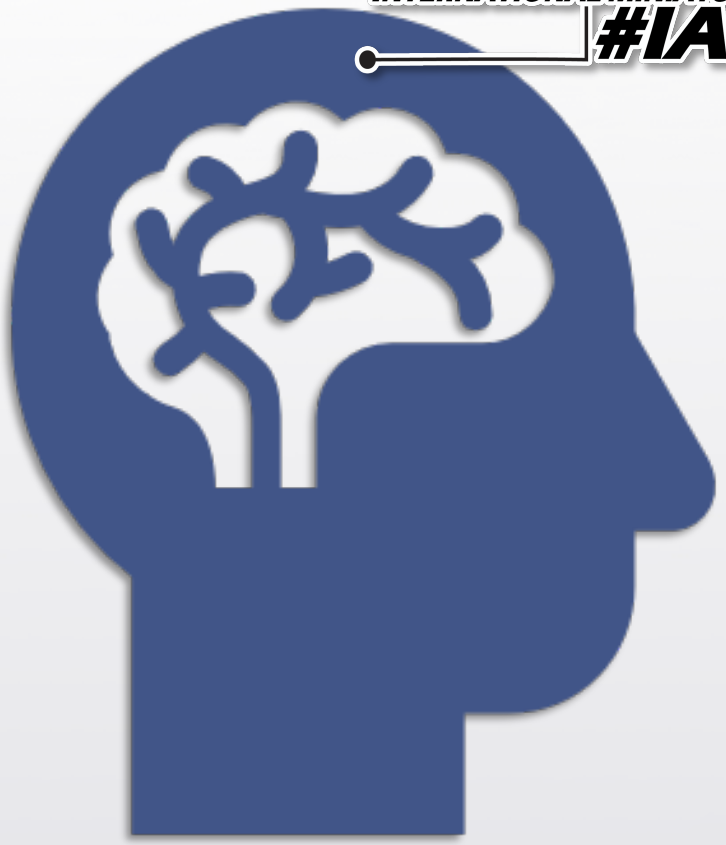
IMAC's MINDSET METHOD

A simple way to understand IMAC criteria

By Adi Kochav



$$Ego = \frac{1}{KNOWLEDGE}$$

The more knowledge we have the less ego we need…

IMAC judges are one of the important courses in IMAC's structure. Therefore they have the responsibility in being the connecting link between the IMAC Club and the pilots.

By inheriting a constant and coherent process of judging in every aspect, it will allow the pilots to have a strong base ground, to understand and fly in a proper way.

This will be feasible only by keeping an open mind and understanding the common sense structuring the IMAC Criteria.

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Bi-directional

The responsibility works in two ways, between the judges and the pilots because of several obvious reasons.

1. IMAC judging method is structured on pilots judging base i.e. pilots should judge in the different contest.
2. Pilots need to know the right and proper way to fly IMAC
3. Pilots need to know how to exploit their knowledge in order to make flying and training more productive in the flying field and out a contest.
4. Dynamic judging

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Productive = Education

EFFICIANT

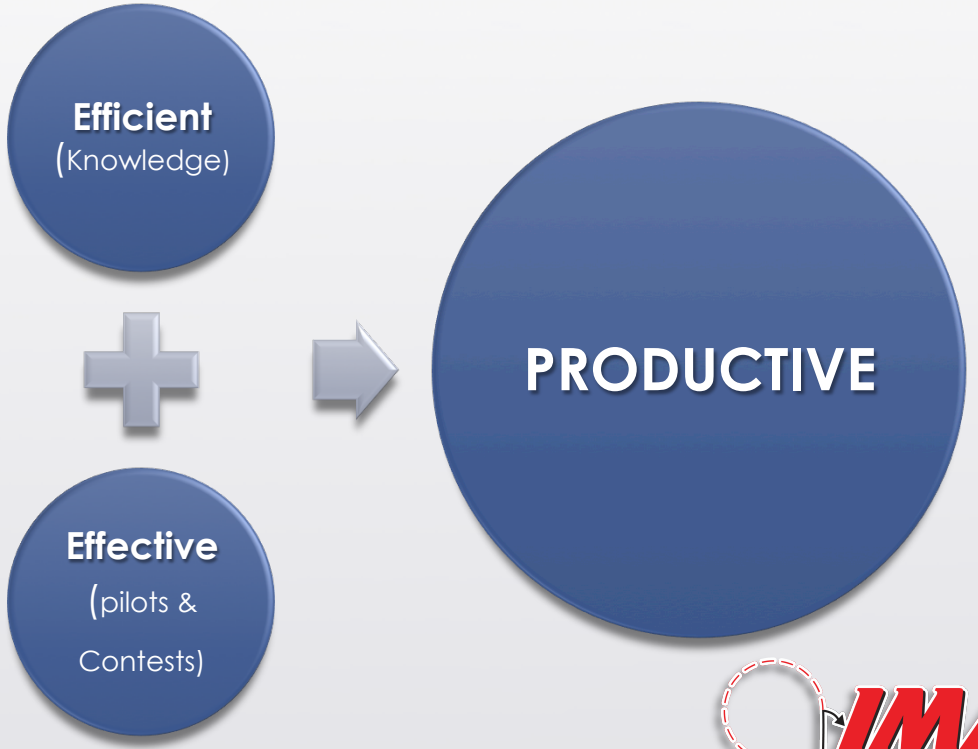
- Contests with less disappointment from judging = knowledge

