# IMAC Judging Criteria Quick Reference

### **Mandatory Zeros**

- Omitted figure.
- Added figure (other than corrective maneuver) zeros next correct figure.
- Flying figure other than that depicted by flimsy.
- Break in Sequence zeros the figure in process at time of break.
- Figure partly or completely behind deadline.
- Accumulation of error > 90 degrees.
- Stall Turn flyover > 4 wingspans.



- Stall Turn any visible slide prior to pivot.
- Tailslides no visible slide.
- Tailslides slides wrong way.
- Snaps no pitch departure and or no autorotation, or wrong type pos / neg.
- Spins no stall push entry, snap, or roll entry.
- Point rolls no recognizable pause.
- Point rolls incorrect number of pauses.

# **Downgrades**

#### Lines:

- 1/2 point per 5 degrees for any track error.
- 1 point from each figure for omitted line between figures.
- Line length deviation for lines required to be of equal length:

Visible error
2:1 error
> than 2:1
No line before or after
No line before and after
2 points
4 points
No line before and after
2 points

#### Turns:

- - 1/2 point per 5 degrees < 60 degrees, > 90 degrees.
- - 1 point for any change of turn rate; bank change.
- - 1 point for roll entry and roll exit rate not matching.

#### **Rolling Turns:**

- Change in roll rate
- Change in turn
- Stoppage in roll (other than direction change)
- Altitude change
- Wings not level at roll stoppage
- Turn or roll not complete

#### **Stall Turns:**

- Aircraft "torques off"
- Pivot beyond 1 wingspan
- Pivot not in vertical plane (pitch)
- Pendulum after pivot

#### Tailslides:

- Slide not in vertical plane
- Torquing
- Wings not perpendicular to horizon

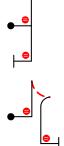
## **Loops and Part Loops:**

- Change in radius
- Lateral displacement (corkscrew)
- Flat spot
- Rolls not centered (apex or bottom)
- Inserted line between part loop and roll

- 1 point per occurrence
- 1 point per occurrence
- 1 point per occurrence
- 1/2 point per 5 degrees
- 1 point per 1/2 wingspan
- 1/2 point per 5 degrees
- 1 point per occurrence
- 1/2 point per 5 degrees
- 1 point per occurrence
- 1/2 point per 5 degrees
- 2 points per occurrence

These part loops must be smooth and constant, but need **not** match any other part loops in the figure.

These part loops must be constant, smooth; identical in size.



#### 3/4 Loops (Goldfish): Loop rules apply 1/8<sup>th</sup> loops not equal - 1 point 45 degree lines – roll centering criteria applies 1/8<sup>th</sup> loop and 3/4 loop radii need not match **Reversing Loops:** Loop rules apply Inserted line between 3/4 and 1/4 loop - 2 points Inserted line between loop and roll - 2 points **Horizontal S:** Loop rules apply 5/8<sup>ths</sup> loops not equal - 1 point 45 line – roll centering criteria applies Vertical S: Inserted line between half loops - 2 points Inserted line before or after 1/2 roll - 2 points Vertical 8s: Loop rules apply Inserted line before or after 1/2 roll - 2 points **Horizontal 8:** Loops rules apply 45 degree lines – roll centering criteria applies 3/4 and 5/8<sup>ths</sup> loops not equal - 1 point Inserted line between roll and 5/8<sup>ths</sup> loop - 2 points **Horizontal Super 8:** Loop rules apply 3/4 loops not equal - 1 point 1/8<sup>th</sup> loops not equal - 1 point 45 degree lines – roll centering criteria applies Horizontal / Vertical 5/8<sup>ths</sup> Loops (Half Cubans / Teardrops): Loop rules apply All part loop radii must be equal - 1 point 45 degree line – roll centering criteria applies P Loops / Reversing P loops: Loop rules apply Joined part loops equal radii - 1 point Inserted line between joined part loops - 2 points Inserted line between part loop and roll - 2 points Vertical lines – roll centering criteria applies 7/8ths Loops (Q Loops): Loop rules apply 45 degree line – roll centering criteria applies Part loop radii need not match **Humpty Bumps / Double Humpty Bumps:** 1/4 Loop radii not equal - 1 point

• Vertical lines – roll centering criteria applies

• *Half loop(s) need not match 1/4 loops, or each other.* 

**Rolls:** 

Change in roll rate
 Over / under rotation
 - 1 point per occurrence
 - 1/2 point / 5 degrees

This document is supplied only as a supplement to the official 2013 AMA Scale Aerobatics Rules and does not supersede the AMA Scale Aerobatics Rules.