



# **RULEBOOK**

**DMFV EUROPEAN ACRO CUP** 

Unlimited
Intermediate
Basic

## **DMFV-SPORTREFERAT** EUROPEAN ACRO CUP

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## Basics about the EUROPEAN ACRO CUP

The EUROPEAN ACRO CUP (following EAC) is a session of modern and challenging contests, spread all over Europe. The results of the contests are added together to an overall ranking. The contests are mainly based on the organization "International Miniature Aerobatic Club" (following IMAC) in mind of large scale aerobatics.

The used airplanes are based on replicas of original aerobatic planes. The contest is very attractive and challenging for the pilots, as for the spectators, due to the different programs and the final freestyle session.

## **Contests**

Each year two contests will take place in Germany. One as the contest for the nation Germany and the second one as final contest of the season. Further European nations can add one contest per season to the final ranking.

In this case, all contests, counting to the overall ranking must match the same format. The conditions are, that the lower categories are offered and the resulting process is the same for every contest.

The decision which contest will be part of the overall ranking is made by the Sportreferent.

The class EAC is organized in three different difficulties:

## Unlimited:

In this class four rounds are flown per contest. Two rounds of the known program, changed annually (see attach 1). Further two rounds with different unknown sequences, which have a lower difficulty than the known sequences.

## **Intermediate:**

In this class four rounds are flown per contest. Two rounds of the known program, changed annually (see attach 2). Further two rounds of different unknown sequences, which have a lower difficulty than the known sequences.

#### Basic:

In this class three rounds of known sequences, changed annually, are flown per contest (see attach 3).

The organizer has the decision if the Basic class will be flown or not, to minimize the effort.

#### Freestyle:

The participation in the class freestyle is open to every pilot. The participation in the class freestyle is only possible for pilots, who participate in one of the three classes mentioned above.

The choice of the class is left to the competitors. The "Sportreferent" is allowed to advice an pilot to go to a higher class, if his performance is not suitable to the chosen category.

Regarding the organization of the contests a committee of arbitration is installed during the opening ceremony. This team is build out of these persons:

Sportreferent, contest director (most time a club member), judge, pilot out of each class

This committee of arbitration is responsible to discuss and decide about contentious situations, problems or decisions. Here the arbitral tribunal has full decision-making power. Examples:

- Due to bad weather, the contest could not be continued (e.g. fog, rain), the committee decides about the further going on of the contest
- If a pilot is lodging appeal, the committee investigates the subject and decides whether the appeal is effectual.

During the contest, every pilot can lodge appeal against a judgement. Then a appeal fee of 30€ is taken. If the decision is made in favor of the protestant, he receives back the fee, if not it is spending to the club.

The entry fee for the german contests will be: Unlimited: Adult (30€), youth till age of 18 (15€)

Intermediate: Adult (30€), youth till age of 18 (15€)

Basic: Adult (20€), youth till age of 18 (10€)

The registration must be completed latest till one week bevor the contest starts (please use the online registration form on homepage). The payment of the entry fee will be via bank transfer on the lower bank account. Please add following comment in the transfer:

NAME-PRENAME-EAC-LOCATION-CLASS

example:

KIEHL-WILLIAM-EAC-POCKING-UNLIMITED

Bank account

Name: William Kiehl

IBAN: DE33200411110596467100

BIC: COBADEHDXXX Bank: comdirect

A refund of entry fees for non - participation is not possible.

A valid insurance license and the usage of a 2,4 GHz transmitter is required to participate. The use of <u>alcohol, drugs and doping substances</u> (according Prohibited List 2008, the World Anti-Doping Agency) is forbidden for participants during the competition.

## **Determination of the results**

To determine the results during a competition the Sportreferent can be asked for the corresponding computer program, which is based on tool Microsoft Excel.

## **Unlimited:**

Best known (weighting 450%), best unknown (weighting 550%)

## **Intermediate:**

Best known (weighting 450%), best unknown (weighting 550%)

#### Basic:

Two best known sequences

## Freestyle:

Ranking in freestyle class is build separately from the other classes. The flown round is counting to the freestyle ranking.

