# **Judging Downgrades Summary**

Ref: BAeA Website 11/10/15 and AAC Regulations 2015

Here is a précis of the principal "faults" that you should look for and the number of marks to deduct whilst you are applying standard CIVA rules of critique to sequence programmes at all levels. Always however refer to the current CIVA Section-6 Rules for the 'official' solution in all matters of judging detail.

# At the entry to and exit from EVERY figure element DEDUCT.

### Horizontal start & finish Lines

Off axis left or right n-deg Climbing or diving n-deg One wing low n-deg No distinct line drawn Flying in wrong direction on the "A" axis

## Family 1 - lines and angles

#### Horizontal 45's & Verticals

Climbing or diving n-deg (before or after roll) Steep or shallow n-deg (before or after roll) Positive or negative n-deg (before or after roll) No line drawn before or after roll Longer or shorter line before or after roll

### Family 2 - turns and rolling turns

#### Turns

Rolling entry or exit (i.e. a "co-ordinated" turn) Bank angle too shallow (less than 60 deg) Bank angle varied **Rolling Turns** Roll rate varied Roll stopped or turn and then restarted Not an even integration of rolls at end Not enough / too many rolls or a flick-roll seen **Both Types** Turn rate or radius varied Climbing or diving in turn **Exit** Was n-deg early or late

# Family 5 - stall turns

#### Up/down Lines

Up/down-line pos/neg/left/right n-deg (before or after roll) Short, long or no line drawn up/down (before or after roll) *The Turn* Turn-around too wide (pivot beyond wingtip)

Rolled or pitched n-deg in turn-around Exit pull or push radius smaller or larger 1 point/5 deg 1 point/5 deg 1 point/5 deg 1 point each Mark = Hard Zero (HZ)

1 point/5 deg 1 point/5 deg 1 point/5 deg 1 point each 1 to 3 points

1 to 2 points 1 point/5 deg 1 point/variation

1 point/variation 2 points 1 point/5 deg Mark = hard zero

1 point/variation 1 point/5 deg

1 point/5 deg

1 point/5 deg 1 to 3 points

1 point/wing length 1 point/5 deg 1 to 3 points

# Family 6 - Tail Slides

Up/Down Lines	
Up/down-line pos/neg/left/right n-deg (before or after roll)	1 point/5 deg (was 2 per 5 - beware!)
Short, long or no line drawn up/down (before or after roll)	1-3 points
The Slide	
Visible 'cheat' angle at the top	Mark = Perception Zero (PZ)
No slide seen	1 point/5 deg
Yawed or rolled n-deg in slide	1 to 3 points
Pitched the wrong way (wheels up or down)	Mark = Hard Zero (HZ)

# Family 7 - Loops and Eights

### Half & Full Loops

Large or small radius at top or in 1'st/2'nd etc. quarter	1 to 3 points
Line drawn between roll and looping segment	2 points
Roll not central in looping segment	1 to 3 points
Off axis during looping segment	1 point/5 deg
Higher or lower exit	1 to 3 points
Eights	
Smaller or larger 2'nd half	1 to 3 points
Lower or higher 2'nd half (horizontal)	1 to 3 points
With Corners	
Longer or shorter 2'nd etc. line length	1 to 3 points
Up/down-line pos/neg/left/right n-deg {before or after roll}	1 point/5 deg
1'st/2'nd etc. 45 steep or shallow {before or after roll}	1 point/5 deg
Horizontal segment off axis left/right/up/down	1 point/5 deg

# Family 8 - Combinations of Lines, Angles and Loop, Humpty Bumps

#### Humpty Bumps

Up/down-line pos/neg/left/right n-deg (before or after roll)	1 point/5 deg
Rolled or yawed in half-loop	1 point/5 deg
Push instead of pull, or pull instead of push	Mark = hard zero

# Family 9 - Rolls and Spins

Slow Rolls	
Rolled n-deg short or too far	1 point/5 deg
Roll barrelled (pitched and/or yawed whilst rolling)	1 point/5 deg
Roll rate varied	1 point/variation
Axis changed left/right/up/down n-deg during/after roll	1 point/5deg
Hesitation at random point	2 points
Wrong type of roll substituted	Mark = Hard Zero (HZ)
Hesitation Rolls	
Climbed or sank in knife	1 to 2 points
Slower or faster 2'nd etc. half/quarter/eighth	1 to 3 points
Under/over rotated 1'st/2'nd etc. half/quarter/eighth	1 point/5 deg
Hesitation missed (wrong type of roll substituted)	Mark = Hard Zero (HZ)
Flick Rolls	
Part flicked and part aileron'd roll	2 to 5 points
Not flicked (no stall seen)	Mark = Perception Zero (PZ)
Positive instead of negative, or neg instead of pos	Mark = Hard Zero (HZ)
Combinations Of Rolls	
Any line between two rolls	At least 2 points
Significant(?) line between rolls	Mark = Hard Zero (HZ)
Same direction when opposite required (or vice versa)	Mark = Hard Zero (HZ)
Wrong number of rolls where linked	Mark = Hard Zero (HZ)

Rolls immediately prior to or just after looping	
Any line between stopping loop/roll and starting roll/loop	At least 2 points
Roll starts before loop finishes	1 point/5 deg (from required line)
Significant line between rolls	Mark = Hard Zero (HZ)
Spin Entry	
Entry not stalled, and/or "rolled" in – not spinning	Mark = Perception Zero (PZ)
Flicked entry (too fast)	Mark = Perception Zero (PZ)
Spin Exit (DJP amended)	
Spin rotation short or too far n-deg	1 point/5 deg
Attitude after was positive or negative n-deg	1 point/5 deg

### The following general points apply to all sequences:

- At unlimited and advanced two half-rolls and a selection of "safety figures" are allowed prior to the start of the sequence. At other levels reduced allowances are made consult the respective national rules.
- The sequence start, end and any intermediate breaks must be signified by three wing rocks.
- Every figure must begin and end on the "A" or "B" axis in erect or inverted level flight.
- The mark for each figure is 10 points minus the sum of the deductions that you judge appropriate.
- The framing mark (out of 10) is judged on the symmetrical and good use of the whole 'box'.

