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European Acro Cup
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Fachverband der Modellflieger in der Bundesrepublik Deutschland



Ausschreibung für den EUROPEAN ACRO CUP des DMFV

- Fassung 2014 -

von
Modellfliegern



DEUTSCHER
MODELLFLIEGER
VERBAND

für
Modellflieger

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Overview „European Acro Cup“ (EAC)

The „**EAC**“ is a modern and challenging event located all over Europe, which supports the FAI F3M initiative and the initiative of the IMAC (International Miniature Aerobatic Club) in the sense of "Large scale Aerobatic" aerobatics class. Therefore only scale-replicas are admitted to compete in the "EUROPEAN ACRO CUP". Because of the various flight schedules with a final freestyle, the competition is designed in the manner, to present an exceptionally challenge and an interesting event to the participants as well as the spectators.

Two EAC-competitions are taking place in Germany, organized by the DMFV. The first competition is announced as a nationwide contest for the country "Germany", the other one as the final competition of the "EUROPEAN ACRO CUP" in order to finish the international series.

Further EAC-competitions take place in other **European countries**. The locations can be found on the homepage of DMFV in EAC event calendar. In order to accommodate the individual results of participants from other EAC-contests to the annual EAC-Championship, it is necessary that the local results are handed out by the contest organizers. This should take place prior to the final competition of the EUROPEAN ACRO CUP. (Excel-sheet). (For more details see below: "Europe-wide participation").

There are two classes:

- a) The class "**NATIONAL**" is intended for the entry into the competition-round EAC and proposes to encourage all pilots without competition experience likewise national series e.g. F3A or F3a-X.
- b) The program group "**INTERNATIONAL**" is intended to advance and exceed the skills of all competition pilots, who would like to participate in the European or World Championships for Large Scale Aerobatics or would like to measure their skills among like-minded people.

All flight programs are short in order to guarantee a high activity for the pilots and to make sure that competitive and fair results are achieved even during bad weather conditions. In both classes, "INTERNATIONAL" and "INTERNATIONAL", two "**known programs**" and two "**unknown programs**" are flown in an alternating way. To finish the competition a "**freestyle round**" is flown on Sunday. (see Appendix III: freestyle)

For the models, there is no engine capacity limit. Only models are allowed to start, which have a **take-off weight** to maximum of 25 kg (applies only to competitions in Germany!), including fuel and all additional attachments during the freestyle. All airplanes must be in perfect technical condition (more details see below: "Request to the model")

At the end of each competition held in Germany, all participants receive a certificate and a result list of the relevant class. The first three winners will receive trophies in each class, corresponding to the classes: "EAC-International", "EAC-National" and "EAC-Freestyle" at the end of the competition. (more details see below: EAC-Championship)

The participants of the final competition will receive, if they participated (including final competition) at least at three competitions, a certificate and a result list of the respective class.



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The first three winners of the year receive, the appropriate cups in each class and to the categories: „EAC-International“, „EAC-National“, and „EAC-Champion“ at the end of the final competition. (more details see below: EAC-Championship)

Model-Specifica

Permitted to the competition are only planes, which can be **identified as an explicit replica of an original manned aerobatic plane, which is used during manned aerobatic competitions.**

The dimensions of the models must correspond to a length/wingspan-relation. For monoplanes the length/wingspan-relation must meet a proportional value underneath the constant 1. (fuselage has to be shorter than the wingspan). For biplanes, the factor has to be above 1,05.

Excluded are models, whose full scale archetype meets a length/wingspan-relation >1 . In this case, a written application to the technical committee must be submitted two weeks before the competition.

When deciding on the non-admission of a model due to the above criteria or because of technical defects, the head speaker of the technical commission supports the sports management of the respective competition discharging club.

Emission / Noise

Adequate sound attenuation of the competitive machines is to be ensured during the flights. Using a 3-blade propeller and effective silencing system is highly recommended and may be required in case of need by the Contest Director, especially when the organizing club demands it due to regional regulations. A pilot with a loud machine can receive points deduction, if all judges agree (point deduction = 1). After a repeated violation of an admonition, the pilot will be disqualified.

Remote Control System

Only 2.4 GHz remote control systems are allowed at the competition.

Technical Condition

The pilot is responsible for the technical condition of his model. The signature on the registration form is at the same time the affirmation therefore.

