

The Sport Pilot Practical – How Do I Prepare?

I am a Sport Pilot CFI and Instructor Examiner for Weight-Shift Control aircraft (affectionately known as “trikes” by those of us that fly them). Over the last couple of years I have given quite a few practical tests and am often asked by students “how do I prepare for the practical.” Most of the articles I’ve read have discussed the event itself and covered “how to prepare” in general terms. Here I want to answer the question “how do I prepare” more deliberately and specifically.

The practical test is broken down into two phases: oral and flight. You must pass the oral before moving on to flight. And it is the oral portion that most students struggle with. Those who do well during the oral tend to sail through the flight portion too. One success leads to the other. Don’t misunderstand me – doing well on the oral is not enough to pass – you have to be able to fly too. But someone who can fly just fine can get so rattled by the oral that by the time he gets to the airplane he has forgotten how to strap himself in. Nail the oral and you set yourself up to nail the flight portion too.

Preparing for the Oral

I was one of the first BFIs to make the transition to Sport Pilot. In those early days I had to use Private Pilot and Commercial/CFI materials to prepare for both written and flight tests in a weight-shift control aircraft. I locked myself in my office for a week while my wife and kids slid raw meat under the door and otherwise left the wild beast alone. I passed but boy was it painful. Today there is so much more available and more on the way. To prepare for the oral today, whether it is the Sport Pilot checkride or Sport Pilot CFI, I tell my students study the following listed in order of importance:

Sport Pilot Practical Test Standards (FAA-S-8081-31 for trikes)

I am always surprised and dismayed when a student pilot comes to me for the practical test and has no idea what the test standards are. Their instructor has done them a huge disservice and can expect to hear from me (and their student) after the practical is over.



The FAA provides FAA-S-8081-31 to lay out the Practical Test Standards for Weight-Shift aircraft. This little book (referred to as the PTS) not only tells you what subject areas I am going to be testing you on, but it also tells you what references I will use to develop my questions and where I expect you to find the answers. Pretty cool.

Before I sign a student off to see another examiner my student and I go over the PTS in detail, and that includes going through a mock practical test. They don’t see another examiner until I am sure they can pass. As a student you should insist on this type of training for yourself. It will cost you a little more, but it will save you multiple trips to an examiner and that saves you both time and money – not to mention frustration.

Preparing for the Sport Pilot Practical

For the oral portion of the test you need to focus on PTS Area of Operation One – Preflight Preparation.

FAR/AIM

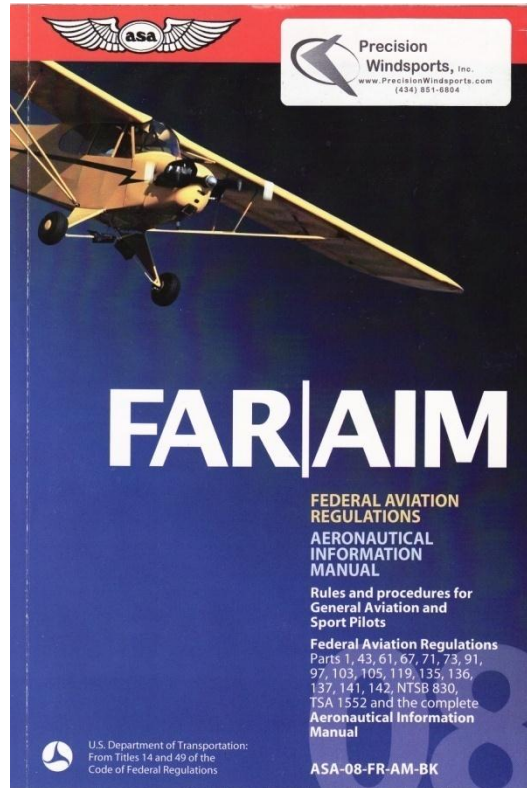
Boy, is this an underappreciated/underused resource. After the PTS this should be your key reference and you should keep it up to date. One of the nifty features of the FAR/AIM is found near the beginning called the Suggested Study List. It lists every FAR and AIM topic you should study in preparing for the test.

