

Sport Pilot Practical Test Review

Date of Test: October 10, 2019

Pilot: [REDACTED]

Result: Passed

Examiner: [REDACTED]
[REDACTED]

The Examiner

- Here are my thoughts about [REDACTED]
- Very professional and calm demeanor.
- Very thorough but fair.
- He isn't looking for cookie cutter answers. He will inquire to see if you really understand the subject.
- He will allow you to use reference materials if you can't remember the answer off the top of your head. Just don't make that your procedure for answering the majority of his questions!
- If you don't know the answer, he will discuss it further with you to see if you can find the answer or describe it to him in another way.
- I came to the test well prepared. Because of that, I believe he was willing to work with me on questions I was struggling with.
- Because I was thorough with my weather brief, flight planning, preflight check, use of checklists and verbally talking thru each procedure/maneuver, I believe that had a positive impact on how the flight test proceeded.
- I would recommend him as a DPE.

Prerequisites

- Examined the flight logbook very carefully, some endorsements had to be redone or corrected before the test could proceed.
- Did a very detailed review of all aircraft documents and maintenance records.
- Examination fee was \$600.

Preflight Preparation

- Make sure to bring the following reference materials with you to the test:
 - FAR/AIM
 - Current FAA VFR Chart
 - Current FAA Chart Supplement
 - Plotter
 - E6B Flight Computer or CX-3 Flight Computer
 - Personal Notes
- I also brought my copy of ASA Sport Pilot Check Ride book tabbed to all the parts of the oral exam. This is allowed because the information within refers to the appropriate FAR/AIM sections.
- It's okay to use reference material, but only use it when necessary.

Task A: Certificates and Documents

- Know what documents are required to be in the aircraft (AROW) and to explain each one in detail.

Task B: Airworthiness Requirements

- Know who is responsible for maintenance of aircraft and who is responsible to ensure the aircraft is airworthy.
- Know what AD's are.
- He will ask who performs what type of maintenance. Trick question regarding preventive maintenance. When I responded that I can perform PM's he challenged me to look up 14 CFR part 91. It states "Private Pilots" can perform PM's. Therefore, the correct answer is sport pilots cannot perform this task. May be a gray area regarding terminology, but for test purposes that is the answer he is looking for.
- Another question that he corrected me on involved inoperable instruments. Know what instruments are in your aircraft. Know what instruments are required for VFR flight. Be careful when answering what to do when a non-critical instrument is found to be inoperable. He will challenge you on who placards it. The correct answer is, prior to flight notify the AP and have him do the placard the instrument.

Task C: Weather Information

- I recommend setting up an account in 1800wxbrief and setting up your weather brief for your cross country in advance. I brought my laptop and hotspot and was able to thoroughly brief him on the weather conditions.
- He will ask you if we are go/no go to fly based on the weather conditions.
- He will ask you about the different weather reporting resources and what they provide.
- He will ask about the following:
 - Surface Analysis
 - Isobars
 - Fronts
 - Wind direction in relation to isobars
 - Pressure systems
 - Freezing Levels
 - Where and what altitude
 - Adverse Conditions
 - Know how to read and understand:
 - TFR's
 - NOTAM's
 - SIGMET's
 - AIRMET's
 - Forecasts
 - Know how to read and understand:
 - Clouds Chart
 - Visibility, Surface Winds and Precipitation Charts
 - Terminal Forecasts
 - Winds Aloft Forecasts
 - Current Conditions
 - Know how to read and understand current weather conditions reports and chart.

- He will ask you about the following:
 - Turbulence
 - Wind Shear
 - Thunderstorms

Task D: Cross-Country Flight Planning

- Make sure to have your chart marked with your flight plan.
- Include enough easily identifiable checkpoints.
- Fill out the flight plan and complete the morning of the check ride using the information from your weather brief.
- Make sure to have alternate airports assigned and know where they are in relationship to your original course. You will be diverted during the flight.
- Be prepared to manually compute headings, flight times, headings, fuel consumption.
- He is very conscious of fuel consumption. Make sure your flight plan allows for fuel stops if your useful load only allows minimal fuel quantity to ensure weight and balance remains within the CG envelope.
- He will want you to calculate flight time and fuel consumption in three phases of flight; takeoff, cruise and descent. Don't just use the average fuel consumption rate for cruise.

Task E: National Airspace System

- He will quiz you on the different airspaces.
- Know the airspace limitations for sport pilot.
- Know how to identify the chart symbols and how to look up information in the chart legend.
- Know the special use and other airspace areas and the related flight rules.
- Know what TFR's are and the related flight rules.

Task F: Operation of Systems

- Be able to explain how the flight controls work.
- Know about the engine and propeller.
- Know about the landing gear and brakes.
- Know what fuel and oil is used and the capacities.
- Know about the flight instruments.

Task G: Aeromedical Factors

- He will ask about the following:
 - Hypoxia
 - Hyperventilation
 - Middle ear/sinus problems
 - Spatial Disorientation
 - Motion Sickness
 - Carbon Monoxide Poisoning
 - Stress and Fatigue
 - Dehydration

Task J: Performance and Limitations

- He will ask about the following:
 - Effects of weight and balance on aircraft performance.
 - Effects of atmospheric conditions on aircraft performance.
- Know what pressure density is and how it affects performance.
- Know what pressure altitude is.
- Complete the weight and balance for your flight in advance and be prepared to explain how you computed it.
- Be prepared to recalculate W&B if he changes some of the parameters.
- He will ask you if you feel the W&B is safe for flight.
- He will ask you about your aircraft's performance and limitations.

