# Fly-only skalatävling vid Östersundsträffen 2015

Fly-only är en tävligsform utan all prestige och enbart avsedd för att öka nöjet inom RC-flyg. I klassen kan alla flygplan som har en verklig förebild deltaga. Det gäller inga andra begränsningar än att modellens förebild skall ha flugit.

## Regler

Tävlingen består av två domarbedömda delar:

1/ Statiskt - modellen skall kunna identifieras som samma typ som sin förebild. Som dokumentation räcker det med en bild på flygplanstypen som är förebild. OBS enbart typen behöver dokumenteras - inte en specifik individ.

**2/ Flygning** - den bästa av två flygningar räknas. Flygningen består av totalt fem manövrar:

- 1/ Start mot vinden
- 2/ Låg rak förbiflygning under 6 meter
- 3/ Valfri manöver (från nedanstående lista)
- 4/ Valfri manöver (från nedanstående lista)
- 5/ Inflygning och landning mot vinden

#### **Domare**

Flera domare används (2-5 st beroende på tillgång). Medelvärdet av domarnas poäng blir resultatet på respektive manöver. Domarna bedömer om modellen kan klassificeras som sin förebild.

## **Flygning**

Flygningen bedöms och poängsätts mellan 1-10 per manöver. Utgångspunkt är hur förebildslik manövern är och manövrarnas utförande finns utförligt beskrivet i Sporting Code för klassen F4C.

I detta dokument finns bilderna från Sporting Code F4C inlagda för att du bekvämt skall kunna designa din flygning.

Varje manöver har en K-faktor 16 som multipliceras med domarnas medelvärde på respektive manöver.

Nedanstående bilder och text är hämtade ur FAI Sporting Code och du kan ladda ner den fullständiga beskrivningen på länken:

