

**Regulations of the
Swiss National Aerobatic Championship
and the
Swiss National Unlimited 4 Minute Freestyle**

Version 2019-1

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Swiss Aerobatic Association
SAA**

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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 Championship (SNAC) and the Swiss National Unlimited 4 Minute Freestyle (U4FS).
- 1.2 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.
- 1.3 No regulation can replace good judgment and common sense of the organizers and participants.
- 1.4 The elaboration of these regulations is based on experience and international rules spirit. Moreover, it is constantly renewed. This is why it is legitimate and necessary to adapt these regulations, normally every year, to the new rules and to the evolution of the sport. Propositions and suggestions in this sense are to be addressed before November 15 to 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.
- 1.5 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.
- 1.6 Aerobatics brings an essential contribution to the perfection of flying skills.
- 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 Swiss National Aerobatic Championship and the Swiss Unlimited 4 Minute Freestyle.
- 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 U4FS are submitted to the present regulations and must abide by the rules.
- 2.5 The Committee of the SAA – together with the Contest Director – 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 U4FS will take place at the end of the SNAC.
- 2.8 Registration to the SNAC and to the U4FS should be open by 5 months latest before the competition.
- 2.9 The SNAC and U4FS 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 article 3.1.2, general section, of the FAI Sporting Code in force. The provision of the 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:
 - (a) Contest Director (CD)
 - (b) Chief Judge (CJ), Judges and Assistants
 - (c) President of Jury (PJ) and Jury Members (JM)
 - (d) Contest Crew
 - (e) Local authorities
 - (f) Competitors

3.2 Categories

- 3.2.1 The competition consists of 4 categories:
 - (a) Sportsman SPO
 - (b) Intermediate INT
 - (c) Advanced ADV
 - (d) Unlimited UNL

3.3 Awards

- 3.3.1 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 (SPO training flight doesn't count as a ranking flight).

- 3.3.2 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.
- 3.3.3 All participants and all members of the contest crew shall receive a small souvenir.

3.4 Contest Director (CD)

- 3.4.1 The Committee of the SAA appoints the CD. He will act as the general manager of the event, appointing contest officials. The CD could be a competitor.
- 3.4.2 The rights and duties of the CD are the following:
 - (a) Administrative
 - (b) Registration procedure
 - (c) Financial supervision
 - (d) Technical organization
 - (e) Conduct of contest
 - (f) Infrastructure
 - (g) Aerodrome flight adaptations
 - (h) Contacts to officials
 - (i) Media work, coordination with the AéCS
 - (j) Communication with the committee of the SAA and the FSVM/MFVS
 - (k) Supervision of the contest in accordance with the present regulations
 - (l) Respect the national regulations of the FOCA (BAZL/OFAC) (NOTAM and other) as well as local regulations
 - (m) Ensuing the co-ordination with the management of the airport and foreseeing the zones reserved to the public, the parking of the aircraft
 - (n) Designating and marking of the aerobatic box.
 - (o) Organization of ground/aircraft communication equipment and service.
 - (p) Organization and documentation of safety measures in coordination with the management of the airport, local authorities and help organizations in case of an accident.
 - (q) Prepare the logistics for the conduct of the competition flights (judges, assistants, helpers, scoring office, publication of the results, etc...).
 - (r) Certify scores.
 - (s) Organization of briefings and ensuing adequate information to the pilots.
 - (t) Warning or excluding of contest any person or competitor for reason of safety or unsportsmanlike conduct.
 - (u) Presenting awards and/or prizes
 - (v) Reduce the timelines for Briefing, Presentation and Selection of Unknown and Free Unknown programs listed under 11.2.20.