Programs and Judgment

Requirements for flight demonstration – Knowns / Unknowns / Freestyle:

The flight demonstrations at the EUROPEAN ACRO Cup should be presented in a manner as realistic as possible, on currently shown in manned European and World Aerobatic Championships or .e.g. at the BREITLING MASTERS CUP (no “figure-racing”).

The beginning and end of the flight demonstration must be clearly indicated. This can be announced by: "Now", "beginning" and “end” and / or with a clear wiggle of the wings, as it is usual shown in manned Aerobatic flying.



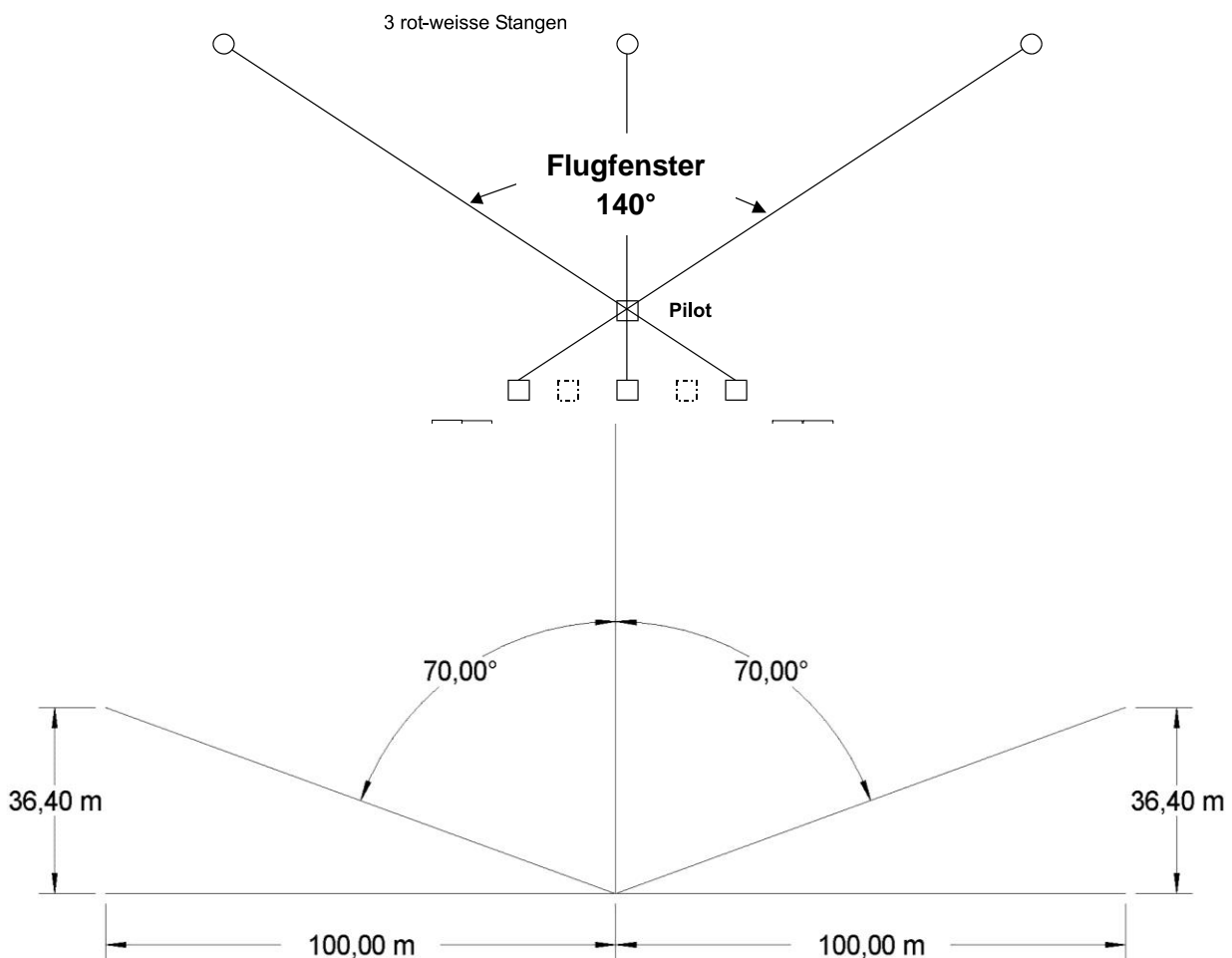
After the pilot is demanded to start, he has to bring his model in the air within 4 minutes. In case of a technical defect the pilot has the opportunity to repeat the attempt by starting as the last participant in the round.

