

Swiss Aerobatic Association

Aero Club of Switzerland

www.saa.ch



Regulations for the Conduct of the

Swiss National Aerobatic Championships

and the

Swiss National Freestyle Championship

Version 2019-3

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SAA**

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[The corrections appear in blue.](#)

Table of Contents

1	FUNDAMENTAL PRINCIPLES AND PURPOSE OF THE CONTESTS	3
2	GENERAL CONSIDERATIONS / BASICS	3
3	ORGANIZATION	4
4	CONDUCT OF CONTEST	7
5	ENTRY AND RANKING CONDITIONS	11
6	REGISTRATION	13
7	PROTESTS	15
8	VALIDITY OF TITLES	15
9	LIABILITY / INSURANCE	15
10	SPORTSMAN CATEGORY (SPO)	16
11	INTERMEDIATE CATEGORY (INT)	18
12	ADVANCED CATEGORY (ADV)	20
13	EXCELLENCE CATEGORY (EXC)	21
14	UNLIMITED CATEGORY (UNL)	25
15	THE SWISS NATIONAL FREESTYLE CHAMPIONSHIP (SNFC)	26
16	SAFETY MANEUVERS	27

1 Fundamental principles and purpose of the contests

- 1.1 The Swiss Aerobatic Association (SAA), on behalf of the Aero Club of Switzerland (AéCS) and the Swiss Power Flying Federation (FSVM/MFVS), organizes every year (if possible) the Swiss National Aerobatic Championships (SNAC) and the Swiss National Freestyle Championship (SNFC).
- 1.2 Aerobatics brings an essential contribution to the perfection of flying skills.
- 1.3 The present regulations contribute, primarily, to the best possible running of the contest. They define the rules and structures of the organization. They can be understood as an educational tool.
- 1.4 No regulation or rules can replace good judgment and common sense of the organisers and participants.
- 1.5 The elaboration of these regulations is based on experience and international regulations spirit. Moreover, it is constantly renewed. This is why it is legitimate and necessary to adapt these regulations, normally every year, to the new regulations and to the evolution of the sport. Propositions and suggestions in this sense are to be addressed before January 31st to the Committee of the SAA. The final document with all the modifications (national and international) for the year will be transmitted to the Central Secretariat of the AéCS through the FSVM/MFVS as soon as it has been updated.
- 1.6 The result of the SNAC is one of the primary selection criteria for the Unlimited Swiss National Team, Advanced Swiss National Team and other Aerobatic National Teams based on FAI managed international competitions now or in the future.
- 1.7 The contest is a means to promote the skills of pilots. It encourages contacts between the participants and the exchange of thoughts and experience within the AéCS in a climate of comradeship and good friendship.

2 General considerations / Basics

- 2.1 The AéCS is a member of the FAI and Swiss Olympic. Therefore the AéCS has the air-sport's power in Switzerland, referred to by the Fédération Aéronautique Internationale (FAI) as the National Airports Control (NAC). It is the sovereignty of the AéCS to conduct the SNAC and the SNFC.
- 2.2 Media work of the SNAC shall be coordinated with the media department of the AéCS.
- 2.3 Safety will, at all times, be the primary consideration for all decisions.
- 2.4 All participants (Swiss and foreign guests) of the SNAC and the SNFC are submitted to the present regulations and must abide by the rules.
- 2.5 The Committee of the SAA searches for an airfield and fixes the date, if possible without overlapping international championships or FAI events.
- 2.6 The SNAC usually takes place towards the end of the summer.
- 2.7 The SNFC will take place at the end of the SNAC as a separate competition.
- 2.8 Registration to the SNAC and to the SNFC should be open by 5 months latest before the competition.

- 2.9 The SNAC and SNFC will be conducted according to the regulations in place at the time of the beginning of the registration. All documents are published on www.saa.ch.
- 2.10 This contest is a sports demonstration in the spirit of General Section, of the FAI Sporting Code. The provision of the current FAI Sporting Code, Section 6, Part 1 (Powered Aerobatics) is applicable by analogy when the present regulations do not diverge from it.
- 2.11 The present regulations shall strive to adhere to the FAI/CIVA regulations as close as possible, however some requirements can be well beyond the capability of manpower or technical resources available to the contest direction and, case arising, must be dealt with by all parties concerned.
- 2.12 The present regulations will be in force after the approval by the SAA Committee and the FSVM/MFVS. Yearly amendments and improvements can and should be made. The amendments will be in force right after their approval.

3 Organization

3.1 Structure

3.1.1 Organizational Structure of the SNAC includes:

1. Contest Director (CD)
2. Chief Judge (CJ), Judges and Assistants
3. President of the Jury (PJ) and Jury Members (JM)
4. Contest Crew
5. Local authorities
6. Competitors

3.2 Categories

3.2.1 The competition consists of 5 categories:

- | | |
|-----------------|-----|
| 1. Sportsman | SPO |
| 2. Intermediate | INT |
| 3. Advanced | ADV |
| 4. Excellence | EXC |
| 5. Unlimited | UNL |

3.3 Awards

- 3.3.1 The winner of each category will be awarded the gold medal and the title of “Swiss National Aerobatic Champion” in that category; the second and third placing will be awarded silver and bronze medals respectively.
- 3.3.2 Awards can only be presented, if at least 3 participants are competing in the concerned category and if at least two flights have been completed per category (Sportsman Training doesn't count as a ranking flight).
- 3.3.3 In the case of a category with less than 3 registered pilots, the concerned pilots will have the possibility to choose flying the next lower or the next upper category. Exception: the Sportsman Category will be ranked in any case.
- 3.3.4 In case of a Category cancellation due to a lack of participants, the decision will be made by the limit of the SNAC registration date.

- 3.3.5 The winner of the highest Category flown will be awarded the gold medal and the title of “Swiss National Aerobatic Champion”.

3.4 Contest Director (CD)

- 3.4.1 The Committee of the SAA appoints the CD. He/she will act as the general manager of the event, appointing contest officials. The CD could be a competitor and that role could be shared (before and during the competitions with an Assistant or PJ).