3.5 Judges

- 3.5.1 The CD nominates the judges before the competition.
- 3.5.2 The board of judges is composed of:

- (a) 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.
 - (b) At least 2 additional Judges and 2 additional Assistant Judges.
 - (c) 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 2.
- 3.5.4 A judge cannot be a competitor during the current SNAC or U4FS.
- 3.5.5 Chief-Judge (CJ) responsibilities:
- (a) 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 should place his expertise at the disposal of the board of judges, and co-ordinate and guide their work.
 - (b) Supervision of the correctness of paperwork, recording of penalties.
 - (c) In case of serious fault, the CJ can ask the Jury to exclude a judge from the contest. The decision belongs to the Jury.
 - (d) 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 Boundary judges are not required for SNAC and U4FS.
- 3.6 Jury
- 3.6.1 The SAA Committee nominates the Jury before the contest.
 - 3.6.2 The Jury consists of a president 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 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 U4FS.
 - 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).

4 Conduct of contest

4.1 Box

- 4.1.1 According to FAI Sporting Code, Section 6, Part 1, Chapter 5.2.6.1. No aerobatic figures are allowed outside the box.
- 4.1.2 The Aerobatic Performance Zone. FAI Sporting Code, Section 6, Part 1, Chapter 4.7.
- 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 amount 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 are as per FAI Sporting Code, Section 6, Part 1, Chapter 4.2.4. In addition height limitations for Sportsman and Intermediate 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
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 Competition flights

4.2.1 Programmes:

Sportsman	Intermediate	Advanced	Unlimited
Training	Free Known	Free Known	Free Known
Known	1 st Free Unknown	1 st Free Unknown	1 st Free Unknown
Free	2 nd Free Unknown	2 nd Free Unknown	2 nd Free Unknown
1 st Unknown	3 rd Free Unknown	3 rd Free Unknown	3 rd Free Unknown
-	-	-	4-min. Freestyle

- 4.2.2 Training for the Unknown Programmes is not permitted. Competitors violating this regulation will be disqualified.

4.2.3 Sequence of flights (Drawing of Lots)

FAI Sporting Code, Section 6, Part 1, Chapter 4.1.8

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. A minimum of 2 pilots will be inserted between a multiple-use aircraft.

4.2.4 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 (250 points).

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.

- 4.2.5 Defects on the ground and in flight: FAI Sporting Code, Section 6, Part 1, Chapters 4.2.7.1. and 4.2.7.2. will apply.
- 4.2.6 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 4.2.7.1. b).
- 4.2.7 During the championship, no flights (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 will be allowed to fly the described figures in FAI Sporting Code, Section 6, Part 1, Chapter 4.2.8. INT and SPO will be assimilated to "Yak 52" (SPO will fly a full roll (9.1.3.4) instead of the permitted flick roll. See 5.1.9 for exception.
- 4.2.8 Duration of flight and signalling start and finish: FAI Sporting Code, Section 6, Part 1, Chapter 4.2.6. SPO and INT are as per "Yak 52".
- 4.2.9 Safety Manoeuvres: FAI Sporting Code, Section 6, Part 1, Chapter 4.3.1.2. (See Annex 1)
- 4.2.10 Measures in case of mechanical defects: FAI Sporting Code, Section 6, Part 1, Chapter 4.2.7 will be applied.
- 4.2.11 A penalty of 250 points will be awarded to a pilot who, without reasonable cause, is not ready when their slot time arrives as per FAI Sporting Code, Section 6, Part 1, Chapter 5.2.4.2.
- 4.2.12 If a pilot keeps the conduct of the contest waiting for more than 10 min without any valid reason, the starter will inform the Jury. The Jury may decide the disqualification of the pilot for the concerned flight.
- 4.2.13 For SPO pilots it is mandatory to help as judges aides if needed. All other pilots will be obliged to help as judges aides during their non-flying day.

4.3 Evaluation of the competition flight and criteria.

4.3.1 FAI Sporting Code, Section 6, Part 1, Chapters 5. and 6.

4.4 Penalties

4.4.1 FAI Sporting Code, Section 6, Part 1, Chapters 5.2 and 5.3, applies.

“Yak 52” rules will apply for SPO and INT, but the penalties may vary.
See 4.4.2 for the penalties table.