Preparation Room

The preparation room is laid down for the pilots. The pilot has to be positioned in the preparation room, where he would like to start from (does a pilot want to start to the right side, he has to take the left preparation room). When starting an engine, the pilot or his helper has to secure the plane against accidental release (e.g. earth hoe with a back strap around the tail).

Flying Area

The flight level should be between 100 to 150 meters in front of the judges. As in manned aerobatics, only a short straight flight before the next maneuver is necessary and desirable. Exceptions are straight trips that are required to achieve the required position for the next maneuver. Both program groups are flown in a 70° aerobatic box (see draft below).





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To measure the flying area, the drawing should be used.

Knowns / Unknowns

The known flight programs were printed completely here in this tender (see attach I). The unknown programs contain approximately 10 figures. These programs are taken from the figures of the FAI Aerobatic ARESTI figure catalog.

To an appropriate time before the unknown round, an envelope is opened and programs are handed out to the participants and judges. From this point, no more training flights are permitted. Test flights are only possible with the explicit approval of the Jury. Violations will be punished with disqualification.



Judging of Knowns / Unknowns during competition

The known and unknown programs are judged by 3-5 judges with points from "0" to "10". When using 4-5 judges, the highest and lowest score is deleted. In case of three judges, all scores will be taken into evaluation. With less than three judges the competition cannot be displayed.

For the judgment of the flight programs, the following document is leading:

<http://www.modelaircraft.org/files/2013-2014RCScaleAerobatics1-1.pdf>

“SECTION II: SCALE AEROBATICS OFFICIAL FLYING AND JUDGING GUIDE”

At the end of each round, the achieved points are translated to 1000%. For the calculation of the final competition-result, three or four scores are taken out of the 2 Knowns and 2 Unknowns. (The lowest score will be deleted)

Following evaluation combinations may occur:

- a) If only 3 judged flights are possible due to the weather conditions, then a known and two different unknown programs are flown. The lowest score of each participant shall be deleted.
- b) It may be due to a strong field of participants - more than 30 pilots - only 3 competition flights are possible, then a known and two different unknown programs are flown. The lowest score of each participant shall be deleted.
- c) It can be due to the weather conditions that only two judged flights are possible, then one known and one unknown program is flown. The lowest score of each participant shall be deleted.
- d) It can be due to the weather conditions that only one judged flight is possible, it is only determined the winner of the day. There is no EAC - competition evaluation.

EAC-Championship

Result Analysis „Competition International“

To evaluate the competition results, the respective rounds are used on a percentage basis and calculated into the competition results. The first three winners will receive the appropriate trophies for the categories "EAC-Freestyle" and the "EAC-Champion" at the end of the competition.

Result „EAC-Champion International“

Here, each of the best-known, Known and Freestyle are drawn together. The Known has a significance of 35%, the Unknown 45% and the Freestyle has a valence of 20%.



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Result Analysis „Competition National“

To evaluate the competition results, the respective rounds are used on a percentage basis and calculated into the competition result. The first three winners will receive the appropriate trophies for the categories "EAC-Freestyle" and the "EAC-Champion" at the end of the competition.

Result „EAC-Champion National“

Here, each of the best Known, Unknown and Freestyle are drawn together. The Known sequence has a significance of 40%, the Unknown sequence 50% and the Freestyle has a valence of 10%.

Result Analysis of EAC-Freestyle

In this case, the ranking of all pilots, concerning both International and National (common result) class, generate the result.

Calculation of Annual Result of EAC-Champion National

After a completed participation at least at three official EAC-competitions the final annual ranking for the competitors of the „International“ class will be calculated on a percentaged basis. Only competitors, who attended the final annual competition, who submitted their documentation of scale and attended at least three competitions (incl. final contest), receive the document of attendance, the final annual ranking and, just in case, a trophy. The first three winners are going to receive the corresponding trophies for the category “EAC-Champion” at the end of the final contest.