By going through the Study List you get a double return on your investment. First, you are working to “learn” the material you are reading (well maybe memorize is a better word but try to “understand” what you are memorizing so that “learning” takes place too). But many students forget that the practical is an OPEN BOOK TEST. The key to an open book test is to know the material well enough that you don’t have to look up stuff you use all the time and know where to find stuff you don’t use as often. The FAR/AIM is over 1000 pages. You are not going to memorize it so don’t try. Read through all the suggested material highlighting and bookmarking as you go. In the process you will learn more than you realize, but even more importantly you will learn to find “stuff” when you need it.

Another key to understanding the FAR/AIM is remembering to use the Table of Contents. I would add “review the Table of Contents” to the Study List if the FAA asked for my suggestion. How does that help, you might ask? Let’s say I ask you a question about pilot privileges. If you have familiarized yourself with the table you would know that Part 61 covers certification of pilots of all stripes. In fact, subparts J and K of Part 61 are where you find out all that is required, expected, and allowed of sport pilots and sport pilot instructors. If I asked you about the rules surrounding VFR operations you would know, if you are familiar with the table of contents, that Part 91 covers general operating and flight rules. It’s a good bet you’d find the answer to the question there. Each of those parts has a table of contents of its own at the beginning to help you further refine your search.

The parts of the FAR/AIM you should be most familiar with:

- FAR:
 - Part 1: Definitions and Abbreviations
 - Part 43: Maintenance (this is left off the Study List for Sport Pilot but it is here that you find the answers to questions about maintenance that are important to both E-LSA and S-LSA pilots. Questions covering airworthiness and preventive maintenance are some of



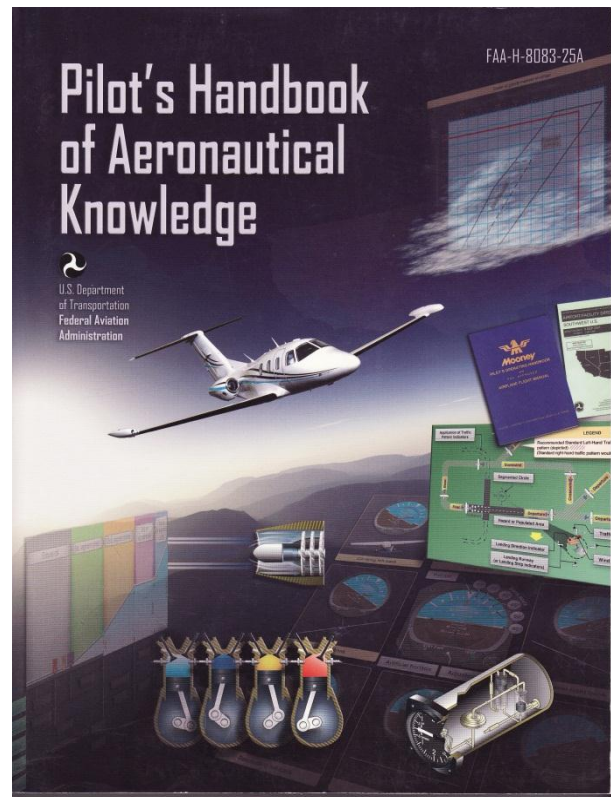
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- the first asked during the oral part of the practical (Area of Operation I: Preflight Preparation, Task B: Airworthiness Requirements).
- Part 61: Certification of Pilots (in particular subparts J and K but subparts A and C are also important)
- Part 91: General Operating and Flight Rules (Subparts A-E)
- AIM
 - Chap 2: Airport Visual Aids (Section 3: Airport Marking Aids and Signs)
 - Chap 3: Airspace
 - Chap 4: Air Traffic Control
 - Section 2: Radio Communications
 - Section 3: Airport Operations (concentrate of sections covering operations at non-controlled airfields)
 - Section 6: National Security and Interception Procedures
 - Chap 6: Emergency Procedures
 - Chap 7: Safety of Flight
 - Section 1: Meteorology (7-1-1 to 7-1-4)
 - Section 3: Wake Turbulence
 - Chap 8: Medical Facts for Pilots (all but 8-1-7)
 - Chap 9: Aeronautical Charts and Related Publications
 - Pilot/Controller Glossary