4.4.2 Tables of penalties:

Penalty	U4FS	UNL	ADV	INT	SPO
Box out*	-	30	20	20	20
Time out	10 / sec	-	-	-	-
Faulty wings rocks	150	30	30	30	30
Too low	250	250	200	150	150
Too high	-	50	30	30	30
Missed slot	250	250	200	150	150
Interruption	-	150	100	50	50
Insertion	-	150	100	50	50
Violation of Safety Manoeuvres	30	30	30	30	30

*If boundary judges are on duty during the contest.

4.5 Meteorological conditions

4.5.1 FAI Sporting Code, Section 6, Part 1, Chapter 4.2.2. applies.

4.5.2 According meteorological conditions and in order to achieve an interesting competition and a valid team ranking, the CD can change the sequence of flights or even omit a whole series for a category.

4.5.3 The priority to fly the maximum of programmes is given to UNL, 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 (1st Free Unknown) or Programme 3 (2nd Free Unknown) to be flown by the best of each category according to the category priority.

4.5.4 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 U4FS has priority on Saturday afternoon.

4.6 Video recording

4.6.1 An up to date video recording system at the judge line is mandatory throughout the contest.

5 Entry 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 and UNL pilots

5.1.3 Category admittance criteria:

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

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 UNL requires to have reached 70% overall or more in ADV at one of the last 3 SNAC's
- flying U4FS, see 12.7.2.

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 flew in the last higher level competition (SNAC).

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 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 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 During the contest,
 - (a) The CD and PJ may arrange and approve flights: for public relations, for weather and box marks checks (these type of flights can't be made by competitors) or evacuation flights in case of bad weather.
 - (b) If a competitor has to fly for any reason (except for test flights according Chapter 4.2.5 and despite 4.2.6), 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.
- 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 organizers.
- 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:
 - (a) A valid pilot's license and a valid medical certificate.
 - (b) 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 document

- 6.2.1 Online registration or by downloading and filling in the registration document. Send it via e-mail to the CD (e-mail can be found on www.saa.ch).
- 6.2.2 Registration deadline: fixed by the CD.

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.
- 6.3.3 Payment deadline: fixed by the CD.

6.4 Free & Free Known Programmes

- 6.4.1 Fill in correctly according to category regulations.
- 6.4.2 Standard CIVA forms A, B, C, L and R, preferably in aerobatics figure drawing format and pdf.
- 6.4.3 Send via e-mail to the CD and/or to the Free Programmes controller.
- 6.4.4 Free deadline: fixed by the CD. No delay will be accepted. The SAA Committee can approve exception.
- 6.4.5 The PJ shall ensure that Forms A, B C, L and R are signed by each competitor at time of registration.

6.5 Speaker information sheet

- 6.5.1 Download 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:

- pilot license,
- aerobatic extension,
- medical,
- low-level flying permission,
- 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. "Nonworking" 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 organizer of the SNAC.
- 9.2 Liability and responsibility:
 - 9.2.1 Every competitor is liable and responsible for his or her own insurance. The organizer assumes no liability.
 - 9.2.2 Legal liability of 3 Mio. CHF is mandatory.

10 Category Sportsman (SPO)

10.1 Programmes

In the Sportsman category, the pilots accomplish the following Programmes:

- | | |
|----------------------|-------------------|
| (a) Training | Training SPO (TR) |
| (b) Known Compulsory | Programme 1 (KC) |
| (c) Free | Programme 2 (FR) |
| (d) Unknown | Programme 3 (UK1) |

10.2 Training

- 10.2.1 Every pilot of the SPO 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 instructors or experienced pilots.

