



**Supplementary Explanations  
to the**

**F3 RC Aerobatic Aircraft  
Manoeuvre Execution Guide**

**2024 Edition**

**FAI Sporting Code Section 4 – Aeromodelling  
Volume F3 Radio Control Aerobatics, Annex 5B**



The purpose  
of the

# Manoeuvre Execution Guide

is to give

**accurate guidelines**

for the proper execution of aerobatic manoeuvres

**to both judges and competitors**



The **flight path** of a model aircraft  
is used to judge the

**shape of all manoeuvres**

Every manoeuvre must be  
entered and exited with a

straight level upright or inverted flight  
**of recognisable length**



**Centre manoeuvres start and finish on the same heading, while turn-around manoeuvres finish on a track 180 degrees to entry.**

**When appropriate, entry and exit of centre manoeuvres must be at the same altitude, unless specified otherwise.**

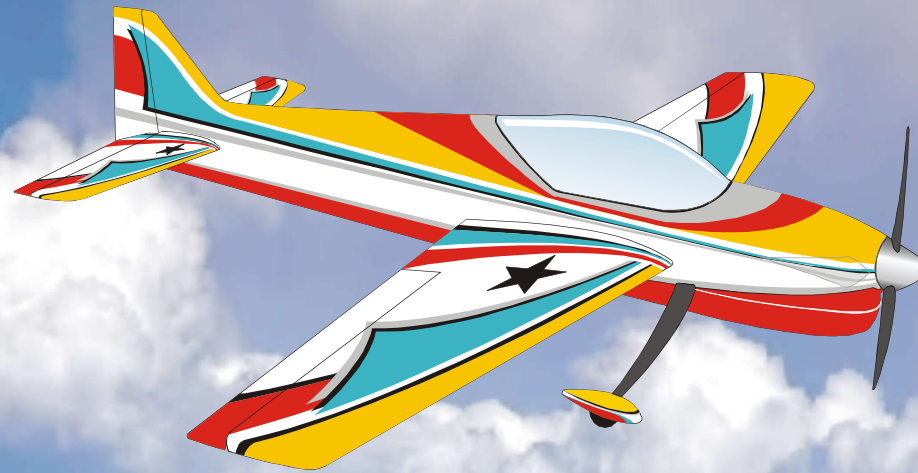
**Positioning adjustments in altitude are allowed in turn-around manoeuvres.**



# Principles

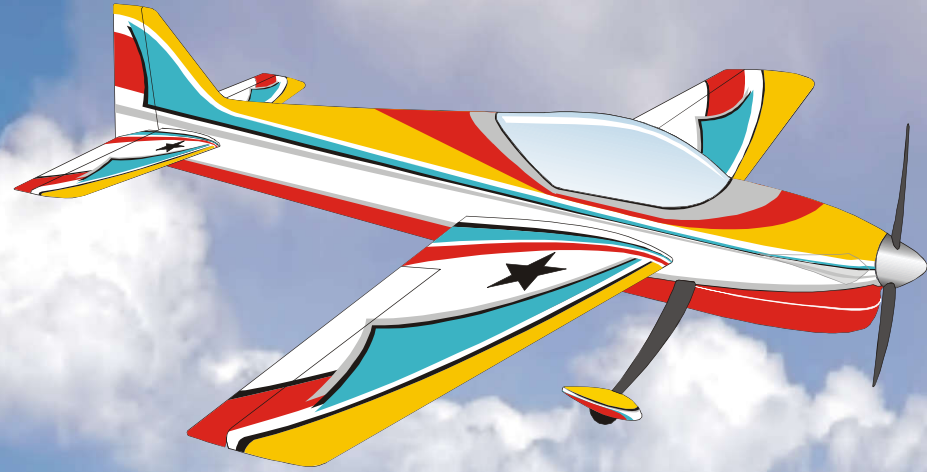
**THE PRINCIPLES** of flying and judging the performance of a competitor in an RC Aerobatic competition is based on the **Perfection** with which the competitor's aircraft executes the aerobatic manoeuvre as described in Annex 5A

All manoeuvres should be executed with:



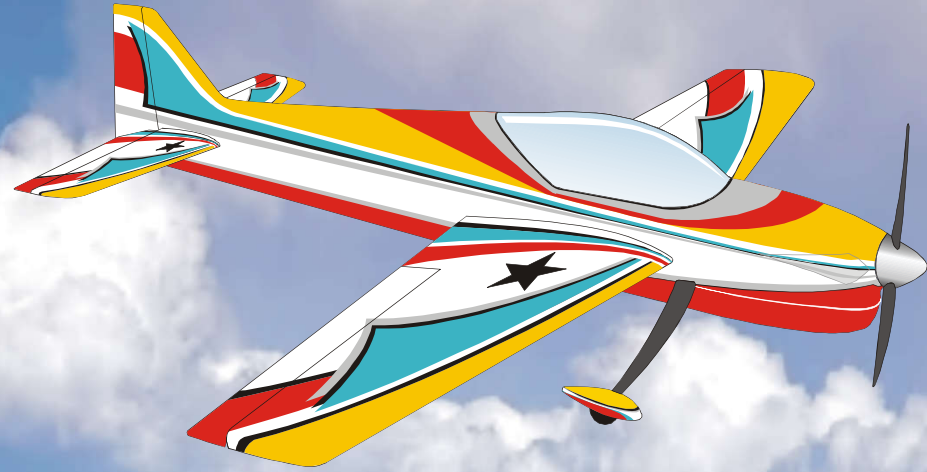
# Geometrical Accuracy

(from the judges' position view)



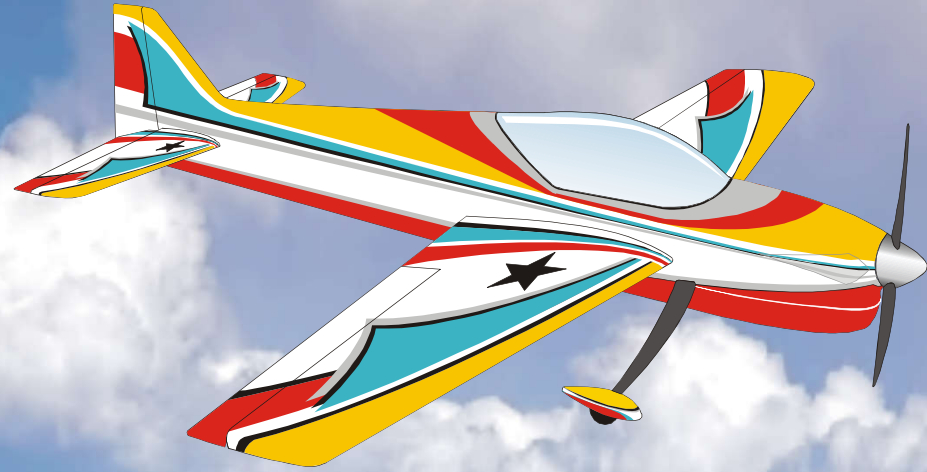
# Constant Flying Speed

(three-dimensional velocity-not airspeed)



# Correct Positioning within the Manoeuvring Zone



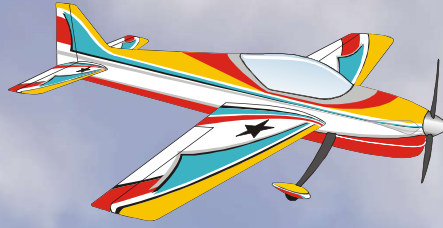


# Size Matching to the Size of the Manoeuvring Zone



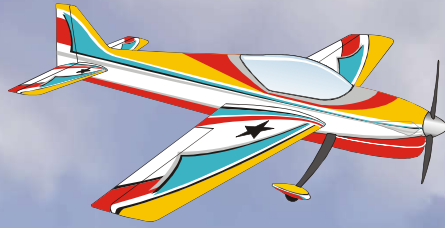
# **GENERAL CRITERIA FOR DOWNGRADING MANOEUVRES**

**“Criteria...are standards by  
which something can be judged”**



## 1. WHAT WAS THE DEFECT, or mistake?

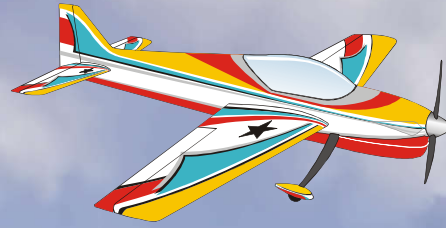
- Over, or under-rolling (or spin, or snap)
- Poor shape or geometry
- Rolls not on middle of lines
- Absence of lines
- Entry, exit poor
- Wrong angles
- Misrelation between line lengths
- Different roll rates
- Etc.



2. **HOW SERIOUS** was the defect, or mistake?

**?** Was it big (major)?

**?** Or was it small (minor)?



3. **HOW OFTEN** did you see the same defect, or mistake in a particular manoeuvre?

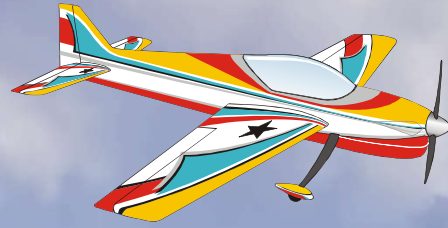
How many defects were there in **TOTAL**?



4. Was **the Flying Speed constant** in climbing and descending parts of the manoeuvre?

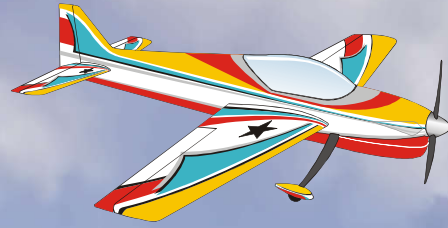


5. WHAT WAS **THE POSITIONING** of the manoeuvre?



6. WHAT WAS THE **SIZE** of the manoeuvre?





7. Was the manoeuvre **partially or completely outside** of the manoeuvring zone?



**100%**  
**GEOMETRICAL ACCURACY**  
**+**  
**CONSTANT FLYING SPEED**  
**+**  
**CORRECT POSITIONING**  
**+**  
**CORRECT SIZE**  
**=**  
**NO DOWNGRADE**  
**=**  
**10 POINTS!**



## Deduct/Downgrade System

Use the deduction/downgrade system  
not impression!

**ALWAYS START WITH PERFECT 10 ...**

**As the pilot starts!**

Then

9.5...9...8.5...8...7.5...7...6.5...6...5.5...5... etc..

**A mark resulting from downgrading steps must not be upgraded again in any case, ie. because the manoeuvre contained „something nice“!**



## **QUALITIES OF A GOOD JUDGE...**

**CONSISTENCY**  
**JUDGING ACCURACY**  
**IMPARTIALITY**



# Judging ACCURACY

Downgrade by **up to 1** point for a minor defect

Downgrade by **up to 2** points for a larger defect

Downgrade by **3, 4, 5,** more points for major defect

Do NOT downgrade 4 points for a minor defect

Do NOT downgrade 1 point for a major defect



# CONSISTENCY

Minor defect on manoeuvre	3 = score 9,5	✓
Minor defect on manoeuvre	7 = score 9,5	✓
Major defect on manoeuvre	9 = score 4	✓
Major defect on manoeuvre	11 = score 4	✓
Minor defect on manoeuvre	12 = score 6,5	✗
Major defect on manoeuvre	15 = score 9	✗

*(Scores must be in the same range,  
for similar defects)*



# MAINTAIN YOUR STANDARD!

PILOT 1	480	- 1,2	495	+8,8	477	-4,2	484	+2,8	470	- 11,2
PILOT 2	364	- 14,8	385	+6,2	416	+37,2	374	- 4,8	355	- 23,8
PILOT 3	491	- 2,6	513	+19,4	486	- 7,6	496	+2,4	482	- 11,6
PILOT 4	505	+9,4	502	+6,4	461	-34,6	511	+15,4	491	- 4,6
PILOT 5	460	- 3,0	477	+14,0	432	-31,0	464	+1,0	482	+19





# IMPARTIALITY

A judge must not, under any circumstances, favour a competitor, or a national team, or a particular flying style, or brand of equipment, or propulsion method.

**Defects by “Celebrity-Competitors” must be downgraded the same way as with “Average-Competitors”**

Judges must only look at the lines of manoeuvres described in the sky.





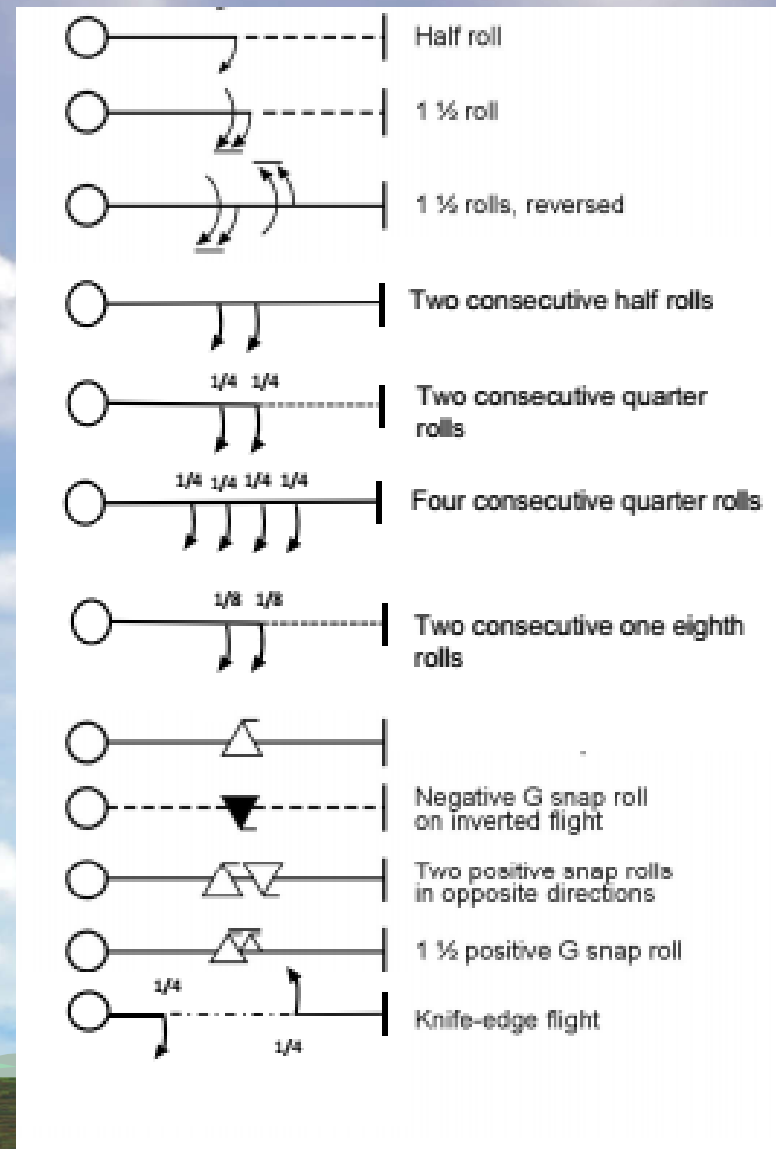
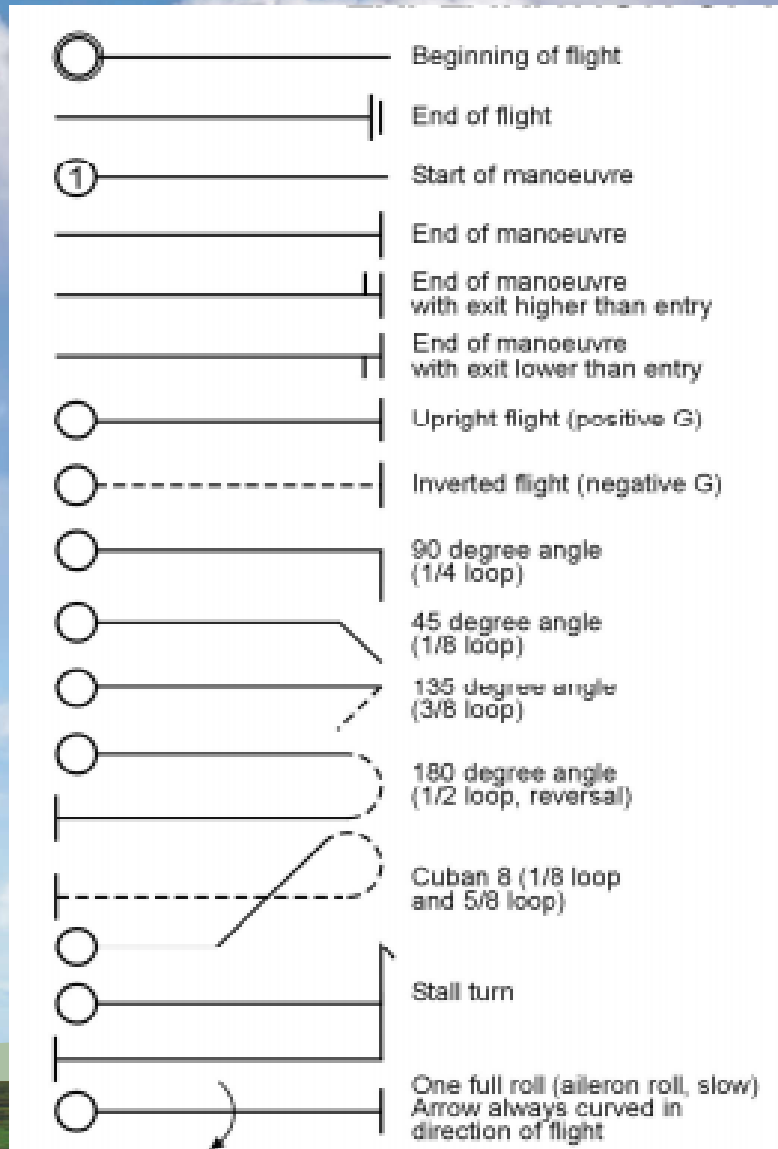
# IMPARTIALITY

Conversely, acts of negative bias towards a competitor, or a national team, or a flying style, or brand of equipment, or a propulsion method, must be viewed in a serious light, and corrective action may be necessary.