- 3.4.2 The rights and duties of the CD are the following:

Before the competitions (in coordination with the SAA Committee):

1. Administrative and registration procedure.
2. Technical organization and the logistics for the conduct of the competition flights (judges, assistants, helpers, scoring office, publication of the results, etc...).
3. Financial supervision.
4. Infrastructure organization.
5. Aerodrome flight and procedures adaptations.
6. Competitions week schedule.
7. Ensuing the coordination with the management of the airport and foreseeing the zones reserved to the public, the parking of the aircrafts.
8. Contacts with officials.
9. Media work, coordination with the AéCS and local authorities.
10. Organization of ground/aircraft communication, equipment and service.
11. Designating and marking of the aerobatic box.

During the competitions:

1. Conduct of contest in respect the national regulations of the FOCA, local regulations and in accordance with the present regulation.
2. Organization of briefings and ensuing adequate information to the pilots.
3. Competitions week schedule update according the situation.
4. Decision making about cancelling/delaying/postponing of a flight for any circumstance (weather conditions, technical or medical problem, etc...).
5. Decision making about a cut within categories for the last flights.
6. Warning or excluding from the contest any person or competitor for reasons of safety or unsportsmanlike conduct.
7. Organization and documentation of safety measures in coordination with the management of the airport, local authorities and help organizations in case of an accident.
8. Certify scores.
9. Presenting awards and/or prizes.
10. In case that the CD is a competing pilot, all decision concerning other competing pilots, flights continuation or cut will be taken with the PJ and/or Jury. A meeting with all the category concerned pilots could be an option for decision making for the competition continuation or a flight repetition.

3.5 Judges

- 3.5.1 The CD nominates the judges before the competition.
- 3.5.2 The board of judges is composed of:
 - 1. 1 CJ and 1 Assistant Judge. The CJ has a casting vote in case the required simple majority cannot be reached within the board of judges.
 - 2. At least 2 additional Judges and 2 additional Assistant Judges.
 - 3. The CD should invite foreign judges for the mix of competence and experience.
- 3.5.3 The judges are subjected to the FAI Sporting Code, Section 6, Chapter 4.
- 3.5.4 A judge cannot be a competitor during the current SNAC or SNFC.
- 3.5.5 Chief-Judge (CJ) responsibilities:
 - 1. The primary concern should be the accurate and fair judging of the competition flights, including the monitoring of flights for zero marks and penalties. He/she should place his/her expertise at the disposal of the board of judges, and co-ordinate and guide their work.
 - 2. Supervision of the correctness of paperwork, recording of penalties.
 - 3. In case of serious fault, the CJ can ask the Jury to exclude a judge from the contest. The decision belongs to the Jury.
 - 4. Unless otherwise specified by the CD and the CJ before the beginning of the contest, if no video recording system is used during the SNAC or if the hard zero (HZ) is not possible to determine by video, HZ of the CJ are automatically registered as confirmed hard zeros (CHZ).
- 3.5.6 The judges will score the Known Compulsory Programme or Free-Known. The CJ will report in case a competitor shows an unsafe performance. The CJ and the CD/PJ will have to discuss the matter with the competitor.
- 3.5.7 Boundary judges are not required for SNAC and SNFC.

3.6 Jury

- 3.6.1 The SAA Committee nominates the Jury before the contest.
- 3.6.2 The Jury consists of a president (PJ) and two additional members.
- 3.6.3 The PJ must be present during the whole contest unless otherwise agreed.
- 3.6.4 The PJ interprets the judging rules and the general regulations of the contest. He/she supervises the activities of the board of judges and deals with protests from competitors.
- 3.6.5 The PJ and the JM cannot be a competitor during the current SNAC or SNFC. He/she will act as CD for decision making concerning pilots if the CD is a competitor himself.
- 3.6.6 In order to be allowed to function as PJ and JM, it is necessary to be familiar with the regulations in force (national and FAI/CIVA).
- 3.6.7 The PJ will conduct design briefings, presentations and selections of Free Unknown and Unknowns programs.
The PJ shall ensure that Forms A, B C, L and R for the Free/Free-Knowns are signed by each competitor at time of registration.

4 Conduct of contest

4.1 Box

- 4.1.1 According to FAI Sporting Code, Section 6, Part 1, Chapter 4.3.2.1. No aerobatic figures are allowed outside the box.
- 4.1.2 The Aerobatic Performance Zone. FAI Sporting Code, Section 6, Part 1, Chapter 3.3.
- 4.1.3 One calls "box" the space within which the programmes must be executed. The box will be clearly and distinctly marked on the ground, as far as the terrain configuration permits, by contrasting marking strips.
- 4.1.4 The box is normally located close to a runway for obvious safety reasons.
- 4.1.5 The horizontal measurements of the box are of 1'000 m x 1'000 m. If the marking of the box is not possible, the CD may omit reasonable number of corners, or "T's". The center of the box must be marked or clearly represented (i.e. house, building, etc.).
- 4.1.6 Height limitations per categories are valid as per the table below:

Limits	Lower	Upper	Disqualification
Sportsman	500 m / AAL	1'500 m / AAL	300 m / AAL
Intermediate	500 m / AAL	1'500 m / AAL	300 m / AAL
Advanced	200 m / AAL	1'100 m / AAL	100 m / AAL
Excellence	100 m / AAL	1'000 m / AAL	50 m / AAL
Unlimited	100 m / AAL	1'000 m / AAL	50 m / AAL

- 4.1.7 A competitor flying lower than these lower limits will be disqualified (from the current programme) for causing a dangerous situation.
- 4.1.8 The CD can, depending on the presence of obstacles in the box or in the immediate vicinity or when the position of the judges does not allow the control of the lower limits of the box, change these limits upwards. Safety has priority over all other considerations.

4.2 Programmes drafting

4.2.1 Sequence submission:

1. Each competitor must submit a computer file for the programme to the CD or Free Programme Controller by mail, for verification of compliance with the relevant rules. Hard copies alone, or hand drawings will not be accepted. The computer file (using OpenAero) must contain completed pages for the five Forms A, B, C, R and L for checking. It is the competitor's responsibility to ensure the software used has been updated to comply with the Aresti System (Condensed) and Section 6, Part 1, regulations as currently amended by CIVA.
2. Forms B, C, R and L (according CIVA Sporting Code Section 6 2.2.1.9) must carry the correct symbol for the wind direction. The forms will

include the conventional symbols, catalogue numbers and coefficients only. No account will be taken of any other writing or notation.