Pilot's Handbook of Aeronautical Knowledge (FAA-H-8083-25A)

This book is almost totally unknown in the Sport Pilot world and yet it contains so much great information for the beginner and is a must reference book for any CFI's library. Even though it was written and illustrated with fixed-wing aircraft in mind much of the information in there is relevant to any aircraft that uses wings and a motor to fly.

While preparing for the Knowledge Test many students rely on computer-based practice tests to memorize the proper response to a question. But that won't work at the practical. My job as an examiner is to find out if you really know what you are talking about, and if I detect weakness that is where I start picking at you. But if you walk into my office with a copy of this resource and it looks like it has been well read you start earning points before

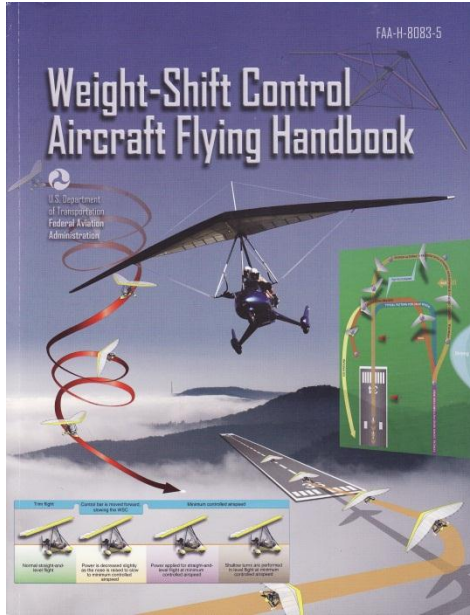


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the test has even begun. I assume you are pilot material until you start proving me wrong. Walk in with nothing but a smile and I assume you don't have a clue and am usually right.

Here is what you should concentrate on in this book:

- Chap 1 – Intro to Flying
- Chap 3 – Principles of Flight
- Chap 4 – Aerodynamics of Flight
 - Forces acting on the airplane
 - Wingtip vortices
 - Ground effect
 - Load factors
- Chap 8 – Flight Manuals and other Documents
 - Aircraft Documents
 - Aircraft Inspections
- Chap 11 – Weather Theory
- Chap 12 – Weather Reports
 - Intro
 - Weather Briefings
 - Aviation Weather Reports
 - Aviation Forecasts
- Chap 13 – Airport Operations
 - Types of Airports
 - Sources for Airport Data
 - Airport Markings and Signs
 - Wind Direction Indicators
 - Traffic Patterns
 - Radio Communications
 - Wake Turbulence
 - Collision Avoidance
- Chap 15 – Navigation
 - Intro
 - Aeronautical Charts
 - Latitude and Longitude
 - Effect of Wind
 - Pilotage
 - Dead Reckoning
 - Flight Planning
 - Charting the Course
 - Lost Procedures
 - Flight Diversion
- Chap 16 – Aeromedical Factors (Hypoxia)



Weight-Shift Flying Handbook (FAA-H-8083-5)

This is the weight-shift supplement to the Pilot's Handbook (FAA-H-8083-25A). You will want to read all of this book. While there is some overlap between this book and the Pilot's Handbook I've tried to minimize the overlap by having you only read those sections in the Pilot's Handbook that either are not covered or inadequately covered in the Weight-Shift Handbook.

