



2021
Revalidation and Currency Exam



Introduction

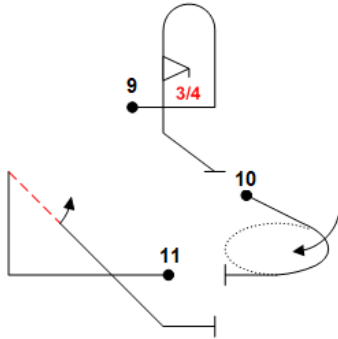
IAC judges must pass the annual Revalidation & Currency ("R&C") exam with a score of 80% or better to remain qualified to act as a Grading Judge or Chief Judge. If you do not achieve that score, please contact the Judges Program Chair at judgeschair@iac.org for a review and reset.

While we are happy to provide this printable version of the exam, you must submit your answers online at: <https://www.iac.org/exam/2021-judges-revalidation-currency-exam> (member login required).

You will also need a computer or smart phone to view the video associated with question #7 and a copy of the IAC Contest Rules, available at www.iac.org/download-contest-rules (member login required).

Questions

1. The competitor was to fly the figures shown below:



The Judges see the competitor fly figure 9 as drawn on the sequence form. Then the Judges see the competitor fly a shark's tooth (aka wedge) on the Y-axis. The competitor then wags his wings to signal a break. The competitor circles to restart on the X-axis flying from the Judges right, wags, and flies Figure 11 from right to left. As a Grading Judge, what should you do?

Hint: 26.3.1; 26.5

Choose one:

- A. Award an HZ for skipped figure 10, ignore the first execution of figure 11, and award a numerical grade for the second execution of figure 11.
- B. Award an HZ for skipped figure 10, award a numerical grade for the first execution of figure 11 and assign that grade to figure 10 on the Form A. Grade the second execution of Figure 11.
- C. Award a grade of HZ to figure 10, award a grade of HZ to figure 11 for execution on the wrong axis, award no grade for the second execution of figure 11 and grade the following figures.
- D. Award a grade of HZ to figure 10, award a grade of HZ to figure 11 for execution on the wrong axis, award a grade of HZ for figure 12 (not shown) as the second execution of figure 11 is an inserted figure.

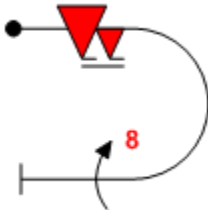
2. A competitor flies a four-point roll, pausing for one second at the first point, two seconds at the second point, and one second at the third point. What is the correct deduction?

Hint: 28.21.4

Choose one:

- A. 2 points
- B. 0.5 points
- C. No deduction
- D. 1 point

3. Flying the figure shown below with a 20-knot wind on the X-axis, the competitor executes the snap roll and eight-point roll flawlessly, but the angle between the start and end of the half-loop is 30 degrees from vertical. You **must** award a grade that:



Hint: 27.10.4

Choose one:

- A. Ignores the fact that the start and end of the half-loop are not vertically aligned
- B. Deducts six points in accordance with the "1-in-5" rule
- C. Is consistent with the method you use to score other pilots' radii
- D. Reflects the outstanding snap roll and eight-point roll

4. The maximum number of figures allowed in a Sportsman Free program is:

Hint: 23.2.1

Choose one:

- A. 15
- B. 12
- C. 9
- D. No limit

5. The Chief Judge announces that competitors have been allowed a free break due to cloud conditions. A glider enters the box, flies the first six figures of a 15-figure Free sequence, wing wags, and lands. You should direct your recorder to mark a break after Figure 6 and to:

Hint: 34.13.2

Choose one:

- A. Assign the grade of 0.0 to figures 7 through 15 with comment “not flown”
- B. Leave the grades and comment blocks for figures 7 through 15 blank.
- C. Assign the grade of “A” to figures 7 through 15
- D. Assign the grade of HZ to figures 7 through 15 with comment “not flown”

6. In the midst of a flight program, the Chief Judge observes that one Grading Judge awards all figure grades 7.0 or 8.0, never awards HZ's, and often appears to be looking away from the competitor flying. Meanwhile, the other Grading Judges have been awarding grades in the range of 2.0 to 9.5 as well as several majority HZ's. What is the appropriate action for the Chief Judge?

Hint: 30.3; 32.4.1

Choose one:

- A. Take that Grading Judge aside, go over what the scores should be, and change that Grading Judge's Form A's.
- B. Remove the Judge from the Judges Line. The Judge's grades are not sent to the scoring computer.
- C. No action needed.
- D. Remove the Judge from the Judges Line. The Judge's grades remain in the scoring computer.