3. The final responsibility for the correctness and compatibility of forms A, B, C, L and R lies with the competitor.
4. If any pilot submits their Free/Free Known sequence after the registration deadline, he/she could have a missed slot penalty of 250 K.

4.2.2 Building Free Unknowns.

Meetings are scheduled as part of the SNAC to prepare the unknown programmes. There are eight separate meetings, one per category (Advanced, Excellence and Unlimited) and per Programme (Free Unknown 1, 2 and 3). At the meeting, a drawing is performed for the order in which pilots are submitting their figure. The figures have to comply with the rules for the Programmes 2, 3 & 4 according FAI Sporting Code, Section 6, Part 1, Chapter 2.3.1.4. It is welcomed that the pilots have their figures ready for submission before the actual meeting. Depending on the draw, minor changes need to be applied, but precious time can be saved if at least a rough sketch is available.

4.2.3 Free Unknowns, sequences:

1. Each competitor has the option of creating his own sequence from the figures as defined.
2. It is encouraged that competitors with aircrafts of similar characteristics work out a common sequence to reduce the amount of time and effort.
3. Competitors must submit their sequence at least 24h in advance of the competition to PJ, the approval and publication will be not less than 18h before the competition. The pilots are responsible for submitting a correct sequence (A, B, C, R and L forms) in OpenAero format to the PJ.
4. All sequences will on approval also be attached to the message board, which sets the time-mark for the mentioned 18h.
5. At least 12 hours before the commencement of each Programme, each competitor will notify the PJ which of the proposed sequences he/she will fly.

4.2.4 Free Unknowns, drawing of lots

The original CIVA procedure as described in Chapter 2.3.1.1 in the FAI Sporting Code, Section 6, Part 1 is not applicable, as it builds upon the fact that multiple NAC are in contest. For the SNAC the rules have to be adapted: instead of NAC, competitors will choose the unknown figures. By lot, 10 pilots will be selected to propose a personal unknown figure, according:

- (i) If there are more than 10 pilots competing, then each pilot will draw lots. The pilots who draw the numbers 1-10 will be able to nominate figures in the order of the drawn lots. This procedure will be repeated for each Free Unknown programme.

(ii) If there are fewer than 10 pilots in a category, then among those pilots lots are drawn. This will be repeated until 10 figures have been nominated.

4.3 Competition flights

4.3.1 Programmes:

Sportsman	Intermediate	Advanced	Excellence	Unlimited
Training	Known	Free Known	Known	Free Known
Known	Free	1 st Free Unknown	Free	1 st Free Unknown
Free	1 st Unknown	2 nd Free Unknown	1 st Free Unknown	2 nd Free Unknown
1 st Unknown	2 nd Unknown	3 rd Free Unknown	2 nd Free Unknown	3 rd Free Unknown

4.3.2 Training for the Unknown Programmes is not permitted. Competitors violating this regulation will be disqualified for the concerned flight.

4.3.3 Sequence of flights (Drawing of Lots)

FAI Sporting Code, Section 6, Part 1, Chapter 3.2.1.1

The starting order for each programme will be determined by drawing of lots. If a pilot is not present without a valid reason during drawing of the lots, he/she will fly as number 1. The CD may decide on permutations, if the use of the same aircraft by successive competitors would slow down the competition. If possible, a minimum of 2 pilots will be inserted between a multiple-use aircraft.

4.3.4 Radio communications:

In order to improve the security and the good progress of the competition, the pilot must stay in permanent radio contact during the flight with the starter, the CJ or an assistant on the prescribed frequencies. The abusive use of the radio can be sanctioned by disqualification or penalty.

As an exception, the CD can allow a contest flight without radio. A competitor experiencing radio failure before starting his programme must land. If the breakdown occurs during the execution of the programme, the competitor can finish the programme before landing and taxi the aircraft into a designated secure area for cases of technical defects.

The competitor enters the box only after permission has been received from the starter or the CJ. A competitor entering an occupied box ("hot box") will be disqualified for the current flight or the whole competition, as per decision by Jury and CD.

4.3.5 Defects on the ground and in flight: FAI Sporting Code, Section 6, Part 1, Chapters 3.12.1 and 3.12.2 will apply.

- 4.3.6 In the event that a test flight is required and the competitor does not allow a non-competing pilot to fly his aircraft for test purposes, a special authorization will be given to the competitor to fly this test flight by PJ. Conditions: FAI Sporting Code, Section 6, Part 1, Chapter 3.12.1.2).
- 4.3.7 During the championships, no flight (even on non-aerobatic planes) by competitors are permitted, other than the flights assigned, except if one pilot has to change his plane for another (due to technical problems). In that case, the concerned pilot will be allowed by PJ to practise some select figures during the Safety Manoeuvres. He/she will be allowed to fly the described figures in FAI Sporting Code, Section 6, Part 1, Chapter 3.13.1.2. INT and SPO will be assimilated to “Yak 52/Intermediate” and EXC pilots are as per “Unlimited” (SPO will fly a full roll (9.1.3.4) instead of the permitted flick roll.
- 4.3.8 Duration of flight and signalling start and finish: FAI Sporting Code, Section 6, Part 1, Chapter 3.10.
- 4.3.9 Safety Manoeuvres: see Paragraph 16.
- 4.3.10 Measures in case of mechanical defects: FAI Sporting Code, Section 6, Part 1, Chapter 3.12 will be applied.
- 4.3.11 A “Missed slot” penalty will be awarded to a pilot who, without reasonable cause, is not ready when their slot time arrives.
- 4.3.12 If a pilot keeps the conduct of the contest waiting for more than 10 min without any valid reason, the starter will inform the PJ. The Jury may decide the disqualification of the pilot for the concerned flight.

4.4 Evaluation of the competition flight and criteria.

FAI Sporting Code, Section 6, Part 1, Chapters 4.

4.5 Penalties

4.5.1 FAI Sporting Code, Section 6, Part 1, Chapters 4.3, applies.

“Yak 52/Intermediate” rules will apply for SPO and INT; “Unlimited” rules will apply for EXC, but the penalties may vary.

SNAC tables of penalties:

Penalty	SNFC	UNL	EXC	ADV	INT	SPO
Box out*	-	30	30	30	20	20
Time out	10 / sec	-	-	-	-	-
Faulty wings rocks	150	30	30	30	30	30
Too low	250	250	250	250	200	200
Too high	-	50	50	30	30	30
Missed slot	250	250	250	250	250	250
Interruption	-	150	100	100	50	50
Insertion	-	150	100	100	50	50
Violation of Safety Manoeuvres	30	30	30	30	30	30

*If boundary judges are on duty during the contest.

