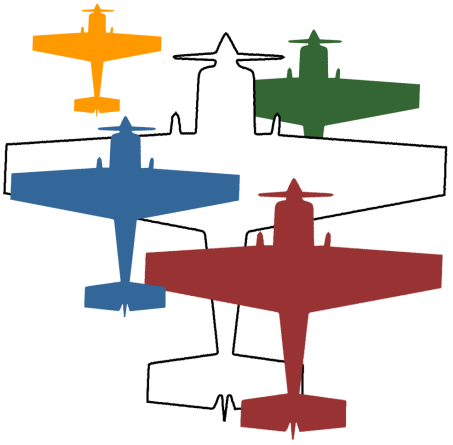
FAI Sporting Code

Fédération Aéronautique International



Regulations for the Conduct of International Aerobatic Events

CIVA Open Tour Series

Version 2021-1

Effective 04/2021

Maison du Sport International
Av. de Rhodanie 54
CH-1007 Lausanne
(Switzerland) Tél.
+41 (0)21 345 1070
Fax +41 (0)21 345 1077
E-Mail: sec@fai.org
Web: www.fai.or

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COMPARISONS / SUMMARY OF DIFFERENCES
CIVA OTS (COTS) VS NORMAL CIVA CHAMPIONSHIP

TOPIC	ART. #	NORMAL CHAMP.	CIVA OTS (COTS)
Duration	1.2.1.1.	7 > 12 days	4 days
Notification by organizer to CIVA	1.2.1.3.	Y-1 (October)	2 months before contest
Bulletin	1.2.1.3.	3 month	2 months
Categories	1.2.2.	INT, ADV, UNL	UNL (for the moment, also intended for ADV later)
Minimum number of competitors	1.2.5.	15	10
Maximum number of competitors	1.2.6.1	80	20
International jury	1.3.1.	3 members	3 members (include Organiser & CJ)
Board of judges	1.3.2.	1 CJ + 7 to 10 judges	1CJ + 4 judges
Technical commission	1.3.4.	1 technical commission	1 technical officer
Practice	1.4.3.	Usually 4 days	On arrival day before main briefing if possible
Warm-up	1.4.8.	2 WU pilots	No WU pilot
Programmes	2.	1 FK + 3 FU + Freestyle	K+3U (one with freestyle figures), Final Freestyle 2 Knowns “Low level”
Sequence of flights	3.2.	4 groups	5 groups
Meteorological conditions	3.6.		Other minimas Low level knowns minima
Time limits	3.10.1.	12/15 minutes	10 minutes-
Points / Awards	5.	Classic award	Addition of points
Appendix A	More possibilities allowed for COTS		
Freestyle	Appendix B.11.	K factor = 400	K factor = 200 Addition with programmes #1 to #4

1. GENERAL RULES FOR THE CIVA OPEN TOUR SERIES

1.1. Aims

1.1.1.1. Run a series of short national aerobatic events in which pilots from other nations can compete.

1.1.1.2. The contest will be named: COTS / CIVA Open Tour Series.

1.1.1.3. The COTS will complement CIVA normal championships.

1.1.1.4. The COTS will be for UNL only at first, but could be expanded to ADV.

1.1.1.5. Each COTS event will be limited to 20 pilots.

1.1.1.6. For all pilots who will participate at 2 or 3 COTS events, an addition of points and a final ranking will be published, and a final winner will be declared.

1.1.1.7. The COTS will need lighter organization than for normal championships, and the paperwork will be reduced.

1.1.1.8. COTS will be an opportunity for judges and officials to gain international experience.

And, as in the CIVA CODE 6.1.1.1.4. to 6.1.1.1.6

1.1.1.9. To promote the sporting skill of aerobatic pilots of FAI members, and arrange competitive contests between aerobatic pilots of FAI members, and to allow aerobatic pilots the maximum opportunity to demonstrate within the scope of the general rules their ability in competition with others.

1.1.1.10. To promote and popularize aerobatics and to develop and foster friendly relations between aerobatic pilots of different countries.