http://www.fai.org/fai-documents#



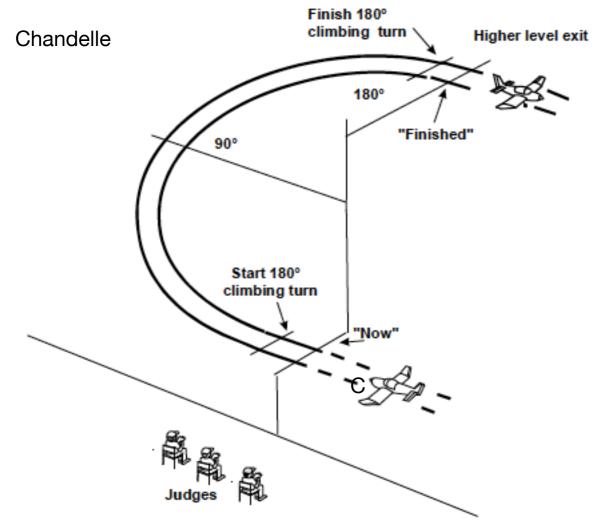
# **FAI Sporting Code**

Fédération Aéronautique Internationale

# Section 4 - Aeromodelling

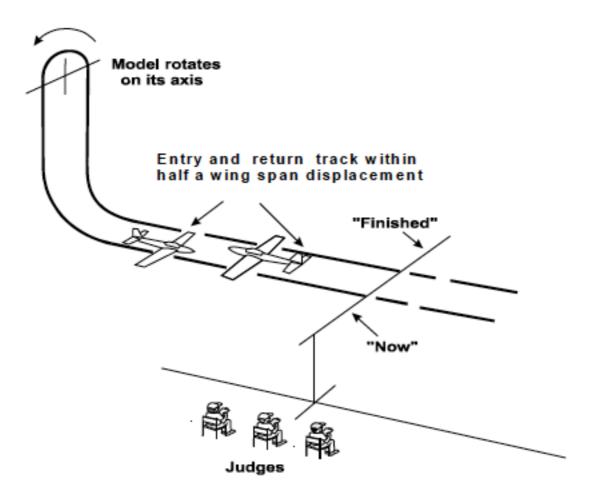
# Volume F4 Flying Scale Model Aircraft

2014 Edition Effective 1st January 2014 Revised 1st March 2014

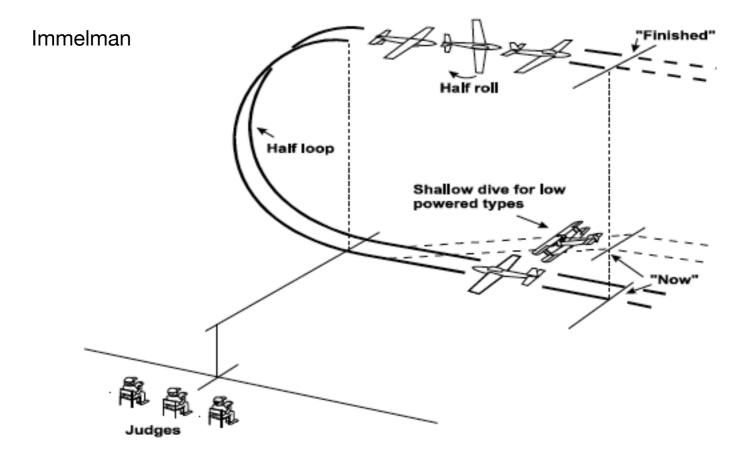


- 1. Turn not smooth and continuous.
- 2. Climb not smooth and continuous.
- 3. Half height gain not at 90° position.
- 4. Excessive/unrealistic engine power used to achieve the climb.
- 5. Insignificant height gain.
- 6. Start and finish not centred on judges' position.
- 7. Entry and exit paths not parallel with the judges' line.
- 8. Final track not 180 degrees opposite to entry.
- 9. Entry and exit not in straight and level flight.
- 10. Too far away or too high.

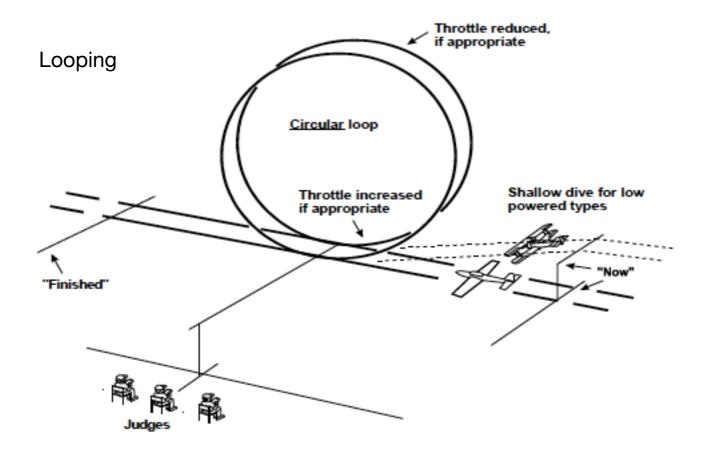
### Stall turn



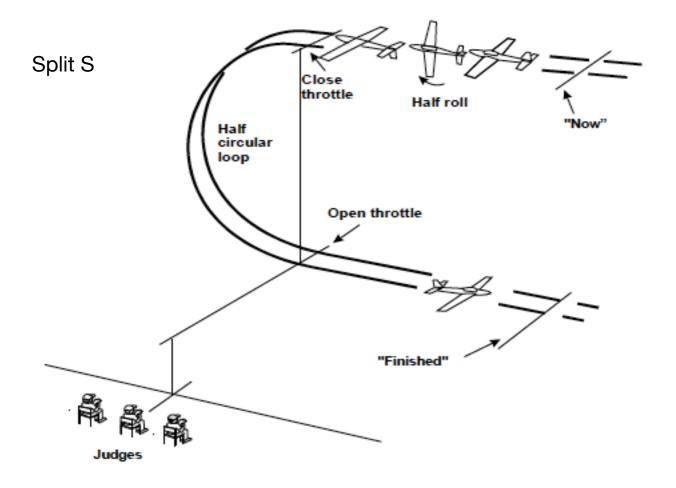
- 1. Start and finish not parallel with judges' line.
- 2. Pull up not positioned to give best view to judges.
- 3. Climb and descent not near vertical.
- 4. Insufficient height gain.
- 5. Model aircraft does not stop.
- 6. Competitor does not specify or achieve nominated left/right turn.
- 7 Entry and exit paths are not at same height.
- 8. Model aircraft does not exit within half span displacement of entry track.
- 9. Entry and exit paths not parallel with the judges' line.
- 10. Too far away/too close/too high/too low.