EFFECTIVE

- More pilots = more contests worldwide

PRODUCTIVE

- Max joy w / Min disappointment = more passion = more pilots = more contest worldwide



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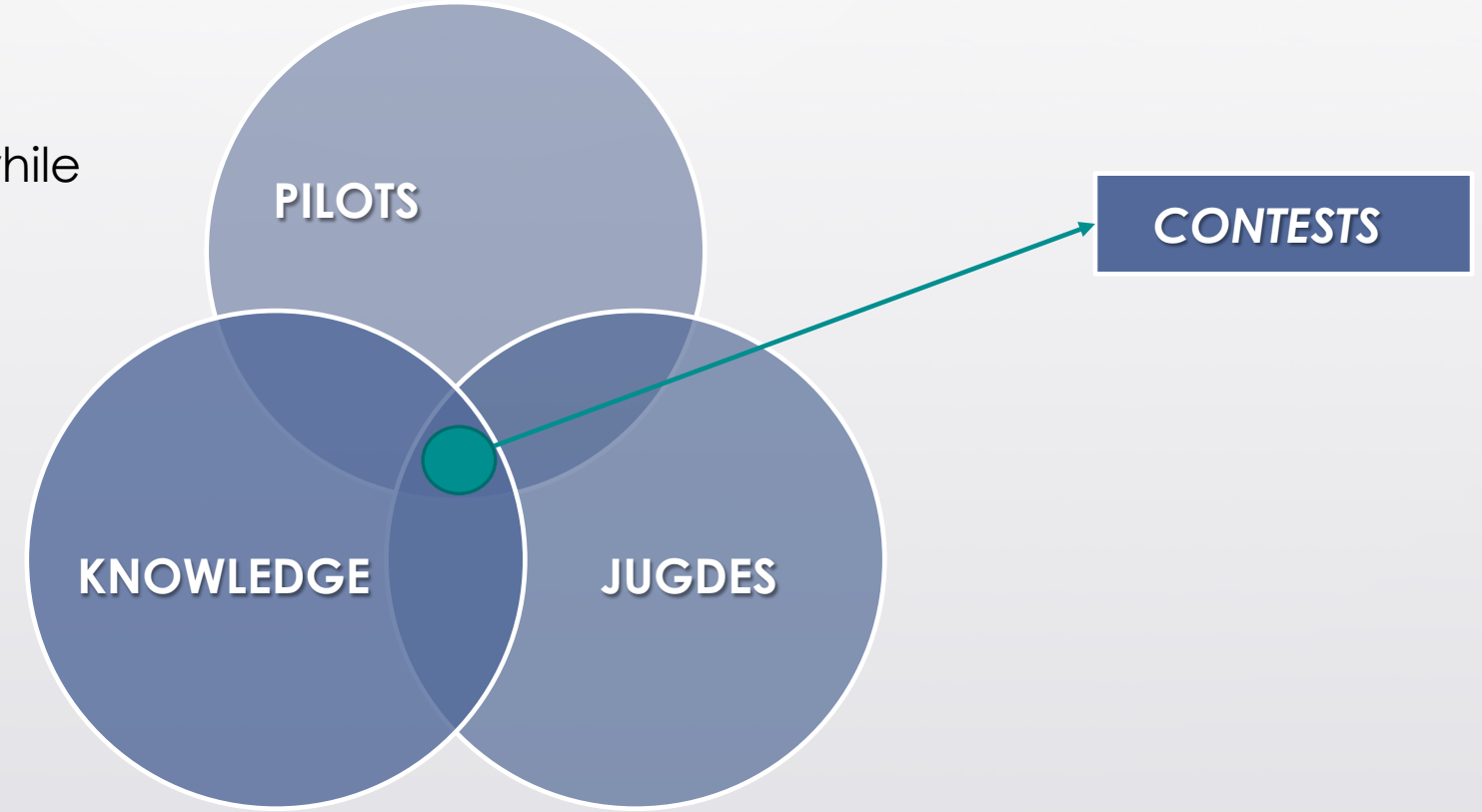
Dynamic Judging

