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2020 JUDGES REVALIDATION & CURRENCY EXAM

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Question 1

The competitor shown was to fly a 45 down-line. You may assume that the bottom of the picture is parallel to the horizon.



As a Grading Judge you would downgrade the competitor for this part of the figure

Your answer	Choice	Correct?	Feedback
	A. 0 Points		
	B. 1 Point		
	C. 3 points		
	D. 6 Points		



The competitor is expected to be flying the 45 degree pitch attitude. The difference between 45 degrees and the pitch attitude of the competitor pictured is large.

Figure 1 0.0. Figure 2 0.0 as the half-roll is an inserted figure.

The competitor is allowed to recover from the error by half-rolling to the correct attitude for the next figure. This is ignored by Grading Judges and the Chief Judge records an implicit interruption.

Question 3

As a Grading Judge you observe a very rapid rotation and you are not sure if the pilot flew a one and one-quarter turn spin or a one and three-quarter turn spin. You instruct your recorder to mark a HZ for the score, and put a reserve score of 8.0 in the comment box for that figure. Other judges have the same question, and a judge's conference is called. As a result of the judge's conference, you decide that a one and one-quarter turn spin was flown. The rules allow you to instruct your recorder to line out the HZ and change the score to an 8.0

Your answer	Choice	Correct?	Feedback
	True		
	False		

After a Judge Conference, a Grading Judge has the options of

1. Retaining the figure grade marked on the Form A
2. Changing the figure grade to an HZ
3. Changing the figure grade to a "CA" for Conference Average

Question 4

A competitor's spouse volunteers to serve as a Boundary Judge for the category that the competitor is flying. The Volunteer Coordinator is obligated to decline the offer as the Official Contest Rules prohibit this.

Your answer	Choice	Correct?	Feedback
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	True		
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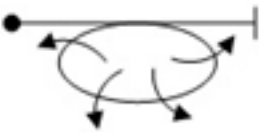
	False		
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A spouse may not serve as a Grading Judge but may serve in any other contest role.

Question 5

The competitor is to fly the figure shown below.



During the first 270 degrees of the figure, a pilot accumulates in excess of ten points in score deductions. During the final 90 degrees of the figure, the pilot clearly and unambiguously snap rolls approximately 45 degrees, recovers and rolls and yaws to the exit heading. As a Grading Judge you award a grade of

Your answer	Choice	Correct?	Feedback
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	A. 0.0		
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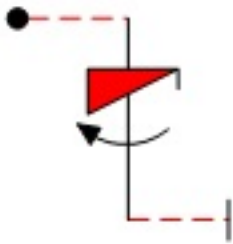
B. HZ



When a competitor's execution of a figure earns both a 0.0 and an HZ, the HZ takes precedence.

Question 6

A competitor is to fly the figure



As a Grading Judge you observe the inverted spin rotate clockwise, a pause, and the roll rotate counter-clockwise. Your figure grade is

**Your
answer**

Choice

Correct? Feedback

A. HZ - The roll axis for an inverted spin is opposite that of the yaw axis. During the spin, pilot yawed to the left, and so rolled to the right. The aileron roll was flown to the right, which is the same direction as the spin roll axis, not the opposite direction.



B. A numerical grade based on the observed direction of rotations being opposite.



C. 0.0 - The roll axis for an inverted spin is opposite that of the yaw axis. During the spin, pilot yawed to the left, and so rolled to the right. The aileron roll was flown to the right, which is the same direction as the spin roll axis, not the opposite direction.

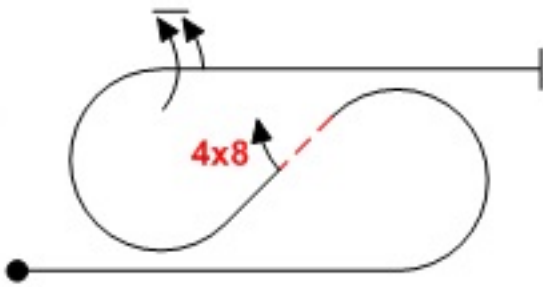
D. "A"

The fine print of the rulebook grading criteria for spins states that the spin's roll component determines the official direction of the spin for grading purposes. An upright spin has the yaw and roll coupled to be in the same direction. Left spin has left yaw and left roll. Right spin has right yaw and right roll.