1.1.1.11. In pursuance of these aims:

a) Fairness and equal treatment shall be ensured by all stakeholders in all CIVA activities and contests, from registration to final results.
b) In case of dispute over the interpretation and application of these rules, and any other regulations for the conduct of aerobatic championships and competitions, a competitor shall be entitled to the benefit of reasonable doubt.

1.2. General regulation

1.2.1. Contest scopes

1.2.1.1. COTS will be held every year and should last 4 days from opening to closing.

1.2.1.2. The Organiser will provide conditions for entry and participation for any pilot on an equal rights basis, and will carry out each COTS event on the basis of the decisions and rules of the FAI.

1.2.1.3. CIVA will be notified by the Organiser, not later than 2 months before the beginning of the championships, of any general organisational conditions such as time, place, travel and visa formalities, entry forms, entry deadline, etc.

1.2.1.4. All the organizers who want to participate in the COTS must follow the present rules.

1.2.1.5. The organizers who want to participate in the COTS will have to declare it to CIVA with the dates of the competition, if possible during the two first months of the year.

1.2.1.6. All COTS events will be referenced in a schedule on the website “civa news” (*https://www.civanews.com/*).

1.2.1.7. The COTS events will use the FPS / Fair Play System for the scoring

1.2.1.8. The CIVA Bureau will nominate a COTS staff every year, with:

a) One CIVA Official.
b) One organizer.
c) One international aerobatic coach.

1.2.1.9. This COTS staff will be responsible to:

a) Follow the COTS competition and their results.

b) Publish the COTS ranking after every contest, with the addition of points per pilots.

1.2.2. COTS categories

1.2.2.1. The COTS will be initially reserved for UNL pilots.

1.2.3. Aircraft restriction

1.2.3.1. COTS is open to piston-engine and electric powered aircraft only.

1.2.3.2. All competing aircraft must meet the performance characteristics required for the kind of flight they will be undertaking.

1.2.4. Competitors eligibility restrictions

Not applicable

1.2.5. Minimum / Maximum number of competitors

1.2.5.1. A COTS event will be held or recognised as such if there are at least 10 competitors.

1.2.5.2. A COTS event will accept a maximum of 20 competitors.

1.2.6. Competitors and team composition

Not applicable

1.2.7. Aircraft documentation

Same as CIVA Code 6.1.2.7

1.2.8. Air safety

Same as CIVA Code 6.1.2.8

1.2.9. Insurance

Same as CIVA Code 6.1.2.9

1.2.10. Internal communication

Same as CIVA Code 6.1.2.10

1.3. Contest bodies

1.3.1. The jury

1.3.1.1. Responsibilities:

a) Mediation for the protests.
b) Supervision of the briefings and drawing of lots.
c) Review of the Unknown programmes.

1.3.1.2. The jury of each COTS event will be:

a) The organizer.
b) The chief judge.
c) A selected judge.

1.3.2. Board of judges

1.3.2.1. Composition of the board of judges

At COTS event, the board of judges will be composed of:

a) The chief judge.
b) One assistant or more to the chief judge.
c) **4 international judges** (each with an assistant) for marking the quality of aerobatic manoeuvres and positioning.

1.3.2.2. The chief judge

a) The chief judge will be appointed by the organiser. He may be a citizen of the organiser's country.
b) The Chief Judge must be an International Judge listed in the FAI official record and must have previous experience of serving as Chief Judge at an international aerobatic event (or a major national competition) run under FAI rules.
c) The chief-judge will score the flights.

1.3.2.3. Representation of the board of judges

a) Judges will be invited by the organiser.
b) The judging panel will be limited to a maximum of two judges from any nation.
c) The contest Organiser shall provide accommodation, food and local transport for the judges and their assistants, with no entry fees.