4.6 Meteorological conditions

- 4.6.1 FAI Sporting Code, Section 6, Part 1, Chapter 3.6. applies.
For SPO and INT Category, minimum cloud base is 1'300 m AAL. Break will be allowed with cloud base between 1'300 and 1'500 m.
For EXC Category, refer to UNL regulations.
According to terrain, minima could be higher.
- 4.6.2 Competition flight will not take place in precipitation.
- 4.6.3 According meteorological conditions and in order to achieve an interesting competition, the CD can change the sequence of flights or even omit a whole series for a category.
- 4.6.4 The priority to fly the maximum of programmes is given to UNL, then EXC, then ADV, then INT and finally to SPO. In exceptional circumstances, the CD may decide to cut up to 50% of the pilots in a category to allow the Programme 2 (Free or 1st Free Unknown) or Programme 3 (1st Unknown or 2nd Free Unknown) or Programme 4 (2nd Unknown or 3rd Free Unknown) to be flown by the best of each category according to the category priority.
- 4.6.5 The SNAC usually ends on Saturday at noon. A programme not flown by all remaining pilots in the category will be cancelled. The Contest Director can approve exceptions according to situation and timing. The SNFC has priority on Saturday afternoon.

4.7 Time between Programmes

- 4.7.1 No competitor will fly more than one programme per day.
- 4.7.2 Rule 4.7.1 above is subject to the Jury deciding on exceptions in case the CD determines that applying this rule would put at risk completion of a valid contest. In such a case, the CD must allow sufficient time between programmes such that no competitor shall be required to fly a Free Unknown or Unknown Programme less than five hours after landing from his/her previous programme.

4.8 Video recording

- 4.8.1 An up to date video recording system at the judge line is highly recommended throughout the contest.

5 Entry and ranking conditions

5.1 Competitors

- 5.1.1 Every pilot must have a valid pilot's license with aerobatic extension. (Unless included in the pilot's license, reasonable proof of adequate aerobatic experience has to be provided).
- 5.1.2 Appropriate valid low-level flying permissions for ADV, EXC and UNL pilots.
- 5.1.3 Category admittance criteria:

The first competition shall be at SPO level. During the training or the Known Compulsory or Free-Known, the pilot has to assure the Jury and the judges that he/she is in control of the aircraft and safely flies the series of figures in the box.

1. Higher category participation requires the proof of a previous successful participation at the preceding lower level at a Swiss national or an international contest. This proof is based on former results:
 - flying INT requires to have flown once in SPO at SNAC;
 - flying ADV requires to have reached 65% overall in INT or a podium with 60% overall or more in INT, at one of the last 3 SNAC's;
 - flying EXC requires to have reached 65% overall in ADV or a podium with 60% overall or more in ADV, at one of the last 3 SNAC's;
 - flying UNL requires to have reached 65% overall or more in EXC or a podium with 60% overall or more in EXC, at one of the last 3 SNAC's;
 - in case a Category was not flown the previous year, the upgrade of a pilot will be discussed and approved by the SAA Committee;
 - all other special cases will be discussed and approved by the SAA Committee.
 2. Lower level admission as a ranked competitor is possible if one of those conditions is fulfilled:
 - a minimum of two consecutive years of non-participation to a SNAC or an international competition in the upper level;
 - the pilot gained less than 50% of the maximum possible marks across the sequences he/she flew in the last higher level national competition (SNAC);
 - special cases will be discussed and approved by the SAA Committee.
- 5.1.4 Scores reached in any SAA recognised event may qualify the pilot for the higher category. This must be approved by the SAA Committee.
- 5.1.5 Only Swiss and Liechtenstein competitors, as well as foreigners who have been living in Switzerland as permanent residents for more than five years, can win a medal or the title of Swiss Champion. Foreigners however are welcome and can compete as guests as "Hors Concours" (H/C) pilots. "H/C" pilots will not be ranked during the SNAC.
- 5.1.6 If a competitor has double nationality (Swiss plus another) and this competitor is flying or has flown within the last 5 years for another NAC in a FAI competition or event, he/she will be classified as foreign competitor (even if living in Switzerland or Liechtenstein) and can compete at the SNAC as a H/C pilot only.

- 5.1.7 The CD fixes the maximum number of competitors. In case of too many applications, the rule of first come first served will prevail. In Unlimited, all Swiss and Liechtenstein candidates will be accepted (until the inscription deadline).
- 5.1.8 The competitors participate in all general briefings and in all briefings of their category and comply with given instructions. The CD may exempt competitors who have finished their flights from briefing participation.
- 5.1.9 All the participants must be familiar with and accept the doping regulations issued by the AÉCS.
- 5.1.10 If a competitor has to leave the contest for any reason, he/she will be ranked anyway if a scored competition flight has been completed.
- 5.1.11 During the contest,
 1. The CD and PJ may arrange and approve flights: for public relations, for weather and box marks checks (these types of flights can't be made by competitors) or evacuation flights in case of bad weather.
 2. If a competitor has to fly for any reason (except for test flights according Paragraph 4.3.6), the pilots of the concerned category have to be consulted and the flight has to be approved by all of them.

5.2 Aircraft

- 5.2.1 Must have a valid certificate of airworthiness.
- 5.2.2 Must have certificate of insurance with coverage in civil responsibility, warranting a cover of at least three millions of Swiss Francs (CHF) and not excluding the participation at aerobatic competitions.
- 5.2.3 In all manoeuvres, the pilot will respect rigorously the limits stipulated in the Aircraft Operating Manual (AOM), allowing for some safety margin.
- 5.2.4 The aircraft must be capable of flying all manoeuvres of the category the pilot competes in without restriction. In Sportsman Category, if a plane got inverted flight restrictions, this has to be announced to the CD at the time of registration.
- 5.2.5 The aircraft must have a VHF radio in working condition.
- 5.2.6 An aircraft will not be admitted to the contest unless the appropriate documentation has been submitted to the organisers.
- 5.2.7 Pilots must wear a parachute during competition flights or the plane must be equipped with a ballistic recovery system.