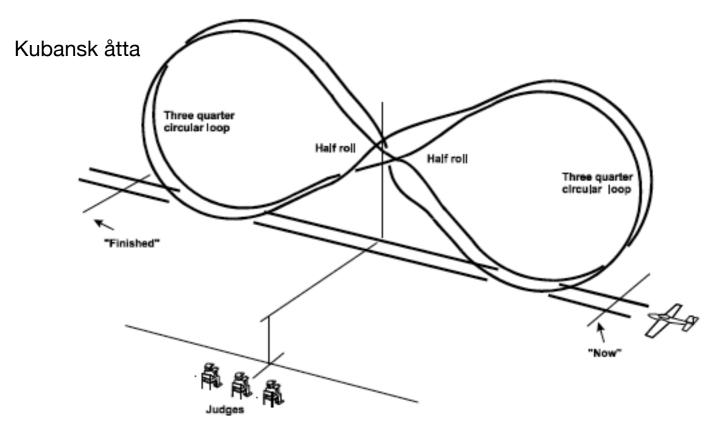
- 1. Track of the half loop not vertical.
- 2. Half loop not centred on judges' position.
- 3. Half loop is not sufficiently semicircular.
- 4. Roll starts too early or too late.
- 5. Excessive height loss in the roll.
- 6. Track veers during the roll.
- 7. Does not resume straight and level flight on the opposite track to entry.
- 8. Manoeuvre not flown parallel with judges' line.
- 9. Size of manoeuvre and speed not in manner of the prototype.
- 10. Too far away/too close/too high/too low.



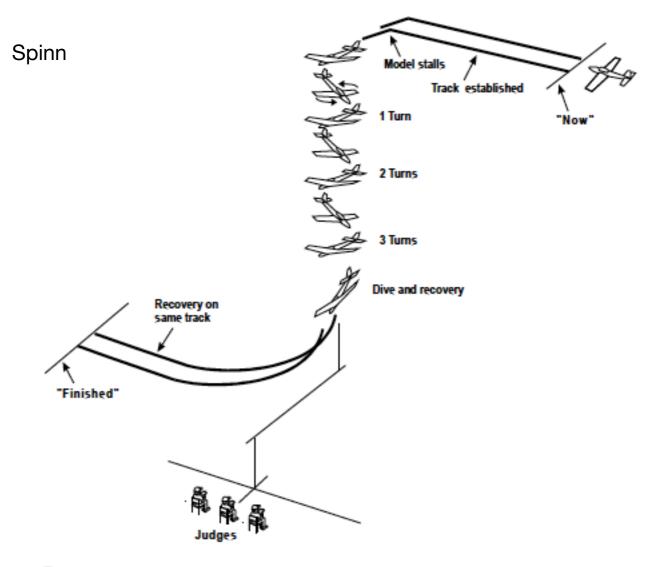
- 1. Track of loop not vertical
- 2. Loop not sufficiently circular, commensurate with the subject type.
- 3. Inappropriate use of throttle.
- 4. Size and speed of Loop not in manner of prototype.
- 5. Not centred on judges' position.
- 6. Does not resume straight and level flight on same track and height as entry.
- 7. Manoeuvre not flown parallel with judges' line.
- 8. Too far away/too close/too high/too low.



- 1. Model aircraft changes track during half roll.
- 2. Model aircraft inverted too long or too short.
- 3. Inappropriate use of throttle.
- 4. Track of half loop not on line or vertical.
- 5. Half loop is not sufficiently semicircular.
- 6 Too fast or too tight a half loop.
- 7. Does not resume straight and level flight on opposite track to entry.
- 8. Half loop not centred on judges' position.
- 9. Manoeuvre not flown parallel with the judges' line.
- 10. Too far away/too close/too high/too low.