Each round of the contest is normalized on 1000‰. Thus the pilot with the highest abolute points receives 1000‰ for this round. The further scores are evaluated – in regard to the highest score. The scores of the rounds are added in regard of the weighting of the different rounds. The pilot with the highest percentage score after all rounds is the winner of the contest. His score is normalized on 1000‰. The scores of the other pilots are based on this normalized result. Thus, a victory is always worth 1000 ‰ .

## Overall ranking:

For a overall ranking a pilot has to participate at least 3 contests in this season, including the final contest.

The scores are determined like this:

The two best normalized scores + normalized score of the final contest

The pilot with the highest score in this ranking, is winner of the overall season ranking of EAC. The scores are normalized on 1000‰.

The overall ranking is determined in the classes Unlimited, Intermediate, Basic and Freestyle.

## **Models**

The flown models must be recognizable replicas of original aerobatic planes.

The maximum take-off weight is limited within 25 kilograms. But there's no limitation in regard of the engine power.

The minimum wingspan for monoplanes is 2m and for biplanes 1,7m.

The geometry of the models must suite to these conditions:

Monoplane:

Wingspan >= length over all (incl. Spinner cap)

Biplane:

Wingspan \* 1,05 =< length over all

Excluded of this rule are all airplanes, where the original plane excides these limits. In this case the usage of such an model has to be reported to the Sportreferent and the evidences have to be attached.

The Sportreferent reserves the right to carry out measurements of the models and optionally exclude pilots in violation of the rules of competition. The result achieved so far is deleted.

The installation and the usage of Gyro-systems (1, 2 or 3 axis) during the contest is not allowed

In case of exclusion of a pilot, due to technical lack, the Sportreferent supports the decision made by the contest director of the local club.

## **Judging of the maneuvers**

The flight maneuvers are judged by 5 judges by scores between 0 and 10 points in half point steps.

There is no limitation of the flight box.

The actual directives of the organization IMAC applies as base for the judgement (see attach 4).

The highest and the lowest score of each maneuver is deleted and the left three scores are added and multiplied with the corresponding k-factors.

In addition to the scores for the flight maneuvers, an additional category is judged, which should evaluate the overall impression of the flight. This category is multiplied with the K-factor 30. The judgement is based on these subjects:

- power management (how is the pilot using the throttle, NOT the noise)
- placement of the maneuvers
- combining the maneuvers

A pilot marks the entry in the flying box with the call " In the Box". The end of the flight is marked by the call " Out of the Box".

Before and after the score flight the pilot is not allowed to do any aerobatic maneuvers, excluded maneuvers to enter the flight box.

## Freestyle:

The freestyle has a length of 4min +/- 10sec.

It is judged in following categories:

- Difficulty: 20K

Diversity: 20KHarmony: 30K

- Precision: 30K

- Overall: 30K

- Show effects: 10K

For the judging of the show effects these directives are used:

The maximum of points is 10.

Smoke (over mufflers or EL-Smoke): 0 (no smoke) – 2 (less smoke) – 4 (thick smoke)

Streamers: 0 (no streamers) -1 (streamers throw able) -2 (streamers rolled out, throw able and used good)

Smoke cartridges: 0 (no smoke cartridges) -1 (1 smoke cartridges at the fuselage) -2 (2 smoke cartridges at the wings)

Confetti: 0 (no confetti) – 2 (throw able confetti); only biological

In these special cases the pilots receives a zero for freestyle sequence:

- Crossing the safety line: is this line crossed during the flight pilot receives 0 points, excluded start and landing
- Loosing part of the plane: loosing part of the plane is judged with 0 points (except parts of the showeffects)
- Touching the ground: touching the ground (included tree or grass) results in 0 points

## **Attach**

Attach 1 - Known sequence Unlimited

Attach 2 – Known sequence Intermediate

Attach 3 – Known sequence Basic

Attach 4 – judging rules

http://eac.dmfv.aero/files/Judging rules 11.pdf http://eac.dmfv.aero/files/Judging rules 21.pdf