6 Registration

6.1 Pilots

- 6.1.1 Must be SAA Members.
- 6.1.2 Non-SAA Members will be charged the yearly SAA membership fee.
- 6.1.3 Foreign pilots may compete as guests or "Hors Concours", H/C pilots. They may be exempt of the yearly SAA membership fee. They must provide the following:
 1. A valid pilot's license and a valid medical certificate.

2. A proof of level in aerobatics by their national aero-club, or the proof of participation to a similar level of contest (national or international).

6.2 Registration procedure

- 6.2.1 Online registration on www.saa.ch.
- 6.2.2 Registration deadline: fixed by the CD.
- 6.2.3 Late registration will be discussed and approved by the SAA Committee. A penalty fee may apply. Exception is made for SPO passing their ACR qualification later than the SNAC registration deadline.

6.3 Registration fee

- 6.3.1 Registration fee: fixed by the CD.
- 6.3.2 Includes contest participation and lunch meals during contest days. Payment deadline: fixed by the CD.

6.4 Programmes Free/Free-Known checking

- 6.4.1 It shall be the duty of the Free Programme Controller to check each competitor's sequence validity:
 - i. correct use of the Known 'master set' for Free-Known or standard SAA rules for Free, non-repetition and versatility requirements;
 - ii. catalogue reference numbers and difficulty coefficients on Form A (respectively R and L) with respect to the symbols on Forms B and C (respectively R and L), taking the reference numbers in the Aresti System (Condensed) as the basic criteria for deciding compliance with the Rules of this section.
- 6.4.2 The final responsibility for the correctness and compatibility of Forms A, B, C, R and L lies with the competitor. Any inaccuracies in the drawing of symbols or in the quoting of coefficients, or the discovery of any cases of repetition of figures, will be referred to the competitor so that the forms may be corrected and resubmitted.
- 6.4.3 The CD will provide hard copies to each competitor for signature, and those signed hard copies will be the ones used by the CD for reproduction.
- 6.4.4 The CD will be responsible for reproducing a sufficient number of copies of competitors' programmes to meet the requirements of the contest. The relevant set (A/B/C or R/L) shall be delivered to each judge for scoring operations.
- 6.4.5 The judges shall only consider what is actually shown on the relevant Form B or Form C (respectively Form R or L), depending on the official wind direction. The figures drawn on this Form, their orientation with reference to wind and box axes, shall be definitive. Corrections may be made to Forms B, C, R, L, via the PJ, and presented to the CJ at any time prior to the flight commencing.

6.5 Speaker information sheet

- 6.5.1 Download (from www.saa.ch) and fill in the speaker information sheet.
- 6.5.2 Send via e-mail to the CD.

6.6 What to bring to the contest:

- valid pilot license (SEP) with aerobatic extension (ACR),
- valid medical,
- valid low-level flying permission for concerned categories,
- valid aircraft documents (insurance, log book, airworthiness certificate, ...),
- signed anti-doping agreement (download from www.saa.ch).

7 Protests

- 7.1 All protests must be submitted to the PJ in writing, with a deposit of CHF 50 per pilot, not later than two hours after the occurrence, decision or publication of results, which causes the protest to be made. "Non-working" hours will not be counted. The deposit will be returned if the protest is granted.
- 7.2 The Jury decides within 24h after the filing of the protest.
- 7.3 The decision of the Jury is final.
- 7.4 The money collected from non-granted protests is part of the current SNAC budget.

8 Validity of titles

- 8.1 The title of "Swiss Champion" can only be assigned to a Swiss citizen or a citizen of Liechtenstein, as well as foreigners who have been living in Switzerland as permanent residents for more than five years.
- 8.2 The title of "Acting Swiss Champion" is valid until the next SNAC.
- 8.3 The title of "Swiss Champion" does not expire.

9 Liability / Insurance

- 9.1 The insurance should protect the organiser of the SNAC.
- 9.2 Liability and responsibility:
 - 9.2.1 Every competitor is liable and responsible for his or her own insurance. The organiser assumes no liability.
 - 9.2.2 Legal liability of 3 Mio. CHF is mandatory.

10 Sportsman Category (SPO)

10.1 Flight Programmes list

The following competition flights will be scheduled:

Training	The Sportsman Training (SPO TR)
Programme 1	The Known Compulsory (KC)
Programme 2	The Free (FR)
Programme 3	The Unknown (UK)

10.2 The Sportsman Training

10.2.1 Every pilot of the Sportsman Category has the right for training for 10 minutes in the box.

10.2.2 In case of bad weather during the week, the training could be combined with the Know Programme (Time for training (i.e. 7 min.), then the competing flight). It is a CD and PJ decision.

10.2.3 The CD fixes the starting order assigned to every competitor. A flight not started within the given time limit cannot be replaced (cancellation of training). The CD can, based on a valid request (technical defects, multiple-use aircraft, etc.) move the practice slot of a pilot.

10.3 Programme 1 - The Known Compulsory Programme

10.3.1 The Known Compulsory Programme will be published by the SAA at the beginning of the year for the SNAC. Every year a new programme is suggested by SAA instructors or experienced pilots.

10.3.2 Figures of the Known Compulsory Programme are chosen at a level slightly above the requested figures by the FOCA/EASA for the purpose of getting the "ACR" extension.

10.3.3 The Known Compulsory Programme will be constructed in such a way that it can be executed in all safety with the aerobatic type of aircraft the most limited in performance available in aerobatic school, considering among other things, the inverted flight capability of the engine, and the local terrain configuration of the aerodrome where the contest takes place.

10.3.4 The SAA committee will choose the Known Compulsory Programme that will be flown for the contest.

10.3.5 Basic values for establishing the Known Programme:

1. Number of figures 9 to 12
2. Number of K : from 130 to 160.
3. Figures are chosen from
 - (i) Figures are chosen in the FAI catalogue (current Aresti System, condensed).
 - (ii) No snaps are allowed in SPO.
 - (iii) No duplication of any figure is allowed.

10.4 Programme 2 - The Free Programme

10.4.1 The Free Programme construction must respect the following rules:

1. Number of figures: 11 maximum.
2. Figures are chosen in the FAI catalogue (current Aresti System, condensed).
3. Number of K: 150 maximum.