Task K: Principles of Flight

- Know about the following:
 - Forces on the aircraft during different flight maneuvers.
 - Aircraft stability and controllability.
 - Torque effect.
 - Wingtip vortices.
 - Loads and load factors.
 - Angle of attack.
 - Stalls and stall recovery.
 - When stalls can happen during flight.
 - Explain the purpose, use and proper technique of flight controls and their effects during flight.

Preflight Procedures

Task A: Preflight Inspection

- Use the checklist.
- Call out everything you are doing.
- Use the wooden dipstick to check fuel level. Do not rely on fuel gauge!
- He will ask you again if you have enough fuel for your flight.
- Be ready to answer any questions about what and why you are doing.

Task B: Cockpit Management

- Make sure your flight material is organized and stowed properly.
- Use the checklist. Brief him on safety harness use, doors, communications and emergency procedures.

Task C: Engine Starting

- Use the checklist and call out everything you are doing.

Task D: Taxiing

- Use the checklist and call out everything you are doing.
- Perform a brake check.
- Position flight controls for wind direction.
- Situational awareness and proper taxi speed to avoid other aircraft and hazards.

Task F: Before Takeoff Check

- Use the checklist and call out everything you are doing.
- Check your gauges during run up and call out if they are within tolerances.
- Know your takeoff airspeed and distance to clear 50'.
- Be ready to explain what to do if there is an emergency during takeoff.
- Check airspace and the pattern for aircraft. Call out if you see anything and determine if it is safe to enter the runway and takeoff. We had people in the pattern using 9/27 and 5/23. One of the aircrafts did not have radio communication, I delayed entering the runway until I felt it was safe.
- You are the PIC, he will not call out traffic for you. He said I am to fly the plane as if no one is in the back seat.

Takeoffs, Landings and Go-Arounds

- You will do each of the following.
 - **Normal**
 - **Takeoff:** stick neutral, full power, stick forward, tail wheel up during roll, climb out at V_y .
 - **Landing:** normal rate of descent/speed/flare, hold off, stick back at touchdown.
 - **Soft field**
 - **Takeoff:** stick neutral, full power, stick forward, tail wheel just off ground during roll, accelerate in ground effect, climb out at V_y .
 - **Landing:** shallow rate of descent, minimum threshold speed, minimal flare, add small amount of power, extend hold off, touchdown, stick back at touchdown.
 - **Short field**
 - **Takeoff:** hold brakes, full power, stick forward, brakes released, tail wheel up during roll, when V_x achieved then pitch for climb.
 - **Landing:** shallow rate of descent, speed just above stall at target point, power as needed to make the target point, power off, stick back, apply brakes.
 - **Forward slip to landing**
 - **Go-around/rejected landing**
 - He will call out a hazard on the runway while you are at the end of final.
 - Don't forget to make the appropriate radio call while performing the maneuver.

Performance Maneuver

- You will do the following:
 - Steep turns
 - Ask which direction.
 - He will make you do the turn both left and then right.
 - Don't forget to do safety clearing turn.
 - Ask if he wants another clearing turn for the second steep turn.

Ground Reference Maneuvers

- You will do the following:
 - Turn around a point
 - Ask if a clearing turn is required.
 - I only did one turn, my choice of direction.
 - He said if the first circuit was questionable, he would have asked me to do a second one.

- You may do the following if your turn around a point was marginal.
- S-turns
- I was not required to do this.

Navigation

- Pilotage and dead reckoning
 - We flew for about 6 minutes to my first check point.
 - He will ask you if you are on the correct heading and how long it will take to arrive.
 - You are only allowed to use your navigation log and chart.
 - Make sure to call out what the check point is and when you see it.
- Diversion
 - He will describe a scenario requiring you to cancel your flight plan and divert to another airport.
 - You will be required to provide him the following information:
 - Approximate heading and distance.
 - He will ask you if we have enough fuel to alternate airport.
- Lost Procedures
 - We did not do this.

Slow Flight & Stalls

- You will do the following:
 - Slow flight with turns in both directions.
 - Power-off stall straight ahead with no turn.
 - Power-on stall straight ahead with no turn.
- You will discuss the following:
 - Spins

Emergency Operations

- You will do the following:
 - Emergency approach and landing.
 - Power loss procedures
 - Use your checklist
 - Include in the checklist unlock door.

Systems and Equipment Failure

- You will do the following procedure:
 - Engine power loss.
- You will discuss the following procedures:
 - Rough engine
 - Overheating engine
 - Carburetor icing
 - Loss of oil pressure
 - Door open in flight
 - Engine fire
 - Smoke in cockpit

Emergency Equipment and Survival Gear

- We did not discuss this.

Postflight Procedures

- Use the checklist.

Practical Exam Sequence

1. Preflight Inspection
2. Flight Briefing and Safety Instructions
3. Engine Start
4. Taxi
5. Before Takeoff Check
6. Normal Takeoff and Climb
7. Navigation to Check Point #1
8. Diversion to Alternate Airport
9. End Navigation Phase
10. Steep Turn Left
11. Steep Turn Right
12. Power-On Stall
13. Power-Off Stall
14. Simulated Engine Out
15. Emergency Approach and Landing
16. Turn Around a Point
17. Return to Airport
18. Forward Slip to Normal Landing
19. Soft Field Takeoff
20. Go Around/Rejected Landing
21. Soft Field Landing
22. Short Field Takeoff
23. Short Field Landing
24. Taxi
25. Shutdown
26. Post Flight Brief