Annual Result of the „EAC-Champion International“

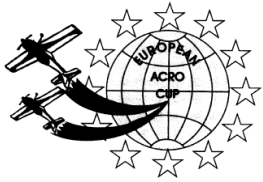
Here, the percentaged results of the top three competition-rankings are being drawn to generate the “EAC-Champion”. In the case of two or more pilots winning three contests each, a play-off round is going to be installed at the final competition. Which programs and how many flights are being displayed is to be decided by the arbitration.

Calculation of Annual Result of EAC-Champion National

After a completed participation at least at three official EAC-competitions, the final annual ranking for the competitors of the „National“ class will be calculated on a percentaged basis. Only competitors, who attended at least at three competitions (incl. final contest), receive the document of attendance, the final annual ranking and, just in case, a trophy. The first three winners are going to receive the corresponding trophies for the category “EAC-Champion” at the end of the final contest

Annual result of the „EAC-Champion National“

Here, the percentaged results of the top three competition-rankings are being drawn to generate the “EAC-Champion”. In the case of a tie, further the top rankings are being drawn together for a decision.



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Advancement from class „NATIONAL“ to class „INTERNATIONAL“

- a) The top two pilots of the annual ranking in the EAC-Championship of class “NATIONAL” have to advance to the class “INTERNATIONAL” in the upcoming season.
- b) Pilots, who also won more than three EAC-Competitions in the class “NATIONAL” in the time of two years have to advance to the class “INTERNATIONAL” in the upcoming year.

Terms of introduction to the EUROPEAN ACRO CUP

Pilots, who competed at international events such as F3A world cups, national F3A contests or F3A-X A-class in the last two years have to compete in the class „INTERNATIONAL“.

Europe-Wide Participation

The EUROPEAN ACRO CUP operates internationally. The international venues are to be noticed at the Homepage of the DMFV in the calendar of events.

At every event the champions of class “INTERNATIONAL” and “NATIONAL” are being nominated.

The rankings of international events have to be submitted to the DMFV bureau in Bonn or the EAC speaker by the contest director or a chosen participant. In the case of non occurrence, the contest results may not be used for the **final results**.



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Organisation

Terms of Participation

Every model pilot is permitted to compete at the EUROPEAN ACRO CUP, regardless associational affiliations.

An insurance coverage and the application of **2.4 GHz radio-systems** are required. The use of alcohol or drugs is strictly forbidden while the contest runs (corresponding to the prohibition-list of the WADA 2008).

In Germany the entry fee accounts **30 € each**, except youngsters until the completion of their 21st year of age. In this case the entry fee accounts **15 €**. By signing the registration, the participant accepts all terms of this document.

Registration for german competitions

The competitor has to register at the online-portal <http://eac.dmfv.aero/> (not at the speaker or the DMFV-association) at the latest from **1 week before the competition**. The accommodation and final registry may only be executed after payment of the entry fee at the banking account. (Account-information is being given at online-portal)

The starting order will be allotted by software. A registration at the site of competition is only accepted when the starting field amounts **less than 30 pilots**.

Multiple Usage of Models

The models that have been registered for the contest shall only be used by one person. The pilot has not to be the builder or proprietor. Exceptions are only possible with approval of the arbitration.

If there is a technical damage on of the planes, it is possible for two pilots to use one plane. This is only allowed by the compliance of the arbitration.

An exception of this rule is only given for youngsters under the age of 21. It is possible that one participant lends his plane, so that both may fly the same model.

Technical-Commission-EAC

The technical commission is formed by 3 members, the speaker Stefan Buch, William Kiehl and Alexander von den Benken.

Purposes of change concerning this document are to be displayed by the pilots to the technical commission. One time in a year, the "Technical-Commission-EAC" has a meet and discusses the applications of modification, concludes rules and implements them in the upcoming year.

Judges

At the EUROPEAN ACRO CUP, only experienced pilots or judges shall be installed as judges. They should take part in pilot's practice before competition as often as possible. The judgment has to be achieved regarding the international rules of FAI, which are exemplified by the



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document of the International Miniature Aerobatic Club (IMAC) above. To display the flight schedules vividly and avoid misunderstandings a non-judged flight is possible. The last starter shall be chosen for examination.