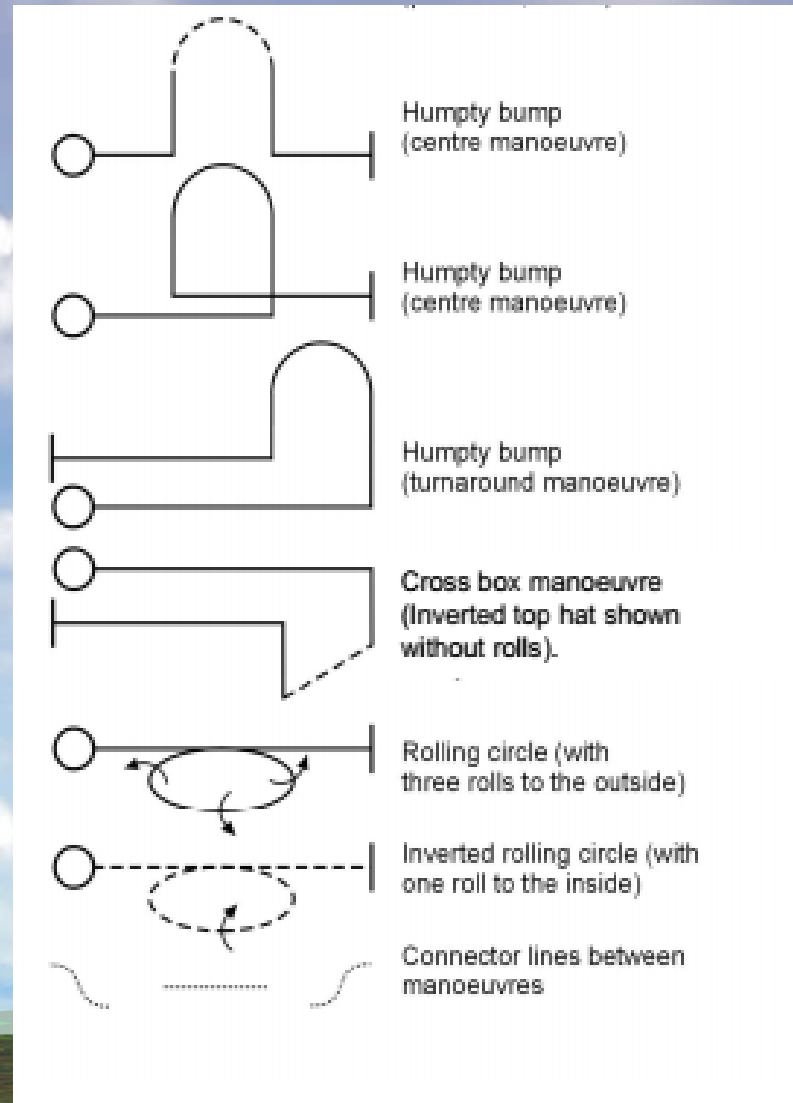
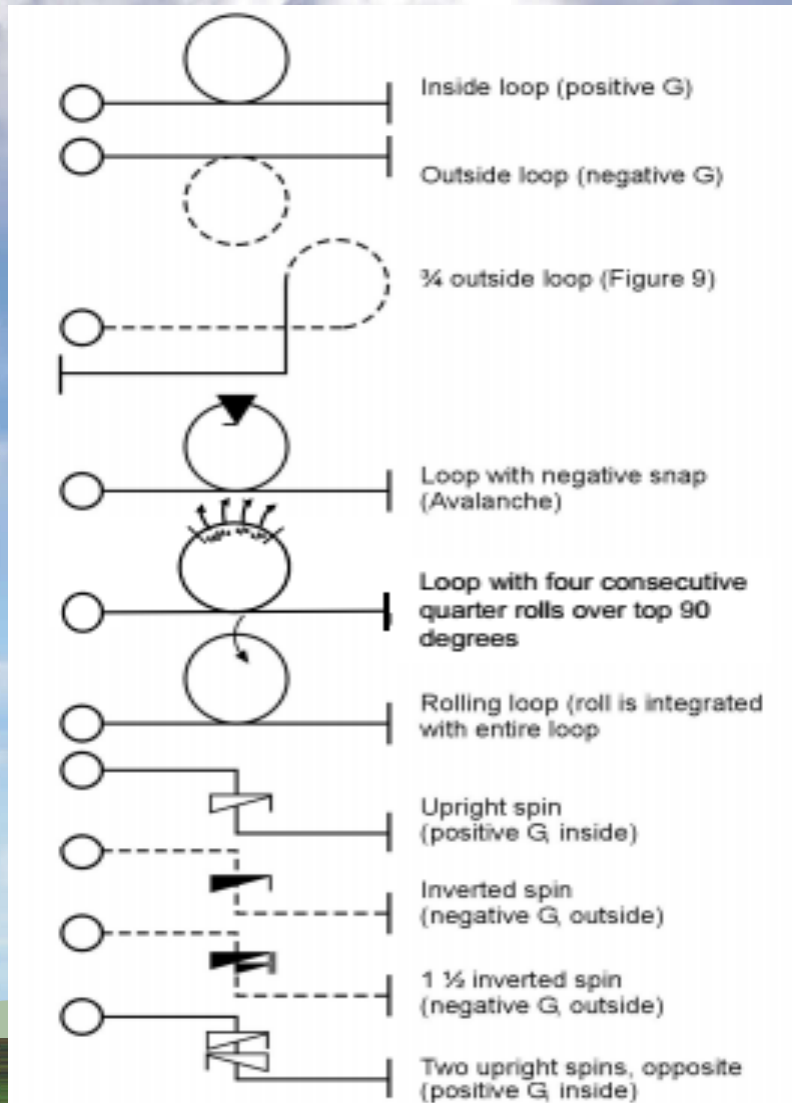
# ARESTI SYSTEM

Please become familiar with Aresti symbols used in F3 Aerobatics.





# ARESTI SYSTEM





# Devices for entering scores

## Score input without scribe



**Electronic Scribe  
by Peter Vogel/USA**



**Notaumatic/FRA**

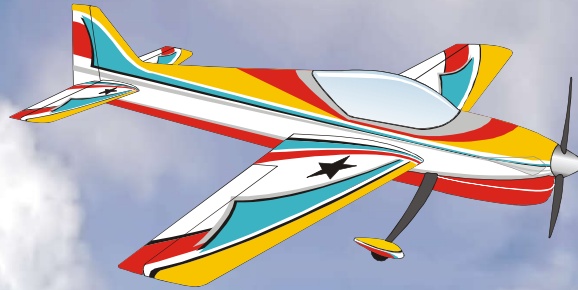


**Escribe from  
Switzerland**



**Bartovsky  
System/CZE,  
similar to  
Kraiwiesen  
system by O.  
Hajek/AUT**

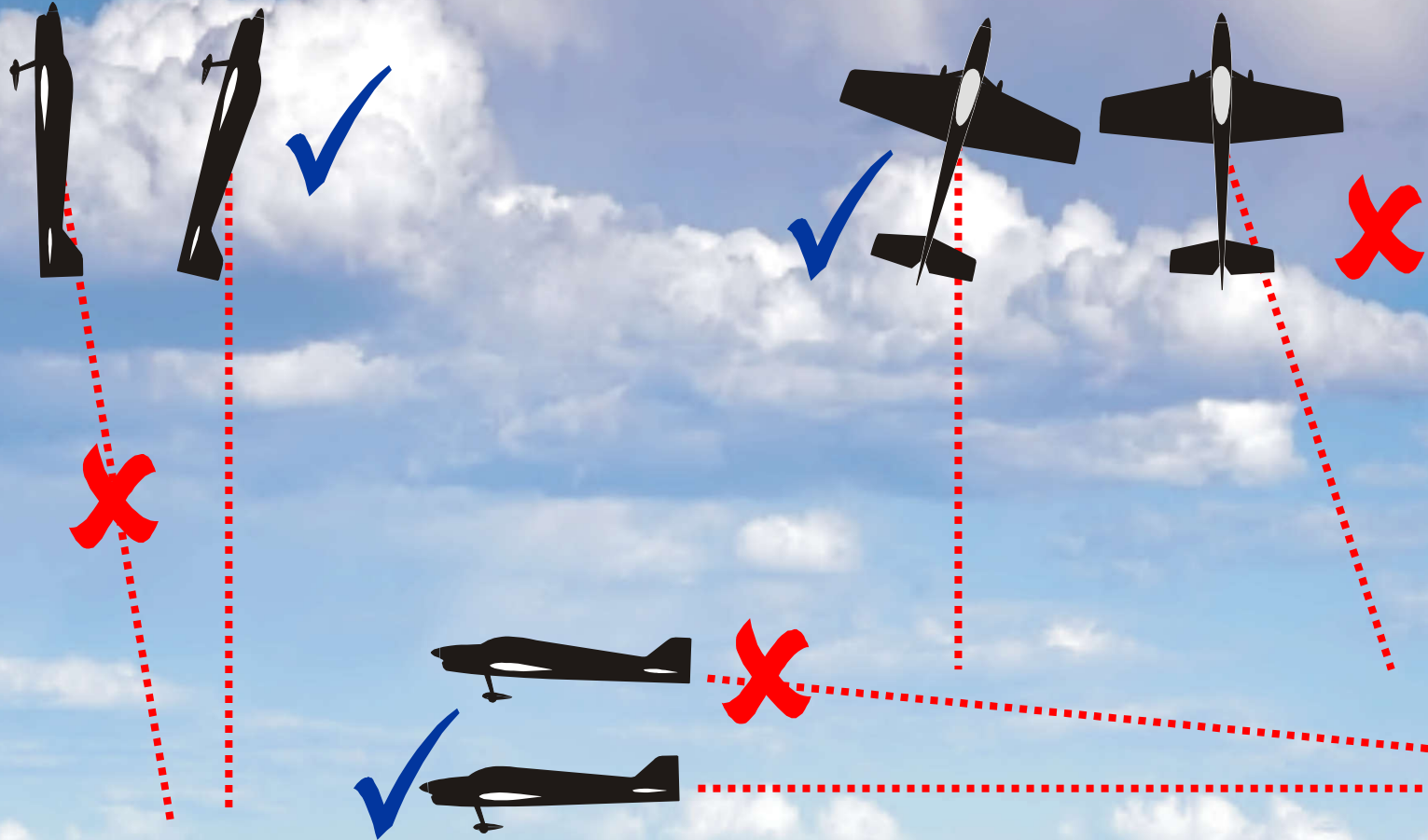
- + No scribes needed.
- + Scores input directly to the computer.
- + Live scoring is possible.
- Very experienced judges needed, especially with unknown schedules.
- Somebody who knows the system must be present, if problems with network occur.



# CRITERIA FOR JUDGING INDIVIDUAL MANOEUVRES

**(Method)**

# ATTITUDE vs. FLIGHT PATH

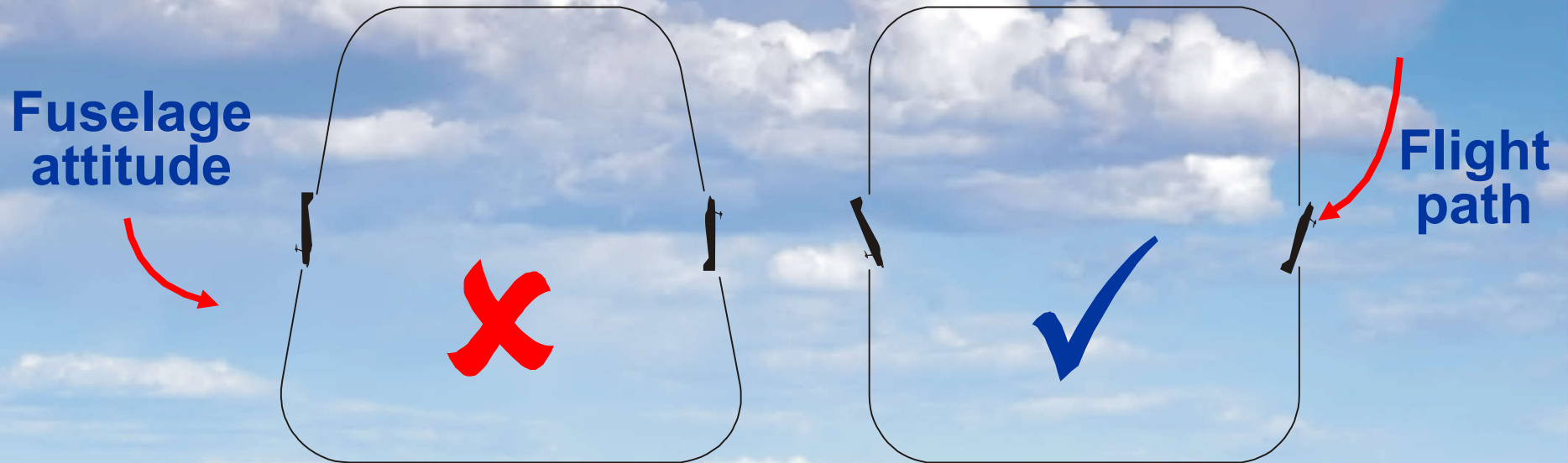


The flight path of a model aircraft is the trajectory of its centre of gravity. The attitude is the direction of the fuselage centreline in relation to the flight path. If not otherwise stated, all judging is based on flight path.

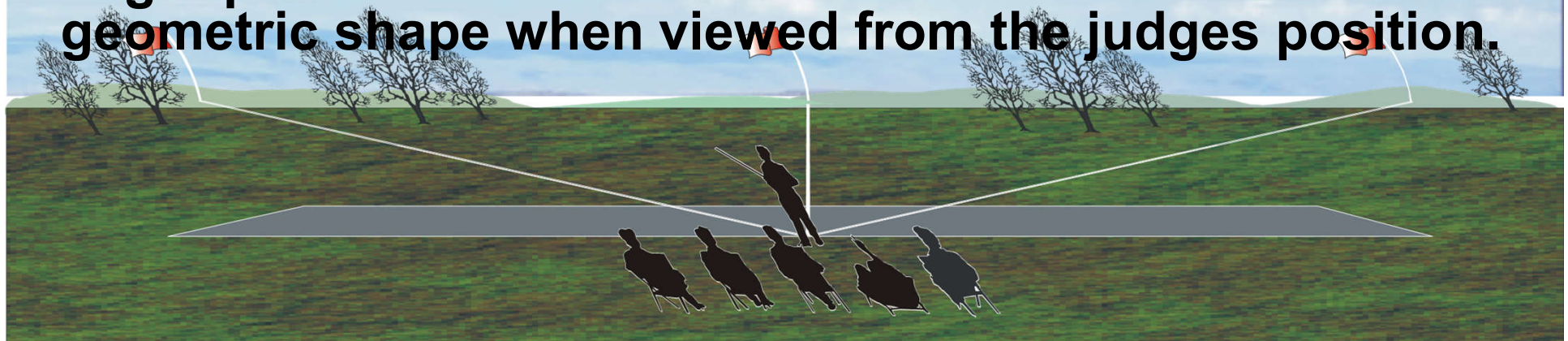


# Wind Correction

All manoeuvres are required to be wind corrected.  
The exceptions to this criterion are in the snap-rolls, stall turns, and spins, where the model aircraft is in a stalled condition.



Flight path of model aircraft must describe correct geometric shape when viewed from the judges position.





## **GEOMETRICAL ACCURACY OF THE MANOEUVRE**

**As a guide for downgrading deviations from the defined manoeuvre geometry, the manoeuvres are divided into their different components:**

**Lines, loops, rolls, snap-rolls, horizontal circles,**

**Line/loop/roll/horizontal circle combinations,**

**Stall turns, and spins.**

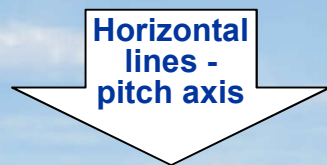




# 1 POINT PER 15° DEVIATION

1 point must be subtracted for each approximate 15 degrees deviation, but 0.5 points only for half of this.

Perfect geometry =  
No downgrade



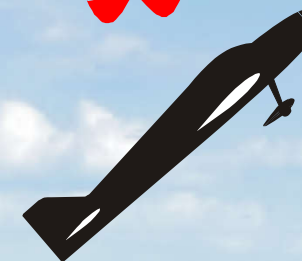
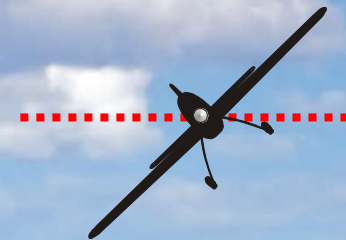
Approximate 15°  
deviation =  
1 point downgrade



Approximate 30°  
deviation =  
2 points downgrade



Approximate 45°  
deviation =  
3 points downgrade





# 1 POINT PER 15° DEVIATION

Perfect geometry =  
No downgrade

Approximate 15°  
deviation =  
1 point downgrade

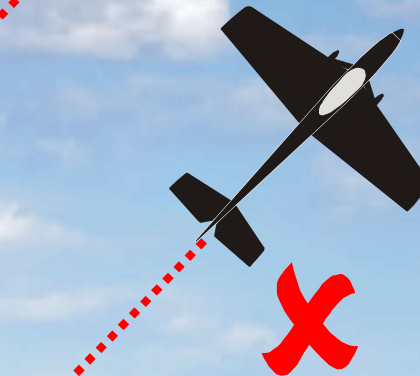
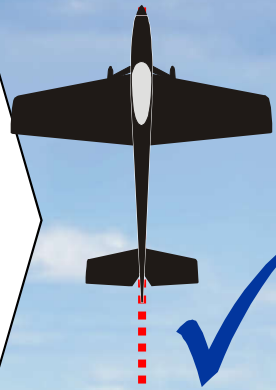
Approximate 30°  
deviation =  
2 points downgrade

Approximate 45°  
deviation =  
3 points downgrade

Vertical  
lines -  
pitch  
axis



Vertical  
lines -  
yaw  
axis



0.5 point downgrade for approximated 7.5 deviation,  
1.5 points downgrade for approximate 22.5 deviation, ...



**1 POINT PER 15<sup>0</sup> DEVIATION**

**In general, lines must be judged more critically than deviations in yaw and roll.**

**Reason: Lines can be evaluated easier than roll and yaw.**



# LINES

Horizontal



90°



60°



45°





# LINES

**5B.8.3 All aerobatic manoeuvres are entered and exited by a horizontal line of recognisable length.**

**When no horizontal line is flown between two manoeuvres, the just-completed manoeuvre must be downgraded by 1 point and the upcoming manoeuvre must be downgraded by 1 point.**

**All lines within a manoeuvre have a start and an end which define their length. They are preceded and followed by part loops (or part circles).**

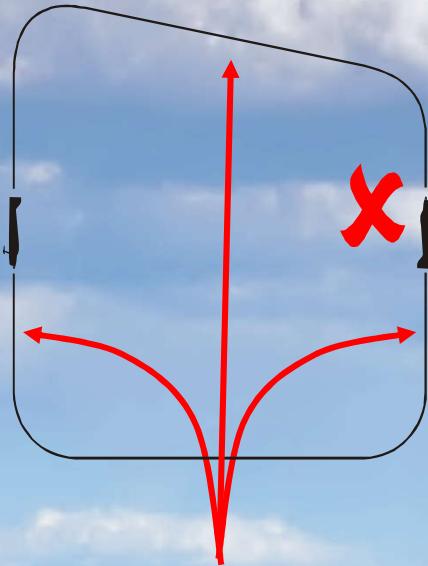
**The length of a line should only be graded when a manoeuvre contains more than one line with a given relationship to each other ie as in a square loop.**

**If there is a minor deviation in the relationship then 0.5 point is subtracted, and more points are subtracted for greater deviations.**



# LINES

Minor mis-relation  
between line lengths  
= minus 0,5 point!

