

# VAWC spirit and rules

## *The VAWC Spirit*

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*VAWC is NOT a normal aerobatic competition! We are NOT regulated by CIVA or IAC. But of course we do use a good portion of this framework in our scoring and rules.*

*VAWC is aimed to attract pilots who have NEVER entered an aerobatic competition before and thus have NO reference and experience with this mentality or culture. VAWC should however also be attractive to experienced aerobatic competitors who might have been participating in regular aerobatic competitions for years... maybe even on a high level.*

*VAWC shall take care of the fabulous old vintage aircraft, asking for soft elegant and precise flying, showing the aircraft and its era to the optimal qualities.*

*VAWC shall have strong focus on safety, and e.g. be generous regarding “free breaks” for height and diving for speed...allowing low powered airplanes NOT to be tempted to pull too many G’s and/or overrev the fine old engines.*

*VAWC is aimed to create and maintain the special balance between a strong sense of competitiveness and a high social ambition, striving to make an attractive platform for bringing your spouse and friends under the mantra: Lets have some serious fun together! And in all we do our mantra should be in focus:*

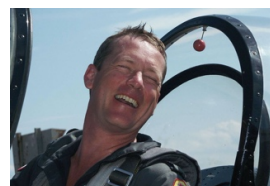
***“VAWC gives these fabulous old-timers a new sense of purpose, and do re-ignite their proud owners and pilots. VAWC unites the competitive and social SPIRIT and gives you personally a sense of going somewhere, rather than retreating...”***

(Hardy Vad, VAWC winner 201(s)6, KZ8)

## ***The VAWC SPIRIT beats rules***

*If the International Jury is presented by a rule-dilemma the meta-instruction is defined twofold: First of all, “the benefit of the doubt” (pilot perspective) should be respected. Second: If a rule-dilemma conflicts the VAWC spirit, the spirit is KING.*

***Søren Dolriis, VAWC Founder***



# VAWC Rules

Mantra: Keep it simple - lets have some fun!

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## The flights

1. You compete in ONE of three known programs/classes:
  - **Looping the Loop**  
(should be flyable in a Tiger Moth or other low power non inverted airplanes)
  - **Dancing the Cloverleaf**  
(should be flyable in a Chipmunk or other low power non inverted airplanes)
  - **Rolling the Circle**  
(should be flyable in Bücker Jungmann or Stampe)

Latest in April every year the annual known programs will be uploaded on [www.vintageaerobatic.com](http://www.vintageaerobatic.com)

*Note: It is our mantra NOT to increase complexity from year to year. We need to take care of the beautiful old airplanes and keep focus on safe fun flying. Unknown programs in "Rolling the Circle" will however most likely include some handling and/or "brain challenges" to the pilot.*

*Local organizers are welcome to suggest known programs for the season, but the VAWC steering group do have the final word in the design of the known- and unknown programs.*

*Note: You are allowed double entry, allowing **power** pilots also to participate in **glider** and vice versa. Apart from this It is NOT allowed a pilot to participate in different aircrafts and in more than one known program/class.*

2. You can complement your choice of known program by participating in The Performance either as SOLO flight or TEAM.
3. If you desire, you can compete *alone* in The Performance (team or solo)
4. You can compete in as well The Performance team, and The Performance solo

### Scoring / know(n) program(s)/classes:

The known programs will be judged by an international judge line manned by experienced judge-teams. Maneuver scoring (only!) criteria from CIVA will be used. Thus, all other CIVA/IAC rules except "maneuver-scoring" is not respected.

## **Scoring / The Performance (SOLO and TEAM)**

The judge line is expanded with selected experienced pilots not participating in the competition (The Performance). The Performance Judges shall be present at the presentation/briefing where competitors in "The Performance" present their performance:

1. Major take home from the performance flight: What Impact do I want to make, emotions, impression...
2. Major creative concept of the flight: Maneuvers, composition, music, speak
3. Major idea behind the show-design linked to the airplane (envelope, time-era, etc.)

## **Number of flights**

- "Looping the Loop" and "Dancing the Cloverleaf" is expected to fly two flights (repetition).
- In "Rolling the Circle" only one known flight is flown. After these two unknown flights is flown.

If weather – or other issue – prevents that two flights can be flown by all pilots in the respective class, the competition management led by the Contest Director can reduce the number of flights. World Champions and Performance Winners can be announced if only one flight is flown by all participating pilots. Contest Director can also expand the number of known flights two three flights if time and weather allow.

## **Starting order**

In principle the starting order is decided by drawing lots. But the competition management can decide otherwise to optimize flying in shared planes, glider participating etc.

# **Scoring**

## **Known programs**

Scoring principles for the known "program flights":

1. **Aresti scoring system, maneuvers: Weight 70%** (Subject to "power balancing" - see below / The Airplanes)
2. **Positioning in front of the judges: Weight 10%**
3. **Rhythm and showmanship 10%: Weight 10%**
4. **Safety attitude: Weight 10%**

Note: Zero penalty is given for "breaking for height", "re-climb" and "restart". However, you will of course lose points in the "rhythm and positioning scores".

## Scoring principle for THE PERFORMANCE

Selected pilots, aviators and judges will perform the judging.

1. "Flight Harmony and Romance" (20% weight)
2. "Piloting Skills" (60% weight)
3. "Creative flight concept" (weight 20%) (Creative expression, program design, music etc.)