Arbitration

The arbitration is formed by 5 persons. 2 participants out of class "NATIONAL", 1 out of class "INTERNATIONAL", 1 representative of the local club, 1 representative of the judges and the EAC-speaker.

Protest

Protests may only be submitted by participants. They will only be accepted in a written manner. The fee of treatment is about 30 € and has to be delivered together with the written protest. By allowing the protest the fee will be handled back. The arbitration is responsible for all protests and decides whether the pilot is going to be admonished, warned or given the chance to correct or change, or being disqualified. Protests are only possible 30 min. after flight. The conclusions of the arbitration cannot be challenged by an external jurisdiction.



European Acro Cup International Known 2014

B	Contest: 2014 Official Unlimited		
Date:	Program: Unlimited		Known

Fig 1	8.5.2.1 9.1.3.5 9.10.3.7 9.8.2.2	10 9 18 9	46
Fig 2	8.4.19.1 9.10.7.4 9.1.2.2 9.2.4.4 9.2.4.4	14 17 6 9 9	55
Fig 3	1.2.10.1 9.4.2.2 9.1.5.1 9.1.5.5 9.9.2.6	16 7 2 9 16	50
Fig 4	5.2.1.2 9.10.1.8 9.1.5.8	23 26 12	61
Fig 5	2.3.6.4	37	37
Fig 6	8.4.4.1 9.9.10.8 9.4.1.3	16 20 12	48
Fig 7	7.5.4.2 9.1.3.6 9.10.3.6 9.9.3.6	16 10 16 14	56
Fig 8	1.1.7.3 9.11.1.7 9.1.5.3	11 3 6	20
Fig 9	9.8.4.1 8.5.24.2 9.9.4.3 9.10.1.5 9.1.1.1	3 17 11 20 6	57
Fig 10	7.4.7.1 9.10.3.3 9.4.3.3 9.2.3.4	11 13 8 9	41
Total K = 471			