- 1. Manoeuvre not performed in a constant vertical plane that is parallel with the judges' line.
- 2. Loops are not circular.
- 3. Loops are not the same size.
- 4. Half rolls are not centred on the judges' position.
- 5. 45° descent paths not achieved.
- 6. Model aircraft does not exit manoeuvre at same height as entry.
- 7. Model aircraft does not resume straight and level flight on same track as entry.
- 8. Inappropriate use of throttle.
- 9. Size and speed of loops not in manner of prototype.
- 10. Too far away/too close/too high/too low.

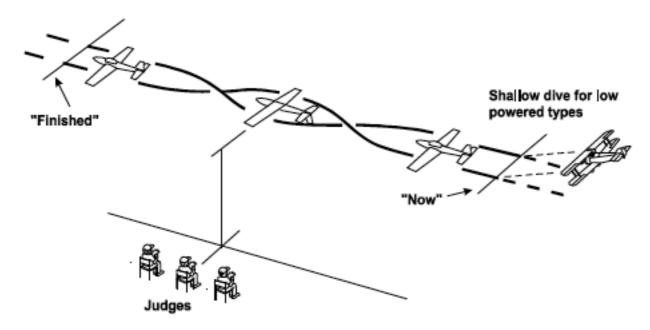


- 1. Engine not throttled back at point of stall.
- 2. Entry into spin not clean and positive.
- 3. Not a true spin but merely a spiral dive (which should score zero).

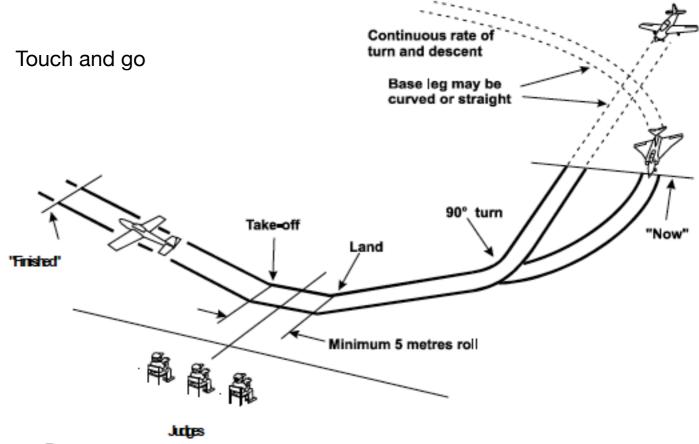
Note In a true spin descent path will be close to C of G of model aircraft. A spiral dive is a tight vertical barrel roll.

- 4. Not three complete turns.
- 5. Start of spin not centred on judges' position.
- 6. Model aircraft does not resume straight and level flight on same track as entry.
- 7. Entry and exit paths not parallel with judges' line.
- 8. Entry and exit not in level flight
- 9. Too far away/too close/too high/too low.

## Roll



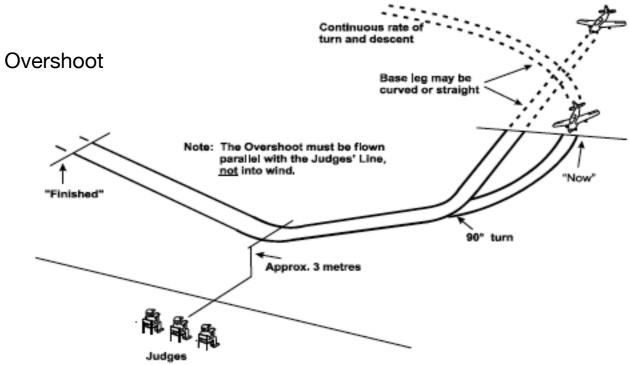
- 1. Rate of roll is not constant.
- 2. Style of roll not typical to prototype.
- 3. Roll not centred on judges' position.
- 4. Entry and exit at different heights.
- 5. Entry and exit at different speeds.
- 6. Entry and exit tracks and line of roll not parallel with judges' line.
- 7. Does not resume straight and level flight on same track as entry.
- 8. Style of roll not as nominated.
- 9. Inappropriate use of throttle.
- 10. Too far away/too close/too high/too low.



