

# Finger Lakes Soaring Spring Checkride

## Expectations/Standards for Your Spring Checkride

OK, Winter's over and it's time to go fly, but first we really want you to spend some time thinking thru all the things that could happen this season. **All private pilots and previously solo'd student pilot members are required to get a field check by an instructor at the start of the flying season.**

The instructors have met and are going to emphasize a more thorough approach to the annual spring checkride, and biennial flight reviews.

**First, understand that the instructor is not doing all the work.** We expect you to be rusty in the flying skills, but want to emphasize you should be prepared for every flight you take. We are checking your preparation, and the attitude with which you are approaching each flight. This is not designed as an instructional flight. The instructor will be acting as a passenger. This is your chance to show the check-pilot that you have the skills and judgment equal to the rating you hold. Ask questions if you have them, and the instructor will be willing to instruct you in anything you have not been exposed to before.

**Do your homework:** Attached is a list of recommended reading you should have already been familiar with. If you're a licensed pilot, review the practical or written tests. For post-solo students, you can expect anything on the pre-solo exam.

We recommend that you take the checkride in the most complex aircraft you're qualified to fly. Although 1 flight is typically all that's needed, if you do well, request another if you'd like. 2 or more flights will cover everything on the following list.

Talk us thru the checklists, any action or maneuver, it will help us clearly understand what you are thinking.

These standards are provided so you will understand what is expected of each maneuver. We understand that you are a little rusty after four months of just reading about soaring - but you must demonstrate that you can complete the exercise with at least the proficiency indicated here.

1. **Preflight:** Review with the instructor and towpilot your expectations for the flight. Prebrief positive transfer of aircraft control and lookout responsibilities. Demonstrate through actual inspection the required preflight items for the aircraft. Review the aircraft operating manual. Recheck the required paperwork and perform a positive control check. Calculate the weight and balance for the aircraft to be flown. Demonstrate the checklist such as "CB SIT CB" or equivalent. Explain what you are doing and why. Explain the signals used for communicating with the ground crew and tow pilot. Brief the weather conditions. Check the wind and take the correct pre-takeoff action. This includes correct aileron and rudder positioning.

2. **Take-off:** During the ground roll, correct for crosswinds, control ground track, allow the glider to fly itself off the runway, and wing positioning. After liftoff, hold low for towplane liftoff, including crab if required, then translate position and attitude to normal tow (fin centered and wheels on the horizon).

**Throughout Flight - Collision Avoidance:** Properly scan for traffic. The instructor will particularly watch that you look before turning and that you perform clearing turns before vertical movements (stalls/spins). Be able to explain the right of way rules. When in the vicinity of others, you must make course corrections that allow you to keep visual contact.

3. **Normal Tow Position:** During the tow, the yaw string should be straight (within 5 degrees), and control movements should be smooth, resulting in a reasonably aligned tow. Slack in the towline should be dealt with smoothly and without endangering either towplane or glider. Reference: ASH and FTM

4. **Boxing the Wake:** Move smoothly around the box and hold coordinated flight at each of the corners. Your pattern should clearly define the towplane wake.

5. **Slack Rope Recovery:** Slack in the towline should be dealt with smoothly and without endangering either towplane or glider.

6. **Release:** Clear traffic below the towplane, and above / to the right before release from normal position, without slack or excess tension on the towrope, pull the release twice and observe the rope drop away before executing a right climbing turn to normal gliding speed. You should trim the aircraft once normal flying speed is achieved. Ref. ASH, FLT and aircraft manual.

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7. **Straight & Level:** You should be able to maintain wings level, yaw string straight, airspeed to within +/- 5 mph and hold a heading towards a selected object within +/- 10 degrees. Loss of the A/S indicator should have no effect. Brief the performance speeds for the aircraft flown. These will include stall, minimum sink, best glide, maneuvering, and never exceed. Reference: aircraft flight manual, PTS

8. **Medium & Steep Turns:** You must be able to perform 30 and 60 degree banked coordinated turns with the yaw string centered, consistent bank angles and airspeed control within +/- 5 mph/kts. The nose should sweep across the horizon at a constant rate without hesitations.

9. **Slow Flight:** You will be asked to fly the aircraft to within 1 - 2 mph/kts of the stall (pre-stall buffet). You must be able to make both right and left turns without accelerating or precipitating a full stall. You should be able to recite the indications of a stall and explain recovery procedures. Reference: PTS and FTM

### 11. Stalls:

11b. **Straight Ahead Stall:** Demonstrate a stall from wings level cruise flight. The wings must remain level and recovery initiated once the aircraft has departed controlled flight (nose falls thru the horizon). You must not attempt to pick-up a downed wing with aileron. You should be able to describe the flight situations that are most likely to lead to a stall and the recovery technique that will result in the minimum loss of altitude. Reference: FTM

11b. **Cross Control Stall:** This is the scenario for an approach to landing stall. You will be asked to perform a shallow (< 15 degrees) banked turn at minimum controllable airspeed and then to yaw the nose slightly into the turn with rudder while holding the bank stable. You are expected to recover by reducing the angle of attack, arresting rotation with rudder and then to smoothly recover from the descent. Recover with as little altitude loss as possible and return to normal cruise speed. Reference: FTM

12. **Spins:** (optional) if the aircraft is capable, CG is correct, and sufficient altitude is attained (recovery above 1500AGL).