We judge by watching and anticipating the flight path, while the plane is flying

JUDGE IN A LINIER WAY

NOT RETROSPECTIVE



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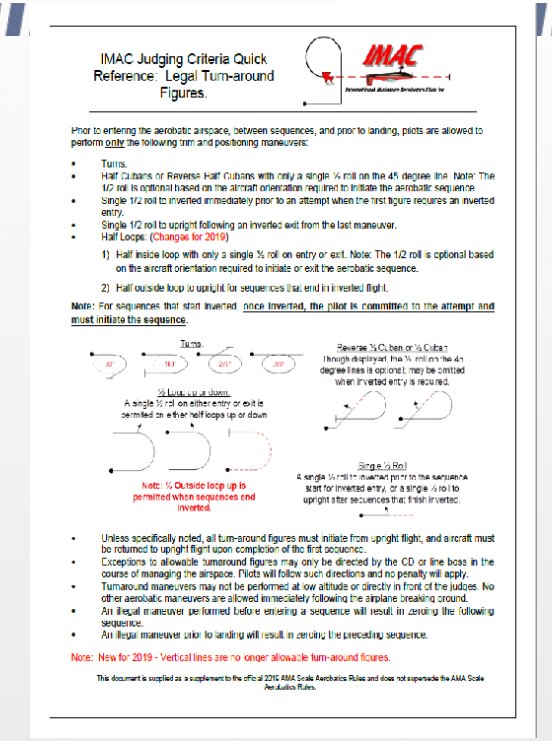


IMAC Judging Criteria Quick Reference: Legal Turn-around Figures.

Prior to entering the aerobatic airspace, between sequences, and prior to landing, pilots are allowed to perform only the following trim and positioning maneuvers:

- Turns.
- Half Cubans or Reverse Half Cubans with only a single ½ roll on the 45 degree line. Note: The 1/2 roll is optional based on the aircraft orientation required to initiate the aerobatic sequence.
- Single 1/2 roll to inverted immediately prior to an attempt when the first figure requires an inverted entry.
- Single 1/2 roll to upright following an inverted exit from the last maneuver.
- Half Loops: (Changes for 2019)
  1) Half inside loop with only a single ½ roll on entry or exit. Note: The 1/2 roll is optional based on the aircraft orientation required to initiate or exit the aerobatic sequence.
  2) Half outside loop to upright for sequences that end in inverted flight.

Note: For sequences that start inverted, once inverted, the pilot is committed to the attempt and must initiate the sequence.

Turns

90° 180° 270° 360°

½ Loop Up or Down

A single ½ roll on either entry or exit is permitted on either half loops up or down

Note: ½ Outside loop up is permitted when sequences end inverted.

Reverse ½ Cuban or ½ Cuban

Though displayed, the ½ roll on the 45 degree lines is optional; may be omitted when inverted entry is required.