Created Using Aesati 6™ software. ACCClassify@aol.com



European Acro Cup National Known 2014

B	Contest:	2014 Official Advanced	
Date:	Program:	Advanced	Known

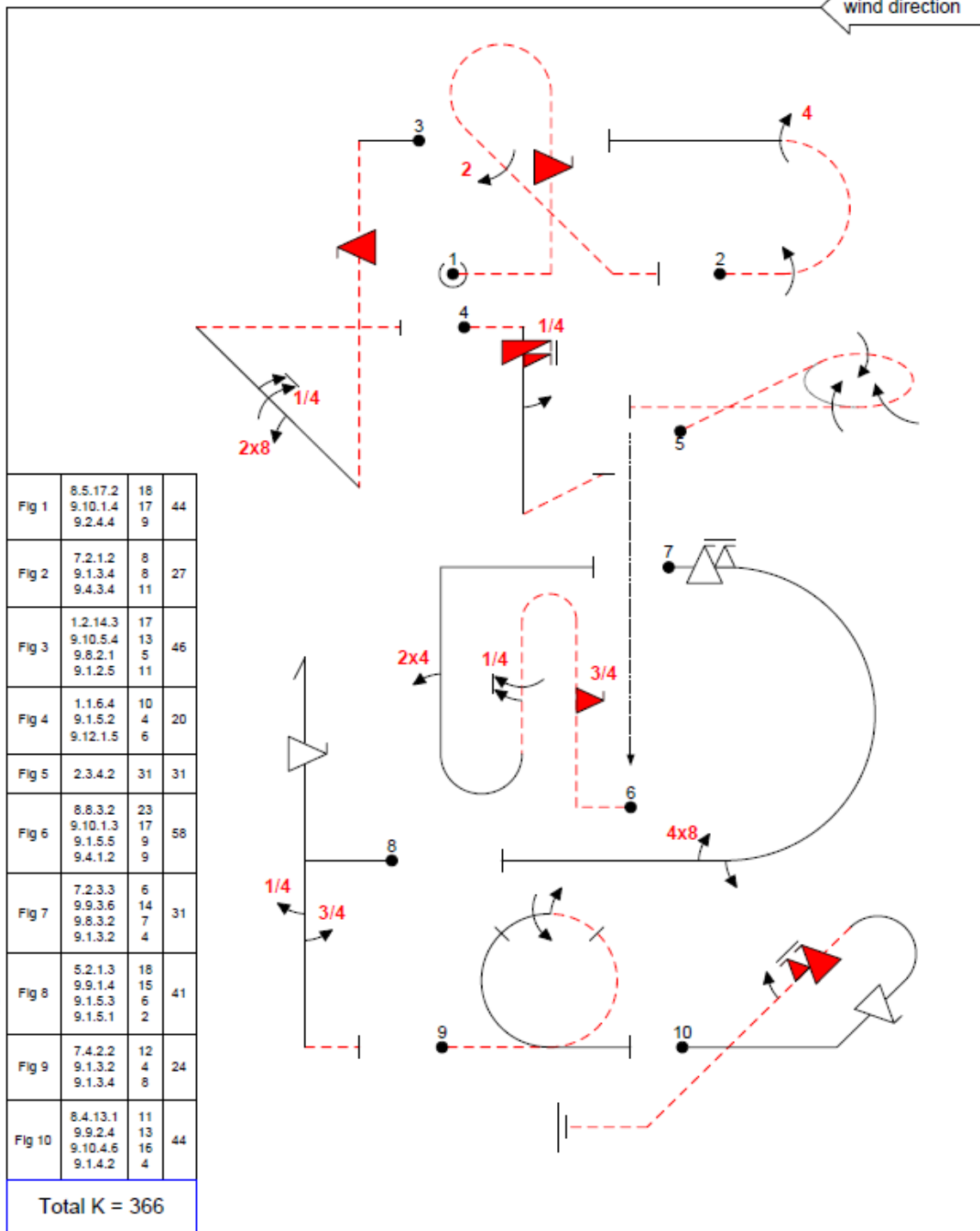


Fig 1	8.5.17.2	18	44
	9.10.1.4	17	
	9.2.4.4	9	
Fig 2	7.2.1.2	8	27
	9.1.3.4	8	
	9.4.3.4	11	
Fig 3	1.2.14.3	17	46
	9.10.5.4	13	
	9.8.2.1	5	
	9.1.2.5	11	
Fig 4	1.1.6.4	10	20
	9.1.5.2	4	
	9.12.1.5	6	
Fig 5	2.3.4.2	31	31
Fig 6	8.8.3.2	23	58
	9.10.1.3	17	
	9.1.5.5	9	
	9.4.1.2	9	
Fig 7	7.2.3.3	6	31
	9.9.3.6	14	
	9.8.3.2	7	
	9.1.3.2	4	
Fig 8	5.2.1.3	18	41
	9.9.1.4	15	
	9.1.5.3	6	
	9.1.5.1	2	
Fig 9	7.4.2.2	12	24
	9.1.3.2	4	
	9.1.3.4	8	
Fig 10	8.4.13.1	11	44
	9.9.2.4	13	
	9.10.4.6	16	
	9.1.4.2	4	

Total K = 366

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Appendix I: Freestyle

The Freestyle-Flight shall not last longer than 4 Min.

The time may be measured from start until landing, but may be also measured while the plane is up in the air. It is the pilot's task to give a clear signal when to start the countdown and when it finishes.

At the Freestyle the pilot is given the chance to show all possible and "impossible" figures. Additives as smoke and/or music, barrier tape or banners are admitted and desirable in case they do not affect the security of flight.

Note:

- a) Every pilot has to mix up his own music and deliver it by a CD or USB-Stick before the start of Freestyle-Round.
- b) The host/organizer has to deliver a well-powered and dimensioned sound-system.

Rules of Behaviour

- a) The model shall not be touched during the flight until the landing.
- b) For reasons of safety, figures that will take place immediately after take-off have to be flown away from the point of take-off.
- c) All figures that are displayed right above the pilot or behind the safety line will be charged by disqualification.
- d) In no case, the safety-net may be overflown. In case of occasion, the pilot will be disqualified immediately.
- e) For Freestyle, the safety line will be transferred 5-10m in front. The pilot is given the opportunity to take his stand at this line.
- f) The usage of not-biodegradable special effects (aluminum-paper or plastics etc.) is strictly forbidden.

Notes concerning point c) and d):

The decision will be executed by the judges. In case of disaccord there will be a decision executed by the arbitration. Pilots may only oppose the decision by a formal protest.