## Penalties

**Low penalty:** To make VAWC a safe event following height limitations (AGL) will be applied:

- Looping the Loop: 1500 feet.
- Dancing the Clover leaf: 1000 feet.
- Rolling the circle & The Performance: 500 feet.
  - 10% penalty in total points for flying 100 feet below low limit.
  - Below this, your flight will be "zeroed". Stay safe, stay high!

**Flying behind the judge-line:** Maneuvers flown behind the judging line are zeroed.

## The airplanes

The categories in VAWC is defined in such way that it allows as many of these old fine machines to compete... still keeping focus on the vintage "soul" and time era. Categories:

1. **Vintage category**  
Airplanes with type certificate (or alike) before 1955 and a least 65 years old.
2. **Classic category**  
Airplanes with type certificate (or alike) before 1975 and after 1955, and a least 45 years old.
3. **Replica category**  
Replicas of Vintage or Classic airplanes. E.g. re-engined / modified vintage- and classic airplanes. Or plans build "remanufactured" airplanes. Either from professional hands or your own.

**Borderline cases will be accepted or denied by the steering group of VAWC.**

**Power balancing:** In order not to kill the winning potential of the original vintage **and classic** planes, we have decided to balance the typical power-advantage of the replicas. Keeping it simple we leave out propellers etc. and stick to horsepower ratio compared to the original.

Actual % power increase compared to the "vintage original" (definition below) will be compensated by *reducing* the total scores according to below range:

- Below 10% power increase => 0% score reduction in scores
- 10-30% power increase => 5% score reduction in scores
- 0-50% power increase => 10% score reduction in scores
- More than 50% power increase => 15% score reduction in scores

The definition of "The Vintage Original" is as follows: **A factory build version of the type build and certified before 1955.**

*Note: "The Performance" flight is **not** subject to this Power Balancing.*

**Vintage Balancing Bonus:** Since the Vintage Airplanes are competing with as well radically more modern Classic airplanes as effective replicas, we have decided to balance the fairness. We all know that the pilot needs to take more care of the vintage airframe, structure and engines to keep them flying safely into the future... and this may limit the way you fly your program. From VAWC 2020 and will add 10% bonus to the scoring total of the "program flights" to the pilots flying a vintage airplane.

*Note: The Vintage Balancing Bonus is not active for The Performance / The Performance Team*

## The winners

All three known program / categories will each battle for the World Champion Title.

The World Champion will be the pilot flying the highest %-score in the respective flight category, this being piloting a Vintage, Classic, Replica airplane. (Glider or Power)

On top of this we will announce a VAWC Champion in "The Performance/solo" and "The Performance/team"

## The flight

Judging criteria - what we will be looking for. In general, we will be looking for a flight with rhythm, harmony, precision and elegance; well centered in front of the judges and flown parallel to the box lines (X- and Y-axis)

### Safety maneuvers

Following maneuvers are allowed before the wing-dip: Humpty bump or Hammerhead... and if desired in combination with a 2-point roll.

### **Wing-dip before the start of your program**

All programs must be *initiated and finished* with three clearly visible wing-dip. The wing-dips can be inside the box, it can be on the speed dive-line allowing you NOT to lose energy after having reached your desired starting altitude. (Remember to signal interruption of program with 3 wing dip as well!)

### **Radio control, Judging line and tower**

Except if the Contest Director allows otherwise, all participants must have a functional VHF radio and keep up communication readiness with either the "tower" or Chief Judge. More instructions on procedures at the competition

### **What the judges will be looking for in the maneuvers**

First and last: It is imperative that every maneuver must be separated by a short (or long) horizontal line.

Following criteria is in particular aimed to the participants NOT familiar with aerobatic competition.

**Loop:** Vertical circular flight path starting and ending in same height.

**Wing over:** Pitch and roll in harmony. Wings vertical at the top. Pitch rate constant before/after the top.

**Barrel roll:** Pitch and roll in harmony flying a horizontal "barrel". Start and end-heading the same and parallel to the judging line. (When performed on X-Axis)

**Cloverleaf:** Quarter roll UP – or down – (as per instruction in the annual program) in each segment and within the four segments. 90dg turn pr. segment. Pitch and roll in harmony. Start and finish at same heading, parallel to the judging line.

**Cuban eight:** Looping-segments round. Looping segments with same radius. Half-rolls positioned at mid-line down. Half rolls on course and with constant roll rate. Half rolls stopped after precisely 180 dg.

**180 dg horizontal turn:** From level and horizontal flight roll briskly to 60-degree bank maintain 60-degree and turn 180 degree roll briskly to level and horizontal flight

**Top roll:** Circular looping segment. Half roll positioned and ... adjusted with roll rate... so you will end up flying horizontal straight and level just after the top of the loop. Heading during the roll and after the roll, on axis.

**4-point roll:** Horizontal line (or as close you can get). Four segments of the roll: 1) 90dg, 2) 180 dg, 3) 270 dg, 4) 360 dg. Same roll rate within the roll segments. Same roll rate in all segments. On the line.

**Roll:** Constant roll rate. Horizontal line. (...or as close you can get) (Engine coughing allowed)

VAWC Steering group

12. Nov 2019

Søren Dolriis / VAWC Founder