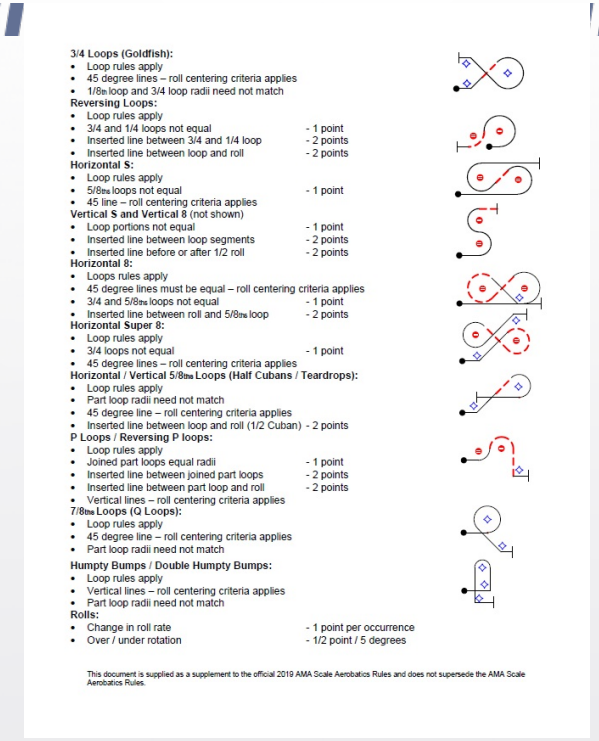
Single ½ Roll

A single ½ roll to inverted prior to the sequence start for inverted entry, or a single ½ roll to upright after sequences that finish inverted.

- Unless specifically noted, all turn-around figures must initiate from upright flight, and aircraft must be returned to upright flight upon completion of the first sequence.
- Exceptions to allowable turnaround figures may only be directed by the CD or line boss in the course of managing the airspace. Pilots will follow such directions and no penalty will apply.
- Turnaround maneuvers may not be performed at low altitude or directly in front of the judges. No other aerobatic maneuvers are allowed immediately following the airplane breaking ground.
- An illegal maneuver performed before entering a sequence will result in zeroing the following sequence.
- An illegal maneuver prior to landing will result in zeroing the preceding sequence.

Note: New for 2019 - Vertical lines are no onger allowable turn-around figures.

This document is supplied as a supplement to the official 2019 AMA Scale Aerobatics Rules and does not supersede the AMA Scale AeroJudics Rules.



3/4 Loops (Goldfish):
- Loop rules apply
- 45 degree lines – roll centering criteria applies
- 1/8th loop and 3/4 loop radii need not match

Reversing Loops:
- Loop rules apply
- 3/4 and 1/4 loops not equal - 1 point
- Inserted line between 3/4 and 1/4 loop - 2 points
- Inserted line between loop and roll - 2 points

Horizontal S:
- Loop rules apply
- 5/8th loops not equal - 1 point
- 45 line – roll centering criteria applies

Vertical S and Vertical 8 (not shown)
- Loop portions not equal - 1 point
- Inserted line between loop segments - 2 points
- Inserted line before or after 1/2 roll - 2 points

Horizontal 8:
- Loops rules apply
- 45 degree lines must be equal – roll centering criteria applies
- 3/4 and 5/8th loops not equal - 1 point
- Inserted line between roll and 5/8th loop - 2 points

Horizontal Super 8:
- Loop rules apply
- 3/4 loops not equal - 1 point
- 45 degree lines – roll centering criteria applies

Horizontal / Vertical 5/8th Loops (Half Cubans / Teardrops):
- Loop rules apply
- Part loop radii need not match
- 45 degree line – roll centering criteria applies
- Inserted line between loop and roll (1/2 Cuban) - 2 points

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

7/8th Loops (Q Loops):
- Loop rules apply
- 45 degree line – roll centering criteria applies
- Part loop radii need not match

Humpty Bumps / Double Humpty Bumps:
- Loop rules apply
- Vertical lines – roll centering criteria applies
- Part loop radii need not match

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

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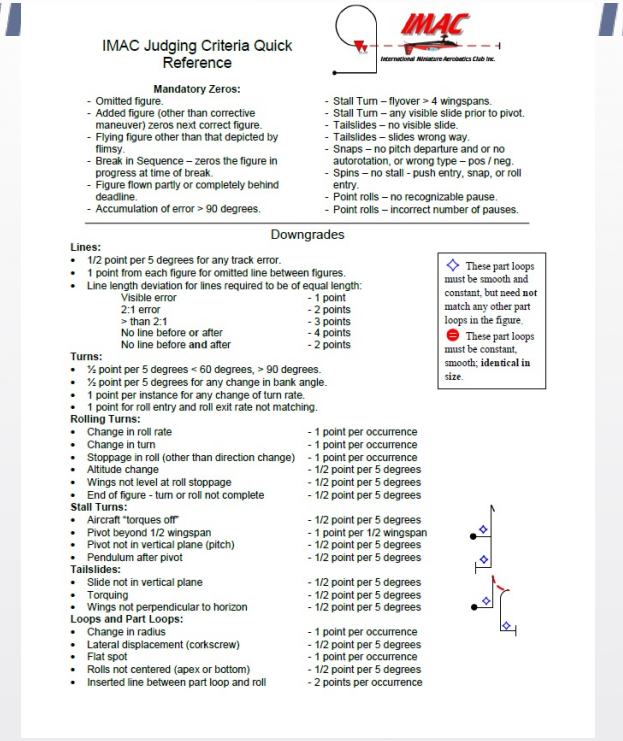