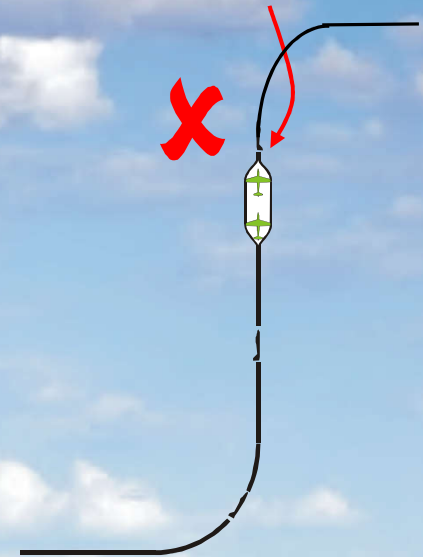


(This example maybe  
minus 2 or 3!)

No line  
between manoeuvres...  
= minus  
1 point here...  
and minus 1  
point here!



No line  
after roll... =  
minus  
3 points!

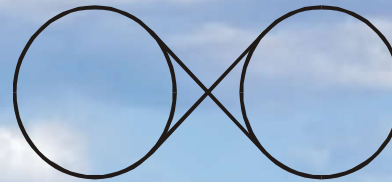
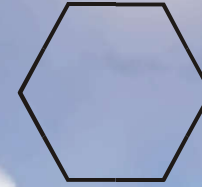
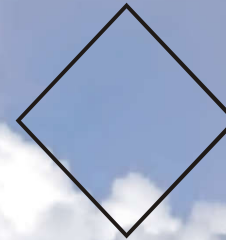
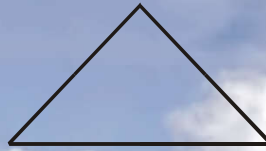
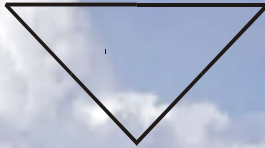




**The last manoeuvre of a schedule must have an exit line of at least one (1) second in duration for the manoeuvre to be deemed complete.**



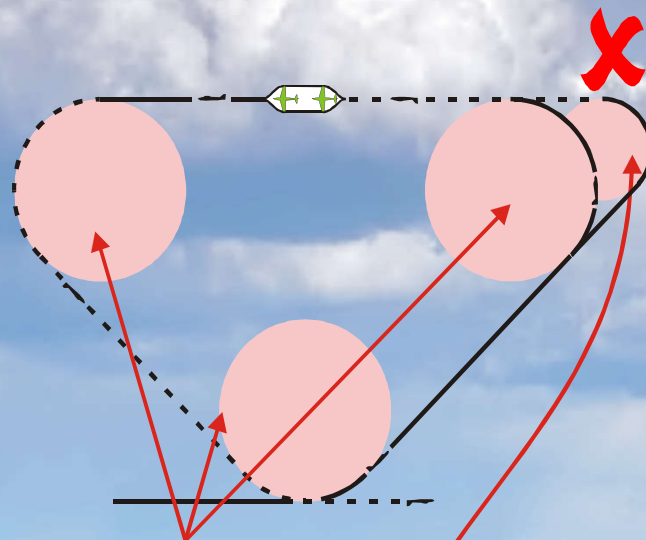
# LOOPS





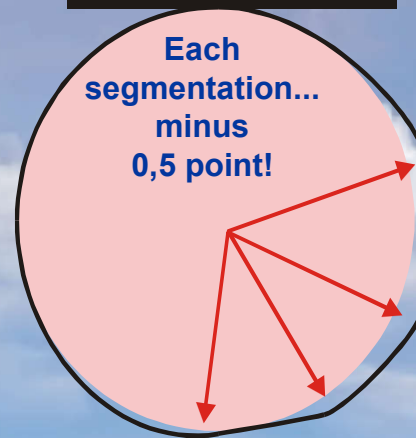


# LOOPS



All part-loop radii equal.  
**Minor** mis-relation...  
minus 0,5 point!

This = minus 2 points!



Each  
segmentation...  
minus  
0,5 point!



Radius too  
tight

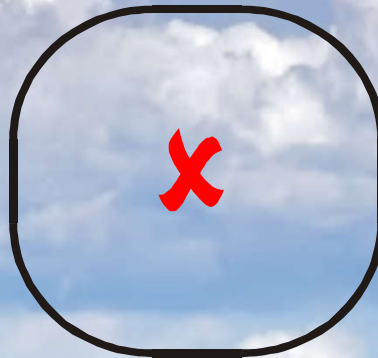
The first radius of a manoeuvre does not define the radii for the remaining radii of a manoeuvre but it is a starting point. As the manoeuvre progresses, the judge will compare each radius that was just flown to the last radius flown and if there is a difference, then a downgrade will be given based on the severity of the difference.



# LOOPS



Radii too tight...



...too open/loose...



Good compromise!

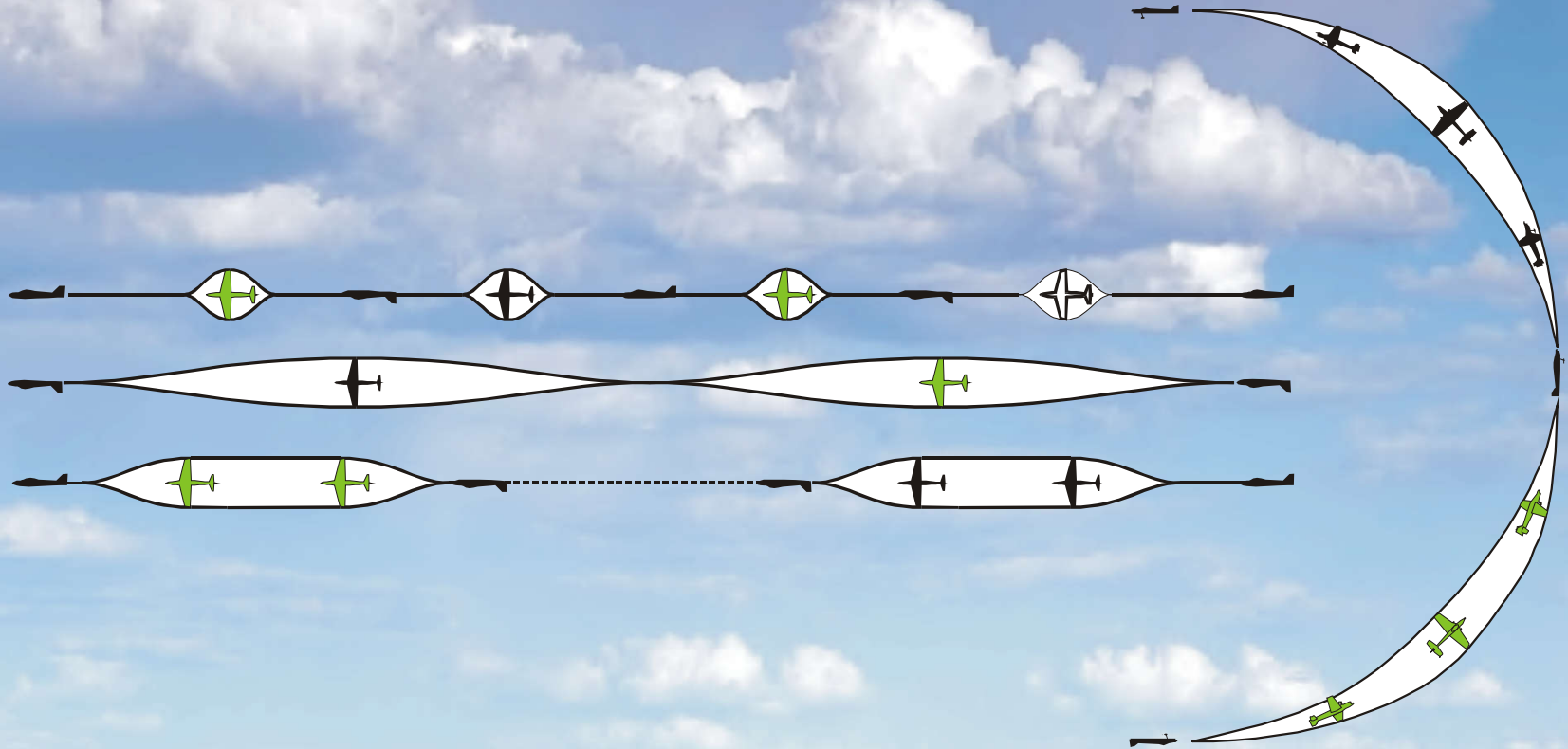
up to minus 1 point

**Part loops must have a recognisable radius which must not be too tight (very high G-load) or too loose (a well-defined line between the part loops is not clearly recognisable). If part loops are performed too tight or too loose, up to one point must be deducted.**



# Rolls

(Continuous Rolls and Part-Rolls)





# Rolls

## (Continuous Rolls and Part-Rolls)

Continuous Rolls: Continuous rolling 360 degrees and more.

Part-Rolls: Rolling less than 360 degrees.

**The roll-rate must be constant. Minor variations in roll-rate must be downgraded by 0.5 point, while more severe variations must receive a downgrade of 1 or more points. Slowing down (or speeding up) the roll-rate towards the end of a roll must be downgraded using the 1 point per 15 degree rule**



# ROLLS

**In all manoeuvres which have more than one continuous roll, the continuous rolls must have the same roll-rate. In all manoeuvres which have more than one part-roll, the part-rolls must have the same roll rate.**

**Where there are continuous rolls and part-rolls within one manoeuvre, the roll-rate for the part-rolls does not necessarily have to be the same as the roll-rate for the continuous rolls.**

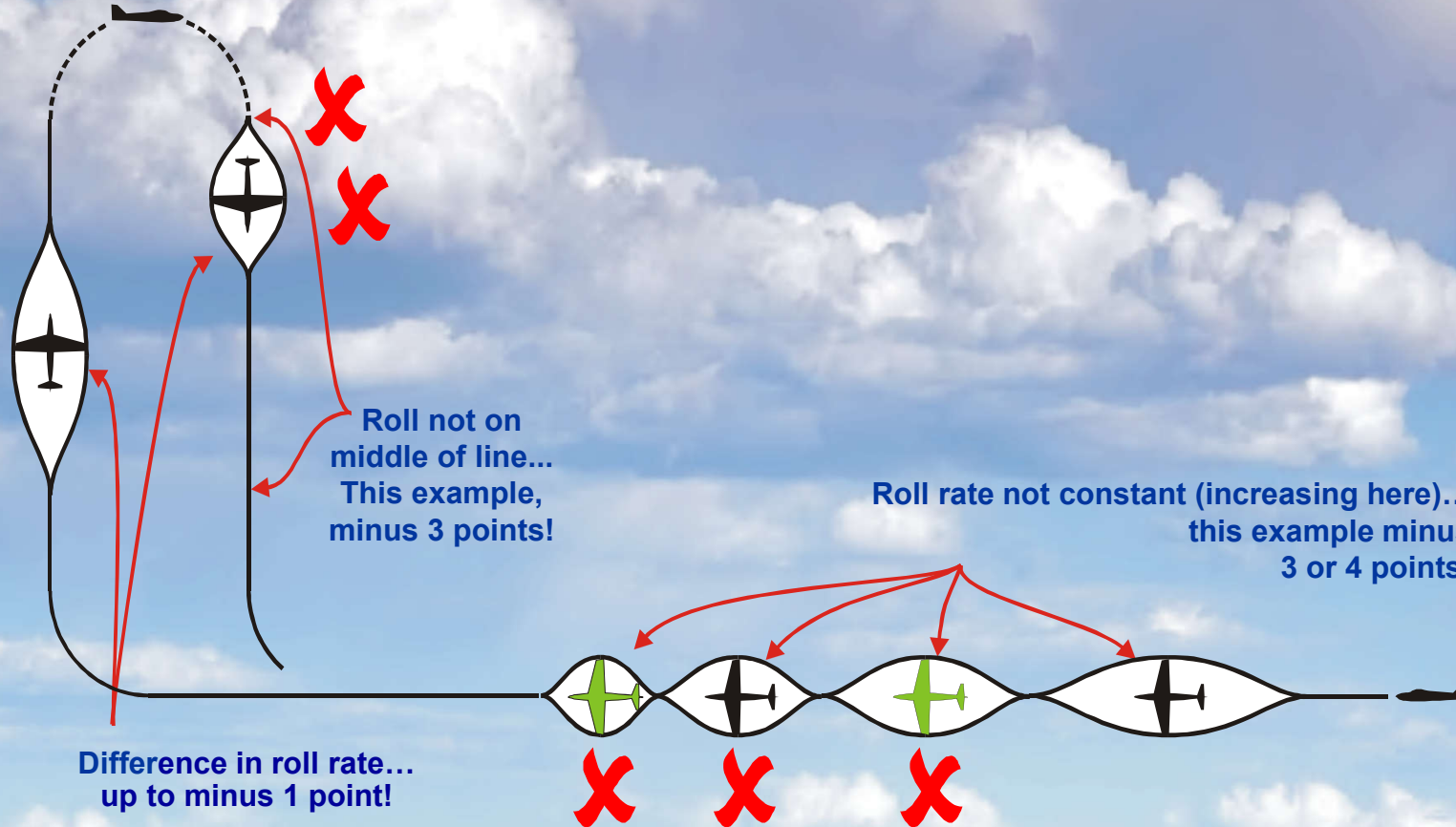
**This doesn't apply to integrated rolls and integrated part rolls because roll rate depends on the length of the flightpath in which the roll or the part roll is integrated.**



# ROLLS

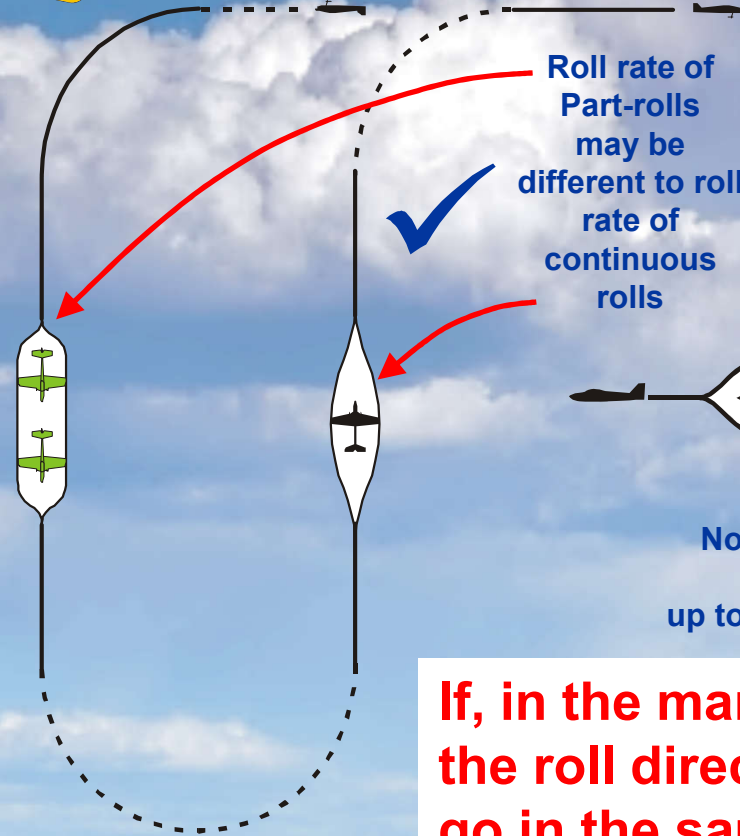
The roll-rate of the first continuous roll or part roll of a manoeuvre does not define the roll-rate for the remaining continuous rolls or part rolls of a manoeuvre but it is a starting point. As the manoeuvre progresses, the judge will compare the roll-rate of each continuous roll or part roll that was just flown to the roll-rate of the last flown continuous roll or part roll and if there is a difference, then a downgrade will be given based on the severity of the difference. In a manoeuvre with both continuous rolls and part rolls the two types of rolls must be considered separately for roll rate deviations.

# ROLLS

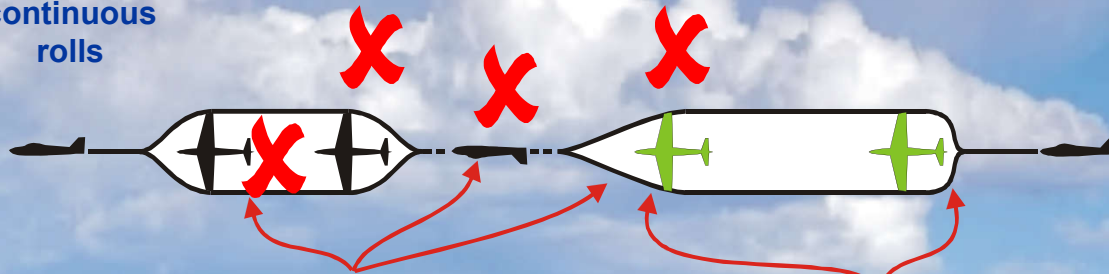


**The start and stop of the rotation must be crisp and well-defined. If a start or stop is badly defined, 0.5 or more points are to be subtracted for each.**

# ROLLS



Roll rate of Part-rolls may be different to roll rate of continuous rolls



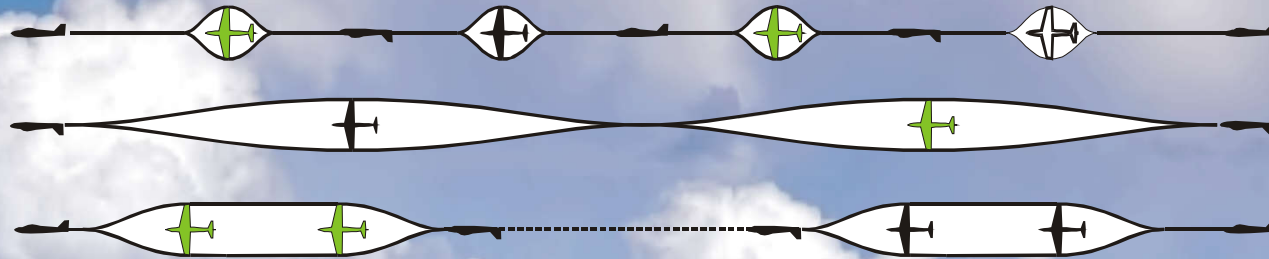
Not equal length of lines between part-rolls up to minus 1 point for each!

Different roll rate... up to minus 1 point!