10.4.2 The following figures must be included:

1. Figures 2.1.1.1 or 2.2.1.1 or 2.3.1.1 or 2.4.1.1
2. Figure 5.2.1.1
3. Figure 7.4.1.1
4. At least one figure each from sub-family 9.1.x.x to 9.4.x.x
5. Only one figure from sub-family 9.11.1.x.
6. A catalogue reference number may be used only once.

10.4.3 The sequence must be made in a way to enable the pilot to fly all the figures in safety with the aircraft available taking into consideration the local conditions of the aerodrome (terrain, obstacles, altitude).

10.4.4 The start and finish of the Free Programme may be executed in normal or inverted level flight.

10.5 Programme 3 – The Unknown Programme

10.5.1 The CD will provide the Unknown Programme; it will consist of a maximum of 10 to 12 figures. The Unknown Programme is created by SAA instructors or experienced pilots and approved by the SAA Committee.

10.5.2 The Unknown Programme will be announced to the competitors not less than 24 hours before the time at which the programme is to be flown.

10.5.3 Figures will be chosen as for the Known Compulsory programme.

10.5.4 Pilots are personally responsible to carefully check the submitted programme to be compatible with the performance characteristics of their aircraft and their safety. They must notify the PJ within 2 hours from publication time any dangerous sequence. The PJ must then amend the programme with new figure(s).

10.6 Positioning marks

10.6.1 The K factor accorded to positioning marks in SPO Programmes 1, 2 and 3 is 20 K.

11 Intermediate Category (INT)

11.1 Flight Programmes list

The following competition flights will be scheduled:

Programme 1	The Known Compulsory (KC)
Programme 2	The Free (FR)
Programme 3	The First Unknown (UK1)
Programme 4	The Second Unknown (UK2)

11.2 Programme 1 – The Known Compulsory Programme

11.2.1 The Known Compulsory Programme is published by the SAA at the beginning of the year. Every year a new programme is suggested by Instructors or experienced pilots.

11.2.2 The Known Compulsory Programme will be constructed in such a way that it can be executed in all safety with the aerobatic aircraft available, considering, among other things, the local terrain configuration of the aerodrome where the competition takes place.

11.2.3 Basic values for establishing the Known Compulsory Programme:

1. Number of figures between 10 and 12.
2. Number of K: about 200.
3. The figures will be chosen with the objective to strengthen the acquired level in Sportsman Category and to build a solid base to progress into the Advanced Category.
4. Most interesting figures from the current CIVA “master set” for Intermediate can be integrated into the Known Compulsory Programme.

11.3 Programme 2 - The Free Programme

11.3.1 The Free Programme construction must respect the following rules:

1. Number of figures: 12 maximum. Figures are chosen in the FAI catalogue (current Aresti System, condensed).
2. Number of K: 200 maximum.

11.3.2 The following figures must be included:

1. At least one of those figures: 2.1.3.1 or 2.2.5.1 or 2.3.4.1 or 2.4.7.1.
2. Figure 5.2.1.4.
3. At least one figure from family 7.
4. At least one figure from family 8.
5. At least one figure each from sub-family 9.1.x.x to 9.8.x.x
6. At least one from sub-family 9.9.x.x or 9.10.x.x
7. Only one figure from sub-family 9.11.1.x or 9.12.1.x
8. A catalogue reference number may be used only once.
9. At least one opposite roll with elements from family 9.1.x.x to 9.10.xx

11.3.3 The sequence must be made in a way to enable the pilot to fly all the figures in safety with the aircraft available and taking into consideration the local conditions of the aerodrome (terrain, obstacles, altitude).

11.3.4 The start and finish of the Free Programme may be executed in normal or inverted level flight.

11.4 Programme 3 & 4 - The First and Second Unknown Programmes

11.4.1 The Programmes 3 & 4 are created by SAA instructors or experienced pilots and approved by the SAA Committee.

11.4.2 The Programmes 3 & 4 will be announced to the competitors not less than 24 hours before the flight.

11.4.3 Figures shall be selected considering the performance characteristics of each competing aircraft and the safety of all pilots. No negative descending figures are allowed in Programmes 3 & 4 (most of the figures in column 3 and 4 in the FAI aerobatic catalogue), except 45° negative down with straight in level recovery. No negative spin is allowed in Programmes 3 & 4, except if the same negative spin occurs in the Known Compulsory of the year.

11.4.4 Pilots are personally responsible to carefully check the submitted programme to be compatible with the performance characteristics of their aircraft and their safety. They must notify within 2 hours from publication time any dangerous sequence or figure. The PJ must then amend the programme with new figure(s).

11.5 Positioning marks

11.5.1 The K factor accorded to positioning marks in INT Programmes 1, 2, 3 and 4 is 30 K.

12 Advanced Category (ADV)

All flights according to FAI Sporting Code, Section 6, Part 1, Chapter 2.

12.1 Flight Programmes list

12.1.1 The following competition flights will be scheduled:

Programme 1: The Free Known Programme

Programme 2: The First Free Unknown Programme

Programme 3: The Second Free Unknown Programme

Programme 4: The Third Free Unknown Programme

12.2 Programme 1 – The Free Known Programme

Flights according FAI Sporting Code, Section 6, Part 1, Chapter 2.2

The “Known” figures specified by CIVA for powered aircraft in 2019 are:

Advanced power category

Max total K allowed = 320

<p>Fig A 5.3.1.1(18) 9.1.2.4(10) 9.1.1.1(6) 9.9.5.3(11) K: 45</p>	<p>Fig B 8.4.3.1(15) 9.1.1.2(8) 9.1.5.3(6) K: 29</p>	<p>Fig C 8.6.1.4(12) 9.12.1.4(7) 9.1.3.3(6) 9.4.3.3(8) K: 33</p>	<p>Fig D 7.2.4.2(6) 9.1.3.6(10) 9.9.3.6(14) K: 30</p>	<p>Fig E 2.2.5.2(23) K: 23</p>
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12.3 The Free Unknowns – Programmes 2, 3 & 4

Flights according FAI Sporting Code, Section 6, Part 1, Chapter 2.3.

13 Excellence Category (EXC)

Inspired (under FFA authorization) by FFA Excellence Category regulations and according to FAI Sporting Code, Section 6, Part 1, Chapter 2, except for Programme 1, 2 and 5.

