# 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
- $\quad>$ than $2: 1$
- No line before or after
- No line before and after
- 2 points
- 3 points
- 4 points
- 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
- $1 / 2$ point per 5 degrees
- $1 / 2$ point per 5 degrees
- $1 / 2$ point per 5 degrees
- 1 point per $1 / 2$ wingspan
- $1 / 2$ point per 5 degrees
- $1 / 2$ point per 5 degrees
- $1 / 2$ point per 5 degrees
- $1 / 2$ point per 5 degrees
- $1 / 2$ 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
$\diamond$ These part loops must be smooth and constant, but need not match any other part loops in the figure.
Ө These part loops must be constant, smooth; identical in size.



## 3/4 Loops (Goldfish):

- Loop rules apply
- $1 / 8^{\text {th }}$ loops not equal
- 1 point
- 45 degree lines - roll centering criteria applies

- $1 / 8^{\text {th }}$ 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

Horizontal S:

- Loop rules apply
- $5 / 8^{\text {ths }}$ loops not equal
- 45 line - roll centering criteria applies
- 1 point


## Vertical S:

- Inserted line between half loops
- Inserted line before or after $1 / 2$ roll

Vertical 8s:

- Loop rules apply
- Inserted line before or after $1 / 2$ roll
- 2 points

Horizontal 8:

- 2 points

- Loops rules apply
- 45 degree lines - roll centering criteria applies
- $3 / 4$ and $5 / 8^{\text {ths }}$ loops not equal
- Inserted line between roll and $5 / 8^{\text {ths }}$ loop

Horizontal Super 8:

- Loop rules apply
- 3/4 loops not equal
- 2 points
- $1 / 8^{\text {th }}$ loops not equal
- 1 point

- 45 degree lines - roll centering criteria applies
- 2 points


Horizontal / Vertical 5/8 ${ }^{\text {ths }}$ 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
- Inserted line between joined part loops
- 1 point
- Inserted line between part loop and roll
- 2 points
- Vertical lines - roll centering criteria applies

7/8 $\boldsymbol{8}^{\text {ths }}$ 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:

- 2 points

- Change in roll rate
- 1 point per occurrence
- Over / under rotation
- $1 / 2$ 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.