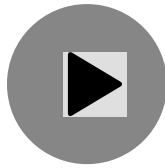
Inverted spins have the yaw and roll coupling opposite. That is a left foot inverted spin has left yaw (clockwise to the observer below) but right roll. The rulebook criteria makes an inverted left foot spin's official direction to be "right". This formula makes the rulebook direction of spin match what the Judge sees from below. That is when the competitor executes an inverted left foot spin, the Judge sees rotation to the right, and an inverted right foot spin presents rotation to the left.

Question 7

he competitor was to fly the figure



The 4x8 on the 45 down line was executed as shown in this video



DESCRIPTION:

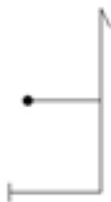
Basic MP4 video of an Advanced competitor executing a laydown S

As a Grading Judge you observe the 4x8 roll element to have

Your answer	Choice	Correct?	Feedback
	A. No score downgrades		
→	B. Short first point, long third point	✓	
	C. Only 3 points		
	D. 4X different lengths of stops at points		

Question 8

The competitor was to fly the figure



on the X-axis, into the wind. The competitor executed this figure as shown in this video. You can assume that the bottom of the image is parallel to the horizon and that there is no cross-box wind.



DESCRIPTION:

Basic MP4 of a Decathlon hammerhead

As a Grading Judge, you observe the execution of the pivot and reduce the figure score by

Your answer	Choice	Correct?	Feedback
	A. 0 Points		
→	B. 4 Points	✓	
	C. HZ		

D. 8 Points

Reduce the figure grade by 1 point for each half-wingspan that the pivot is “flown over” after the first ½ wingspan.

Question 9

As you sit down in your Grading Judge seat at a 2020 contest, you review the Free Program Form A for an Intermediate competitor. You observe that the Presentation K box printing states “8” which has been lined out and over-written by hand with the number “15”, and the “Including Presentation” box printing states “198” which has been lined out and over-written by hand with the number “198”. Based on your observation you

Your answer	Choice	Correct?	Feedback
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	A. Hand the Form A to your recorder and get ready for the competitor to dive into the aerobatic box.		
--	--	--	--

	B. Mark the Presentation Grade “HZ”		
--	-------------------------------------	--	--

	C. Mark the Presentation Grade 0.0		
--	------------------------------------	--	--



	D. Notify the Chief Judge that the Free Program is illegal.		
--	---	--	--



For the 2019 competition season the hand writing of the changed Presentation K

onto previously signed Free Programs. For the 2020 competition season onwards Free Programs must be copied onto the newer Form A's that have the correct Presentation K printed on them. The Free Program must then be checked, and signed by a Judge who's name appears on the IAC website's Current Judges List for the new year.

Question 10

The competitor was to fly the figure



The competitor executed this figure as shown in this video. You can assume that the bottom of the image is parallel to the horizon.



DESCRIPTION:

Basic MP4 video of a competitor flying a half-loop down and drawing a line before the roll combination.

As a Grading Judge, you observe the competitor's transition from the end of the half-loop and the start of the $\frac{1}{4}$ roll and reduce the competitor's figure grade by

Your answer

Choice

Correct?

Feedback

A. 0 Points



B. 2 Points



C. 4 points

D. HZ

Between the end of the nose of the aircraft pitching around the half loop the competitor paused then pushed the nose up and after a visible delay, began the first roll. The half-loop followed by a roll is flown with no line between the half-loop and roll. Drawing a line requires a downgrade. Drawing a line requires a downgrade.

Question 11

The competitor was to fly the figure





The competitor executed this figure as shown in this video. You can assume that the bottom of the image is parallel to the horizon.



DESCRIPTION:

This basic MP4 video shows a competitor executing a late snaproll at the top of a loop.

As a Grading Judge you observe the placement of the snap roll and reduce the competitor's figure grade by

Your answer	Choice	Correct?	Feedback
	A. 10 Points		
	B. 0 Points		
	C. 1 Point		
	D. 4 Points		

The Grading Judge is to calculate the angular difference between the center of the roll and the apex of the loop, and then reduce the figure grade by 1 point per 5 degrees.

Question 12

In January you, as a Regional Judge, review your Judging credits on the IAC web site and see that during the previous year you served as a Grading Judge for 23 Sportsman flights. The last Judges school that you attended was 3 calendar years ago. Once you pass this Revalidation & Currency Exam your name will appear on the IAC web site's Current Judges List – True or False?