IMAC Judging Criteria Quick Reference

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 progress at time of break.
- Figure flown 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 - 1 point
  - 2:1 error - 2 points
  - > than 2:1 - 3 points
  - No line before or after - 4 points
  - No line before **and** after - 2 points

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.

Turns:
- ½ point per 5 degrees < 60 degrees, > 90 degrees.
- ½ point per 5 degrees for any change in bank angle.
- 1 point per instance for any change of turn rate.
- 1 point for roll entry and roll exit rate not matching.

Rolling Turns:
- Change in roll rate - 1 point per occurrence
- Change in turn - 1 point per occurrence
- Stoppage in roll (other than direction change) - 1 point per occurrence
- Altitude change - 1/2 point per 5 degrees
- Wings not level at roll stoppage - 1/2 point per 5 degrees
- End of figure - turn or roll not complete - 1/2 point per 5 degrees

Stall Turns:
- Aircraft "torques off" - 1/2 point per 5 degrees
- Pivot beyond 1/2 wingspan - 1 point per 1/2 wingspan
- Pivot not in vertical plane (pitch) - 1/2 point per 5 degrees
- Pendulum after pivot - 1/2 point per 5 degrees

Tailslides:
- Slide not in vertical plane - 1/2 point per 5 degrees
- Torquing - 1/2 point per 5 degrees
- Wings not perpendicular to horizon - 1/2 point per 5 degrees

Loops and Part Loops:
- Change in radius - 1 point per occurrence
- Lateral displacement (corkscrew) - 1/2 point per 5 degrees
- Flat spot - 1 point per occurrence
- Rolls not centered (apex or bottom) - 1/2 point per 5 degrees
- Inserted line between part loop and roll - 2 points per occurrence