1.3.2.4. Qualification of judges

a) Regardless of the chief judge, a minimum of 3 judges must be listed in the FAI official record and must have previous experience of serving as judge at an international aerobatic event (or a major national competition) run under FAI rules.
b) Regardless of the chief judge, one judge not listed in the FAI official record but with previous experience serving as judge at a major national competition run under FAI rules, will be accepted.
c) All Judges must have a qualified Assistant, able to understand, read, and announce figures to the judge.

1.3.2.5. Timekeepers and evaluators

Same as CIVA Code 6.1.3.2.5.

1.3.2.6. Position of judges

Same as CIVA Code 6.1.3.2.6.

1.3.2.7. Role of judges

Same as CIVA Code 6.1.3.2.7.

1.3.2.8. Judges' assistants

Same as CIVA Code 6.1.3.2.8

1.3.3. Contest management

Same as CIVA Code 6.1.3.3.

1.3.4. Technical Officer

1.3.4.1. The Organiser shall appoint a suitably-experienced licensed aircraft engineer to be the "Technical Officer".

1.3.4.2. The Technical Officer is responsible to the Jury for the inspection of competing aircraft and of aircraft documentation; for certifying compliance with the airworthiness regulations of aircraft after inspection; for a qualified and objective inspection in case of defects of the technical equipment; and for finding the causes of defects which have occurred during the competition flights. The Technical Officer will advise and inform the Jury on any points of technical importance.

1.4. Administrative arrangements

1.4.1. Entries

1.4.1.1. Entries will be submitted by each pilot.

1.4.1.2. The COTS event's entry form must be completed correctly and submitted not later than requested by the Organiser.

1.4.2. Entry fees

1.4.2.1. Entry fees are fixed by the organisers.

1.4.2.2. Entry fees will be refunded as established in the COTS event's Bulletin if the event does not take place.

1.4.3. Practice

1.4.3.1. The organiser should organise one practice flight for each competitor during day #1.

1.4.3.2. In case of adverse weather, the programme #1 (COTS Known) will have a bonus time of 5 minutes to permit a full practise with the same rules as in Code 6.3.9.

1.4.4. Accomodation, food, medical services

1.4.4.1. The organiser is encouraged to provide adequate accommodation and food for the duration of the event to all pilots and officials (to be included in the entry fees).

1.4.4.2. The Organiser may also choose to exclude the costs for accommodation and food from the entry fees. In any event, they will give assistance with room reservation and will ensure that adequate food supply will be available at or near the airfield.

1.4.4.3. The Organiser will be responsible for adequate medical and fire services being available to all official participants.

1.4.5. Fuel and oil

1.4.5.1. Aircraft fuel and oil will be provided by the Organiser for functional test flights and contest flights without imposing extra charge.

1.4.6. Technical services

1.4.6.1. The Organiser will provide technical assistance **if possible, and hangarage for competing aircraft is mandatory.**

1.4.7. Interpreters

Not applicable

1.4.8. Warm-Up pilots

Not applicable

1.4.9. General briefing and judging meeting

1.4.9.1.1. In the evening prior to the first day of competition flights, there will be a briefing by the Organiser for judges and pilots, on flight conditions, the contest programmes, and any other matters which might arise over the interpretation of the rules. This General Briefing will take place concurrently with the drawing of lots described in 3.2.

1.4.9.1.2. Procedures for competitors to enter the Performance Zone will be clearly announced during the general briefing, in accordance with CIVA Code 3.5.1.7 & 8 regarding communication, and 3.10.2 regarding signalling.

1.4.9.1.3. For familiarisation with and a standardised interpretation of the judging rules the Chief Judge will hold one or more seminars with the panel of Judges. The Chief Judge will give guidance to the Judges as to the current Judging Criteria and rules for judging, on which he should conduct `question and answer' sessions. Throughout the contest the Chief Judge will hold routine evaluation meetings with the Judges.

1.5. Final regulations

1.5.1. Interpretation

Same as CIVA Code 6.1.5.1.

1.5.2. Competitors' pledge

1.5.2.1. All competitors undertake, by signing the entry form, to comply with the General Section and Section 6 of the Sporting Code of the FAI, the COTS Sporting Code and any local regulations made under rule 1.5.3.1.

