

**NSRCA JUDGING PROGRAM
FAI F3A RULES TEST**

PARTICIPANTS NAME: _____

1. FAI maneuvers are scored from ten to zero in _____ number increments.
2. During the flight the judges observe something fall from the aircraft. The judges should:
 - A. Zero the flight.
 - B. Cease scoring.
 - C. Cease scoring and instruct the pilot to land the aircraft immediately.
 - D. Zero the remaining maneuvers, but score the landing.
3. The principles applied to scoring are precision, smoothness or gracefulness, position, and size. Of these, _____ is the most important.
4. One point should be subtracted for each approximate _____ degrees of deviation from defined maneuver geometry.
5. The flight path (track) of an aircraft is:
 - A. Its heading.
 - B. The direction of the fuselage centerline (attitude).
 - C. The trajectory of its center of gravity.
6. Judging of the geometry of maneuvers is based on the _____ of the aircraft.
7. All aerobatic maneuvers are started and ended with a:
 - A. Straight line.
 - B. Horizontal line.
 - C. Wing wiggle.
 - D. Pilot or helper calling the beginning and end.
8. When no line is flown between two maneuvers, the maneuver just performed is downgraded _____ point and the upcoming maneuver must be downgraded _____ point(s).
9. The length of a line should be considered in the score if:
 - A. The aircraft is under powered and the maneuver is flown with short lines.
 - B. The aircraft draws long lines throughout the maneuver.
 - C. There are several lines with a given relationship within a maneuver.
10. A maneuver contains a roll placed on a line. The length of the lines before and after the roll must be _____.
11. Loops must have a constant radius and be flown in the _____.
12. Clearly seen segmentation (flats) in loops should be downgraded _____.
13. Slight differences in the radius of part loops within a maneuver should be downgraded _____. Major differences should be downgraded _____.

14. All rolls, or part rolls, must have crisp and well-defined start and stop. _____ point is deducted for _____ ill-defined start or stop.
15. Point rolls must hesitate with _____ time on each point and demonstrate _____ roll rate.
16. If a point (hesitation) of a point roll is missing, or an extra point is present the downgrade is _____.
17. The lines in a stall turn maneuver:
 - A. Must have vertical and horizontal flight paths (track).
 - B. Containing roll(s) must have roll(s) in the middle of the vertical lines.
 - C. As long as the top of the box is not exceeded, the length of the vertical line is not a judging criteria.
 - D. Drift of the model aircraft during the stalled condition must be ignored, provided the model aircraft does not drift outside the aerobatic zone.
 - E. All of the above.
18. During a stall turn the aircraft demonstrates a pendulum movement. The downgrade is _____.
19. In a stall turn the model does not pivot around the CG but the pivot is within $\frac{1}{2}$ wingspan. The maneuver should be downgraded _____ point(s)? If the radius of pivot is 2 or more wing spans the maneuver is considered a wing-over and the score should be a _____?
20. During the initiation of a snap roll, the aircraft must demonstrate a definite _____.
21. The aircraft must be _____ throughout a snap roll.
22. An aircraft returns to an un-stalled condition during a snap roll. The maneuver is _____ downgraded.
23. During a spin entry the nose drops as the aircraft stalls, simultaneously the _____ in the direction of the spin.
24. If the aircraft fails to stall or is snap rolled into the spin the score is _____.
25. A near _____ downline of _____ length must be held after spin rotation stops.
26. In an Immelman turn, a line flown before the half roll should be _____.
27. Half, and Half-Reverse Cuban 8's should be flown with the _____ of the $\frac{1}{8}$ loop the same as the $\frac{5}{8}$ loop.
28. A Rolling loop is flown with the top and bottom loops round; the half rolls must be _____ with the loops.
29. During a one roll rolling loop the following must occur:
 - A. The loop must be _____.
 - B. The roll must be _____.
 - C. The wings are in the _____ of the loop at 3 and 9 o'clock positions.

30. All maneuvers are required to be wind corrected in such a way that the _____ of the maneuver is preserved by the aircraft's _____.
31. Center maneuvers that are displaced should be downgraded according to the misplacement in the range of _____ points.
32. The downgrades for flying a small part of a maneuver beyond the 60° boundaries should be _____.
33. The downgrade for flying a most of the maneuver beyond the 60° boundaries should be _____.
34. Box violations that occur near the 150-meter line should be downgraded _____.
35. It may be _____ to fly a large aircraft on a line 175 meter in front of the judges.
36. Maneuvers performed on a line greater than 175 meters should be _____ and maneuvers flown in excess of 200 meters must be _____.
37. When appropriate, entry and exit of center maneuvers will be at the _____.
38. The entry and exit altitudes of turnaround maneuvers may be different. True / False
39. In asymmetrical rolling maneuvers beginning with a snap roll and followed by another rolling element, the hesitation between elements should be _____.
40. A Reverse Top Hat must always be flown with the horizontal leg _____.
41. During reverse spins, the reversal must be _____.
42. A Rolling Circle must demonstrate these qualities:
 A. _____ roll rate.
 B. Constant _____ of circle.
 C. Entry and exit at _____.
43. You notice that there is no place on the FAI Score Sheet for takeoffs and landings. This is an error and takeoff and landing should be scored 0 or 10. True / False
44. The first radius of a maneuver defines the radii for all others in a maneuver. True / False
45. For snaps, if the stall/break does not occur and the model aircraft barrel-rolls around, the manoeuvre must be severely downgraded (more than 5 points). Similarly, axial rolls disguised as snap-rolls must be severely downgraded (more than 5 points). True / False
46. The pilot lands in the opposite direction of takeoff. The entire flight should be zeroed because the sequence was disrupted. True / False
47. **Rolling Circles** may be performed out to 350 meters without downgrade. True / False

48. FAI F3A rules require that the Take-off, Landing, box entry, and box exit be called by the flyer or helper. True / False
49. Scoring is to cease _____ minutes after the pilot is given permission to start the aircraft's engine. There is no penalty if the last maneuver has been completed and the model is still airborne when the time expires.
50. A _____ standard of judging is very important. Being consistently high or low is unacceptable if the scores are not a _____ of the maneuver performed