IMAC CRITERIA QUICK REFERENCES

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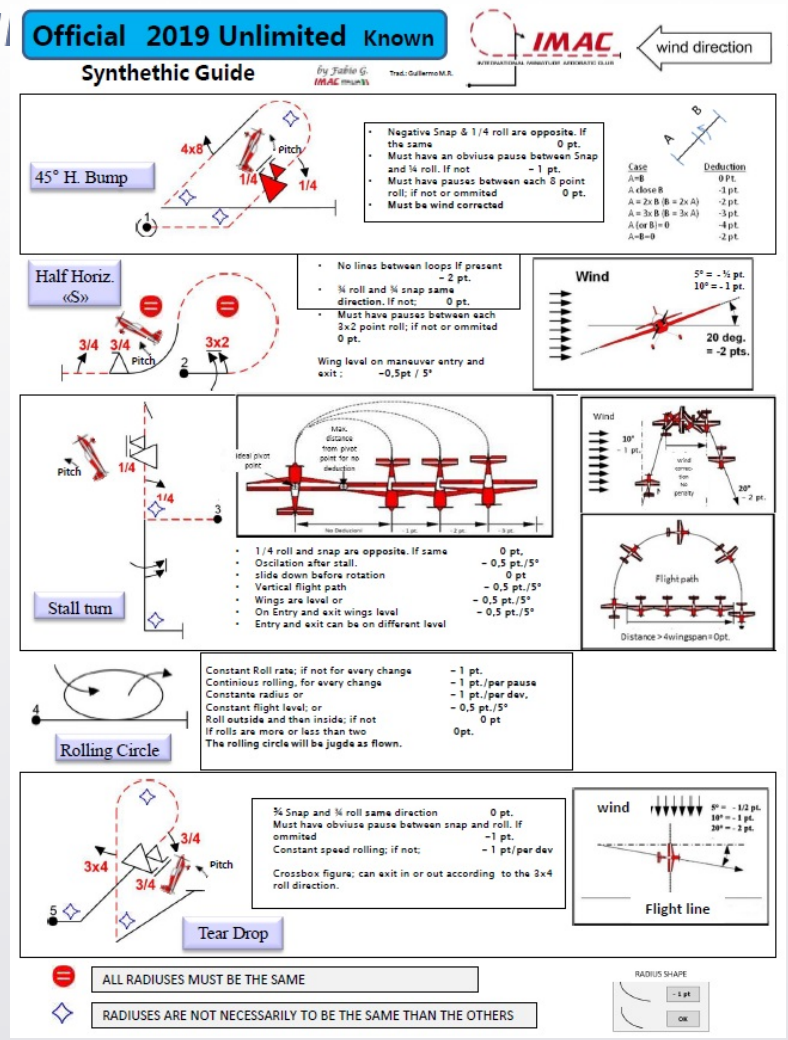
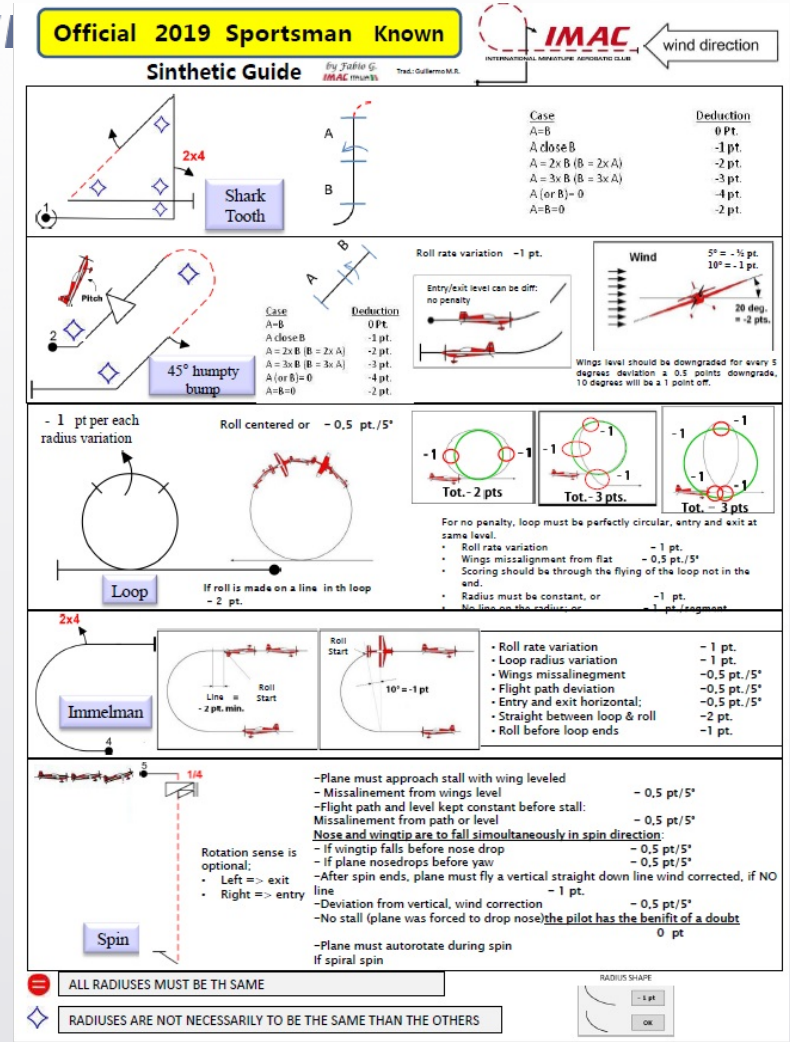
FIXED CLASS REFERENCE