Of particular note is that this is the book that goes over all of the weight-shift maneuvers required by the practical, so it is particularly helpful in helping you prepare for the flight portion of the practical.

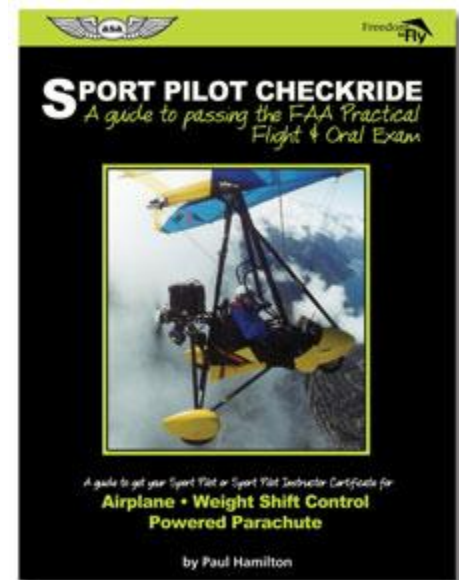
Sport Pilot Checkride by ASA

Paul Hamilton of Adventure Productions has put together an excellent resource for getting you through the oral. Many examiners use this book to help develop their questions, so by going through this guide you are getting a good look at the oral. But this guide does not replace the references above – it just helps you get more out of them. It will also give you more confidence, which is important.

Preparing for the Flight Test

This is the easiest part of the test to prepare for. It is also the most fun. Think about it – you are practicing flying. What could be more fun than that?

By the time you get your solo endorsement you should have already practiced every one of the required flight maneuvers. You can also read about the maneuvers in the Weight-Shift Flying Handbook mentioned above. The focus of your solo time is having fun and preparing for the test by practicing these maneuvers until you can do them well within the PTS standards and they are instinctive. If you can only barely meet the standards you are not ready for the test. Remember, you are going to be nervous on test day and by the time you get to the flight line your brain has been scraped clean during the oral portion of the test; consequently, you may be operating on autopilot by this time – your autopilot needs to be well trained to finish strong. The “auto-pilot” in this case is muscle memory. Train until the maneuvers are instinctive and you will do fine.



Preparing for the Sport Pilot Practical

There are a few tasks that your brain needs to show up for even if it is pretty worn out and this frequently gets students into some difficulty. They are:

- Navigation / Situational Awareness
 - You need to make sure that you pick easily recognizable landmarks for the navigation portion of the test and quiz yourself on them.
 - Before you take off know which way you will be turning to your first landmark and pick one that you can see while still on the ground, if possible.
 - Use landmarks that are no more than 3 miles away so that you can still see them even if test day turns out to be hazy.
 - Finally, don't forget that after you are done demonstrating your maneuvers the examiner is going to expect you to be able to find your way back to the airport so keep yourself oriented.
- Collision Avoidance – YOU MUST LOOK FOR TRAFFIC AND CLEAR THE AREA BEFORE YOU PERFORM ANY MANEUVERS.
 - Clearing Turns. Before any maneuver do your clearing turns; whether they are two 90° turns, two 180° turns, a single 360° turn or any combination thereof I don't care – just clear the area and make sure to tell your examiner when you are doing it, so he can give you credit for them. The best way to be sure you don't forget to clear the area before maneuvers is by practicing them when preparing for the test. That way they become a habit.
 - Scan for traffic and ask the examiner to do the same. You can ask your examiner to do anything you would ask a non-flying passenger to do. Everytime I take someone up for a ride I ask them to help me look for traffic, and it is not uncommon that they spot something I missed. Continue scanning for traffic throughout the entire test with special emphasis during the maneuvers themselves.

So there you have it. If you study using the guidelines above you WILL PASS THE TEST. Those who study properly always tell me “that was a lot easier than I expected.” Those who don't feel like they just spent a day in a torture chamber – and it wasn't pleasant for me either.



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