13.1 Flight Programmes list

The following competition flights will be scheduled:

Programme 1	The Known Compulsory (KC)
Programme 2	The Free (FR)
Programme 3	The First Free Unknown (UK1)
Programme 4	The Second Free Unknown (UK2)

13.2 Programme 1 – The Known Compulsory Programme

13.2.1 The SAA committee will choose the Known Compulsory Programme that will be flown in the season and will be published at the beginning of the year. Normally, it will be chosen from the current or a former FFA Excellence Known Programmes. It could be also new programmes suggested by SAA instructors or experienced pilots.

13.3 Programme 2 - The Free Programme

13.3.1 The Free Programme may be composed of a specified maximum number of figures or combinations of figures. A combination will be taken as one figure. All figures must be taken from the Aresti System (Condensed) as currently amended by CIVA. The total difficulty coefficient of all figures and combinations of figures shall not exceed a certain amount. The limits in each case are given in the table below.

	Maximum figures	Maximum Total K
Excellence	9	360

13.3.2 The start and finish of Programme 2 must be carried out in normal or inverted level flight. Competitors may begin and finish their programme at any height between the upper and lower limits given in Rule 4.1.6.

13.3.3 A catalogue reference number may be used only once.

13.3.4 The method of constructing figures and calculating difficulty coefficients is as described in the Aresti System (Condensed).

13.3.5 Versatility

In order to achieve versatility in the design of Programme 2, it is a mandatory requirement that competitors shall include the following. Programmes not including these figures will not be accepted:

Family	Excellence
1	At least one figure
2	At least one from either 2.2.3 to 2.2.6, or 2.3.2 to 2.3.5, or 2.4.2 to 2.4.8
5	At least one figure
6	At least one figure
7	At least one figure
8	At least one figure
9.1 to 9.8	Not specified
9.9 & 9.10	At least two of each sub-family
9.11 & 9.12	At least one figure from either
Opposite Rolls	At least one instance with elements from Families 9.1 to 9.10

13.4 Programmes 3 & 4 - The Free Unknown Programmes

13.4.1 Flights according FAI Sporting Code, Section 6, Part 1, Chapter 2.3 “Unlimited” regulations, restricted by this present regulation.

13.4.2 The total difficulty coefficient of all figures and combinations of figures shall not exceed a certain amount. The limits in each case are given in the table below.

Excellence	Programme	Figure Min. K	Figure Max. K
	3	22	50
	4	22	50

13.4.3 Total K max for Programme 3 and 4 is 350 K.

13.4.4 In the nomination of figures there will be a limit on the number of figures selected from the following:

Family	Excellence
1.1.6-1.1.11	Max. of two from columns 3 and 4
8.4.1 to 8.4.4 8.4.15 to 8.4.18 8.5.2, 8.6.1, 8.6.2	A maximum of two from column 3 and 4
9.9	Min. 2*
9.10	Min. 2*
	*Total of Families 9.9 and 9.10 not exceed five, max. 2 vertical

13.4.5 Variations to UNL figures and rotations from Appendix A:

1. Add figures 2.1.3.x
2. Following figures are prohibited:
 - Family 1:
1.1.10.4 and 1.1.11.4,
1.2.1.4, 1.2.2.4, 1.2.5.3, 1.2.6.4, 1.2.7.3 and 1.2.8.4
 - Family 7:
7.4.1 to 7.4.6, column 3 and 4,
 - Family 8:
8.4.1.3, 8.4.2.3, 8.4.3.4 and 8.4.4.4,
8.4.15.3, 8.4.16.3, 8.4.17.4 and 8.4.18.4
8.6.1 to 8.6.8 with negative three-quarter loop pushed up (column 3 and 4).
3. If the descent part of figures 8.4.1 to 8.4.4, column 3 and 4 got a spin, no vertical snap is allowed. Only 9.1.1.1 to 9.1.1.4 and 9.4.1.2 is allowed.
4. No vertical snap allowed on 8.6.5 to 8.6.6 column 3 and 4.
5. Snap 9.10.8.2 can only be found on: 7.2.2.1, 7.2.4.2, 8.5.3.3, 8.5.4.4, 8.6.2.4 and 8.6.4.3
6. Descending rotation on:
 - (i) 1.1.6.4 and 1.1.7.3 is limited only to 9.1.5.2
 - (ii) 1.1.6.3, 1.1.7.4, 1.2.5.4, 1.2.6.3, 1.2.7.4 and 1.2.8.3 is limited only to 9.1.5.3
7. If a snap occurs on the climbing part of 8.4.15.1, 8.4.15.2, 8.4.16.1, 8.4.17.1, 8.4.17.2 and 8.4.18.2, no rotation allowed in the descending part.
8. For 8.6.1 and 8.6.3, column 1 and 2, a top rotation excludes a snap in the vertical part and limited it to 9.1.1.1 or 9.1.1.2. A snap on top excludes any vertical rotation.
9. On 8.6.5.2 and 8.6.6.1, descending rotation is limited to 9.1.5.2
10. On 8.6.5.1 and 8.6.6.2 with top rotation, the descending rotation is limited to 9.1.5.3.
11. No snap after a spin.
12. After a spin, rolls are permitted, max. 9.1.5.2
13. Rotations not allowed:
 - (i) 9.2.2.6
 - (ii) 9.4.2.3
 - (iii) 9.9.6.2, 9.9.6.3, 9.9.7.2, 9.9.7.4, 9.9.8.2, 9.9.8.4, 9.9.9.2 and 9.9.9.4
 - (iv) 9.10.1.x, 9.10.7.x, 9.10.8.4, 9.10.9.x

14. Negative exit not allowed after:

- (i) 9.1.5.3
- (ii) 9.2.5.4
- (iii) 9.4.5.2
- (iv) 9.8.5.2
- (v) 9.9.5.x and 9.9.10.x
- (vi) 9.10.5.x and 9.10.10.x

15. Negative entry limited max. to:

- (i) 9.1.1.4
- (ii) 9.4.1.3
- (iii) 9.8.1.1

13.5 Positioning marks

13.5.1 The K factor accorded to positioning marks for Programmes 1, 2, 3 and 4 is 35K for EXC.

13.6 Lower performing aircrafts – Optional Free Break

13.6.1 If asked by a pilot with a less powered aircraft, an Optional Free Break (OFB) could be allowed for a programme or the entire competition. If in force, this OFB will be possible for any competitor in EXC Category.

