

Flick Roll and Spin entry criteria, and HZ downgrades A proposal based on practical / evidence based reassessment



Background

At the 2022 CIVA plenary conference changes were approved to the judging rules for Flick Rolls and Spin entries that require the Hard Zero (HZ) to be awarded if certain criteria are not met.

Specifically the criteria mentioned were in paragraph 4.4.2.1:

- i) a flick roll never started proper auto-rotation; (*see B.9.27.2*)
- j) a spin never started proper auto-rotation; (*see B.9.29.6*)

Where these two very dynamic figure elements are concerned, the decision to apply no downgrade at all or award a Hard Zero to the whole figure demands instant assessment from the judge based on an extent of error that is visible only very briefly. What seems acceptable (no downgrade) but can become totally unacceptable (Hard Zero) is an immediate decision. Later review by video to determine whether an HZ should be confirmed may also not be convincing for other judges.

- i. **Flick Rolls:** The combination of key **Pitch -> Yaw -> Autorotate** elements occur in very quick succession and classifying them as “Acceptable” or “Unacceptable” is challenging. Good and bad flicks are relatively easy to identify, however in between these more obvious states minor errors can be extremely difficult to categorise as definitely “OK” or “Not OK”.
- ii. **Spins:** A correctly executed **Stall in level flight with immediate wing-drop and yaw** is fairly easy to recognise, but visible flight-path and attitude errors are not easy to categorise as either “OK” (no downgrade) or “Unacceptable” (HZ). Once again the video with its narrow field of view provides a very limited version of the original as perceived by the judge.
- iii. Minor errors in Flick Rolls and Spins are often extremely difficult to categorise as “matters of fact” when the video is reviewed as it is only the degree of error that provides the clues. Clearly also what is OK for one judge may be less so, even unacceptable, to another.
- iv. If a judge’s honestly given HZ is a minority opinion at a post-flight conference with video review and for whatever reason the HZ is rejected, the judge’s confidence to assess objectively will be affected. This contributes a detrimental influence on the judge’s future selection prospect, an unavoidable added pressure when making the initial assessment.
- v. Experienced Chief Judges normally defer all score-sheets with minority HZ’s for video review because there is always a possibility that the non-HZ judges will change their opinion in support of a CHZ. This significantly affects the flow of paperwork to the scoring office with inevitable delays to checking by competitors and prompt upkeep of the results.
- vi. For the competitor the effect of an HZ on a complex high-K figure with many other judged elements can be extremely damaging. It ignores all other areas of figure execution, which may be good and when considered separately deserve continuing assessment.

During post-flight video review of Flick Rolls and Spins to resolve mixed numeric grades and Hard Zeros it is often unrealistic to identify the degree of error as a “matter of fact”. Judges are naturally reluctant to revise their initial assessments, and experience now shows that frustration with this process has led to avoidance of the HZ for Flicks and Spins unless the error was very obvious and likely to be confirmed. The unavoidable consequence is that confident, good quality judging is being affected and competitors not correctly assessed for poor quality flying.

It is essential that CIVA employs clear and workable rules for judges to grade every aspect of figures and enable appropriate downgrades to be employed. For Flick Rolls and Spins we can now see that the downgrade options set at the 2022 plenary are not satisfactory. At EAC and WAAC this year a very high proportion of all programme-1 flights were subjected to video review, mostly to resolve minority Flick Roll HZ's, the majority of which were rejected because the video was unable to show that the HZ opinions of some were acceptable to other judges as "matters of fact". This proportion reduced in later programmes demonstrating a growing reluctance of judges to freely express their opinions, a poor result for both judges and competitors.

The judges viewpoint

Two workshops were conducted during EAC-23 to discuss Flick Roll and Spin judging. The panel discussed the judging criteria and reached the following unanimous conclusions:

- a) The current judging criteria for Flick Rolls and Spins require no changes. A satisfactory opinion of the observed error(s) can commonly be reached.
- b) The downgrade for error(s) observed during Flick Rolls and Spins should be proportionate to the observed degree of error. The HZ was considered excessive and inappropriate.
- c) Judges should be free to determine an appropriate downgrade in direct proportion to the error(s) seen, i.e. the value of the downgrade should be set in a graduated manner.
- d) Natural pressures will ultimately ensure that downgrades are made at an appropriate level. We must all rely on judges to use their skill and experience at all times, that's their job.
- e) In a complex high-K figure with many elements, failure to meet Flick Roll or Spin criteria should not affect ongoing judgement and proper grading of the remainder of the figure. A shift to "whole figure judging" and therefore away from use of the Hard Zero for these internal elements is considered a fairer way to assess the complete execution of all figures.

The following revisions to Section 6 Part 1 were proposed at EAC to achieve the above:

B.9.27. Family 9.9 - Positive Flick Rolls

Revision to para B.9.27.2. Change final sentence -

From: "However, if both the required pitch change and actual autorotation are not clearly seen, the figure must be given a Hard Zero (HZ)."

To: "However, if the required pitch change and yaw are not clearly seen and/or the observed rotation appears driven by other control inputs a downgrade must be applied ...

Proposed option-1: ... that reflects the severity of the errors detected.

Or: Proposed option-2: ... in proportion to the value of the Flick Roll or Spin within the whole figure, per the guidelines in Table XX.

Table XX

Figures with a single roll or group of rolls	Downgrade up to: 8 points
Figures with two rolls or groups of rolls	Downgrade up to: 6 points
Figures with three rolls or groups of rolls	Downgrade up to: 4 points

Or: Proposed option-3: ... with the fixed value of 5 points.

Revision to para B.9.27.3. Change penultimate sentence -

From: "If the judge considers that a proper flick has not been initiated, then he must give a HZ."

To: "If the judge considers that the flick criteria have not been met, a downgrade must be applied ... *followed by either Option 1, 2 or 3 as above.*"

B.9.29. Family 9.11 and 9.12 – Spins

Revision to para B.9.29.6. Change

From: "If the aircraft never stalls, it is apparent that it cannot spin, and a HZ must be given. You will see "simulated" spins where barrel rolls or flick rolls are offered as spin entries. In both cases, the flight path will not be downward. In all of these cases, the figure will be given a HZ."

To: "If the aircraft never stalls it is apparent that entry to the spin is directly affected, and provided a valid spin does subsequently develop, a downgrade must be given in proportion to the degree of error(s) seen and the relative importance of the spin within the whole figure. You will also see "simulated" spins where barrel rolls or flick rolls are offered as spin entries, in which case the flight path will not be downward and the figure must be awarded a HZ."

Note-1: Whole figure judging

It follows naturally from the foregoing that all Aresti figures with Flick Rolls and Spins deserve to be judged and a score applied to the entire figure, with no individual element leading to an HZ unless any of the usual overall rules apply, i.e. cumulative errors greater than 90°, a physically incorrect element, flight in the wrong direction etc.

Note-2: Table XX (right)

This is offered as a simple optional way to regulate the value of downgrades applied to poorly executed Flick Rolls and Spins within figures.

The phrases "Figures with a single roll / two rolls / three rolls or groups of rolls" can quickly and conveniently be applied to any compound Aresti figure. They are intended to set easily understood practical limits to the value of flexible downgrades, so that errors observed in the Flick or Spin elements are managed in proportion to their importance within the whole figure:

