

Oral portion

The areas that really matter are
FOI

- 1) Task E Instructor Responsibilities and Professionalism. Go through Randy's FOI Flashcard handout and memorize
- 2) Task G: Risk Management. Go through Randy's FOI Flashcard handout and memorize
 - a. Google FAA FRAT
 - b. Know what a Risk Assessment matrix is
 - c. Plus the items in the PTS memorized

Technical Subject areas

- 1) Task B: Runway Incursions. Use the Pilot Nick to teach the examiner the 17 items in this section
- 2) Task M: I like to have the student write out the Private Pilot on one page, the Commercial Pilot on another since it's easy to miss the 61.39 endorsements (endorsement 1 & 2) in the AC 61-65F. Make sure the written tests are Private (or commercial) Pilot Airplane and the practical tests are Private (or Commercial) Pilot Airplane Single Engine Land. Know how long a student pilot certificate is good for (same as normal pilot certificate nowadays) Know what cross country means for a student endorsement vs 'for the purposes of a rating'

Definitions Know the FAA Definition of the following terms

- 1) Instructor Knowledge (Instructor PTS). It is on each and every task objective.
- 2) Flight time (FAR/AIM) Can you log the following actions as flight time in logbook?
 - a. Mag Check Failure
 - b. Maintenance run up
 - c. Aborted takeoff without coming off the ground
 - d. Aborted takeoff after becoming airborne slightly
- 3) Accident vs Incident (is a gear up an accident?)
- 4) AFD vs Chart Supplement (AFD is no longer available)

Maneuvers we did

Note: during the clearing turns, they want to hear the procedure for the maneuver and the relevant aerodynamics for the particular maneuver (ie: adverse yaw, left turning tendencies, overbanking tendencies, etc)

- 1) Soft field takeoff: Excellent. Can tell just from this that no additional work is needed on take offs. Remember to always do checklists and don't forget anything. Short field landing CANNOT be short, or the 180 precision landing.
- 2) Lazy Eights are supposed to be 'constantly changing bank and pitch' and also hit the four marks (45,90,135,180). They will not accept a bank that isn't constantly changing nor a pitch that isn't constantly changing. 45 deg banks aren't acceptable. The banks are 0 to 30 deg and the pitch is 0-15 deg (12 deg on a chandelle gives you stall speed in the arrow.)
- 3) Steep Spiral followed by a 180degree precision landing. These two are almost always done together on the check ride if the clouds are high enough. If the clouds are too low, it will only be a precision engine out from abeam the numbers.
 - a. The goals of this maneuver

- i. This maneuver is intended to keep you up in the air long as possible and give you three practice tries at lining up on the runway. This is why best glide speed, gear up and no flaps is used during the spiral
- ii. The word steep in the title is not the same as the word steep in 'steep turns'. The goal is to do a $\frac{1}{4}$ or $\frac{1}{2}$ mile constant radius turn around a point. That point should be abeam your landing point, halfway between the approach end of the landing target and your target abeam point for the landing portion. Many teach to circle the runway but this puts you overshooting the runway each time around and you want three chances at lining up on the runway before actually performing a landing.
- iii. Each time turning upwind, the engine should be cleared (throttle slowly forward and back) to make sure no issues are encountered in case a go around is needed.
- iv. Maximum bank angle is 60 degrees. Anything over this will be a failure.

This is straight out of the Airplane flying Handbook. A constant airspeed should also be maintained throughout the maneuver. Failure to hold the airspeed constant will cause the radius of turn and necessary angle of bank to vary excessively. On the downwind side of the maneuver, the steeper the bank angle, the lower the pitch attitude must be to maintain a given airspeed. Conversely, on the upwind side, as the bank angle becomes shallower, the pitch attitude must be raised to maintain the proper airspeed. This is necessary because the airspeed tends to change as the

- i. bank is changed from shallow to steep to shallow.

- 4) Eights on pylons. Make sure to announce your pivotal altitude and target airspeed. During the start of each turn, expect to slowly pitch up....during the last half of the turn, expect to slowly pitch down. This maneuver was done well. The perfect 8's maneuver would have the first part of the turn with a slow pitch up and the last half of the turn slowly pitching down rather than constant pitch ups and pitch downs during the turns. It is at this point that we've reached instructional knowledge (application and correlation) of what the maneuver is trying to teach us.

At one point, the examiner will have you teach him/her a maneuver while they fly. At some point during that maneuver, they will put you into an unsafe condition and expect you to take over (my airplane). This should be done sooner rather than later. Most examiners tell me the student waited too long to take over. This is human nature when the examiner is making it unsafe vs a real student.

Good luck on your checkride! Thank you for taking me flying yesterday!