13. *See Additional unusual / Emergency Simulation Scenarios listed below...*

14. **Slips:** You must be able to perform full slips to the right and left while maintaining desired ground track +/-10 degrees. You should be able to execute turns in either direction while slipping. Reference: PTS, FTM

15. **Pattern & Landing - Checklist:** complete the before landing checklist. We suggest WUFSTALLS". Reference: FTM

15a. **Landing Area / Pattern Planning:** Brief landing options, ensure a safe landing area, point out traffic in the pattern and assure you do not create a conflict. check the prevailing final approach course while on base.

15b. **Wind Awareness:** Prior to entering the pattern, you should have noted the wind direction and speed and must demonstrate how you will adapt your pattern to best compensate for the effects of the wind. Reference: FTM

15c. **Airspeed Control:** Fly briefed approach speed on downwind, trim the aircraft and be able to explain the airspeed chosen. Fly the entire pattern with only temporary deviations that do not exceed +/- 5 mph and minus 3 mph. Reference: FTM

15d. **Turn Coordination:** All turns must be coordinated such that the yaw string is normally within +/- 5 degrees of center. Reference: FTM

15e. **Spoiler/Flaps:** You are expected to turn a normal base and final where extreme measures, such as using full spoilers and a full slip, are not required. If the aircraft has flaps, you will be expected to demonstrate their use. Reference: FTM

15f. **Flare/Touchdown:** You will be expected to flare for landing such that the pitch attitude is constantly and smoothly increasing from the start to touchdown. The touchdown should be smooth and at minimum airspeed for the conditions without bouncing.

15g. **Touchdown Point:** You will be expected to touchdown on or within 100 feet of a designated point. You must not touchdown before the target or force the aircraft to land before excess airspeed is dissipated.

15h. **Rollout & Stop:** You must maintain control of the glider during the rollout and use proper braking technique (avoid using the skid). Reference: NM

15i. **Crosswind Correction:** You should make adjustments to your pattern as necessary. Be sure to straighten the glider before landing to minimize side loads on the landing gear. You should maintain runway alignment during the rollout and stop with the upwind wing down. Reference: FTM

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**13. Unusual / Emergency Situations:** You may expect at least one of these.

13A. **Low Pattern:** From a 400' pattern entry, you must be able to safely place the glider on the airport without significant maneuvering below 200'. This should not appear to be an emergency.

13B. **Towplane Engine Failure:** You must release promptly if requested by the tow pilot. You must use good judgment in assessing take-off performance and abort the tow if towplane performance is questionable. If the towplane loses power during take-off, maneuver to pass to his right. Reference: FTM, Soaring Handbook

13C. **Release Failure:** You must know the signals for release failure and should be able to explain your plan of action if this were to occur. You shouldn't plan on breaking the towrope.

13D. **Rope Break:** Be prepared to explain what you would do if the towrope breaks at any point. You must be able to safely place the glider on the airport without significant maneuvering below 200'.

13E. **Spoiler Failure:** You must adjust your pattern and demonstrate the ability to land the glider with reasonable precision after losing the spoilers.

13F. **Alternate Runway:** You may be asked to demonstrate a landing on an alternate runway. You must demonstrate the ability to alter your pattern and land on target using different reference points. This might also include a downwind landing, in which case, airspeed control will be particularly emphasized.

13G. **Unexpected Sink:** The instructor may choose simulate flight in extreme sink by opening the spoilers. You must demonstrate your ability to adapt to changing conditions by adjust your pattern and airspeed. Again, you shouldn't need to aggressively maneuver below 200'.

13H. **Distractions:** The instructor may generate various distractions intended to increase your workload. You must continue to fly the aircraft with precision and keep your traffic scan up while dealing with the distraction.

13I. **Instrument Failure:** The instructor may cover-up the airspeed or altimeter at any time. You should be able to maintain airspeed by attitude reference and fly a normal pattern without either of these instruments.

## Resources

PTS - Practical Test Standard

FTM - Finger Lakes Flight Training Manual

## Suggested Study Materials

- 14 CFR parts 1, 61, 67, and 91
- Aeronautical Information Manual
- AC 00-6, Aviation Weather
- AC 00-45, Aviation Weather Services
- FAA-H-8083-1, Pilot's Weight and Balance
- FAA-H-8083-3, Airplane Flying Handbook
- AA-H-8083-13, Glider Flying Handbook
- FAA-H-8083-25, Pilot's Handbook of Aeronautical Knowledge
- FAA-S-8081-29, Sport Pilot Practical Test Standards (Airplane, Gyroplane, Glider and Flight Instructor)

<http://www.faa.gov/library/manuals>

Most of the Documents now can be downloaded in .pdf format

**Written Exams** can be practiced by going to the following website:

<http://www.webexams.com/exam/view?exam=153>