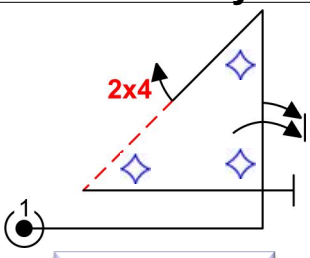
Official 2019 Intermediate Known

Synthetic Guide

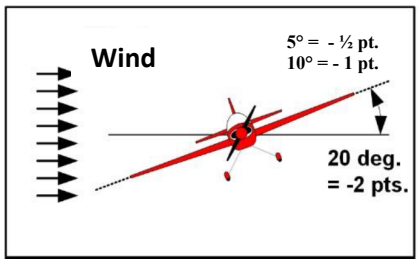
by Fabio G. IMAC ITALIA — Trad.: Guillermo M.R.

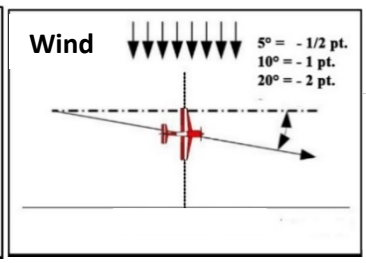
IMAC INTERNATIONAL MINIATURE AEROBATIC CLUB

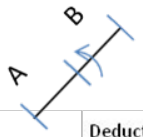
wind direction



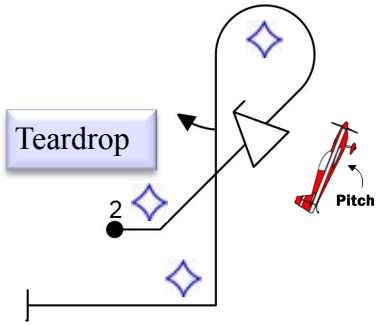
Shark Tooth



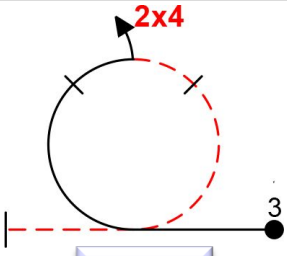




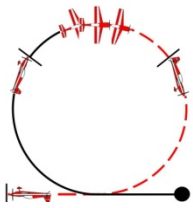
Case	Deduction
A=B	0 Pt.
A close B	-1 pt.
A = 2x B (B = 2x A)	-2 pt.
A = 3x B (B = 3x A)	-3 pt.
A (or B)= 0	-4 pt.
A=B=0	-2 pt.



Case	Deduction
A=B	0 Pt.
A close B	-1 pt.
A = 2x B (B = 2x A)	-2 pt.
A = 3x B (B = 3x A)	-3 pt.
A (or B)= 0	-4 pt.
A=B=0	-2 pt.



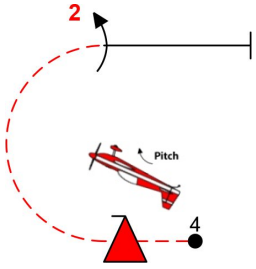
Loop



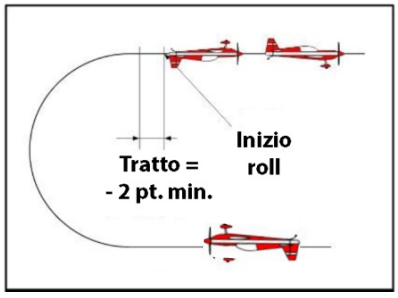
If the 2x4 Roll is NOT centered on the loop top, then **– 0,5 pt./5°**

For no penalty, loop must be perfectly circular, entry and exit at same level.