1.5.3. Supplementary rules

1.5.3.1. The Organiser will, within the scope of the Sporting Code and the approval by CIVA, prepare such local regulations or specialized details as are relevant and necessary for clarification of organisational problems and duly distribute them to all pilots and officials.

1.5.3.2. The Organiser shall publish in English language and send to the pilots and officials which have indicated a preliminary intention to participate, not less than 2 months prior to the event:

a) The local regulations containing only local operating procedures and administrative details including details of the aerodrome at which the Championships will be held.
b) An English translation of applicable rules, issued by the Aviation or Customs Authorities of the host country.

2. PROGRAMMES OF COTS EVENTS

2.1. Flight programmes schedule

The following schedule will be operated at COTS events. This schedule may be subject to change for weather or local reasons.

This schedule must be considered as a guideline for organisers.

2.1.1.General

All meals including breakfasts shall be catered to and taken at the airport to save time. Except at the MAB (Main Aviation Briefing) on day #1

DAY #	HOURS	ACTION	PROVIDED BY ORG.
#0	Afternoon	Arrivals	Accommodation solutions (not included in fees) Hangar facilities Transportation facilities
#1	All day	Arrivals Training slots if available	Accommodation solutions / fees Hangar facilities Transportation facilities Slots management
	Evening	General briefing **(MANDATORY)** Drawing of lots Drawing of UK Drawing of FU fig.	Accommodation solutions / fees Hangar facilities Transportation facilities General briefing Drawing of lots Send FU figures to designers
#2	All day	Prog #1 + #2	Accommodation solutions / fees Hangar facilities Transportation facilities Infos via phones
#3	All day	Prog #3 + #4	Accommodation solutions / fees Hangar facilities Transportation facilities Infos via phones
#4	Morning to 4:00 PM	Backup Prog #2 to #4 (see 2.1.1.) *Or* Prog #5 (Final Freestyle) Podium	Transportation facilities Infos via phones Medals / Trophies
	Evening	Departures (pilots near the contest airfield)	Hangar facilities Transportation facilities Infos via phones
#4+	All day	Departures (Other pilots)	Accommodation solutions (not included in fees) Hangar facilities Transportation facilities

2.1.1. Flight programmes list

Programme #1: The COTS Known Programme
Programme #2: The first Unknown Programme (Aresti only)
Programme #3: The second Unknown Programme (Aresti only)
Programme #4: The Third Unknown Programme (Aresti + Freestyle figures)
Programme #5: The final Freestyle Programme

In case of local conditions (public, media) and local arrangements, the order of flight programmes can be changed by the organiser. This change will be announced in the bulletin.

#	Prog #1	Prog #2	Prog #3	Prog #4	Prog #5
Type	Known	Unknown	Unknown	Unknown	Freestyle
Max K	No limitation	500	500	500	K = 200
Number of Fig.	10	8 to 10	8 to 10	8 to 10 (1)	-

(1) With 3 figures of Freestyle

2.1.2. General regulations of flight programmes schedule

2.1.2.1. After the COTS 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.

2.1.2.2. For Programme #4, if there may be 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. In this case the number of competitors qualified for Programme #4 shall be at least 50% of the total number of competitors still in the running, based on the combined standings before Programme #4. If, subsequently, time is available for more flights, the International Jury may add competitors from the cut group to Programme #4 in the order of their ranking from the combined results before Programme #4, highest first. All flights made in Programme #4 through this mechanism will be considered valid in the final results for the contest.

2.1.2.3. Unlike Code 6 Sporting Code, Programme #4 will have priority over Programme #5 for COTS events.

2.2. Programme #1 - The COTS Known programme - Adverse weather (Programmes #6 & #7)

2.2.1.1. Sequences for the COTS Known Programme will be composed of 10 figures or combinations of figures (a combination being taken as one figure) selected from the Aresti System.