**If, in the manoeuvre description of a roll combination, the roll direction is not specified, then the rolls must go in the same direction.**

**Between consecutive continuous rolls and part-rolls in opposite direction there must be no line!**





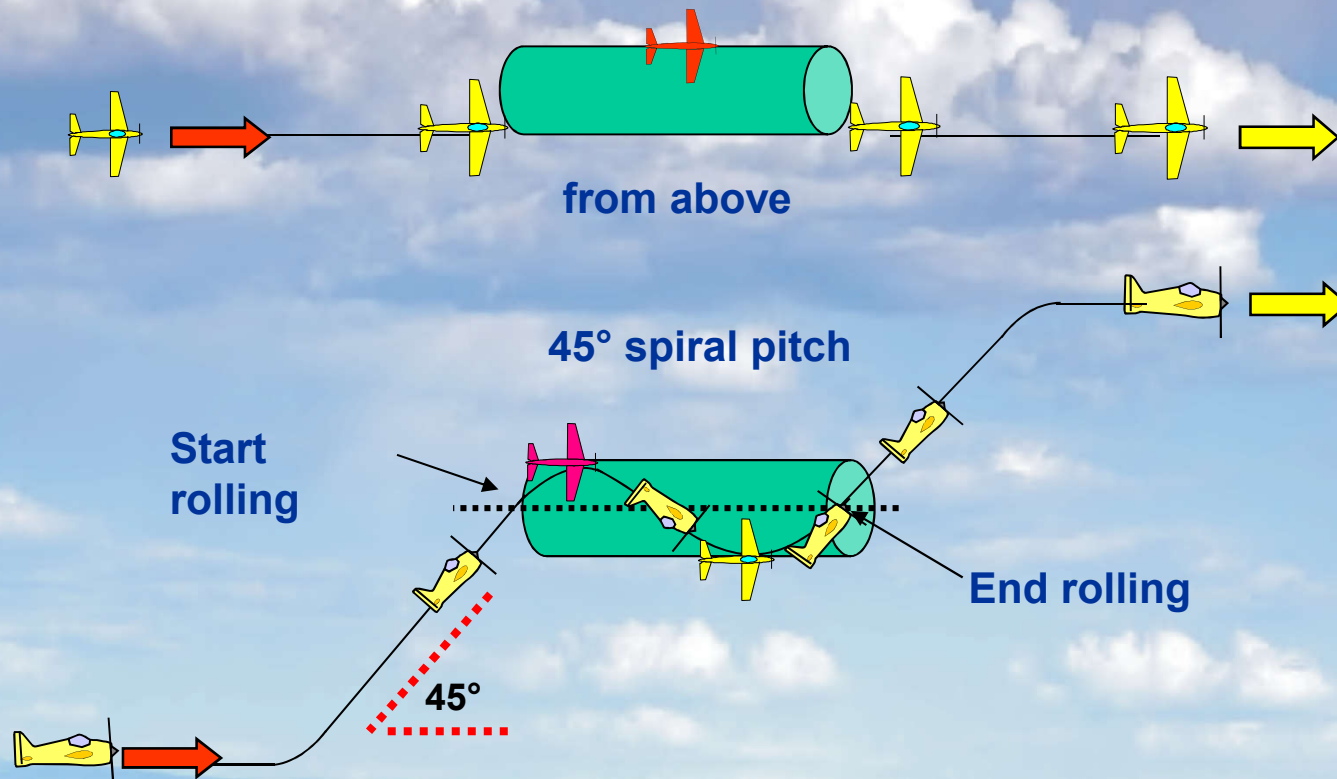
## Missing or additional Part-Rolls: Use the 1 point per 15° rule

- 1 missing  $\frac{1}{2}$  roll: (180 degrees) = **Zero points**
- 1 missing  $\frac{1}{4}$  roll : (90 degrees) = **- 6 points**
- 1 missing  $\frac{1}{8}$  roll : (45 degrees) = **- 3 points**
- the same deductions apply with additional part-rolls



# Barrel Rolls

You first pull into a  $45^\circ$  upline, then at mid level you start to perform a full roll with the flight path going around a horizontal cylinder in a spiral (as the thread of a screw in a  $45^\circ$  pitch).





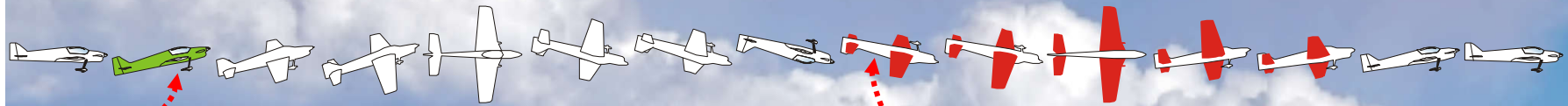
# SNAP ROLLS

A **SNAP ROLL** is basically a spin in the horizontal axis.

The model aircraft rolls rapidly, with a **continuous high angle of attack** (positive or negative).

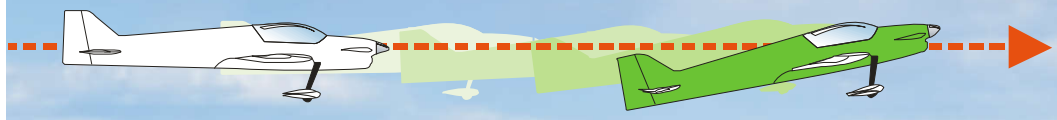
The tail should describe a corkscrew path.

# SNAP ROLLS



“BREAK”  
here

FLIGHT PATH (centre of gravity) must be level



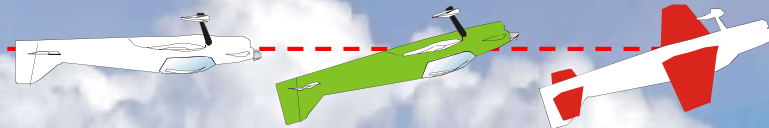
Separation of fuselage attitude  
from flight path



# SNAP ROLLS

**NEGATIVE SNAP ROLL**

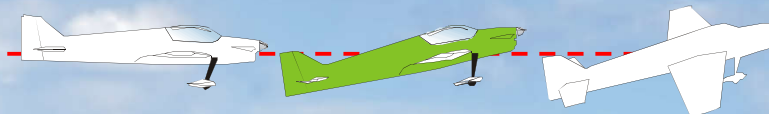
—



DOWN elevator

**POSITIVE SNAP ROLL**

+



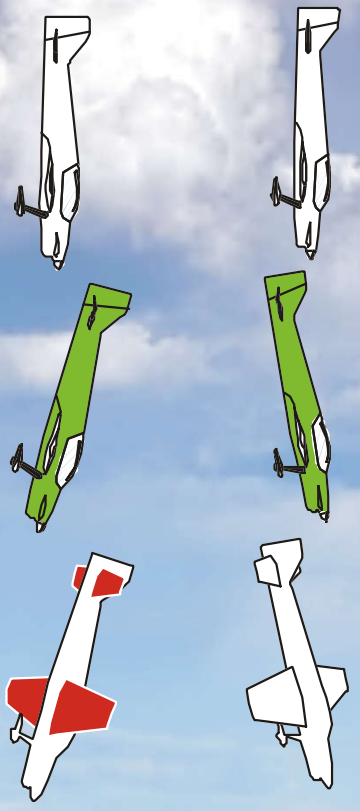
UP elevator

**In the F3A schedules snap rolls may be positive or negative!**

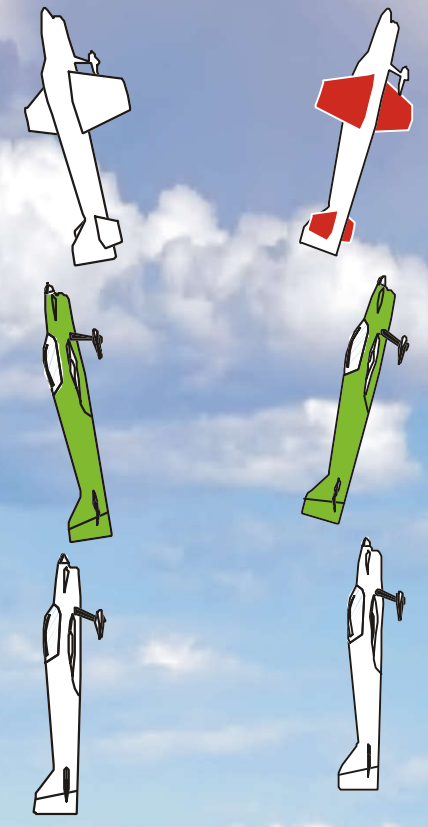


# SNAP ROLLS, DOWN (and UP)

**NEGATIVE SNAP  
= DOWN elevator**



**POSITIVE SNAP  
= UP elevator**



**NEGATIVE SNAP  
= DOWN elevator**





**Barrel roll or axial roll instead of  
snap roll:  
downgrade more than - 5 points**





# Spotters say:

If it is not a BARREL ROLL... **X**



...and it's not an an AXIAL ROLL... **X**



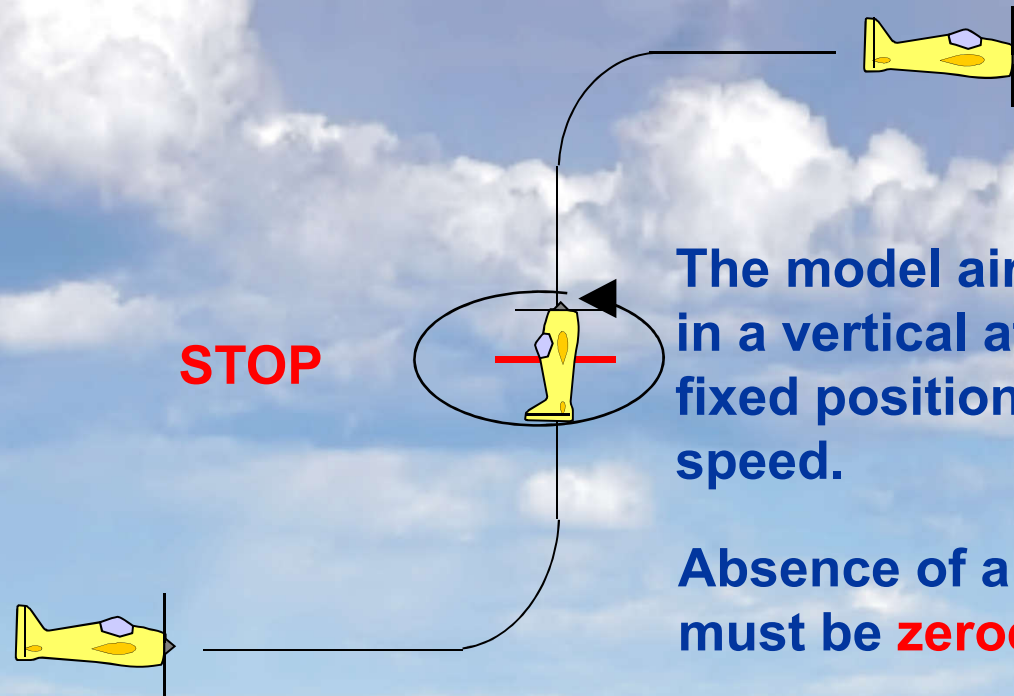
...then it's probably...

# A SNAP ROLL!





# Torque - Rolls



The model aircraft is hovering in a vertical attitude and in a fixed position at no flying speed.

Absence of a hover must be **zeroed**.

Otherwise torque - rolls are judged the same way as axial rolls.



# Horizontal Circles and Part Circles

**Horizontal circles are performed in a horizontal plane and mostly used as centre manoeuvres. Horizontal Part Circles are mostly part of a manoeuvre.**

**Circles and Part Circles within a manoeuvre must have the same radius.**

**Each occurrence of a minor deviation in radius must be downgraded by 0.5 point, while more severe deviations may be downgraded by 1, 1.5, 2 or more points for each occurrence.**



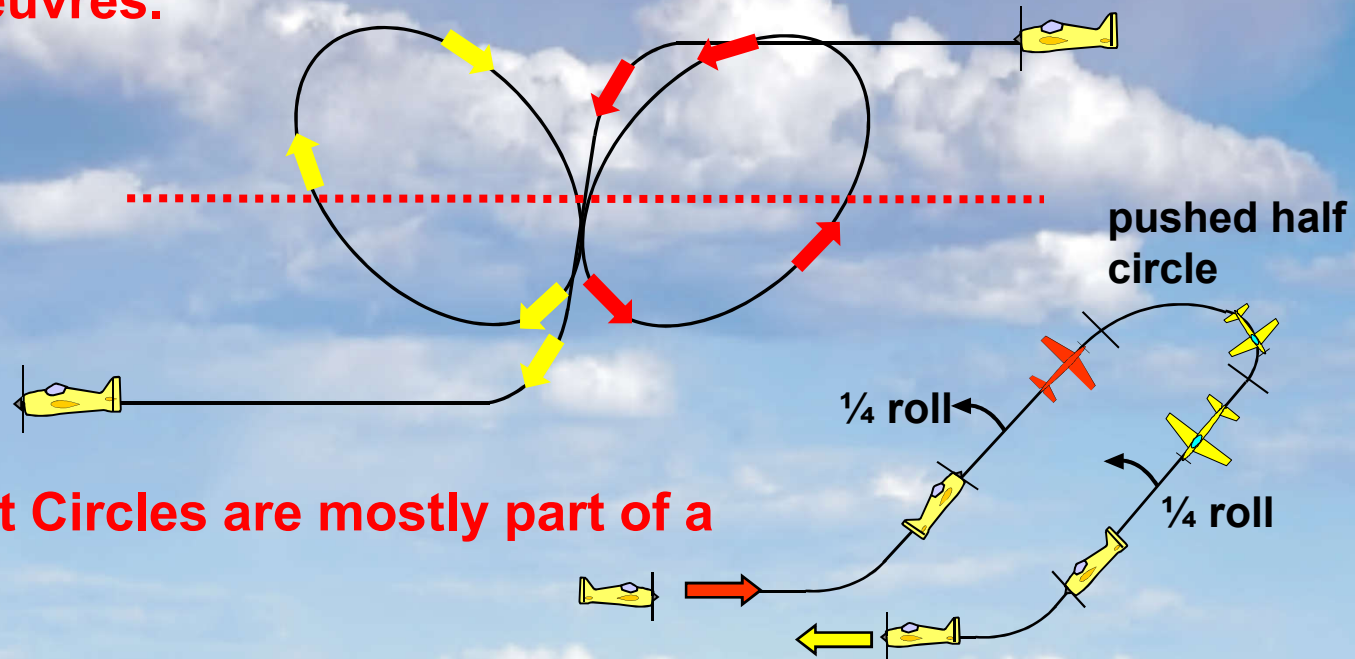
# Horizontal Circles and Part Circles

- **Constant high or low altitude**
- **Circular flight path maintained**
- **Continuous rolling, at constant rate**
- **Rolls positioned correctly**
- **Any reversals to be immediate**



# 45° Plane Circles and 45° Plane Part Circles

45° Plane circles are performed on a 45° plane and mostly used in centre manoeuvres.



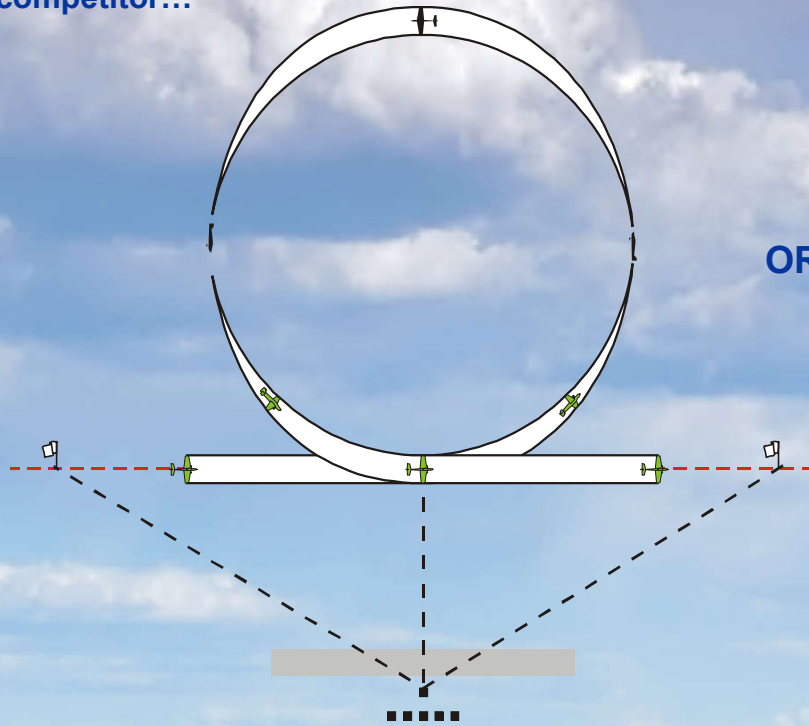
45° Plane Part Circles are mostly part of a manoeuvre.

They are judged with same criteria as Horizontal Circles and Part Circles. As they are not horizontal they cannot be judged by constant altitude.

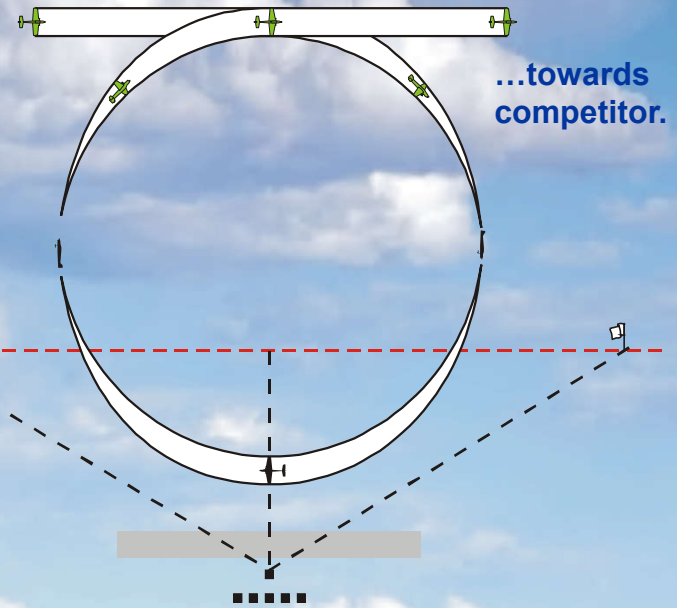


# Rolling Circles

May be **AWAY** from competitor...



OR...