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Mindset samples

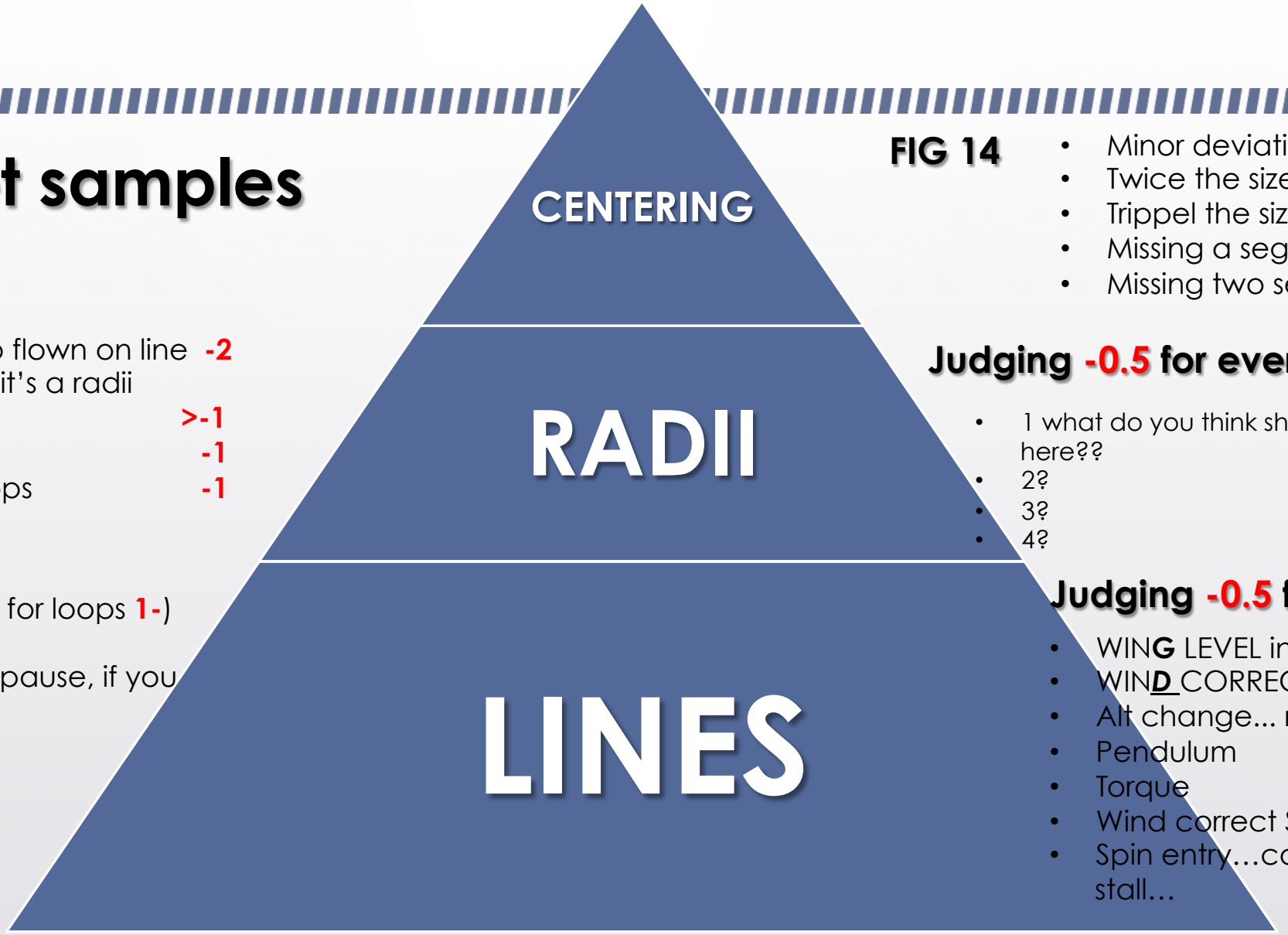

FIG 14

- Minor deviation **-1**
- Twice the size **-2**
- Trippel the size **-3**
- Missing a segment **-4**
- Missing two segments **-2**

- Element in a loop flown on line **-2**
  If its not a **line,** it's a radii
- Corner radii **>-1**
- Change in radii **-1**
- Not matched loops **-1**

Judging -0.5 for every 5^0

- 1 what do you think should be here??
- 2?
- 3?
- 4?

- Adding a line **-2** (except for loops **1-**)
- Missing a line **-1**
- Opposite elements brief pause, if you see an obvious line **-2**
-

Judging -0.5 for every 5^0

- WIN**G** LEVEL in any axes
- WIN**D** CORRECTION
- Alt change… rolling turns
- Pendulum
- Torque
- Wind correct Stall Turn entry
- Spin entry…confusion, late stall…

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CHANGING HABITS vs REACHING GOALS

Don't strive to achieve, strive to improve

CHANGING HABITS

- It's a Process, like running a marathon
- Development of habits
- Help achieving habits >>> the goals as a by-product

REACHEING GOALS

- obsession with the outcome