- 10.3.2 Figures of the Known Compulsory Programme are chosen at a level just above the requested figures by the FOCA 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, taking into account 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:
- (a) Number of figures 9 to 12
Figures are chosen in the FAI catalogue (current Aresti System, condensed).
 - (b) Number of K : from 130 to 160.
 - (c) Figures are chosen from
 - (i) the list of allowed figure for "Yak 52" in the Programmes 3 and 4 (FAI Sporting Code, Section 6, Part 1, Chapter 9.).
 - (ii) Exceptions are possible.
 - (iii) No snaps are allowed in SPO.
 - (iv) 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:
- (a) Number of figures: 11 maximum.
 - (b) Figures are chosen in the FAI catalogue (current Aresti System, condensed).
 - (c) Number of K: 150 maximum.
- 10.4.2 The following figures must be included:
- (a) Figures 2.1.1.1 or 2.2.1.1 or 2.3.1.1 or 2.4.1.1
 - (b) Figure 5.2.1.1
 - (c) Figure 7.4.1.1
 - (d) At least one figure each from sub-family 9.1.x.x to 9.4.x.x
 - (e) Only one figure from sub-family 9.11.1.x.
 - (f) 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.
- 10.4.5 Any selected figure or combination of figures must bear the catalogue reference number(s) and the difficulty coefficient(s) (K) stated in the current FAI aerobatic catalogue. The numbers and coefficients in the FAI aerobatic catalogue (current Aresti System, condensed) will be taken as binding.

10.4.6 The method of constructing figures and calculating difficulty coefficients is as described in the FAI aerobatic catalogue (current Aresti System, condensed, Part I, 11. to 15.).

10.4.7 Programme drafting

- (a) One of each standard CIVA forms A, B, C, L and R must be submitted for control to the CD before the start of the competition.
It shall be the duty of the contest officials to check the catalogue reference numbers on form "A" of each competitor, taking the reference numbers in the FAI aerobatic catalogue. Every inaccuracy in the symbols drawing or in the coefficient value as well as duplication of figures will be brought to the competitor's attention in order to correct the forms and to be presented again for control.
- (b) The final responsibility for the correctness and compatibility of forms A, B, C, L and R lies with the competitor.
- (c) The forms will include the conventional symbols, catalogue numbers and coefficients only. No account will be taken of any other writing or notation.

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.

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.

10.5.5 In case of time constraints due to bad weather or other reasons, the CD may cancel this programme.

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 Categories Intermediate (INT), Advanced (ADV) and Unlimited (UNL)

11.1 Flight Programmes schedule

The following competition flights will be scheduled:

11.1.1 Flight Programmes list

- 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
- Programme 5: The Final Freestyle Programme (Unlimited only)

11.1.2 General regulations on flight programmes schedule

- 11.1.2.a After the Free Known Programme (Programme 1), no pilot shall continue in the competition unless the pilot is, in the judgement of the Jury and Board of Judges, capable of safely flying the remaining programmes. Any pilot disqualified under this rule will be so informed by the Jury before the start of Programme 2.
- 11.1.2.b For Programme 4, if there is insufficient time to complete the championships due to weather problems or unforeseen circumstances, the Jury is authorised to introduce a cut of the competitors, without respect to gender, up to a maximum of 50% of the remaining competitors, based on the combined standings before Programme 4.
- 11.1.2.c The decision on the number of competitors who will fly the Final Freestyle Programme will be made by the Jury in consultation with the Organiser, Priority in selection will be given to those pilots entered for this programme only.
- 11.1.2.d In Unlimited, Programme 5 shall have priority over Programme 4. Thus, if weather forecasts indicate that all programmes may not be completed before the end of the contest period, the Organiser, in consultation with the International Jury, shall direct that Programme 5 be flown before Programme 4.

11.2 Programme 1 – The Free Known Programme

- 11.2.1 Sequences for the Free Known Programme will be composed of figures or combinations of figures (a combination being taken as one figure) selected from the Aresti System (Condensed) as follows:
 - a) Five (5) figures from a Known 'master set' selected at the CIVA plenary each year for each category, used in any order and at any position in the sequence with their start direction into-wind, down-wind or cross-wind in either direction as desired, with their design unchanged;

b) Plus five (5) Free figures that each competitor must add, in order to design a sequence of ten (10) figures that satisfies regulations below. The selected Known 'master set' must be such as to enable competitors to fly all figures safely in the aircraft available to them, provided that the aircraft meet the requirements of normal technical standards.

