



VFR Ground School Online

Kathy Harkness, AGI

240-672-3446

kathy.harkness@harpyr.com

Course Description: This course is designed to cover the knowledge required to pass the FAA Knowledge Test for Sport Pilot, Recreational Pilot, and Private Pilot. Material covered in the class will also be of interest to rusty pilots, pilots who are unfamiliar with complex airspaces such as those surrounding large cities, those who wish to better understand Special Flight Rules Areas (such as the Washington DC SFRA), and all those who would simply like to refresh and extend their understanding of topics related to aircraft and flight.

We have offered this course exclusively online since 2021. Initially this was to accommodate the COVID restrictions still in place in many parts of the country, but we have learned that many students prefer this format, and it enables us to enroll students geographically far removed from our home base in Stevensville, Maryland. This format also gives students greater scheduling flexibility, as presentations will be recorded when they are delivered and be available for viewing later.

Students will have several hours of reading and homework each week and are expected to study between sessions to ensure they are prepared for each class period.

After completing the course, a final comprehensive exam covering all the course material will be given to anyone who wishes to sit for it. This is entirely voluntary; however, students seeking an endorsement to sit for an FAA knowledge test will be required to pass this final exam with an 85% or greater. This exam will be conducted via email and scheduled at the student's convenience. We have already administered tests and delivered endorsements remotely, and are familiar with the formats required to satisfy the FAA testing centers.

Required Books and Materials:

Handbook/Textbook	<p>There are many basic aeronautical knowledge textbooks available. The CSP private pilot syllabus incorporates the Private/Commerical Pilot Handbook by Rod Machado. Earlier versions of Machado, including the Private and Sport Pilot Handbooks are acceptable and may still be available from online sellers. Links to the new handbook are provided below.</p> <p>The FAA also produces a number of excellent instructional books which are available as free pdf downloads from the FAA website; bound paperback copies can be purchased from online sellers such as Amazon. The one most relevant to this course's material is called The Pilot's Handbook of Aeronautical Knowledge.</p>
--------------------------	--

Test Preparation	If you are taking this course to prepare for a written exam, you will want to purchase a test prep aid. These are available as question/answer books, software, and online subscriptions from a variety of vendors. I will be happy to provide suggestions and informal reviews without endorsing a specific product for all students.
Flight Planning Tools	<p>In addition to the textbooks and test preparation materials, some topics will require a few specialized tools. You will need to have on hand:</p> <ul style="list-style-type: none"> • Washington DC sectional chart • Washington/Baltimore Terminal Area Chart • E6B Flight Computer • Plotter <p>If you are located close to Chesapeake Sport Pilot/Bay Bridge Airport (W29) these items (along with the Machado textbook, ASA test prep books, Pilot's Handbook of Aeronautical Knowledge, and FAR/AIM) can be purchased there. There are also online sources such as Sporty's (link below); items may be available from Amazon as well.</p>

Suggested Materials: (These are all available for free download from the FAA website, or hard copies can be purchased online):

- FAR/AIM (You will be required to have a current copy during your oral examination)
- Current Northeast Chart Supplement (ditto)
- Airplane Flying Handbook

Online Resources (not an exhaustive list):

Sites for Free Downloads/Online Access	Sites for Purchase
Electronic Code of Federal Regulations Title 14 (Aeronautics and Space)	Private-Commercial Pilot Handbook, Machado
Pilots' Handbook of Aeronautical Knowledge	Sporty's Pilot Shop
Northeast Chart Supplement	Gleim Test Preparation Book -- Sport Pilot
Airplane Flying Handbook	Gleim Test Preparation Book -- Private Pilot
Aeronautical Information Manual (pdf) (html)	ASA Prepware
Pilot/Controller Glossary (pdf) (html)	Dauntless Test Prep Software
Aeronautical Chart Users' Guide	FAR/AIM 2023 Hard Copy (Amazon)

CLASS SCHEDULE

Each session will be scheduled for two hours. Expect a ratio of about 90 minutes of instructional presentation, with ample time provided for setup, questions, quizzes, and a short break in the middle. We are aware that concentrating in a virtual environment for longer than about two hours is challenging to most people and extending the sessions for longer would be educationally counterproductive. And remember, all class presentations will be recorded and available for viewing again as you need.

Session	Date	Topics
1	Mon Jan 26	FAA Rules and Regulations Certificates and Endorsements
2	Thurs Jan 29	Principles of Flight Aircraft Components
3	Mon Feb 2	Aerodynamics of Lift
4	Thurs Feb 5	Aerodynamics of Thrust and Drag
5	Mon Feb 9	Flight Instruments
6	Thurs Feb 12	Airspace
7	Mon Feb 16	Airport Operations DC SFRA
8	Thurs Feb 19	Navigation and Charts
9	Mon Feb 23	Radio Navigation
10	Thurs Feb 26	Weather Theory
11	Mon Mar 2	Weather Charts and Briefings
12	Thurs Mar 5	Aircraft Performance
13	Mon Mar 9	Weight and Balance
14	Thurs Mar 12	Flight Planning Methods
15	Mon Mar 16	Flight Planning Simulation Exercise
16	Thurs Mar 19	Engines Electrical Systems
17	Mon Mar 23	Aeromedical Factors Aeronautical Decision Making
18	Thurs Mar 26	Bonus/Catch-up Session Becoming an AGI/CFI