# Rolling Circles

Second roll to inside

Reversal is immediate

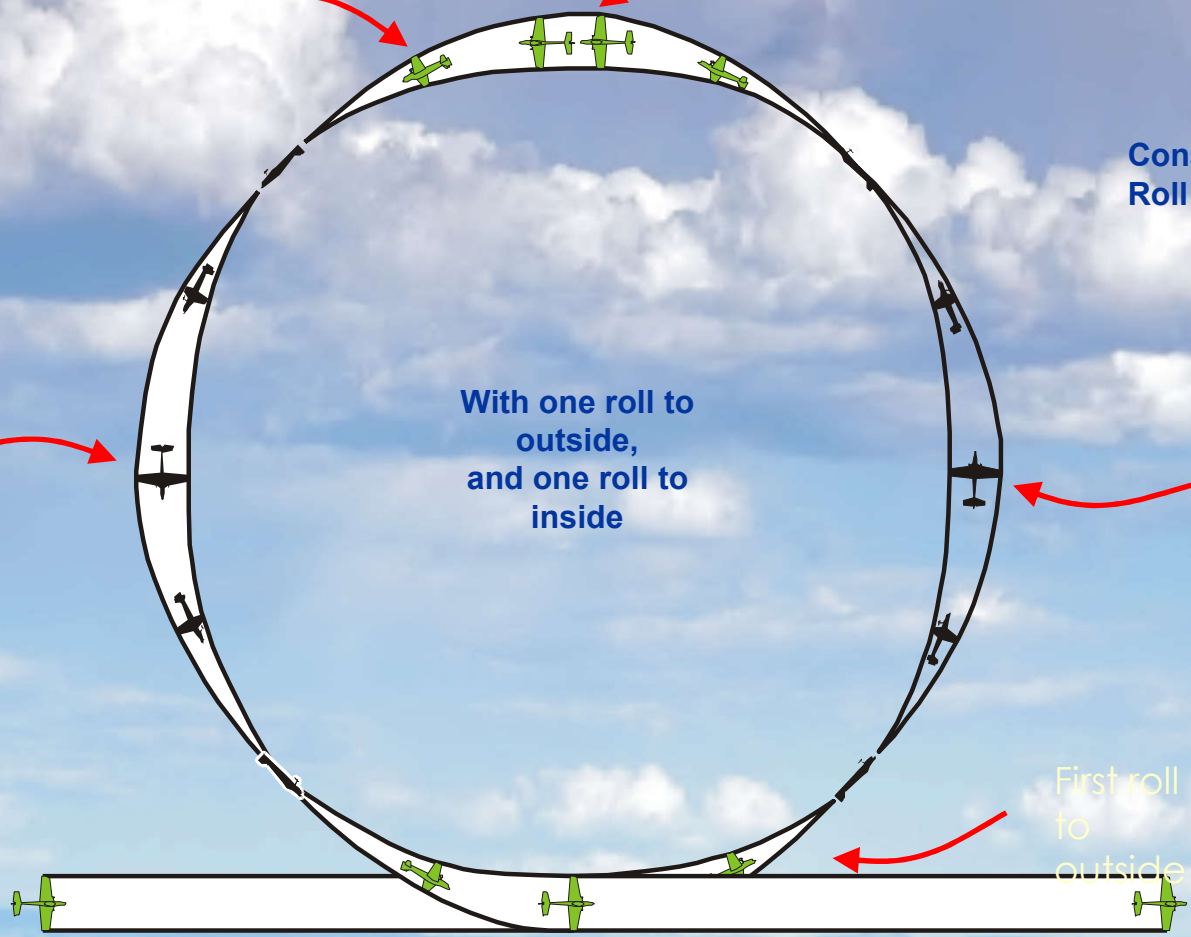
Constant Roll rate

At 270° position of circle

With one roll to outside, and one roll to inside

At 90° position of circle

First roll to outside

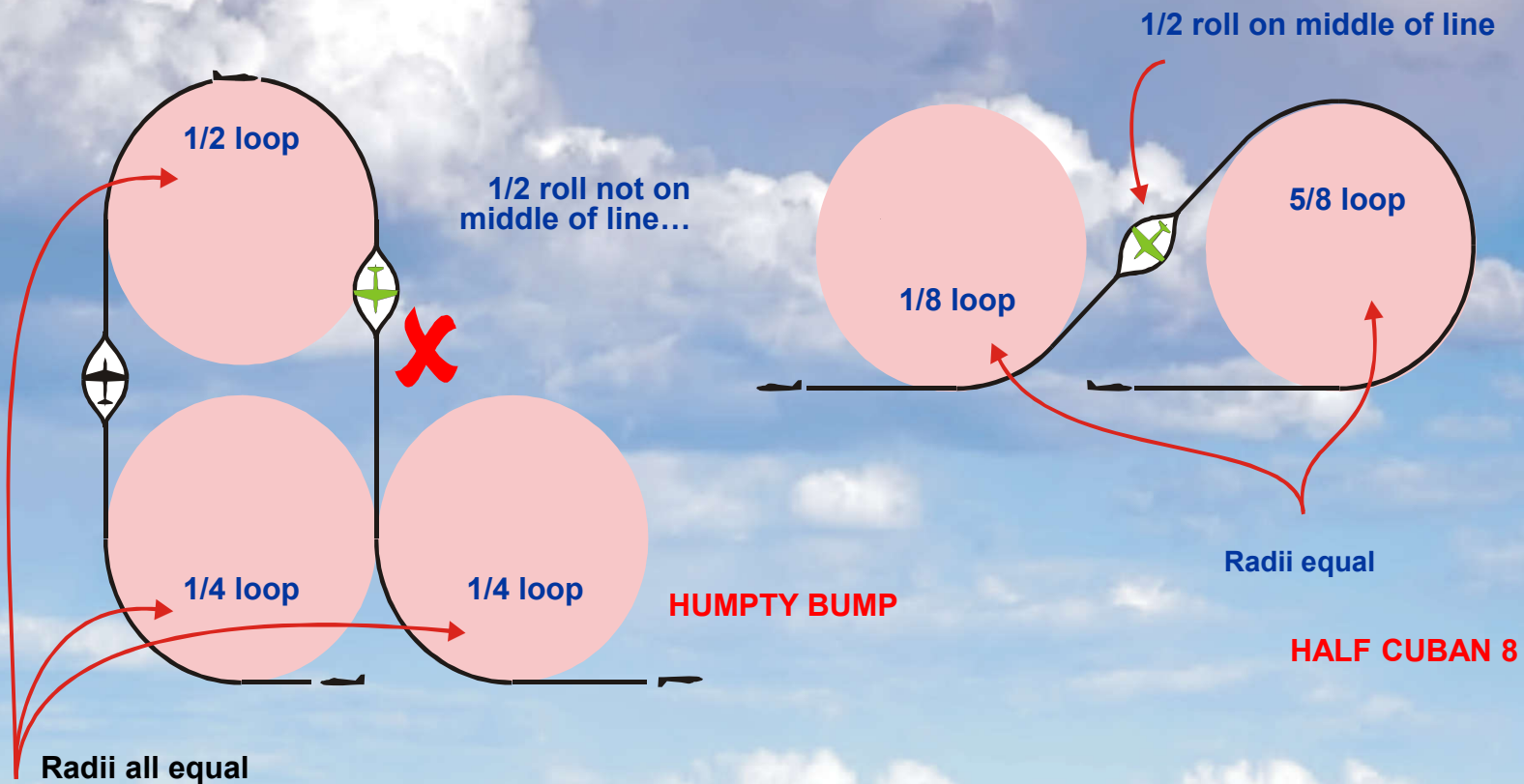




**The 150m distance requirement is waived for horizontal circles, and a downgrade should only be applied if the far side of the circle exceeds approximately 350m. Manoeuvres performed with the far side of the circle exceeding approximately 375m in front of the pilot must be downgraded by at least 1 point.. Manoeuvres performed with the far side of the circle exceeding approximately 400m in front of the pilot must be downgraded more severely (in the order of 2 to 3 points).**



# Line/Loop/Roll/Horizontal Circle COMBINATIONS

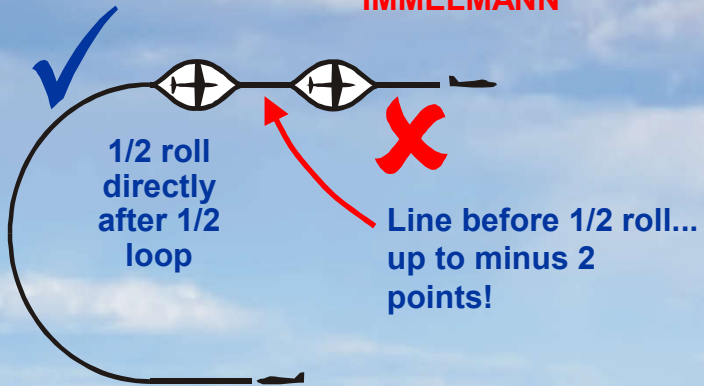


Whenever a continuous roll, part-roll, snap roll, or a consecutive combination of these is placed on a line, the length of the line before and after the roll or the combination of consecutive rolls must be equal. 0.5 point is subtracted for a minor difference, and 1 or more points for a major difference. If there is a complete absence of a line before or after the roll, 3 points are subtracted.





# Line/Loop/Roll/Horizontal Circle COMBINATIONS



Radii are equal

**Double IMMELMANN**

Line before 1/2 roll... up to minus 2 points! **X**

**✓** 1/2 roll directly after 1/2 loop

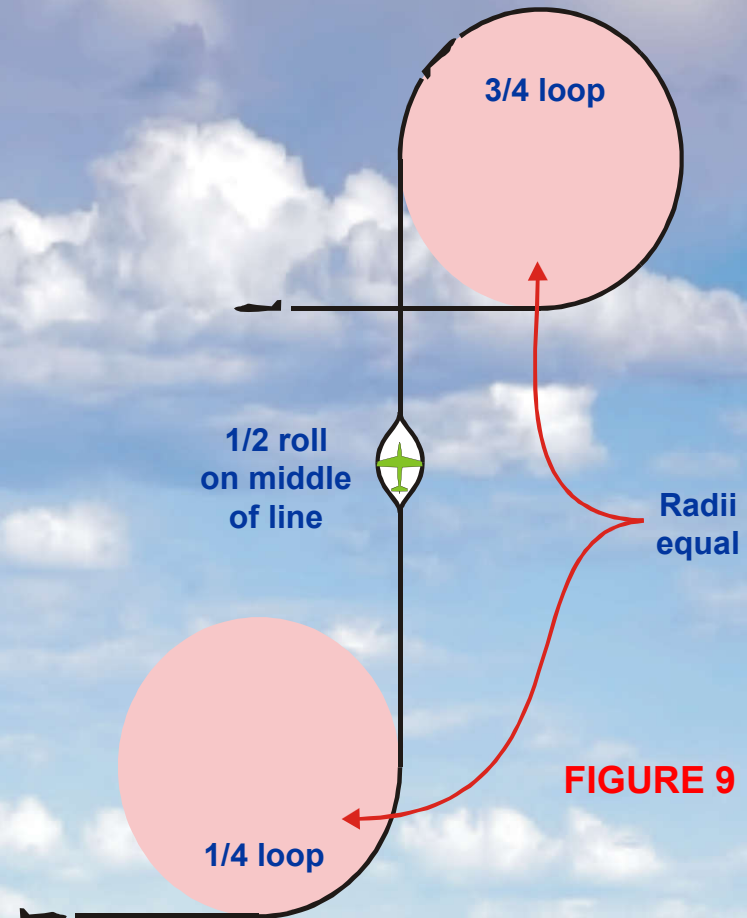
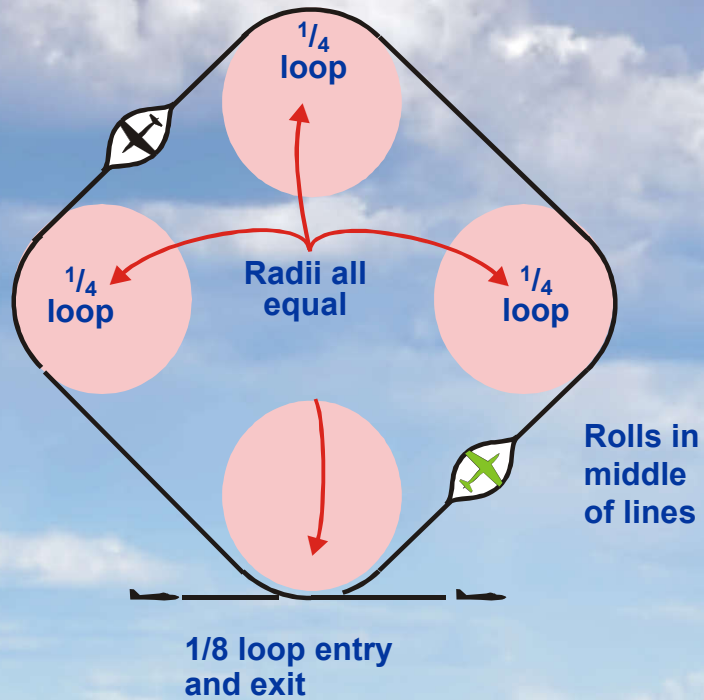
**There is nothing about the length of the lines between the part loops in the Sporting Code!**



# Line/Loop/Roll/Horizontal Circle COMBINATIONS

**SQUARE LOOP  
ON CORNER**

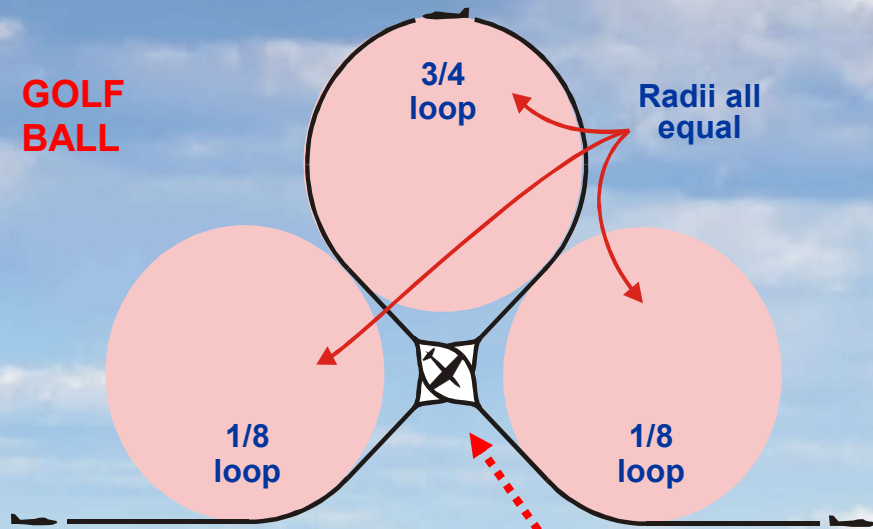
All lines 45°  
All lines equal  
length



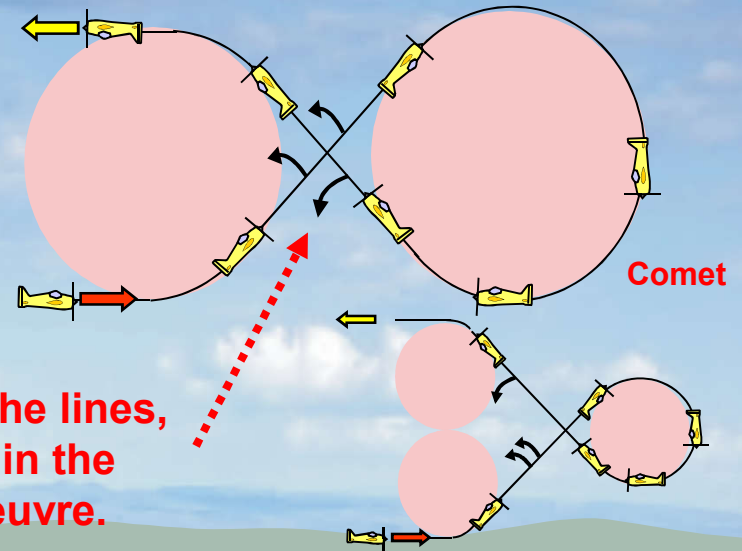
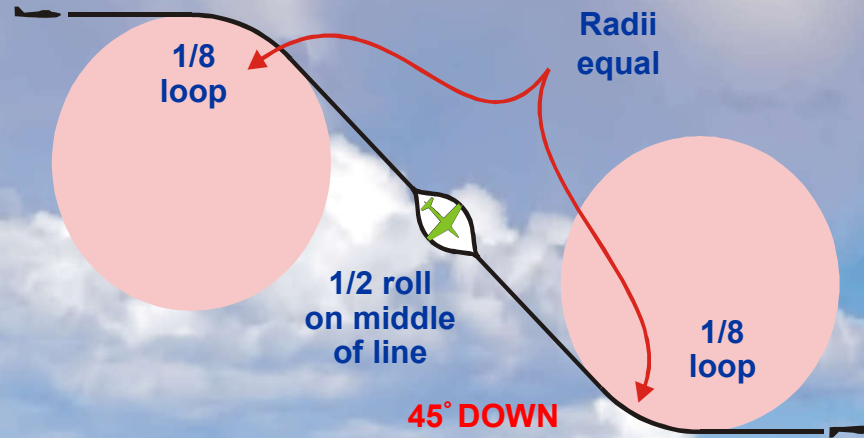


# Line/Loop/Roll/Horizontal Circle COMBINATIONS

**GOLF BALL**



Radii all equal

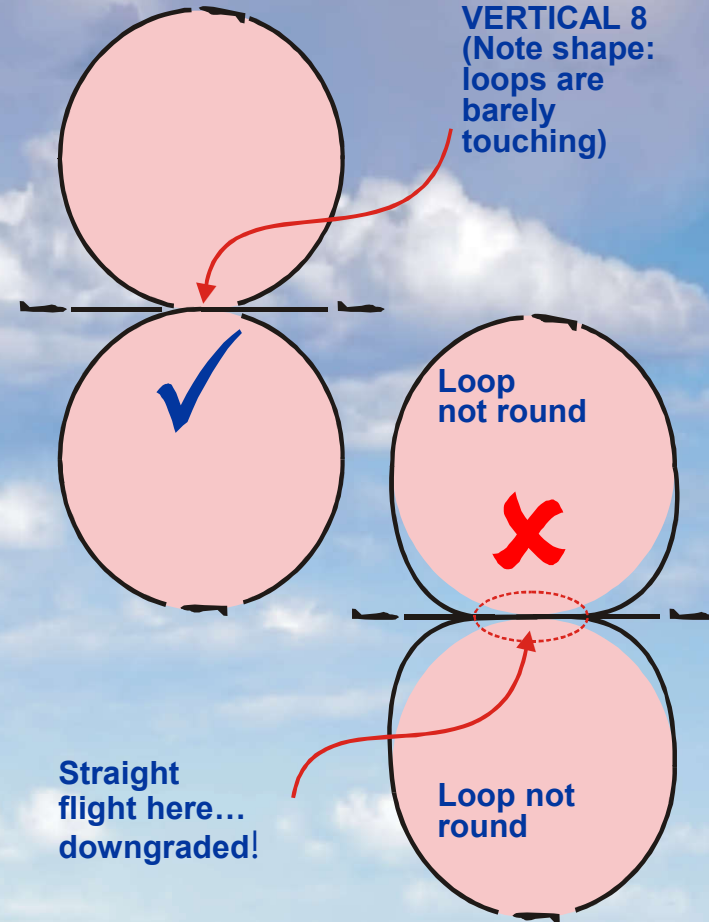
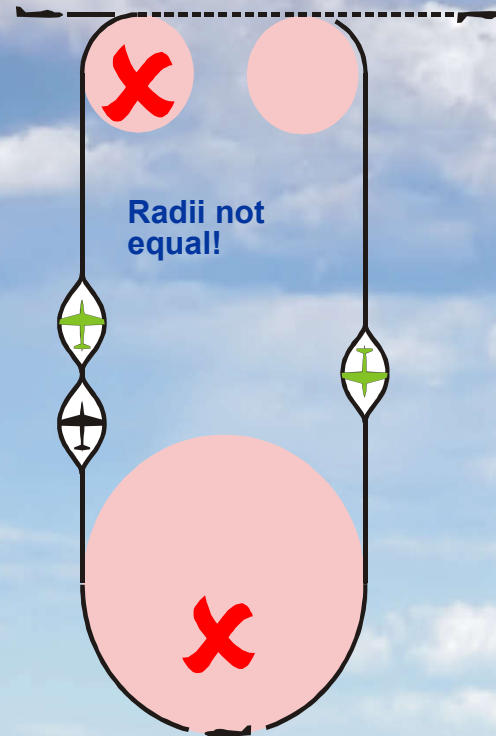
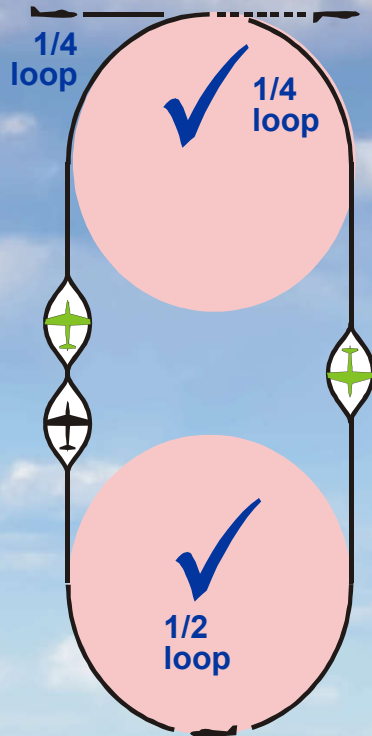