5.1.4.5. The highest marks will be given if the central point of a competition flight is above the secondary axis, and if each figure is optimally placed inside the performance zone. The judge's final decision on a grade for positioning must take into account deductions for asymmetry of the sequence, and non-optimal placement of individual figures.

6.4.1.3. Should a competitor fly a figure at a location, inside or outside the performance zone, such that the accuracy of the flight path or attitude cannot reasonably be determined, a downgrade of 2 points should be applied for each element of the figure that cannot be properly assessed.

6.10.1.1. Even though figures are flown within the performance zone, judges must still consider their positioning in relation to an optimum position where clarity of execution and geometry are at their greatest. This optimum position will vary depending on the aircraft's height and the nature of the figure.

6.10.1.5.Consideration of all the parameters in the few short paragraphs of this section will enable a judge to make a clear decision about any figure that is clearly flown in other than its optimum position. Judging of the particular figure will be difficult, and such bad presentation should be reflected in the positioning grade for the sequence. It would be appropriate to deduct between 0.5 and 1 mark for any such misplaced figure, depending on the severity of the difficulty incurred.

#### <u>Zeros</u>

### 5.3.2. Perception Zero

5.3.2.1. A grade of "perception zero" (PZ) should be given if the Judge considers that the figure is incorrectly flown in respect of a criterion that is a matter of subjective perception, rather than clearly demonstrable fact. For example, if the Judge considers that a flick roll or spin never started proper auto-rotation, that a tail slide did not move backwards by the required amount or that a rolling turn included a flick roll.

5.3.2.2. The Chief Judge should check that PZ's are applied only to manoeuvres where a perception error has been seen, and that a plausible reason has been given. The CJ has no other input regarding the presence of PZ's; they are subjective decisions made by individual judges and there is no

requirement to review or "Confirm" them.

# 5.3.3. Hard Zero

5.3.3.1. A grade of "hard zero" (HZ) should be given if the Judge considers that the figure is incorrectly flown in respect of a geometrical error, as listed below, that is clearly verifiable as a matter of fact. A grade of "HZ" will be given to a figure if:

a) any figure is flown which does not conform to the drawing held by the judges for marking purposes (Form 'B' or 'C'). Note - when a figure is added to a sequence Rule 5.2.5.2 applies;

b) when rolls are superimposed on a turn or loop (Rule 5.3.1.8), the roll is finished but 90° or more of the turn or loop still remains to be flown, or the turn or loop is finished but 90° or more of the roll remains to be flown;

c) any deviation from the prescribed direction (Rules 5.3.1.2 and 5.3.1.3 ) reaches 90°;

d) any other single deviation in geometry/flight path/attitude/rotation (Rule 5.3.1 ) reaches 90°; e) the pre-stated figure or any part of it is omitted;

f) any part of the figure was not visible as it was flown in or behind cloud. If the figure was visible to a majority of judges, then the Chief Judge should instruct unsighted judges to revise their mark from "HZ" to "A".

6.6.1.5. Any figure with both entry and exit lines aligned on the Y-axis must be flown with the exit direction relative to the entry direction as drawn on sequence Forms B or C, i.e. in the same or the opposite direction, otherwise the figure will be marked HZ

7.2.1.1. The awarding of Confirmed hard zero marks is determined by the Chief Judge, if necessary after a judging conference. When a Judge's vote is over-ruled, upward correction of a hard zero will be to a Fitted Value determined by the scoring software. When awarding a hard zero, judges are to write down the nature of the error and are not to give a 'reserve' mark.

7.2.1.2. A Judge has the right to ask for a video review, if it is determined at a Judging conference that his written score is incorrect and he is not in agreement with this ruling.

## 7.2.2. Hard Zeros Given By The Majority Of Judges

The score sheets go to the scorer unchanged, the Chief Judge having checked the Confirmed hard zero (CHZ) box on the score sheet, unless a conference to confirm the facts is demanded by any judge(s). The computer system changes the minority scores to HZ and determines the judges' HZI points for Section 8.8.4.

## 7.2.3. Hard Zeros Given By 50% Or Less Of The Judges

The Chief Judge first determines by means of conferencing whether the hard zero is correct or not. If correct, the Chief Judge will check the "CHZ" box on the score sheet; if not he will leave it blank. The judges must not change their score sheets as a result of the discussion. The score sheets will then go to the scanner and the computer system will then change the incorrect grades and determine judges' HZI points for Section 8.8.4

## 7.5. The Judges

7.5.1.1. It is required that all Judges use an experienced Judge's Assistant (see 2.1.5.2). Judges who do not provide such an Assistant will be excluded.