Your answer

Choice

Correct?

Feedback

True



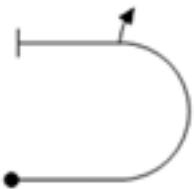
False



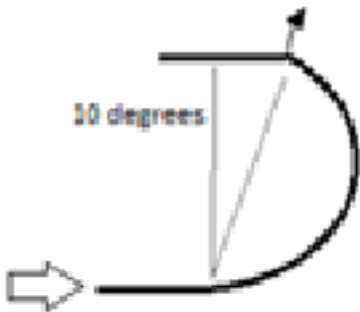
Please see 2.6.3 Currency Requirements For Regional And National Judges

Question 13

A competitor is to fly the Aresti Family 7 figure shown below:



As a Grading Judge, you observe the flight path



You will apply a score downgrade to this figure of at least which of the choices below?

Hint: Score deductions for failure to wind correct and score deductions for variations in radius are independent.

Your answer

Choice

Correct? Feedback

A. -2 points for the changes in radius and
-2 points for the failure to wind correct.



B. -2 points for the change in radius.



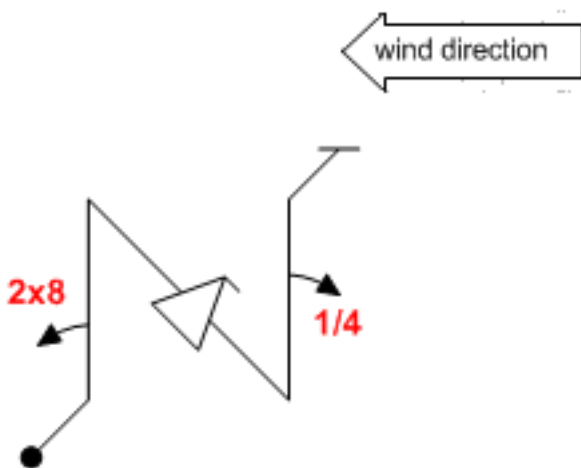
C. -4 points for the change in radius and -3
points for the wind correction error.

D. -2 points for the wind correction error.

Judge can see a looping segment that appears to constantly change radius. The diagram is an illustration of that. So what method do you apply to appropriately downgrade the figure grade? If you do not, you are unfair to the competitors who do a better job of wind correcting and flying a good radius. An appropriate method is to mentally calculate the amount of wind correction error and reduce the figure grade by that error. The diagram shows that the top of the looping segment is 10 degrees off from being directly over the start of the looping segment. Based on that we can apply a 2 point downgrade, one point per 5 degrees, to the figure grade.



Question 14

The power competitor is to fly the figure below.



You observe the competitor enter the figure flying away from you on the Y-axis, fly the 2x8 roll to the right on the first vertical line. The line after that 2x8 roll is visibly shorter than the line before the roll. The corner from the first vertical to the interior 45 line is oval. The 45 line is flown downwind. The snap roll is centered on the 45 line. The corner from the 45 line to the second vertical line appears to be constant radius. The $\frac{1}{4}$ roll on the second vertical line is executed to the left, with the line after the roll visibly shorter than the line before the roll. The competitor exits the figure flying away from you.

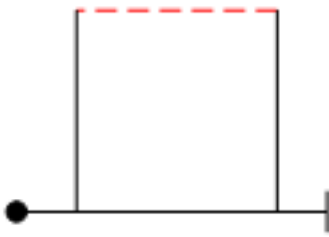
Based on the description above, the highest score that this competitor has earned is:

Your answer	Choice	Correct?	Feedback
	A. 7.5		
	B. HZ		
	C. 8.0		
	D. 8.5		

Please see 7.1.6 Directionality Within Figures

Question 15

A competitor flies a 7.4.3.1 Square Loop.



You observe the competitor to fly the corner at the top of the first vertical up at $\frac{1}{2}$ the radius of the first corner flown from the horizontal entry line to that first vertical line.



The competitor flies a top, inverted, line to be $1 \frac{1}{2}$ times the length of the first vertical line.

You observe that the corner from the top line to the vertical down line is flown with the same radius as the corner onto the top, inverted line.

The vertical down line is flown to return to horizontal flight at the entry altitude, and you observe the competitor carving a corner radius for the fourth corner equal to the radius of the first corner.