**Rolls on middle of the lines,  
but not necessarily in the  
centre of the manoeuvre.**



# Line/Loop/Roll/Horizontal Circle COMBINATIONS

## HUMPTY BUMP

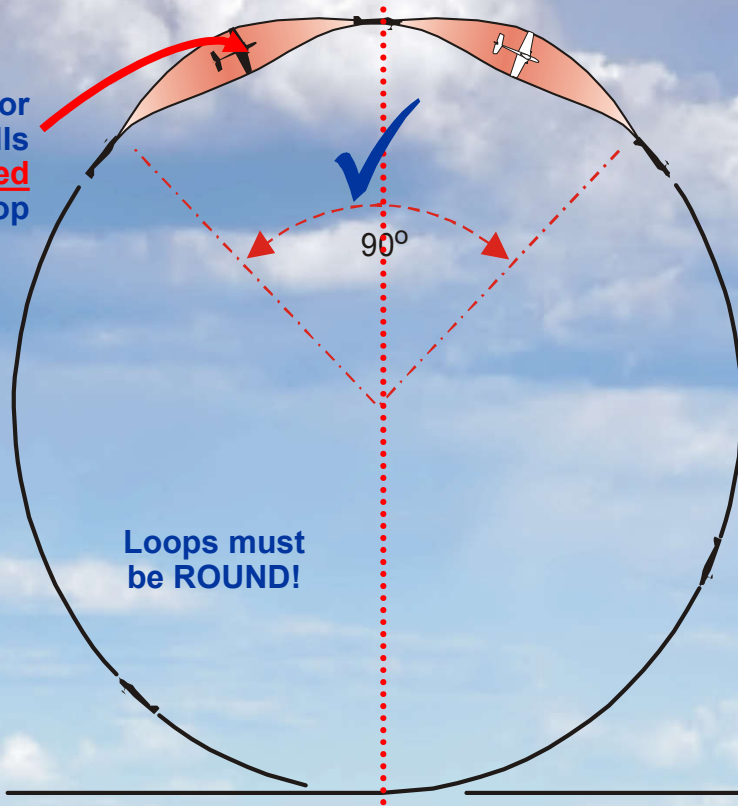




# Line/Loop/Roll/Horizontal Circle COMBINATIONS

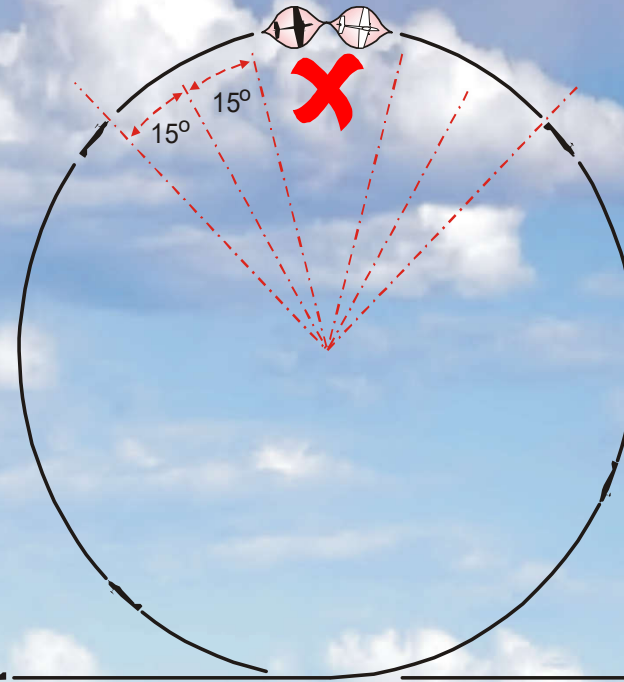
## LOOPS WITH INTEGRATED ROLLS

Rolls or  
part rolls  
integrated  
with loop



Loops must  
be ROUND!

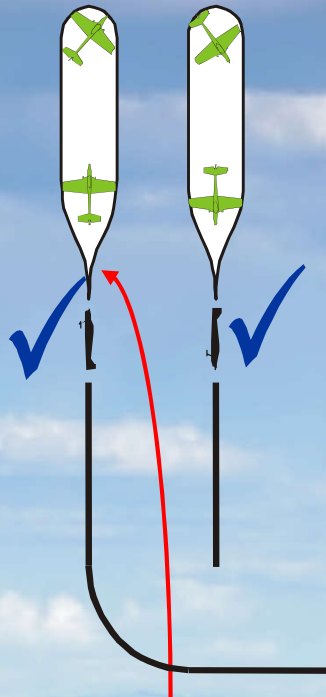
Rapid rolls MUST score less. This  
example = minus 4 for non-  
integration of roll





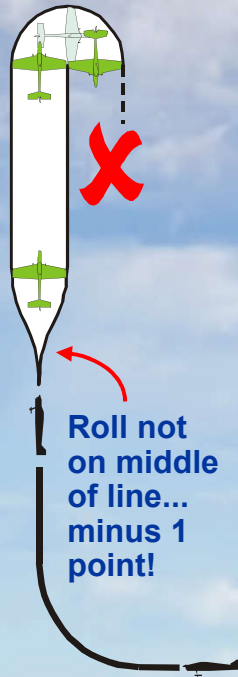
# STALL TURNS

Pivot on CG...  
no downgrade!



Roll on middle of line...  
no downgrade!

Up to  $\frac{1}{2}$  span  
radius of pivot...  
minus 1 point!



Roll not  
on middle  
of line...  
minus 1  
point!

Up to one wing  
span radius...  
minus  $\frac{2}{3}$  points!



Pendulum  
after  
stall...  
minus 1!

No line before roll...  
minus 3 points!

More than  $1\frac{1}{2}$   
span radius but  
less than two  
minus  $\frac{4}{5}$  points!



Over  $15^\circ$   
off vertical...  
minus 2 points!

Roll not on  
middle...  
minus 1 point!

**The model must stop before pivot. If not, downgrade.**



# STALL TURNS

“Skid” or “no stop”  
before reaching  
Stall position...



Minus  
1 point!

Wing-over...  
**ZERO!**

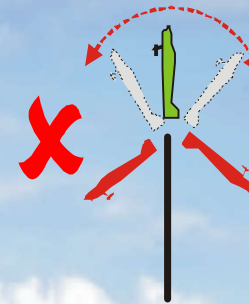


Wing-over =  
2 wing spans  
or more.

Torque-off...  
1pt/15 degree  
downgrade



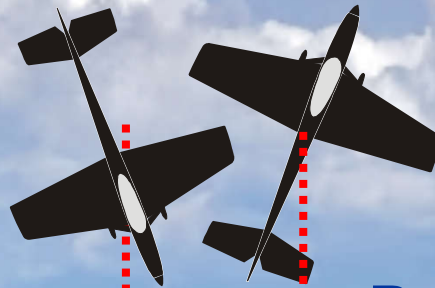
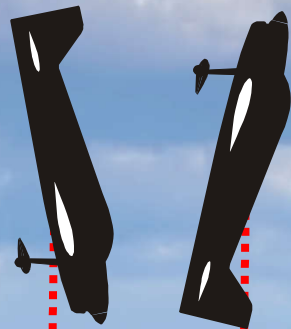
Flop forwards,  
or backwards... **ZERO!**



Drift of the model aircraft during the stalled condition must be ignored, provided the model aircraft does not drift outside the manoeuvring zone.



# WIND COMPENSATION STALL TURNS



Drift caused by wind as the model slows and stops prior to, during and after the pivot must not be downgraded.



Direction of wind



# SPINS



Level entry



Nose-up attitude

Model aircraft spins around CG

STOP, with no over- or under-spin

Vertical (wind corrected) downline after spin

Nose-up attitude increases model aircraft is close to stall

Stall... nose and wing drops... rotation starts



30° to 45° ...minus 3!

15° to 30° ...minus 2!

90° overspin ...minus 6!

Up to 15° ...minus 1!

If wind compensation (yaw) with a crosswind is necessary this is maintained before the spin. Drift caused by wind must not be downgraded as the model slows before, during and after the spin. The wings must be maintained level before and after the spin.



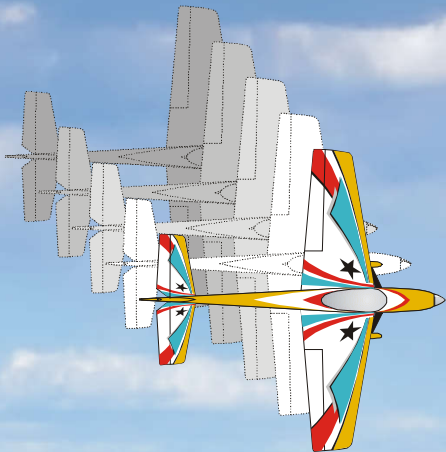
# SPIN: DRIFT - YAWING



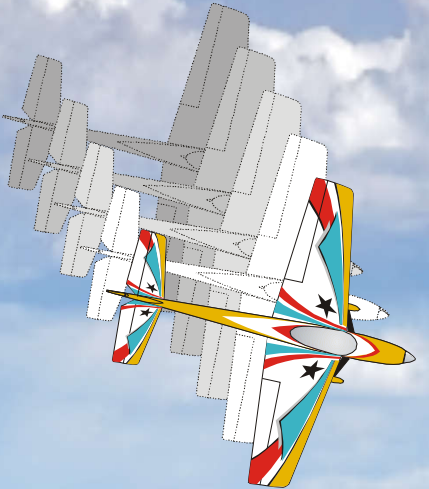
No penalty for drifting with wind close to stalled condition

No penalty for wind compensation.  
No penalty for drifting with wind close to stalled condition

Severe yawing (rotation with wing level) before stall has to be downgraded by 1 point per 15 degrees with 1/2 point steps.



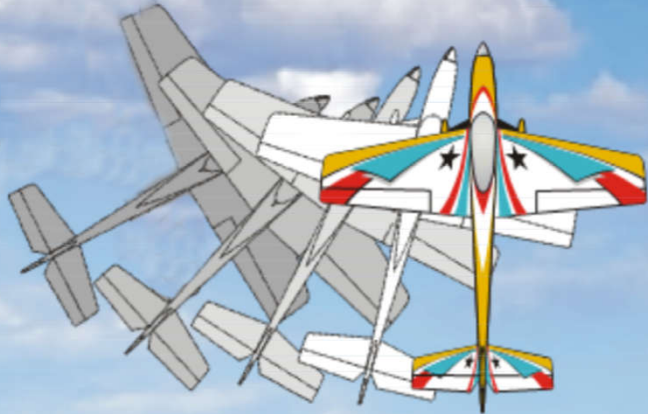
Direction of wind



Direction of wind



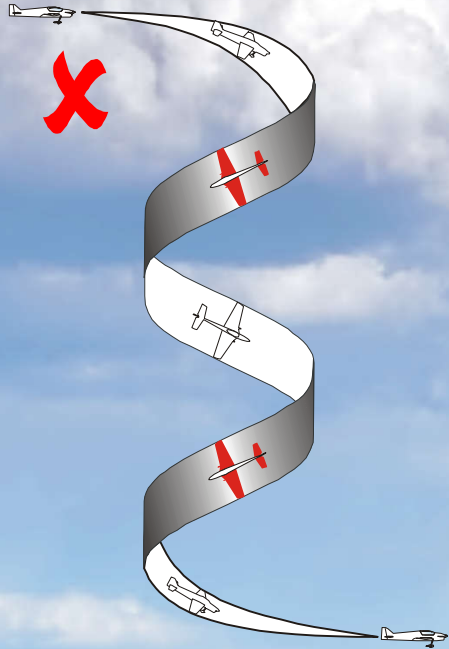
Direction of flight





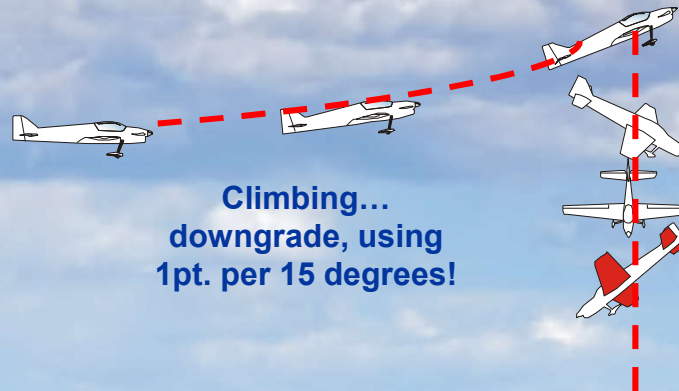
# SPINS

Wing lift (snap entry)...ZERO!



Spiral dive...scores ZERO!

Forced with  
down-elevator...  
minus 4 or 5!



Climbing...  
downgrade, using  
1pt. per 15 degrees!



## Constant Flying Speed

The model aircraft shall maintain a constant flight speed throughout the various manoeuvre components; for example, in climbing and descending sections.

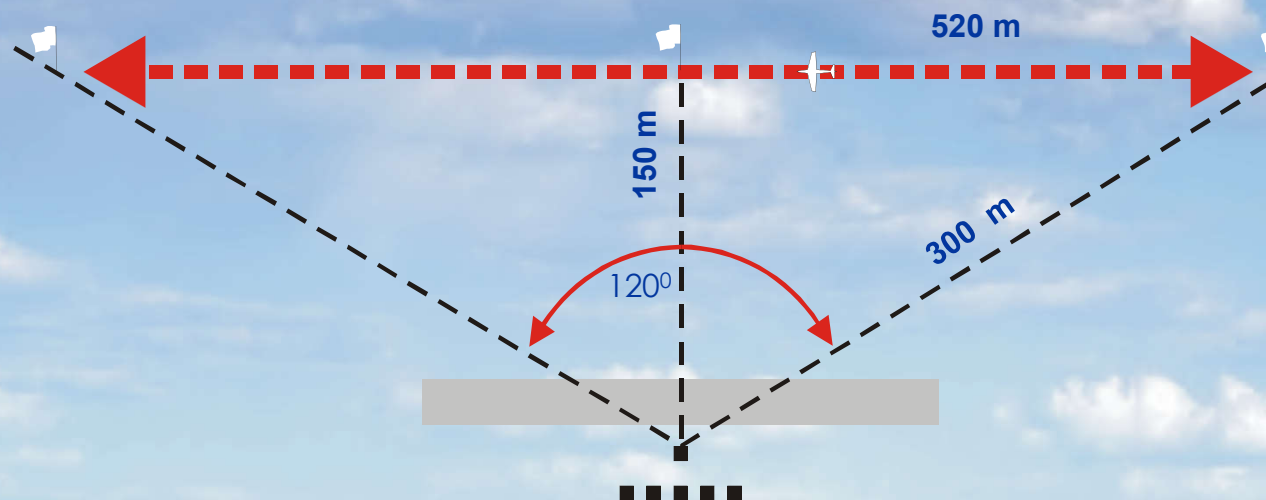
For significant differences up to one point is subtracted.



# LONGITUDINAL POSITIONING

**Manoeuvres should be primarily performed along a line of flight approximately 150m**

Exceptions to this rule are cross-box manoeuvres, 3D - manoeuvres, or manoeuvres in a stalled condition, as well as the horizontal circle manoeuvres which, of necessity, must deviate from the 150m distance of flight.