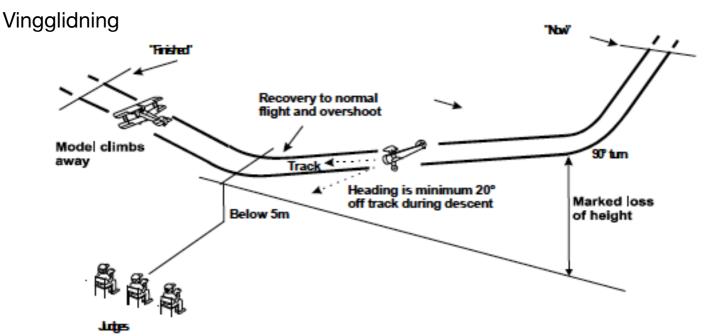
- 1. Manoeuvre does not commence on base leg.
- 2. Turn onto final approach too tight or not 90°.
- 3. Descent from base leg not smooth and continuous.
- 4. Model aircraft does not achieve correct landing approach prior to touchdown.
- Model aircraft does not achieve a minimum ground roll of 5 metres.

Note: if prototype has two main wheels then both wheels must roll on ground for a minimum 5 metres.

- 6. Model aircraft bounces on landing.
- 7. Inappropriate use of flaps.
- 8. Climb out not smooth or realistic.
- 9. Approach and climb out tracks not the same.
- 10. Does not make best use of landing space available for wind direction.

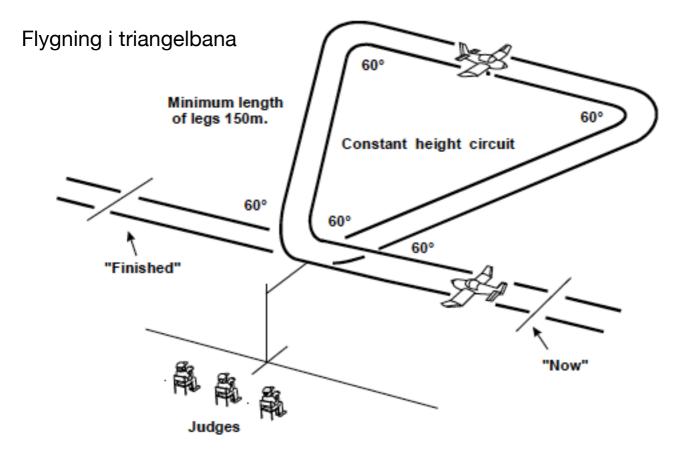


- 1. Manoeuvre does not commence on base leg.
- Turn onto final approach not smooth and continuous or not 90°.
- 3. Model aircraft does not achieve correct high landing approach.
- 4. Model aircraft does not achieve correct landing speed or attitude.
- 5. Not continually descending until power applied.
- 6. Model aircraft descends to significantly above or below 3 metres.
- 7. Lowest point of manoeuvre not achieved in front of judges.
- 8. Not smooth transition of speed & attitude from approach, through descent check to climb-out.
- 9. Inappropriate use of flap and/or gear.
- 10. Model aircraft could have landed from approach.
- 11. Model aircraft does not climb away smoothly.
- 12. Approach and climb out tracks not the same.
- 13. Too close or too far away.



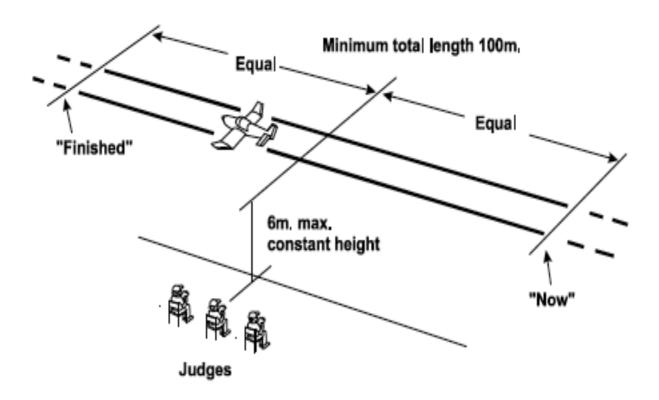
marked loss of height on final approach without an excessive build up of speed or the use of flap.