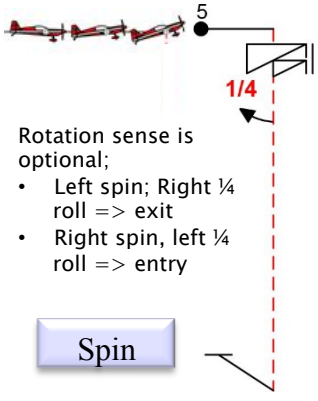
- Wings level **– 0,5 pt./5°**
- Flight path deviation **– 0,5 pt./5°**
- Line during roll **– 2 pt.**
  Roll rate deviation **– 1 pt/per deviation**
- Entry/exit deviation from horizontal **– 0,5 pt./5°**



Immelmann



- Line between snap and half loop **–2 pt.**
- Line between half loop and roll **– 2 pt.**
- Loop radius variation **– 1 pt.**
- Wings level **–0,5 pt./5°**
- Flight path deviation **–0,5 pt./5°**
- Entry and exit horizontal; **–0,5 pt./5°**
- Roll before loop ends **–0,5 pt./5°**



Rotation sense is optional;

- Left spin; Right ¼ roll => exit
- Right spin, left ¼ roll => entry

Spin

The plane must arrive to the stall with wings in horizontal:
- Missalignement from horizontal: **– 0,5 pt/5°**
- No stall and/or snap/aileron entry: **0 pt**

Straight flight path before stall:
- Missalignement from path **– 0,5 pt/5°**

Nose and wing shall fall in sequence or simoultaneosly in spin direction:
- If rotates before nose falls; **0 pts**

Plane must autorotare during spin:
- If spin is spiral **0 pts**

After the spin, the plane must follow a 90° vertical path corrected against wind:
- For any deviation **– 0,5 pt/5°**
- Vertical path omission **– 1 pt.**

Between spin and roll, there must be at least 1 fuse length line.
If less **– 1 pt**

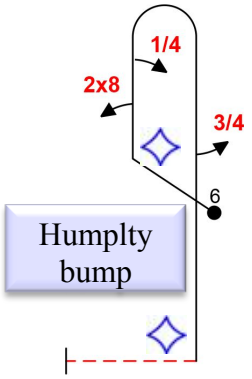
Spin and ¼ roll in opposite direction. If same **0 pt.**

Official 2019 Intermediate Known

Syntethic Guide

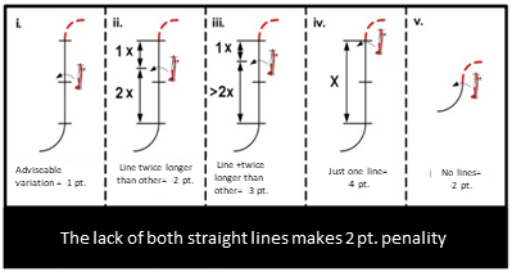
IMAC
INTERNATIONAL MINIATURE AEROBATIC CLUB

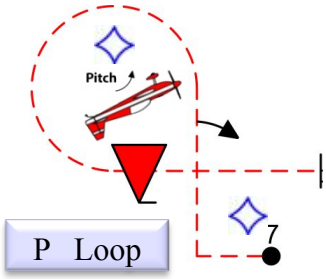
wind direction

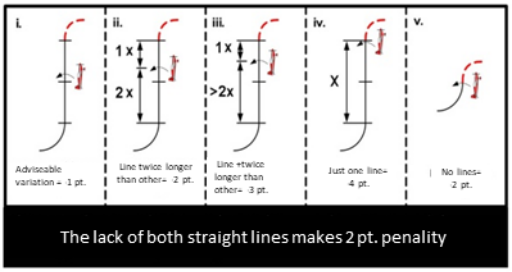


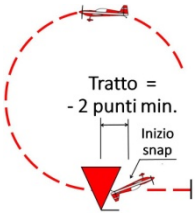
According to the previous maneuver;
- If incoming; ¾ roll must be Rigthense
- If outgoing; ¾ roll must be Leftsense
- Else = **0 Pt.**
- Roll rate variation **– 1 pt.**
- Wings missalignment from flat **– 0,5 pt./5°**
- Flight path deviation **– 0,5 pt./5°**
- Entry/exit deviation from horizontal **– 0,5 pt./5°**