- 11.2.2 The selected Known 'master set' must be such as to enable design of sequences that satisfy the non-repetition requirement and versatility requirements.
- 11.2.3 The total difficulty coefficient of all figures of Free Known sequences shall not exceed the limits given in the table below.

	Maximum Total K
Unlimited	450
Advanced	320
Yak 52 / Intermediate	200

- 11.2.4 The start and finish of Programme 1 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.
- 11.2.5 Any figure or combination of figures which is selected must bear the catalogue reference number(s) and the difficulty coefficient(s) (K) stated in the Aresti System (Condensed) as currently amended by CIVA. The numbers and coefficients in the Aresti System (Condensed) will be taken as definitive.
- 11.2.6 In a given sequence, a catalogue reference number may be used only once.
- 11.2.7 Versatility
- In order to achieve versatility in the design of Programme 1, it is a mandatory requirement that sequences include the following figures. Sequences not including these figures will not be accepted:

Family	Yak 52 / I	Advanced	Unlimited
1	Not Required	At least one figure	
2	At least one from either 2.1.2 to 2.1.3, or 2.2.2 to 2.2.6, or 2.3.2 to 2.3.5, or 2.4.2 to 2.4.8	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	Not required	At least one figure	
7	At least one figure		
8	At least one figure		
9.1 to 9.8	At least one from each sub-family	Not specified	
9.9 & 9.10	At least one	At least two, no sub-family specified	At least two from 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		

11.2.8 Sequence Submission

a) As directed in the event bulletin or at the latest by the time of registration on site, each competitor must submit a computer file for the programme to the Contest Director, for verification of compliance with the relevant Rules. Hard copies alone, or hand drawings will not be accepted. The computer file must contain completed pages for the five Forms described below, in a format declared acceptable by the Bureau of CIVA. 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. If any pilot submits their Free Known sequence after the registration deadline, they will not be allowed to take part in Programme 1.

b) Form 'A' will show all symbols, catalogue reference numbers and difficulty coefficients.

c) Form 'B' will show the continuous sequence of the programme as it would be flown with the wind blowing from right to left, plus a table listing the Figure Numbers, their Catalogue Numbers and coefficients. Form B will also show identification of the five compulsory Known figures with the same designation (A-E) as in the official 'master set'.

d) Form 'C' will show the continuous sequence of the programme as it would be flown with the wind blowing from left to right.

e) Form 'R' will combine in one page Forms A and B.

f) Form 'L' will combine in one page Forms A and C.

g) Forms B, C, R and L must carry the correct symbol for the wind direction.

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

11.2.9 Checking

a) It shall be the duty of the Contest Officials to check each competitor's sequence validity:

i) correct use of the Known 'master set', 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.

b) The final responsibility for the correctness and compatibility of Forms A, B, C, R, 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's Team Manager so that the forms may be corrected and resubmitted.

c) The Contest Officials referred to in this rule are those of the Organiser.

e) The Organiser shall ensure that Forms A, B, C, R and L are signed by each competitor at time of registration. The Organiser will provide hard copies to each competitor for signature, and those signed hard copies will be the ones used by the Organiser for reproduction

11.2.10 Should a competitor disagree with a decision of the Contest Officials concerning his or her Programme 1, a complaint may be put to the Jury before flying commences in Programme 1. The approved programmes of all competitors will be published before the start of Programme 1, in sufficient time for complaints and protests to be made. Once the flying of Programme 1 has started, no complaints of any kind will be accepted by the Jury on any aspect of the composition of a competitor's programme.