- 1. Model aircraft does not smoothly enter Sideslip upon turning final approach.
- 2. Model aircraft is not yawed at least 20° off track during Sideslip.
- 3. Rate of Sideslip and descent are not constant.
- 4. There is insufficient height loss.
- 5. Excessive speed is built up during descent.
- 6. Approach track not maintained or not flown parallel with judges' line.
- 7. The Sideslip is not corrected before passing the judges.
- 8. Overshoot is not below 5 metres.
- 9. Not a smooth transition during return to normal flight and climb-out.
- 10. Too far away/too close/too high/too low.



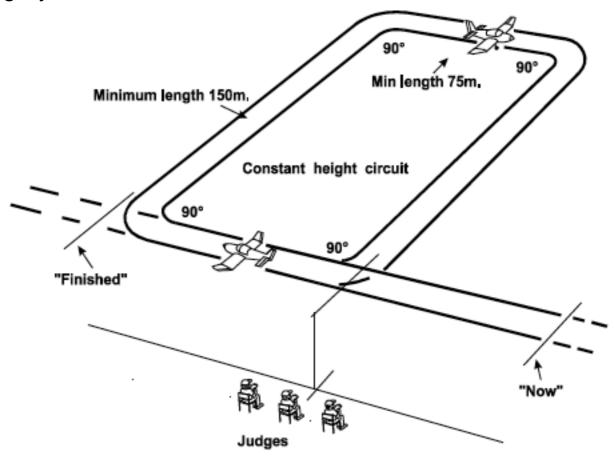
- 1. Not commenced and finished at points equidistant from the judges.
- 2. Model aircraft changes height.
- 3. Rate of turn at corners not constant or inside corners of triangle not 60°.
- 4. Sides of the triangle are not straight.
- 5. Sides of triangle are not equal lengths.
- 6. Sides of the triangle are too long or too short.
- 7. Apex of triangle not centred on judges' position.
- 8. Correction for drift not properly made.
- 9. Start and finish tracks not the same.
- 10. Start and finish tracks not parallel with judges' line.
- 11. Too far away/too close/too high/too low.

# Rakflygning på konstant höjd

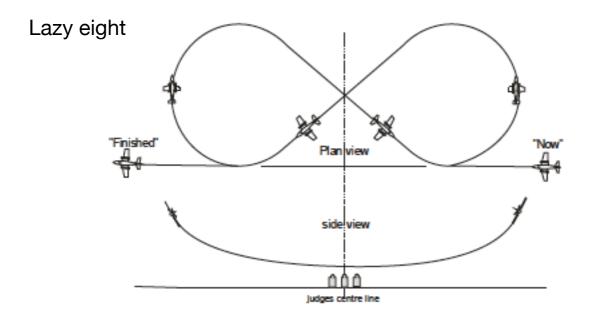


- 1. Not a straight course (slight corrections acceptable with light aircraft).
- 2. Not constant height.
- 3. Not 6 metres or below.
- 4. Not pass over the landing area.
- 5. Not centred on judges' position.
- 6. Not parallel with the judges' line.
- 7. Too short distance (too long is not an error).
- 8. Model aircraft flight path not steady.
- 9. Too far away/too close/too high/too low.

## Flygning i fyrkantsbana

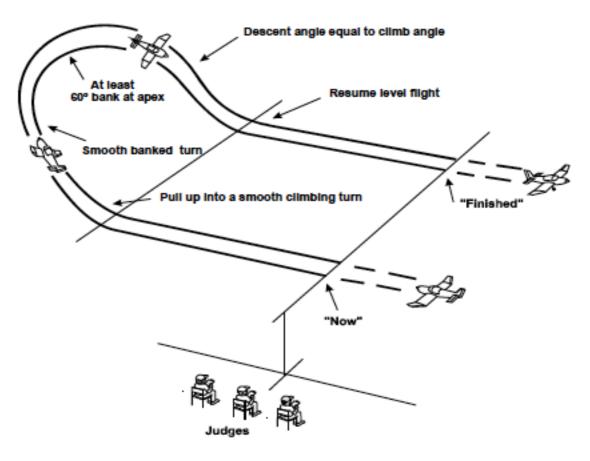


- 1. Not commenced and finished at points equidistant from the judges.
- 2. Model aircraft changes height.
- 3. Rate of turn at corners not constant or corners not 90°.
- 4. Legs are not straight.
- 5. Legs too long or too short.
- 6. Opposite sides of rectangle are not of equal length
- 7. Correction for drift not properly made.
- 8. Final leg of rectangle not centred on judges' position.
- 9. Start and finish tracks not the same.
- 10. Start and finish tracks not parallel with judges' line.
- 11. Too far away/too close/too high/too low.



