ASA Instrument Test Prep](#) \$29.95

[Jeppesen Commercial-Instrument Pilot Textbook](#) \$89.95

[FAR/AIM](#) \$16.98

[L23/L24 LOW ENROUTE CHART](#) \$5.25

[US Terminal Procedures SE-3](#) \$5.95

Please pay your course fee* of either today or at the beginning of the next class.

** 5 or more students \$300, 3-4 students \$450*

Introduction

Ground School is designed not just to help you pass the requirement of passing the FAA Instrument Aeronautical Knowledge written examination, but to give you vital and helpful information which will make you a more knowledgeable and SAFER pilot. This is accomplished by in class presentations, videos, and additional materials found on your flash driv

Introduction

CERTIFICATES

Restrictions

- **Private Pilot (Non-instrument or instrument)**
VFR only without Instrument Rating
- **Commercial Pilot (Non instrument or instrument)**
VFR only without Instrument Rating
- **Airline Transport Pilot**

Requirements for Obtaining An Instrument Rating

(a) **General.** A person who applies for an instrument rating must:

- (1) Hold at least a current private pilot certificate, or be concurrently applying for a private pilot certificate, with an airplane, helicopter, or powered-lift rating appropriate to the instrument rating sought;
- (2) Be able to read, speak, write, and understand the English language. If the applicant is unable to meet any of these requirements due to a medical condition, the Administrator may place such operating limitations on the applicant's pilot certificate as are necessary for the safe operation of the aircraft;
- (3) Receive and log ground training from an authorized instructor or accomplish a home-study course of training on the aeronautical knowledge areas of paragraph (b) of this section that apply to the instrument rating sought;
- (4) Receive a logbook or training record endorsement from an authorized instructor certifying that the person is prepared to take the required knowledge test;
- (5) Receive and log training on the areas of operation of paragraph (c) of this section from an authorized instructor in an aircraft, flight simulator, or flight training device that represents an airplane, helicopter, or powered-lift appropriate to the instrument rating sought;
- (6) Receive a logbook or training record endorsement from an authorized instructor certifying that the person is prepared to take the required practical test;
- (7) Pass the required knowledge test on the aeronautical knowledge areas of paragraph (b) of this section; however, an applicant is not required to take another knowledge test when that person already holds an instrument rating; and
- (8) Pass the required practical test on the areas of operation in paragraph (c) of this section in—
 - (i) An airplane, helicopter, or powered-lift appropriate to the rating sought; or
 - (ii) A flight simulator or a flight training device appropriate to the rating sought and for the specific maneuver or instrument approach procedure performed. If an approved flight training device is used for the practical test, the instrument approach procedures conducted in that flight training device are limited to one precision and one nonprecision approach, provided the flight training device is approved for the procedure performed.

Requirements for Obtaining An Instrument Rating

- (b) ***Aeronautical knowledge.*** A person who applies for an instrument rating must have received and logged ground training from an authorized instructor or accomplished a home-study course on the following aeronautical knowledge areas that apply to the instrument rating sought:
- (1) Federal Aviation Regulations of this chapter that apply to flight operations under IFR;
 - (2) Appropriate information that applies to flight operations under IFR in the “Aeronautical Information Manual;”
 - (3) Air traffic control system and procedures for instrument flight operations;
 - (4) IFR navigation and approaches by use of navigation systems;
 - (5) Use of IFR en route and instrument approach procedure charts;
 - (6) Procurement and use of aviation weather reports and forecasts and the elements of forecasting weather trends based on that information and personal observation of weather conditions;
 - (7) Safe and efficient operation of aircraft under instrument flight rules and conditions;
 - (8) Recognition of critical weather situations and windshear avoidance;
 - (9) Aeronautical decision making and judgment; and
 - (10) Crew resource management, including crew communication and coordination.

Requirements for Obtaining An Instrument Rating

(c) **Flight proficiency.** A person who applies for an instrument rating must receive and log training from an authorized instructor in an aircraft, or in a flight simulator or flight training device, in accordance with paragraph (g) of this section, that includes the following areas of operation:

- (1) Preflight preparation;
- (2) Preflight procedures;
- (3) Air traffic control clearances and procedures;
- (4) Flight by reference to instruments;
- (5) Navigation systems;
- (6) Instrument approach procedures;
- (7) Emergency operations; and
- (8) Postflight procedures.

Requirements for Obtaining An Instrument Rating

(d) ***Aeronautical experience for the instrument-airplane rating.*** A person who applies for an instrument-airplane rating must have logged:

(1) Except as provided in paragraph (g) of this section, 50 hours of cross-country flight time as pilot in command, of which 10 hours must have been in an airplane; and

(2) Forty hours of actual or simulated instrument time in the areas of operation listed in paragraph (c) of this section, of which 15 hours must have been received from an authorized instructor who holds an instrument-airplane rating, and the instrument time includes:

(i) Three hours of instrument flight training from an authorized instructor in an airplane that is appropriate to the instrument-airplane rating within 2 calendar months before the date of the practical test; and

(ii) Instrument flight training on cross country flight procedures, including one cross country flight in an airplane with an authorized instructor, that is performed under instrument flight rules, when a flight plan has been filed with an air traffic control facility, and that involves—

(A) A flight of 250 nautical miles along airways or by directed routing from an air traffic control facility;

(B) An instrument approach at each airport; and

(C) Three different kinds of approaches with the use of navigation systems.

Requirements for Obtaining An Instrument Rating

(g) An applicant for a combined private pilot certificate with an instrument rating may satisfy the **cross-country flight time requirements** of this section by crediting:

(1) For an instrument-airplane rating or an instrument-powered-lift rating, up to 45 hours of cross-country flight time performing the duties of pilot in command with an authorized instructor; or

(2) For an instrument-helicopter rating, up to 47 hours of cross-country flight time performing the duties of pilot in command with an authorized instructor.

(h) **Use of flight simulators or flight training devices.** If the instrument time was provided by an authorized instructor in a flight simulator or flight training device—

(1) A maximum of 30 hours may be performed in that flight simulator or flight training device if the instrument time was completed in accordance with part 142 of this chapter; or

(2) A maximum of 20 hours may be performed in that flight simulator or flight training device if the instrument time was not completed in accordance with part 142 of this chapter.

(i) **Use of an aviation training device.** A maximum of 10 hours of instrument time received in an aviation training device may be credited for the instrument time requirements of this section if—

(1) The device is approved and authorized by the FAA;

(2) An authorized instructor provides the instrument time in the device;

(3) No more than 10 hours of instrument time in a flight simulator or flight training device was credited for the instrument time requirements of this section;

(4) A view-limiting device was worn by the applicant when logging instrument time in the device; and

(5) The FAA approved the instrument training and instrument tasks performed in the device.

Let's get started!