11.2.11 Each judge will communicate to the Chief Judge which of both Form types (A/B/C or R/L) he/she wants to use. The Chief Judge shall then give the consolidated Form type list to the Organiser for sorting out the judging line paperwork. This requirement is valid for all Programmes where such Forms are used.

11.2.12 The Organiser will be responsible for reproducing a sufficient number of copies of competitors' programmes to meet the requirements of the contest. One set of copies of Programme 1 (Forms B and C only) shall be provided to each Team (and to each Judge) prior to the start of this programme. The relevant set (A/B/C or R/L) shall be delivered to each judge for scoring operations.

11.2.13 The Organiser will be responsible for ensuring that the names of the competitors will not appear on Forms A, B and C (respectively R and L) that are given to the judges.

- 11.2.14 The judges shall only take into account 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 Contest Organisation, and presented to the Chief Judge at any time prior to the flight commencing. Programmes 2, 2.3. 3 & 4 - The Free Unknown Programmes
- 11.2.15 For the Free Unknown Programmes, figures will be chosen from Appendix A. A maximum of 10 figures may be submitted. Every competitor (except as Hors Concours) may submit one figure, unless there are more than 10 competitors participating. In this case, the procedure to determine which competitor will submit figures will be as in paragraph 11.2.16. Repetition of any manoeuvre with the same catalogue number is not allowed within any one programme. Repetition of a complete figure from Programme 2 is not allowed in Programme 3, and repetition of a complete figure from Programmes 2 and 3 is not allowed in Programme 4. The intent of this regulation is that sequences for Programmes 2, 3 and 4 will be different.

Category	Programme	Figure Minimum K	Figure Maximum K
Yak 52 / Intermediate	2	12	20
	3	12	25
	4	12	30
Advanced	2	15	30
	3	15	35
	4	15	40
Unlimited	2	22	No limit
	3	22	No limit
	4	22	No limit

- 11.2.16 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.
- 11.2.17 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.
- 11.2.18 These figures must be of the average difficulty of the figures submitted by the pilots and cover Families not represented by them. Repetition of Catalogue numbers is not allowed throughout the nominated figures.
- 11.2.19 Sequences for Programme 2, 3 or 4 are to be composed using the 10 officially approved figures submitted by pilots, and additional figures from the Aresti System (Condensed) as currently amended by CIVA, solely to aid in composition. These additional figures may contain repetitions.

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

Family	Yak 52 / I	Advanced	Unlimited
1.1.6 – 1.1.11			Max. of two from columns 3 and 4
1.2.3, 1.2.4	Max. of one only from columns 3 and 4		
7.8.1 to 7.8.8	Max. of one figure only		
8.4.1 to 8.4.4, 8.4.15 to 8.4.18, 8.5.1, 8.5.2, 8.6.1, 8.6.2			A maximum of two from columns 3 and 4
9.9	Min. 1, max. 2.	Min. 2, max. 4.	A maximum of four*

Family	Yak 52 / I	Advanced	Unlimited
9.10	None		A maximum of four*
			* Total of Families 9.9 and 9.10 not to exceed six, at least one of which must be vertically climbing
9.11 & 9.12	A maximum of one figure		

- b) There will not be more than 1 flick roll (Family 9.9 or 9.10) per figure.
- c) At least one additional figure, up to a maximum of four, must be included in each sequence. The K-factors for these additional figure(s) shall be modified so that they share equally an aggregate of 24K. (note: Additional figures are referred to as “linking figures” in Appendices A and in the Sporting Code document “International Aerobatic Events: Statistical Method for Processing Scores”, nevertheless they are allowed to be placed anywhere in the sequence, including as first or last figure).
- d) Sequences will consist of no more than 14 figures.
- e) In sequence composition, figures may be used starting from one or the other axis. Nevertheless figures with their entry and exit on the same axis must maintain their construction unchanged, i.e. with the exit flight path in the entry direction or with the direction of flight reversed as originally drawn.