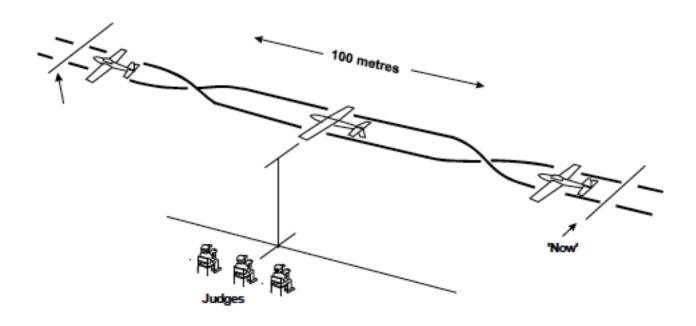
- 1 Entry and exit paths not parallel with judges' line.
- 2. Insufficient climb achieved.
- 3 Insufficient bank achieved.
- 4 Climb and descent angles not equal throughout manoeuvre.
- 5. Manoeuvre not symmetrical about judges' position.
- 6. Arcs misshapen.
- 7. Start and finish positions not as indicated.
- 8. Overall size of manoeuvre not realistic for prototype.
- 9. Model aircraft flight path not smooth and steady.
- 10 Too far away/too close/too high/too low.

## Wingover



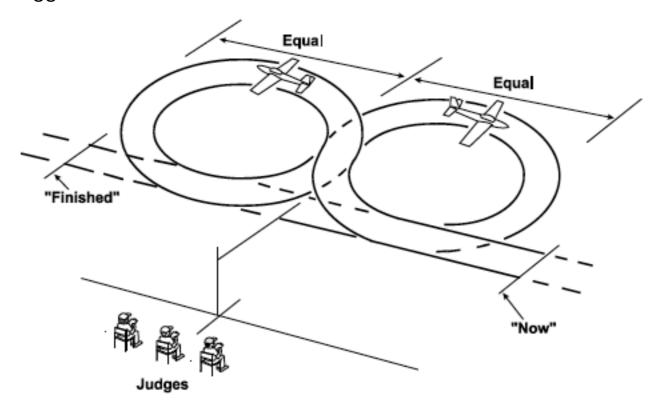
- 1. Start and finish positions not as indicated.
- 2. Insufficient climb achieved.
- 3. Insufficient bank achieved
- 4. Climb and descent angles not equal throughout manoeuvre.
- 5. Model aircraft does not fly a smooth and symmetrical arc.
- 6. Entry and exit paths not parallel with judges' line.
- 7. Overall size of manoeuvre not realistic for prototype.
- 8 Model aircraft flight path not smooth and steady.
- 9. Too far away/too close/too high/too low.

# Inverterad flygning



- 1. Half rolls not performed on same track as inverted flight.
- 2. Model aircraft does not fly a straight course.
- 3. Model aircraft gains or loses height.
- 4. Model aircraft does not remain inverted for the prescribed duration.
- 5. Manoeuvre not centred on judges' position.
- 6. Manoeuvre not flown parallel with judges' line.
- 7. Too far away/too close/too high/too low.

## Liggande åtta



- 1. Entry into first circle not at right angles to original flight path.
- 2. Circles unequal size.
- 3. Circles misshapen
- 4. Constant height not maintained.
- 5. Intersection not centred on judges' position.
- 6. Entry and exit paths not on same line.
- 7. Entry and exit paths not parallel with judges' line.
- 8. Overall size of manoeuvre not realistic for prototype.
- 9. Model aircraft flight path not smooth and steady.
- 10. Too far away/too close/too high/too low.