The competitor is then in horizontal flight for a distance equal to the top, inverted, line before starting the next figure.



The errors described here result in the competitor has earning a maximum figure score of ?

Your answer	Choice	Correct?	Feedback
	A. 5.0		
	B. 4.0		
	C. 2.5		
	D. 1.0		

The corners and the lines of a square loop use the first corner and first line to evaluate the corners and lines that follow. Use the line length rule to evaluate. Visible variation downgrade 1 point 2:1 or 1:2 variation downgrade downgrade 2 points, etc.

Question 16

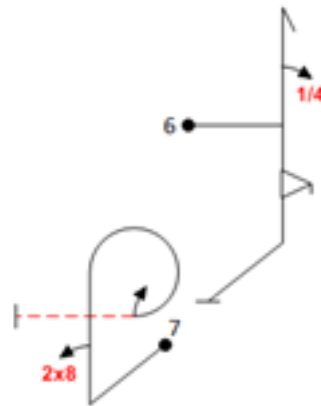
A competitor flying a Family 6 Tailslide is observed to stop at the top of the vertical up line pitched 5° from vertical, slide backwards in the same attitude, then pitch to the vertical down line. This competitor has earned which score downgrade? Hint: Family 6 criteria.

Your answer	Choice	Correct?	Feedback
	A. 0 pts		
	B. 1.0 pt		
	C. 2.0 pts		
	D. 4.0 pts		

See rule book 8.5, Family 6. A Tailslide has 3 lines. If the competitor finishes the first vertical up line 5 degrees off true vertical, that competitor must do the slide with the same deviation. No other action is possible. So a penalty is applied to the deviation from vertical on both lines. Competitors choose this double penalty so as to ensure that they slide the correct wheels-up or wheels-down attitude. A 2 pt penalty is much better than sliding the wrong way and earning a zero.

Question 17

A Power Advanced competitor exits the figure 6 Hammerhead shown below close to the front of the box, exits the figure on the Y axis flying towards the Judges, wing-wags a break, and flies out the front of the box. The competitor then immediately executes a climbing and diving 180 turn back to the front boundary of the box, wing wags, enters the box on the Y-axis flying away from the Judges and begins executing Figure 7 on the Y axis.



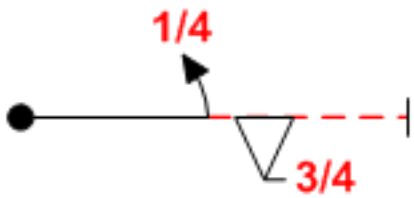
The highest score that the competitor can earn for Figure 7 is:

Your answer	Choice	Correct?	Feedback
➔	A. 10.0	✓	
	B. HZ		
	C. 0.0		
	D. 5.0		

The Y-axis is non-directional. If a competitor breaks between Y-axis figures that competitor may restart flying in either direction on the Y-axis.

Question 18

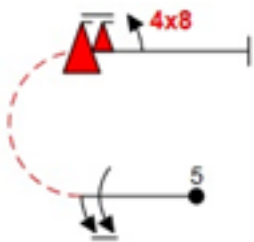
What is the total K-factor for this combination figure?



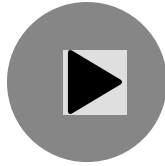
Your answer	Choice	Correct?	Feedback
	A. Not useable, illegal construction		
	B. 13 K		
➔	C. 15 K	✓	
	D. 17 K		

Question 19

The competitor was to fly the figure shown below.





As a Grading Judge you observe the competitor's execution of the figure shown in this video



DESCRIPTION:

This basic MP4 video shows an Unlimited competitor flying a roll combination

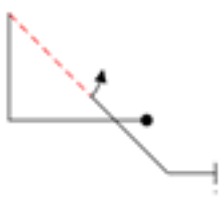
Evaluating this execution of the figure you would award a grade as high as

Your answer	Choice	Correct?	Feedback
	A. HZ		
	B. 5.0		
	C. 7.0		
	D. 10.0		

The roll combination at the top of the half-loop is to be flown to execute both rolls in the same direction. The competitor flies them opposite.

Question 20

The competitor was to fly the figure shown below





As a Grading Judge you observe the competitor's execution of the figure shown in the video.



DESCRIPTION:

This basic MP4 video shows a Sportsman competitor executing a wedge.