11.2.20 The contest Organiser shall provide copies of the list of figures to all competing pilots, and each pilot may submit to the Jury a maximum of one sequence, composed of these figures, for each Programme. The contest Organiser will determine the deadline for submitting proposed sequences. Computer files must be submitted, and must contain complete pages of all five Forms: A, B, C, R and L. Acceptable file formats and responsibility of submitting pilots in terms of up-to-date software are as described).

11.2.21 Publication and Selection of Free Unknown Programmes

- a) All proposed sequences received by the deadline must be checked, and corrected if necessary, by the Jury.
- b) The Jury shall publish all sequences received from the pilots not later than 24 hours before the start of the Programme.
- c) At least 12 hours before the commencement of each Programme, each competitor will notify the Organiser which of the proposed sequences he/she will fly.
- d) Prior to the flight order and paperwork being issued to the judging line, Team Managers or individual competitors as appropriate, shall verify the correctness of the allocation of selected sequence per pilot; this verification shall be recorded by the Organiser.
- e) At least 1 hour before the start of each Programme, the Organiser shall provide each pilot with a list of the Free Unknowns chosen by each competing pilot.

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

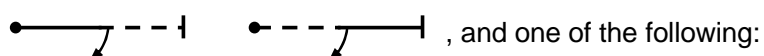
11.3 Programme 5 - The Final Freestyle Programme (Unlimited only)

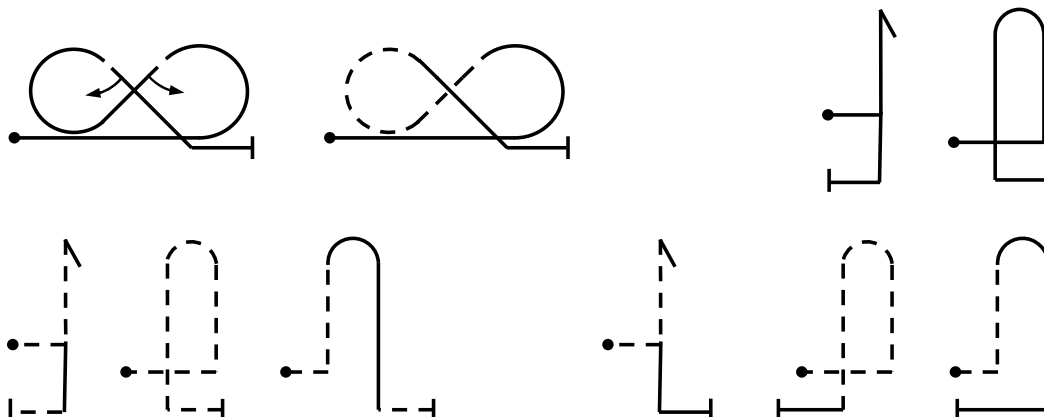
- 11.3.1 Programme 5 will be the last programme flown in the competition. The selection of figures or figure combinations for this programme need not be made with reference to the Aresti System (Condensed). There will be no limitation on the number of figures and the total difficulty coefficient.
- 11.3.2 The start and finish of Programme 5 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.
- 11.3.3 There will be no submission of forms containing the sequence of figures to the Contest Director.
- 11.3.4 Smoke may be used at the option of each individual pilot.

12 Safety maneuvers

FAI Sporting Code, Section 1, chapter 4.3.2.1

- 12.1 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:





- 12.2 Figures of Families 5 and 8 that start or finish inverted are not permitted in SPO and INT. When flown, a figure from Family 5 or 8 that starts inverted shall be inserted after the first half roll. In that case, if the figure is one that finishes positive, the second half roll is not flown.
- 12.3 Prior to the actual performance of Programme 1, in addition to safety manoeuvres according to 3.9.1.1, 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.

The SAA committee has approved the present regulation on 15th of December 2012.

This present regulation has been modified on the 25th of March 2018.

The president of the SAA

Ariel Lüdi