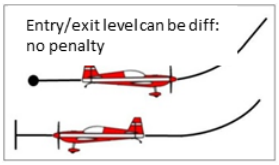
2x8 and ¼ are in opposite direction
If same **0 pt.**
If exit direction is wrong; «Break penality» is to be applied



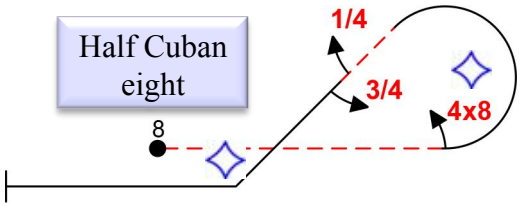






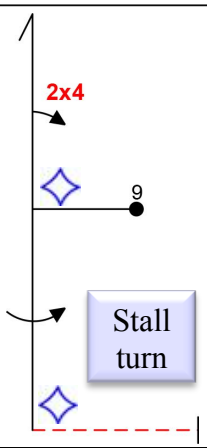


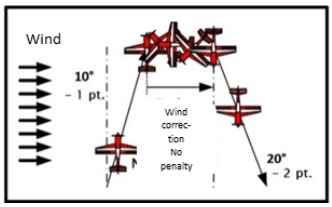
Line before snap at list -2 points

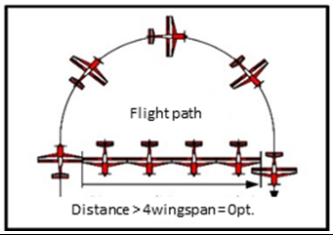


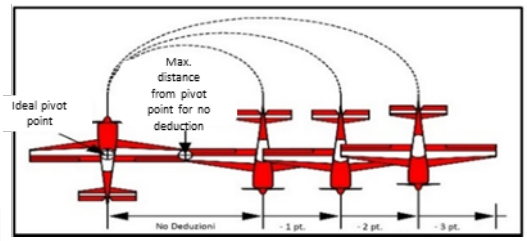
Roll rate variation	**– 1 pt.**
Wings level	**– 0,5 pt/5°.**
Flight Path deviation	**– 0,5 pt./5°**
Entry and exit horizontal or	**– 0,5 pt/5°**
No pause between 1/4 and 3/4 roll	**–1 pt.**
¼ e ¾ di roll are opposite. If same	**0 pt.**

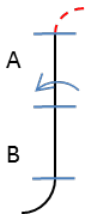
Case	Deduction
A=B	0 Pt.
A close B	-1 pt.
A = 2x B (B = 2x A)	-2 pt.
A = 3x B (B = 3x A)	-3 pt.
A (or B)= 0	-4 pt.
A=B=0	-2 pt.





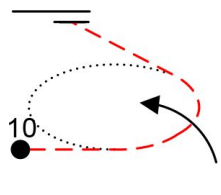






Oscilation after stall	**– 0,5 pt./5°**
Flight Path deviation	**– 0,5 pt./5°**
Wing alignement	**– 0,5 pt./5°**
Vertical path (up/down)	**– 0,5 pt./5°**
Horizontal entry/exit	**– 0,5 pt./5°**
Slide down	**0 pt.**

Case	Deduction
A=B	0 Pt.
A close B	-1 pt.
A = 2x B (B = 2x A)	-2 pt.
A = 3x B (B = 3x A)	-3 pt.
A (or B)= 0	-4 pt.
A=B=0	-2 pt.



Inside Roll: inside roll same direction of curve.

If different	**0 pt,**
Roll rate variation	**– 1 pt.**
Curve radius variation	**– 1 pt.**
Flight level variation	**– 0,5 pt/5°**
Wing level on entry and exit	**– 0,5 pt/5**

Crossbox figure; optional direction; can be outgoing rolling left or incoming rolling right

ALL RADIUSES MUST BE THE SAME

RADIUSES ARE NOT NECESSARILY TO BE THE SAME THAN THE OTHERS