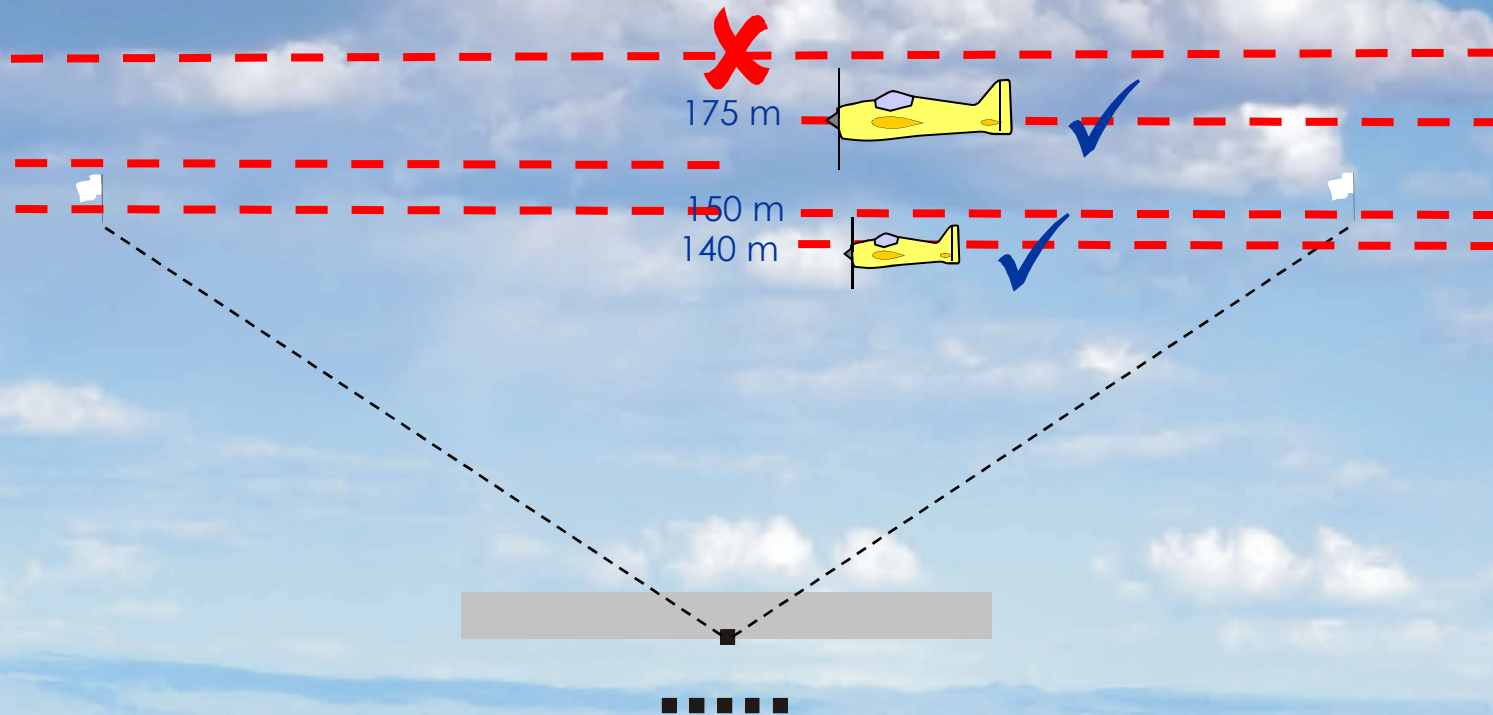




# LONGITUDINAL POSITIONING

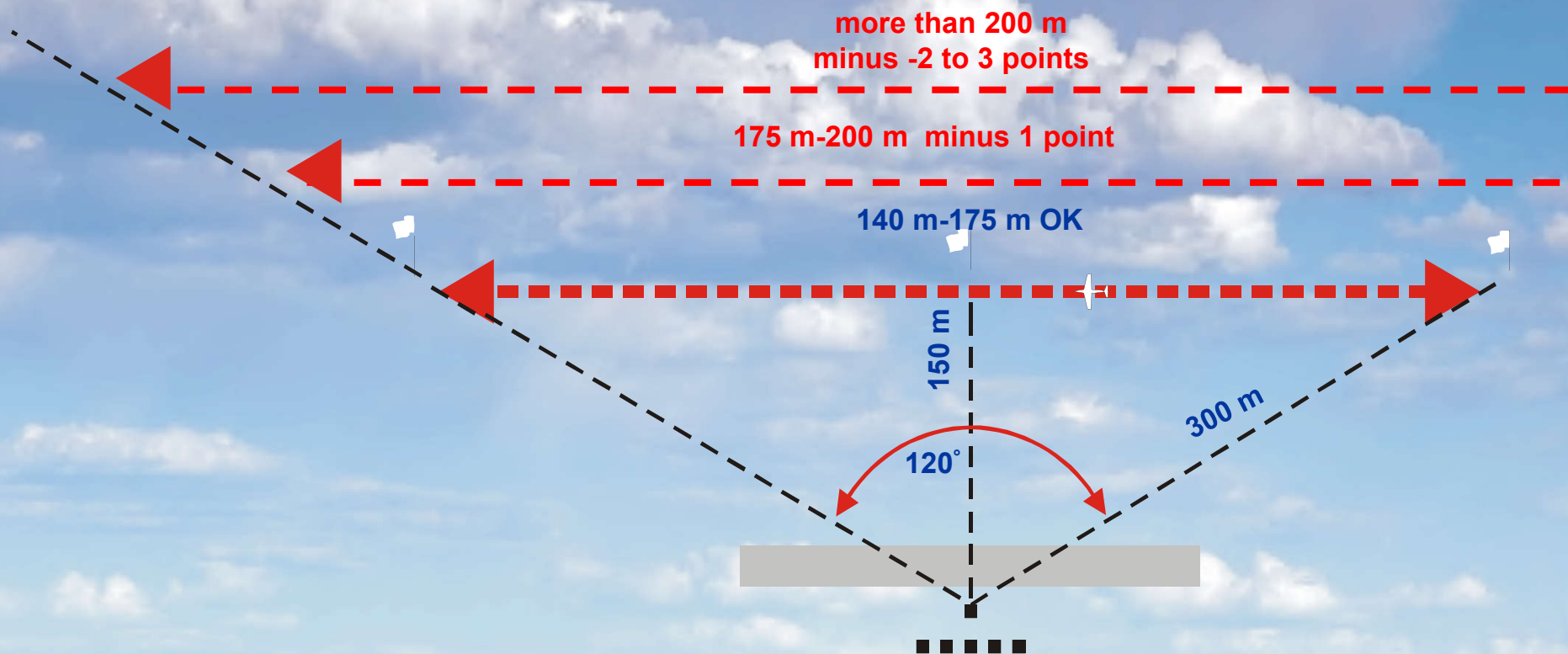
5B.10: “Manoeuvres on a line greater than  
175 m MUST BE DOWNGRADED”

The main criterion is *visibility!*





# LONGITUDINAL POSITIONING



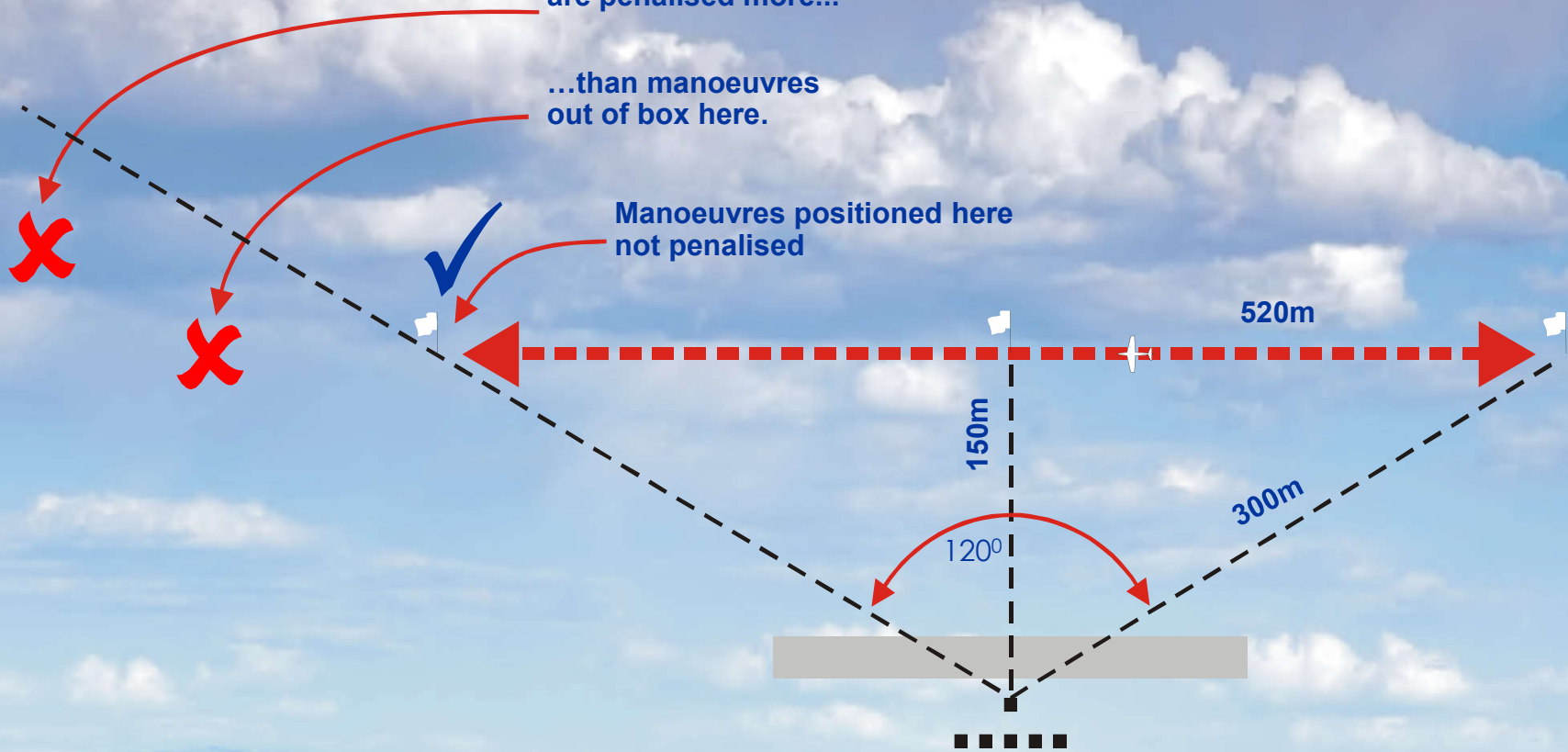


# LONGITUDINAL POSITIONING

Manoeuvres out of box here,  
are penalised more...

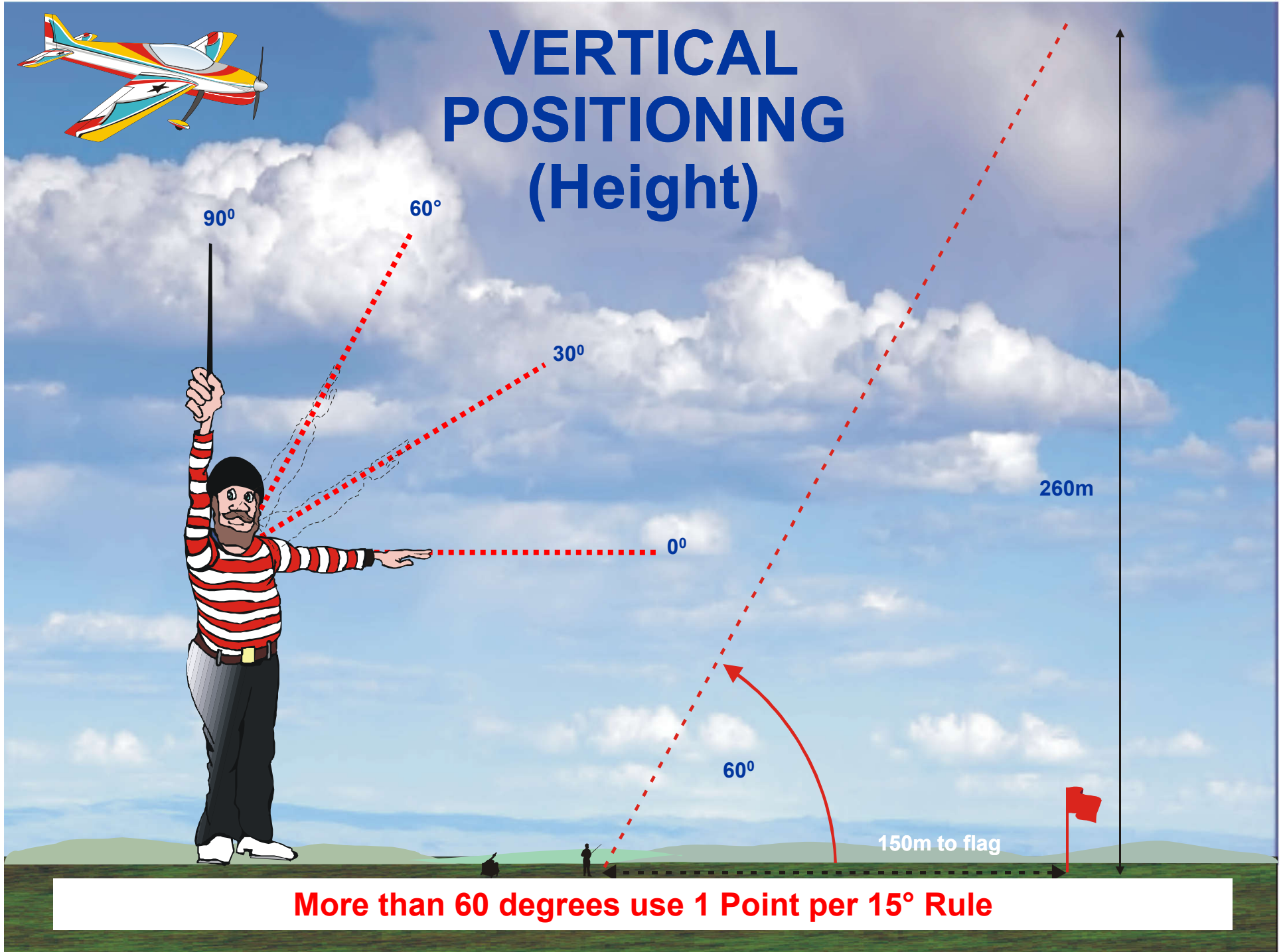
...than manoeuvres  
out of box here.

Manoeuvres positioned here  
not penalised





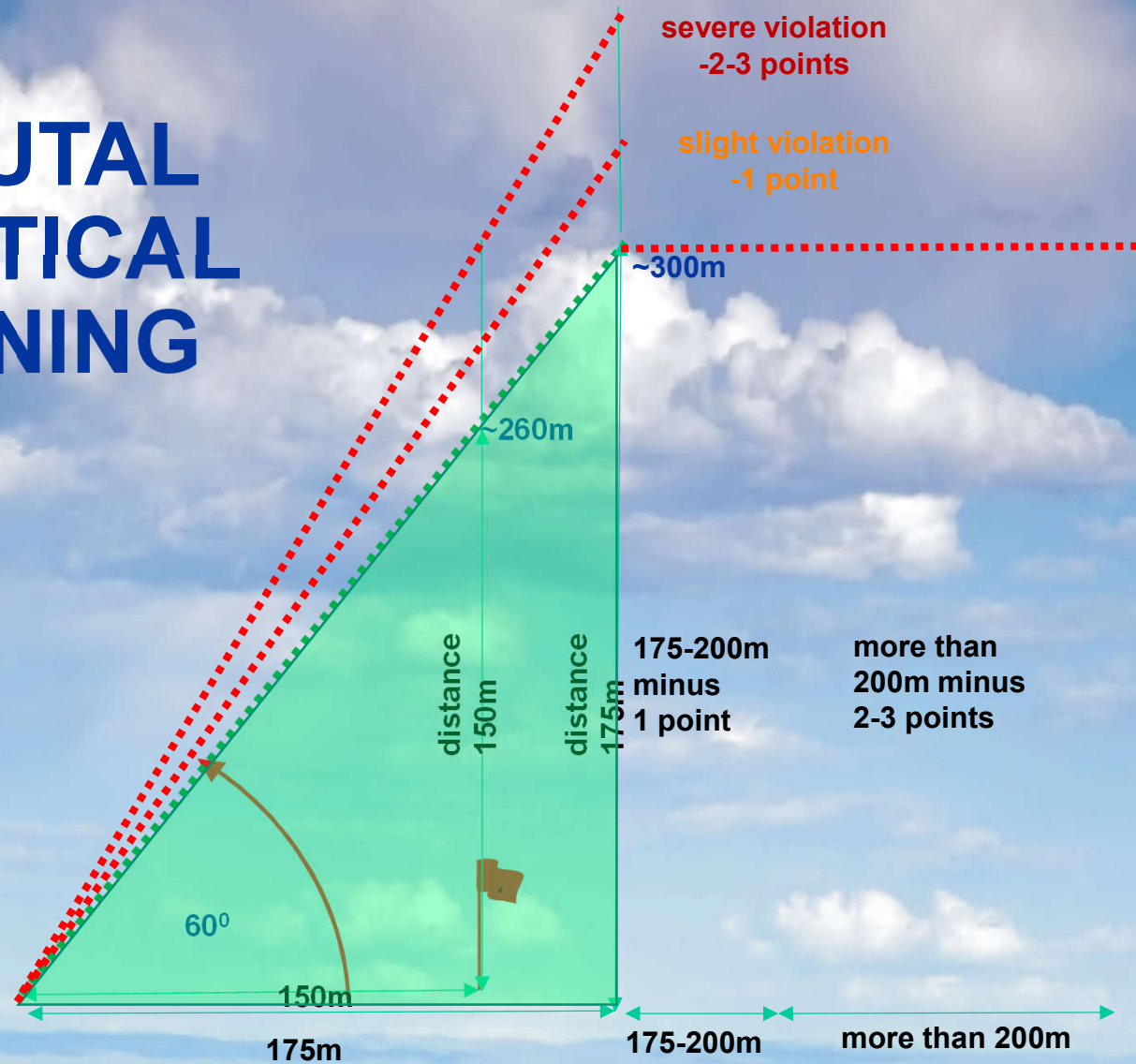
# VERTICAL POSITIONING (Height)



**More than 60 degrees use 1 Point per 15° Rule**



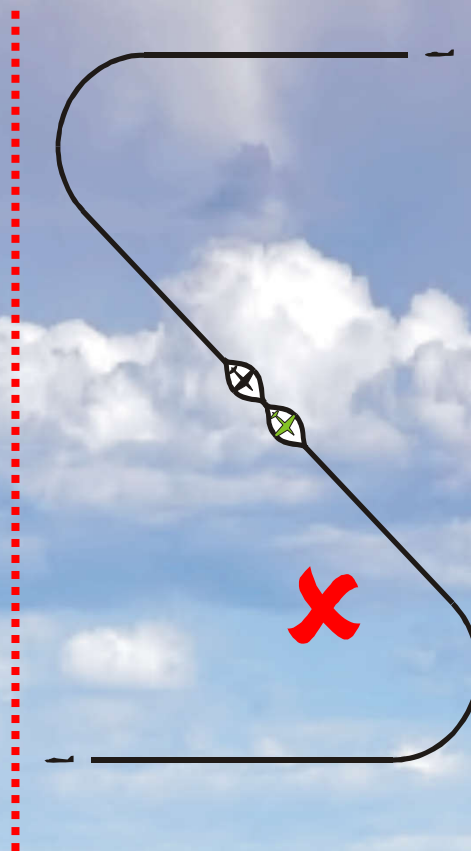
# LONGIDUTAL AND VERTICAL POSITIONING





# CENTRE POSITIONING

Off-centre positioning...  
minus 3 or 4 points!  
(for this example)



**A centre manoeuvre must be flown so that it is centred on the centre line indicated by the centre flag.**

**The centre of a centre manoeuvre is in the middle between vertical limits left and right.**

**If the manoeuvre is flown off-centre, it must be downgraded according to the misplacement.**

**This may be in the range of 0.5 to 4 points subtracted. The centre of a centre manoeuvre is in the middle between vertical limits left and right.**

**Exceptions need to be noted in the manoeuvre description.**





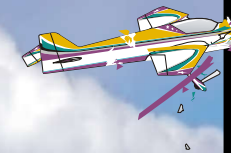
## Size of the Manoeuvre

**The size of a manoeuvre is scored by its matching size relative to the size of manoeuvring zone and the relative size of the other manoeuvres performed throughout the schedule**

**For mis-matching size up to 1 point downgrade.**

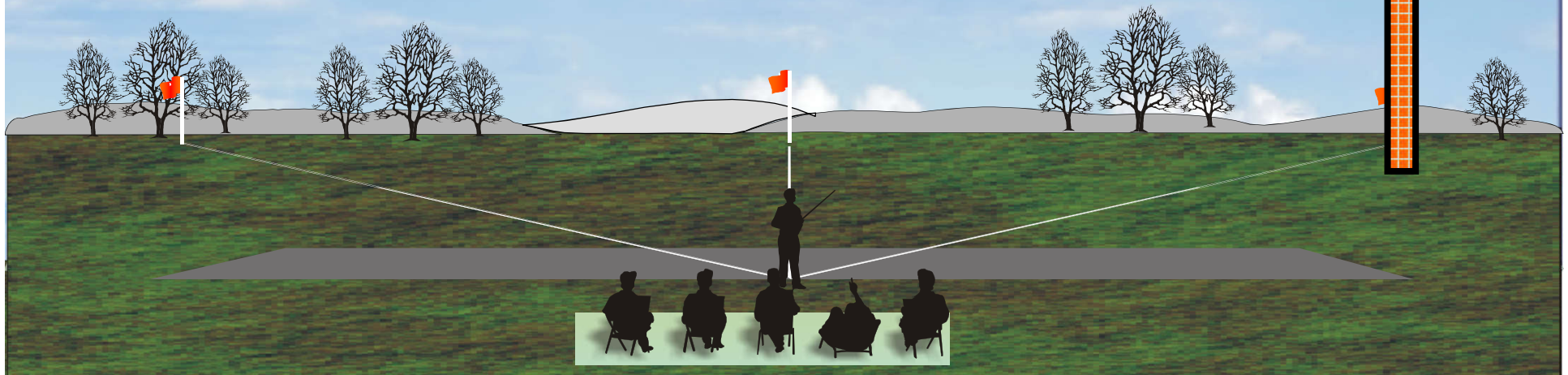


## Proportion of the manoeuvre outside of the manoeuvring zone



Box markers are indicators only.