As a Grading Judge, observing the 45 down line attitude you would reduce the figure grade by



Your answer	Choice	Correct?	Feedback
	A. More than 2 points		
	B. 2 Points		
	C. 1 Point		
	D. 0 Points		

The 45 down line starts with the aircraft attitude at about 5 degrees too steep. The aircraft attitude is about 10 degrees shallow after the roll so the downgrade for the aircraft attitude is 2 points. The camera and wind make the flight path look very

steep, but 45's are graded on aircraft attitude, not flight path.

Question 21

Which statement is **INCORRECT** regarding minimum weather conditions for competition?

Your answer	Choice	Correct?	Feedback
	A. Weather conditions that allow a climb to top of the box while maintaining a minimum cloud clearance is most desired.		
	B. Contest flights will not be conducted if crosswind for the active runway exceeds 20 knots or steady wind velocity is 25 knots in any direction.		
	C. Flight will not be conducted in discernable precipitation.		
	D. The Contest Jury may authorize glider flights in discernable precipitation.		

Question 22

After the scores for a flight are posted and the raw score sheets are made available to competitors, a competitor comes up to you holding a Form A with the scores

you awarded for their flight and points to a figure score. The score box shows “0” and the Remarks box is empty. The competitor represents that “0” is not a valid score and wants a minority HZ which will improve their figure average score. Your recollection of the figure suggests that the appropriate score would have been an HZ. The appropriate action is which of the choices below?

Hint: Can scores be changed outside of a Judges Conference?

Your answer	Choice	Correct?	Feedback
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	A. Go to the Scorer and tell them that the score should be changed to HZ.		
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	B. Explain to the competitor that the score was “0.0” which became final when the Chief Judge sent the scores to the Contest Scoring Director. A protest of the score can be filed for the Contest Jury to review.		
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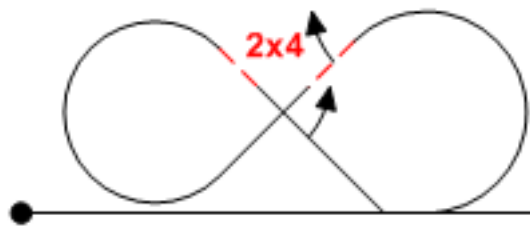


	C. Find the Chief Judge and ask that the score be changed to HZ		
--	---	--	--

	D. Find the Contest Director and ask that the score be changed to HZ.		
--	---	--	--

Question 23

There is no score downgrade if Family 7.8 Horizontal 8's are flown to have different size 5/8 and 3/4 loop segments



Your answer

Choice

Correct?

Feedback

True



False



See rule book 8.5, Family 7.8.1-7.8.8

Question 24

A chapter member asks you to provide the scoring coaching required for Candidate Regional Judges at a pre-contest practice period. You discuss the planned practice program with the competitor who will be flying in the box while the Candidate awards practice scores. You explain that the candidate needs the competitor to fly

**Your
answer**

Choice

Correct? Feedback

A. Any figures that the competitor can think of so that the Candidate Judge is challenged.

B. Preplanned sequences of 4 figures, with breaks in between, so that the coach and the candidate can review and discuss the scores awarded by the Candidate.

C. Multiple passes through the box, flying one figure each pass so that the Candidate can practice awarding scores that are then reviewed by the Judge coach



D. A pre-planned flight program of at least 9 figures



See rule book 2.6.1

Question 25

During a contest flight, midway through figure #7, a competitor's engine goes quiet. The competitor rolls upright and lands on the runway below. The contest Technical Committee examines the airplane. The Chief Judge announces that the Technical Committee has found that the fault was under the control of the competitor. As a Grading Judge, when the competitor dives into the box for the second time you

**Your
answer**

Choice

Correct? Feedback

A. Award new grades for figures 1 – 6, award HZ for figure 7, grade figures 8 through the end of the flight program.

B. Score figure 7 as HZ, change the scores for figures 1 - 6 to HZ, grade figures 8 through the end of the flight program.

C. Observe figures 1 – 6 and change the scores of any figures flown with more defects than the first flight. Score figure 7 as 0.0. Grade figures 8 through the end of the flight program.



D. Observe figures 1 – 6 but leave the original scores unchanged. Score figure 7 as HZ. Grade figures 8 through the end of the flight program.



See rule book 4.18.2 and 4.18.3

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