7. The competitor was to fly the figure shown below.



→ Please play the video at

<https://www.iac.org/sites/www.iac.org/files/GoodwinThomasUnIPwrKnownFigure5-2.mp4>

Based on what you saw in the video, the appropriate score is:

Hint: 27.8.3

Choose one:

- A. 10.0
- B. 5.0
- C. HZ
- D. 0.0

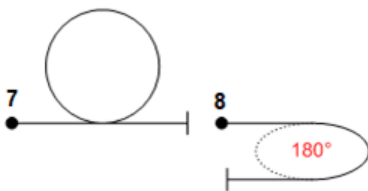
8. You have volunteered to be on the Contest Jury. A competitor has submitted a protest that on a Form A a grade of 0.0 was awarded for a figure and the Remarks box is blank, providing no reason. The grievant requests that the grade be changed to an Average and the scores re-posted. You should vote to:

Hint: 26.2.2, 32.2.1, 31.5.8(g)

Choose one:

- A. Deny the protest because no remark is required
- B. Approve the protest with the 0.0 grade changed to a C
- C. Approve the protest with the 0.0 grade changed to an HZ
- D. Allow the Grading Judge to assign a higher score for the figure.

9. The competitor is to fly the figures shown below.



As the competitor finishes the loop you state to the Recorder "7.5" and then you observe that the competitor banks into the turn at the same instant that the aircraft nose reaches the level flight attitude. As a Grading Judge you:

Hint: 26.7

Choose one:

- A. State to your Recorder “Change that! 6.5” and make a mental note to deduct one point from the turn as well
- B. Do nothing. The competitor can finish one figure and immediately start the next.
- C. Grade figure 8 as an HZ
- D. Mentally note that you will reduce the figure 8 grade by two additional points for the omission of a line between the figures.

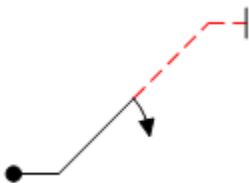
10. As a Grading Judge, while waiting for the next competitor to be cleared into the box, you see an aircraft in the holding pattern do a two point roll and resume circling. At the contest briefing the Chief Judge stated that the safety check maneuver shall be done on base leg approaching the box. You should:

Hint: 14.3

Choose one:

- A. Notify the Chief Judge that the competitor in the hold has performed an aerobatic figure outside the briefed location.
- B. Do nothing. The competitor may choose to do multiple safety check maneuvers in any location.
- C. Downgrade the competitor's Presentation score.
- D. Award a HZ for the first figure.

11. The competitor is to fly the figure shown below.



As a Grading Judge you observe the roll start at a good rate, slow but not quite stop at the 90 degree point, then speed up and then finally stop in the expected wings level 45 attitude. Observing that roll you downgrade the figure score:

Hint: 28.20.1



Choose one:

- A. 2.0 points
- B. No deduction
- C. 0.5 points
- D. 1.0 points

12. A competitor completes a Hammerhead to their left with a strong wind from their right. The aircraft does not climb or descend during the pivot, and you see no heading, roll or pitch errors. However, the aircraft drifts approximately two full wingspans downwind during the pivot. Your grade should be:

Hint 28.8.5

Choose one:

- A. 4.0
- B. 0.0
- C. 7.0
- D. 10.0.

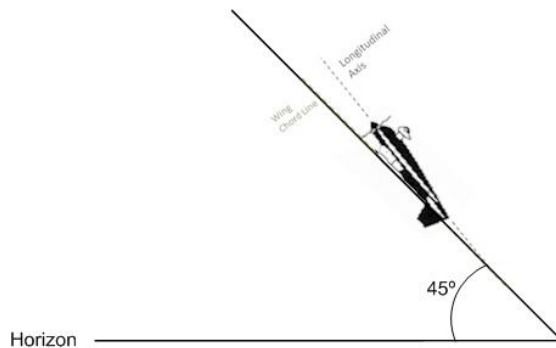
13. During the performance of a sequence a Safety Pilot may, without incurring a penalty against the competitor:

Hint: 4.5.4, 4.5.5

Choose one:

- A. Remind the competitor to check their position in the aerobatic box
- B. Manipulate the controls as needed for safety
- C. Ask the competitor what figure comes next
- D. None of the above

14. As a Grading Judge you observe a Decathlon pull to 45° up, execute a half roll to inverted, and continue up the 45° line appearing like the illustration below.



Observing this competitor you award a downgrade of

Hint 27.2

Choose one:

- A. 0.5 points
- B. 1 point
- C. 1.5 points
- D. No downgrade

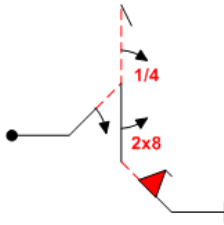
15. The Contest Jury may NOT:

Hint: 31.1.1

Choose one:

- A. Disqualify a competitor for taking a practice flight after completing the Known program
- B. Waive the wind limits
- C. Change a HZ to "C" as the result of a protest
- D. Accept a protest filed by a Grading Judge regarding a competitor that they had scored