14 Unlimited Category (UNL)

All flights according to FAI Sporting Code, Section 6, Part 1, Chapter 2, except for Programme 5.

14.1 Flight Programmes list

14.1.1 The following competition flights will be scheduled:

Programme 1: The Free Known Programme

Programme 2: The First Free Unknown Programme

Programme 3: The Second Free Unknown Programme

Programme 4: The Third Free Unknown Programme

14.2 Programme 1 – The Free Known Programme

Flights according FAI Sporting Code, Section 6, Part 1, Chapter 2.2

The “Known” figures specified by CIVA for powered aircraft in 2019 are:

Unlimited power category

Max total K allowed = 450

<p>Fig A 5.2.1.3(18) 9.9.1.3(15) 9.1.5.3(6) K: 39</p>	<p>Fig B 2.4.3.3(46) K: 46</p>	<p>Fig C 7.5.5.2(15) 9.2.3.4(9) 9.1.3.2(4) 9.10.4.6(16) 9.1.3.4(8) K: 52</p>	<p>Fig D 8.6.8.1(15) 9.1.3.6(10) 9.10.3.4(13) 9.4.5.2(5) K: 43</p>	<p>Fig E 1.3.16.3(21) 9.11.1.4(5) 9.1.5.2(4) 9.8.2.2(9) 9.1.5.4(8) K: 47</p>
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14.3 The Free Unknowns – Programmes 2, 3 & 4

Flights according FAI Sporting Code, Section 6, Part 1, Chapter 2.3.

15 The Swiss National Freestyle Championship (SNFC)

15.1 Admission

1. All SNAC participating UNL pilots.
2. All pilots who:
 - have won a medal in Unlimited Freestyle (UFS) within 5 years
 - have participated to UFS within 3 years
 - have participated to Swiss Cup Freestyle of the current year
 - are qualified or recognized for Freestyle by a SAA [Endorsed](#) Instructor.

15.2 The competition

- 15.2.1 According time and number of participating pilots, a training run will be organized for pilots on Saturday morning.
- 15.2.2 The selection of figures or figure combinations for this programme need not be made with reference to the Aresti System (Condensed). There will be no limitation on the number of figures and the total difficulty coefficient. It has to be flown within 3:30 and 4:00 minutes.
- 15.2.3 The start and finish of the Freestyle Programme may be in normal or inverted flight on a horizontal, ascending or descending path, which must not deviate from the horizontal by more than 45 degrees. Competitors may begin or finish their programme at any height between the upper and lower limits.
- 15.2.4 There will be no submission of forms containing the sequence of figures to the Contest Director.
- 15.2.5 Smoke may be used at the option of each individual pilot. In case of failure of the smoke system, the competitor will not be entitled to a reflight or to delay his flight.
- 15.2.6 Music may be used at the option of each individual competitor.
 - ii) Competitors may submit an audio track to the CD, to be played during their performance to the judging panel and over the public address system. This must be provided at least 2 hours before the scheduled competition start time in .mp3 or .mp4 format, preferably on a USB memory stick.
 - iii) The default time for starting playback of the audio track will be on the third wing rock at the commencement of the performance. Alternatively the competitor may instruct the CD in writing when playback of the audio track should commence, if necessary triggered by a command on the radio from the pilot.
 - iv) In case the audio track fails to be played to the judges, the competitor will not be entitled to a reflight.

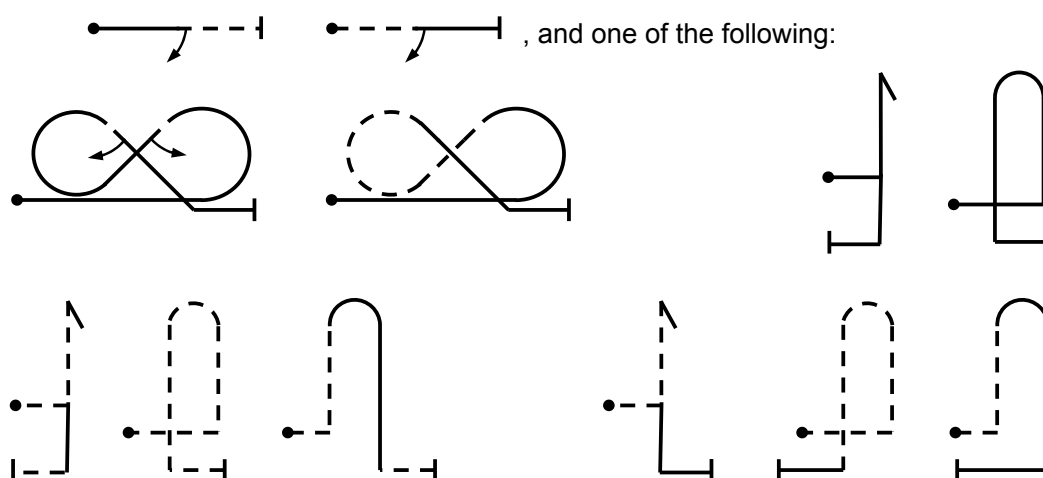
15.3 Awards

The winner will be awarded the gold medal and the title of “Swiss National Freestyle Champion”; the second and third placing will be awarded silver and bronze medals respectively.

16 Safety maneuvers

FAI Sporting Code, Section 1, Chapter 3.9

16.1 Before the wing-dipping at the start of each competition flight in Programmes 1, 2, 3, 4 and 5 it is recommended that all pilots perform safety manoeuvres as follows. These figures are optional but, if flown, may only be flown once, in any order unless a figure starting inverted is used (see below), and continuously on the same axis. They must be flown inside the performance zone:



16.2 Prior to the actual performance of Programme 1 (except for SPO), in addition to safety manoeuvres according to 16.1, competitors will be permitted to fly, once, practice figures from their Programme 1 sequence, starting from figure one (1) of their sequence, consecutively up to the first five (5) figures.

16.3 According to conditions, the CD may limit the Programme 1 (to 10 min.) included safety and practising figures. In that case, the pilot will be responsible to manage his time in the box to complete the Programme 1 within that time. The CJ will announce the 10 minutes time limit by saying: "Time, Time, Time". No training is allowed after the judged Programme 1, even if time is not over.

The SAA Committee has approved the present regulation on 21th of April 2019.

The President of the SAA

Jérôme Cusin

The Judging & Regulations Manager

Sophie Martel