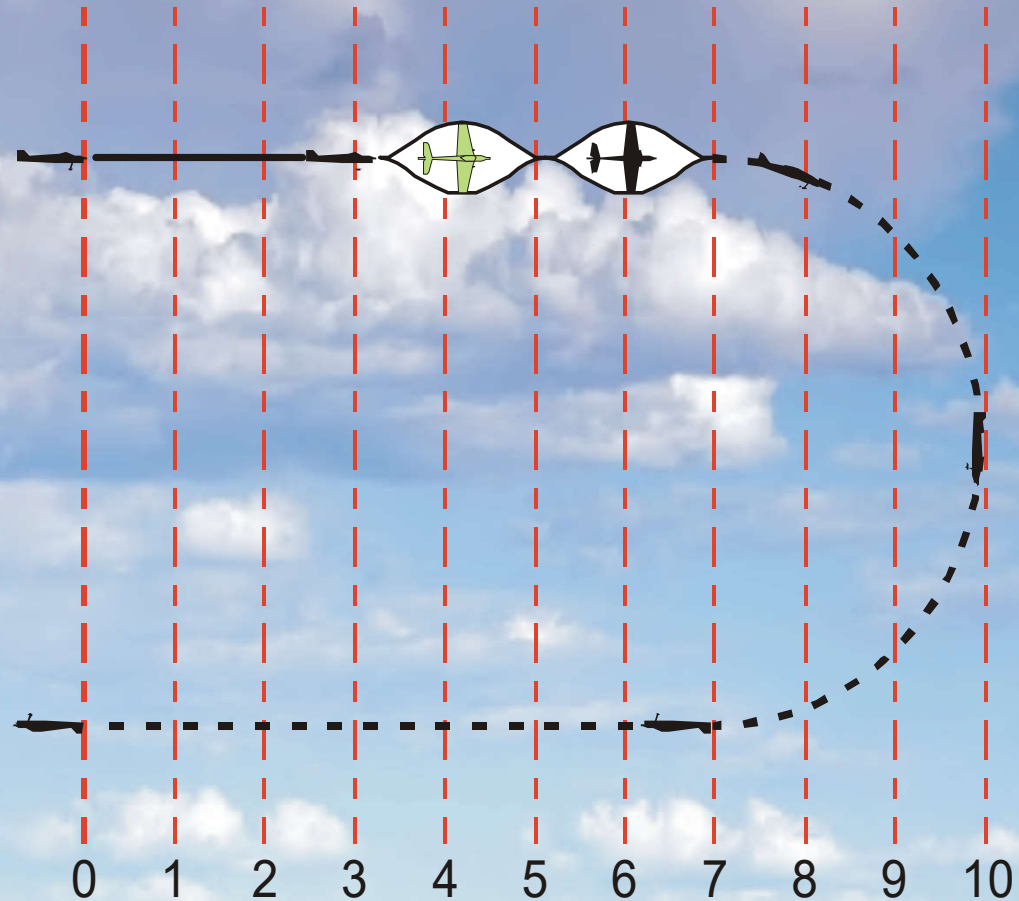
Do not downgrade unnecessarily!





## Proportion of the manoeuvre outside of the manoeuvring zone

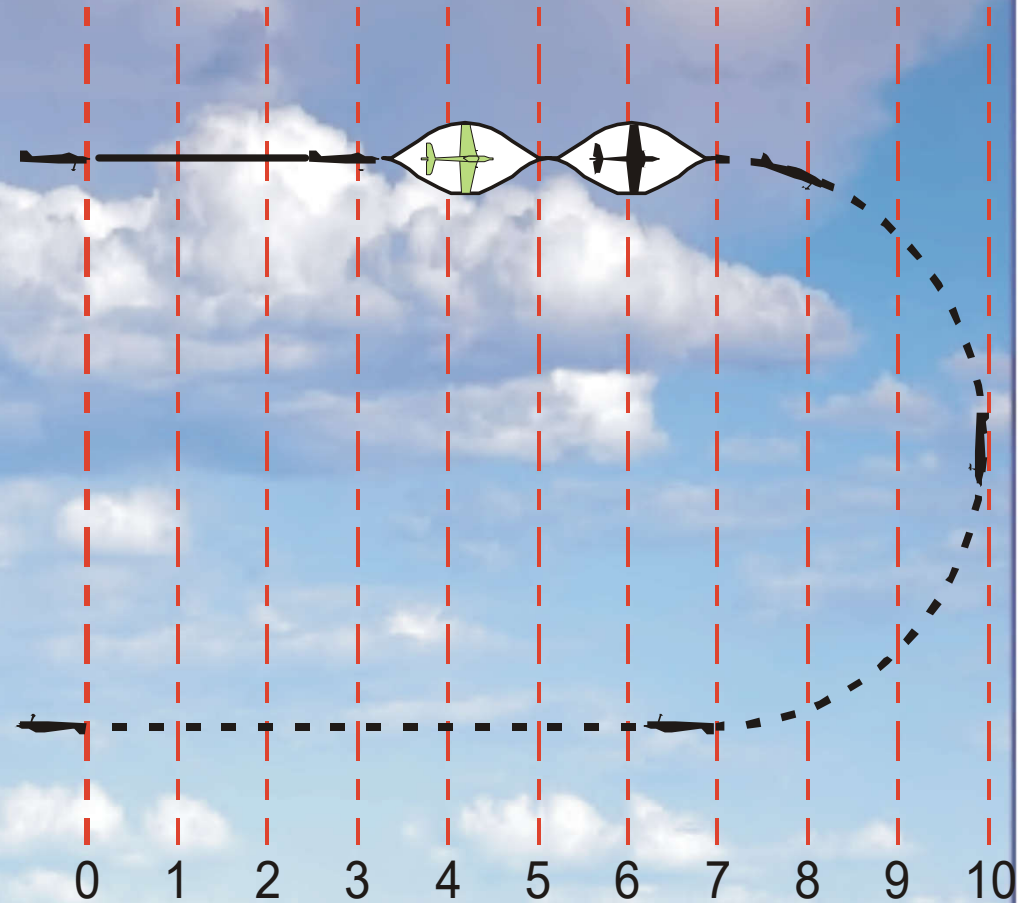
No downgrade  
(positioning only)  
(Entire manoeuvre  
= inside box marker)





## Proportion of the manoeuvre outside of the manoeuvring zone

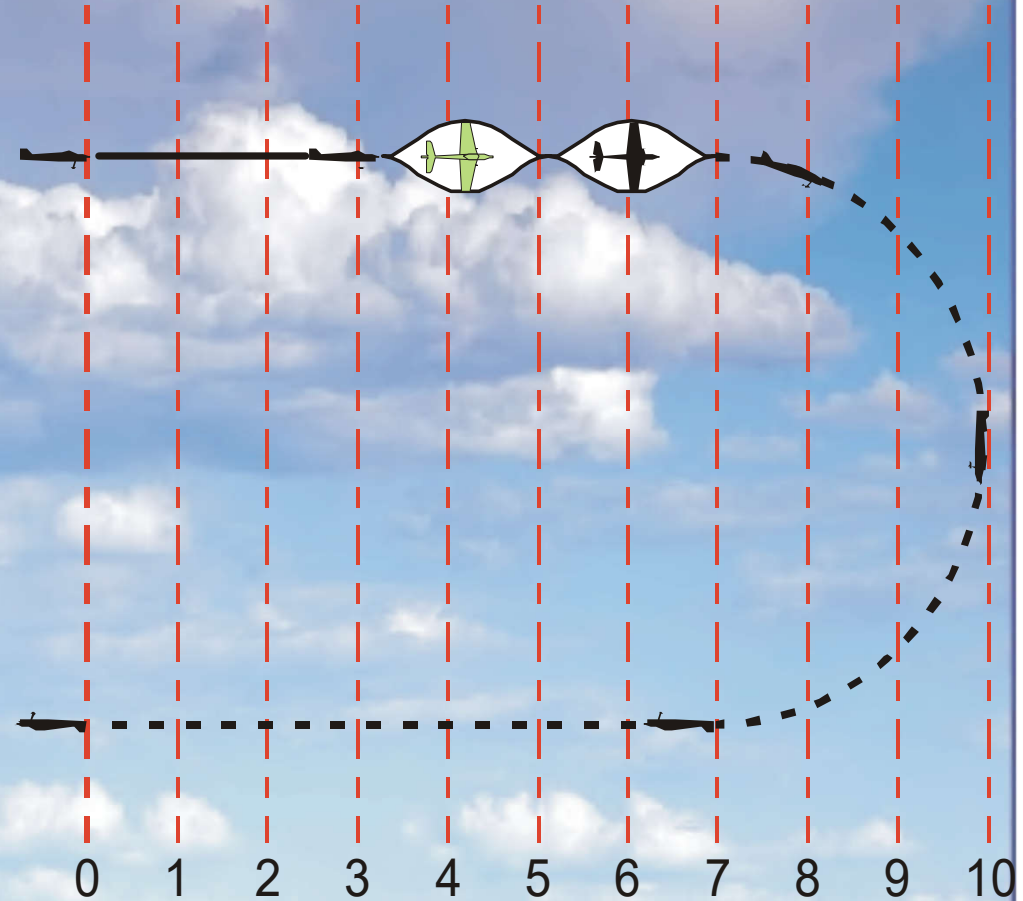
2 points downgrade  
(20% of manoeuvre = outside)





## Proportion of the manoeuvre outside of the manoeuvring zone

5 points downgrade  
(50% of manoeuvre = outside)

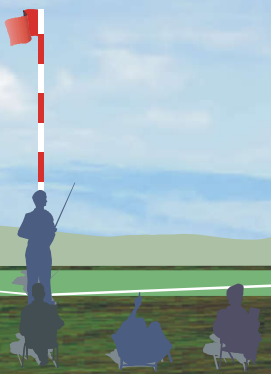
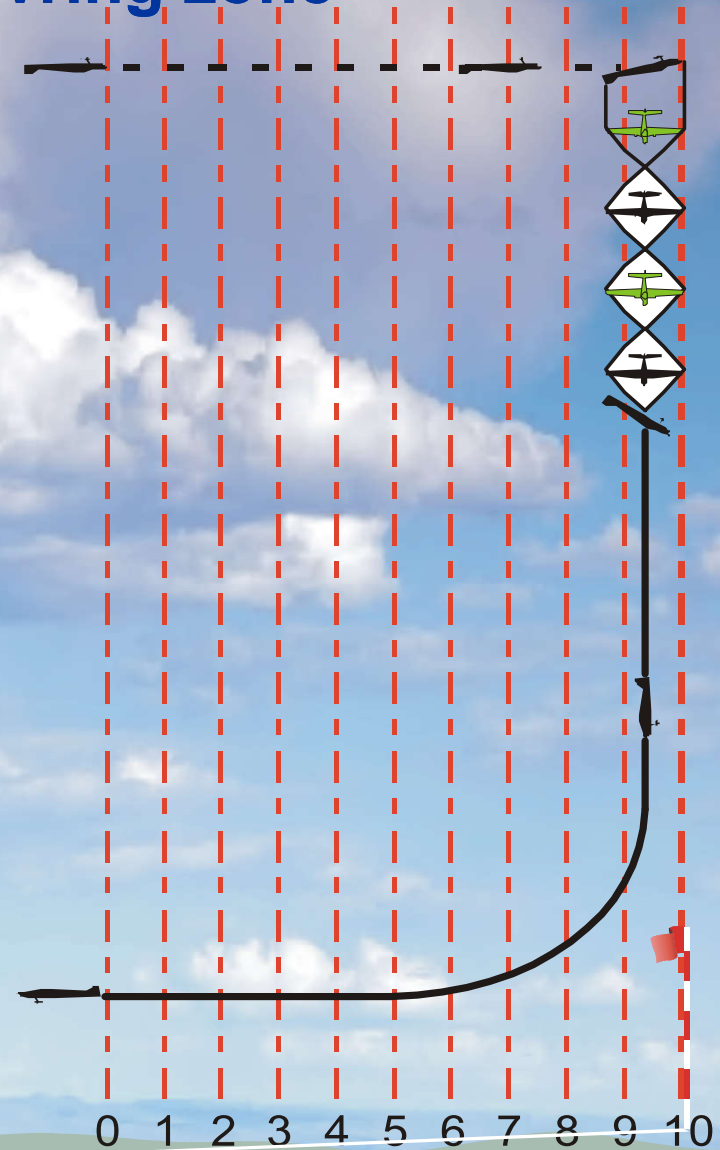




# Proportion of the manoeuvre outside of the manoeuvring zone



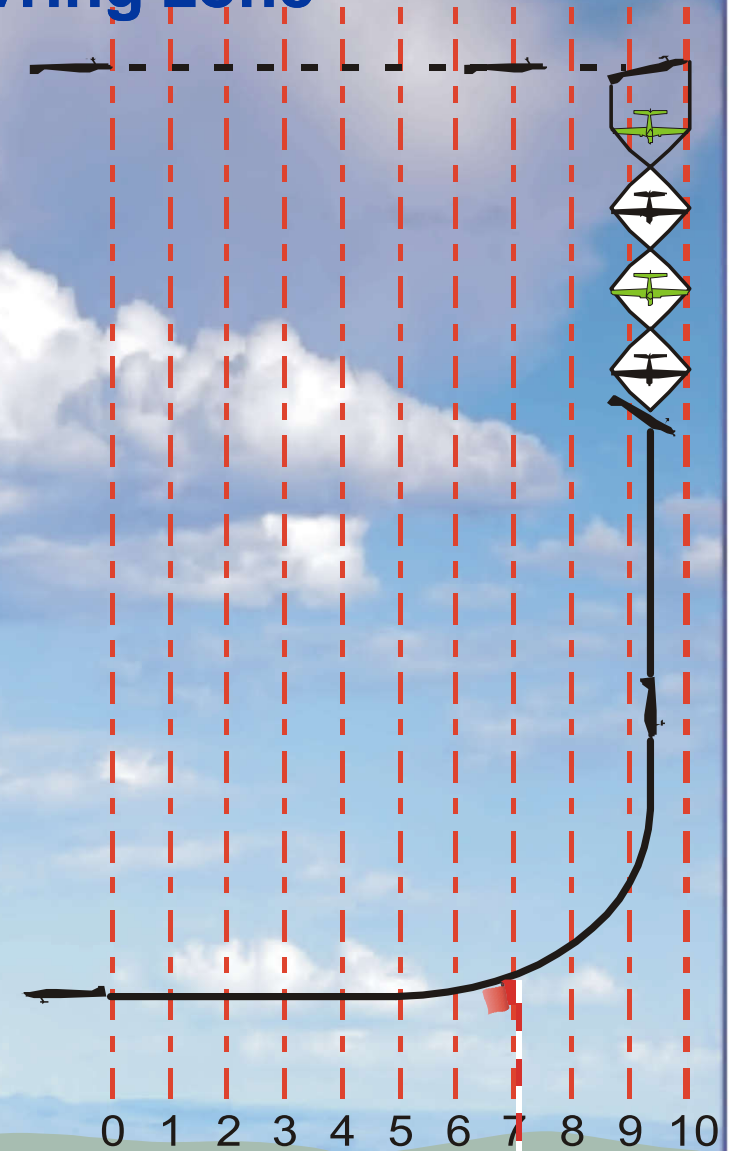
No downgrade  
(Entire manoeuvre = inside box marker)





## Proportion of the manoeuvre outside of the manoeuvring zone

3 points downgrade for positioning.  
(30% of manoeuvre = outside box marker)





## How to prepare as a judge?

- **Know your schedule(s)!!**
  - Like you would fly it yourself or even better
  - Know where the options are so you won't be surprised
- **Be able to read Aresti quickly as a backup reminder sheet**
- **Make sure you get regular breaks**
- **Have some protection with you:**
  - Sun
  - Rain
  - Wind
- **Bring your own (good) chair, if possible.**



**SCORE BETWEEN**

**10 and 0!**

**(NOT 8,5-7,5-6,5 or 6,5-6-5,5 or 6-5-4!)**

**Use  
Deduct/Downgrade  
System!**



**EVERY COMPETITOR...  
STARTS EVERY FLIGHT...**

**WITH A  
PERFECT SCORE!**



**BE CONSISTENT!**

**BE ACCURATE!**

**BE IMPARTIAL!**



**DON'T DISCUSS  
FLIGHTS WITH  
FELLOW JUDGES**



# USE N/O (NOT OBSERVED)

Be FAIR to competitors,  
and yourself!





# Remember

Forget **WHO** is flying

(friend, rival, countryman, flier from other nation)

Forget **WHAT** is flying

(2-stroke, 4-stroke, electric, contra-drive or mono-drive)

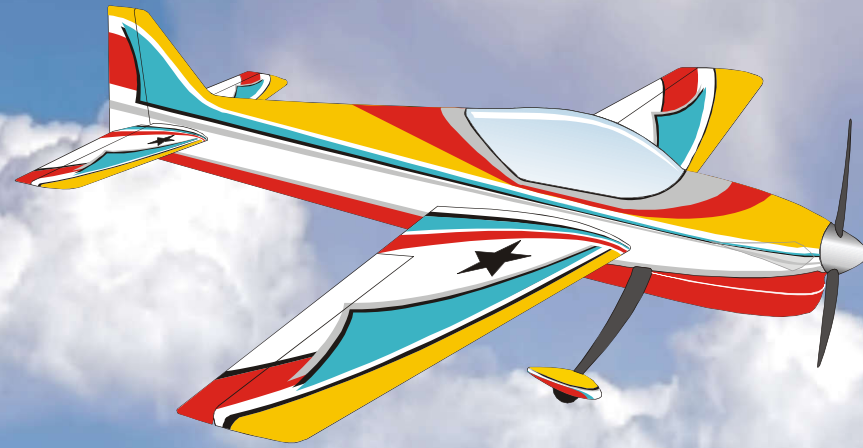
**LOOK ONLY AT LINES DESCRIBED IN THE SKY!**

# What is the game?

- The pilot should do as good as a job as possible to hide errors from the judges
- The judges are there to spot the errors and judge how good the flight appears to be.

# Respect each other

- **Pilots and judges are all human...**
- **Humans make errors - pilots and judges**
- **People who work make errors**
- **People who work a lot make a lot of errors**
- **I do not know people who don't make errors.....**
  
- **So, judges are just humans and can get it wrong or sometimes miss something.**



**Enjoy flying and judging!**

**A special thank to Bob Skinner  
who initiated this presentation.**

© Peter Uhlig, October 2023