16. A competitor is to fly the figure shown below.



As a Grading Judge you observe that

- The first 45 line appears to be 45,
- The first half-roll is 5 degrees short,
- The line after the first roll is visibly but not significantly shorter than the line before the roll,
- The competitor fixes the under roll error during the push to vertical to achieve a vertical line with the wings aligned with the Y-axis,
- The vertical line is flown with the attitude 5 degrees negative (nose short of vertical after the push).
- The $\frac{1}{4}$ roll appears to be 90 degrees of rotation but one wing is “dragging” with the longitudinal axis of the aircraft 5 degrees off vertical,
- The hammerhead rotation appears to be executed to earn no downgrades,
- The first point of the 2x8 roll appears to be 60 degrees of rotation,
- The second 45 line appears to be 40 degrees,
- The half-snap is on axis and stops wings “level” and in the 45 degree attitude,
- The line after the half-snap appears to be twice as long as the line before the snap,
- The competitor completes the figure on the correct box axis and flying in the correct direction

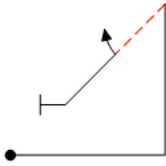
The highest grade that you award the competitor for this figure is:

Hints: 27.6; 27.9; 27.3; 27.4

Choose one:

- A. 5.0
- B. 0.0
- C. HZ
- D. 1.0

17. A competitor is to fly the figure shown below



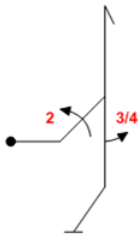
As the aircraft pitches over from the vertical line to the inverted 45 line, its CG track descends somewhat rather than following a constant radius. The **minimum** downgrade for that error is:

Hint: 26.1.4, 27.10.4

Choose one:

- A. No downgrade
- B. 0.5 points
- C. 1.0 points
- D. 2.0 points

18. A competitor is to fly the figure shown below.



As a Grading Judge you observe that after the pivot at the top of the vertical line the competitor first rolls 10 degrees left then reverses the direction of the roll to complete the roll canopy towards you, with the wings on the X-axis. Observing the roll you:

Hint: 26.3.1, 27.6.1

Choose one:

- A. Grade the figure 0.0 and note "Roll wrong direction."
- B. Apply 2.0 point downgrade
- C. Apply 0.5 point downgrade
- D. Grade the figure HZ and note "Reversed roll direction"

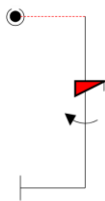
19. Intermediate Free Sequences must include a Snap Roll?

Hint: 23.4.1.2

Choose one:

- A. True
- B. False

20. A competitor is about to fly the following figure:



The Grading Judge must award a HZ if:

Hint: 27.8.4, 26.3.1(c)

Choose one:

- A. The roll component of the spin and the aileron roll are in opposite directions
- B. The roll component of the spin and the aileron roll are in the same direction
- C. At the start of the spin, the aircraft rolls more than 90 degrees before the nose drops
- D. Either B or C

21. A contest site has a large swamp on its back side, making it impossible to put a Boundary Judge there. When submitting the contest sanction request to IAC, the contest organizer(s)...

Hint: 3.3

Choose one:

- A. Must include a request to deviate from rule 7.5.1
- B. Must include a request to deviate from rule 7.4.1
- C. Must submit a diagram showing the box with only the planned Boundary Judge stations.
- D. Do not need approval from IAC headquarters.

22. Which of the following statements is correct?

Hint: 28.18.1, 28.19, 28.16.2, 28.8.2

Choose one:

- A. Square Loops, Double Humptys, and Aresti Family 3 figures all have matching radii requirements
- B. Reversing P-Loops must start and end at the same altitude
- C. The Looping Lines of a Horizontal 8 must be of identical size.
- D. For Aresti Family 5 figures the exit altitude must be lower than the entry altitude

23. A competitor is to fly the figure shown below.



You observe the figure begin with the nose pitching towards the aircraft canopy but as the aircraft reaches the inverted flight attitude, continuing to rotate, the aircraft nose appears to have returned to the line of flight and the aircraft tail is no longer appearing to rotate off-axis in a corkscrew motion. The aircraft continues on-axis rotation until it returns to wings level flight. The highest score that you award for this figure is:

Hint: 28.22.1; 28.22.7; 26.3.1(c)

Choose one:

- A. 10.0
- B. 0.0
- C. 5.0
- D. HZ - ceased autorotation with more than 90 degrees of rotation remaining



24. Glider rules are distributed throughout the Rule Book and marked with a special symbol:



Hint 34.1

Choose one:

- A. True
- B. False

25. The Contest Jury may authorize an Optional Break if:

Hint: 12.6.1

Choose one:

- A. The charted altitude of the airport is 3500 ft MSL or higher
- B. The current calculated density altitude exceeds 5,000 ft
- C. The forecast high temperature for the day would result in a calculated density altitude of over 5,000 ft
- D. The ceiling is less than 5,000 ft AGL