2.2.1.2. The total difficulty coefficient of all figures of the COTS Known is not limited.

2.2.1.3. The COTS known will be designed by one of the organiser or a member of the COTS Staff, and will be published no later than 2 month before the first COTS event. It will be published in .seq and .pdf format.

2.2.1.4. In case of adverse weather forecast before the start of one programme, the organiser can decide to replace one or more programmes from #1 to #4 by one or both “Low clouds Known” (Programme #6 and #7).

2.2.1.5. The “Low clouds Known” will be designed by the COTS Staff and will be published no later than 2 months before the first COTS event.

2.2.1.6. The “Low clouds Knowns” must be designed to fit with safety issues to permit competition flights with adverse weather conditions as defined in 3.6.2.5

2.3. Programmes #2, #3 & #4 - The COTS Unknowns programmes

2.3.1.1. All the COTS Unknown K factors will not exceed 500K.

2.3.1.2. The COTS Unknown Programmes #2 and #3 will be collected or designed by the members of the COTS Staff no later than the first COTS Open.

2.3.1.3. These Programmes will be designed by pair, to promote various figures and difficulties, and will be stored in a folder by the President of CIVA.

2.3.1.4. Files will be named as followed:

Set #	Programme #	File name (e.g for 2021)

1	COTS Unknown #1 / Programme #2	2021-Set1-Prog2
	COTS Unknown #2 / Programme #3	2021-Set1-Prog3
2	COTS Unknown #1 / Programme #2	2021-Set2-Prog2
	COTS Unknown #2 / Programme #3	2021-Set2-Prog3
Etc	Etc	Etc

2.3.1.5. During the general briefing, a set of Unknowns will be selected by drawing of lots and published for all competitors.

2.3.1.6. The COTS Unknown Programmes #4 will be collected or designed by the members of the COTS Staff no later than the first COTS event.

2.3.1.7. The K factor of each Freestyle figure will be 20K per figure, regardless of the difficulty of the figure.

2.3.1.8. These Programmes will be stored in a folder by the President of CIVA.

2.3.1.9. Files will be named as followed:

Programme #	File name (e.g for 2021)
COTS Unknown #3 / Programme #4	2021-1-Prog4
COTS Unknown #3 / Programme #4	2021-2-Prog4
COTS Unknown #3 / Programme #4	2021-3-Prog4
Etc	Etc

2.3.1.10. During the general briefing, an Unknown Programme #4 will be selected by drawing of lots and published for all competitors.

2.4. Programme #5 - The COTS Freestyle Programme

Same as CIVA Code 6.2.4.

2.5. Time between programmes

2.5.1. **Competitors are allowed to fly 2 programmes per day.**

2.5.2. The time between 2 programmes will be:

a) 4 hours if no adverse weather forecast are known.
b) 3 hours if adverse weather forecasts are established. In this case, the organiser should advise all pilots 4 hours before the beginning of the second flight of the day.

For safety and sportsmanship reasons, no pilot will be able to fly 2 flights during the same day without 3 hours between the flights

3. OPERATIONS OF THE COTS EVENTS

3.1. Daily briefing

3.1.1. Regardless the general briefing at the end of day #1, the daily briefings can be replaced by information sent by electronic devices (email, WhatsApp or equivalent, SMS, etc.) to all pilots and officials.

3.1.2. A summary of the informations sent by electronic devices must be available on a board at the scoring office or at the briefing place.

3.2. Sequence of flights (Drawing of lots)

3.2.1.1. The sequences of flights for Programmes #1 to #5 will be determined in the evening prior to the first day of competition flights, concurrently with the General Briefing described in 1.4.9.2.

3.2.1.2. The initial sequence of flights for Programme #1 will be determined by drawing of lots to be arranged by the Contest Director or his Assistant, in the presence of **another** representative of the Jury. Each competitor will draw his or her own lot in front of attendees during the briefing, under supervision of the Jury. If a competitor is not present to draw his or her own lot, a member of the jury may do so.

3.2.1.3. The sequence of flights for Programme #1 may then be adjusted by the Jury if two closely-drawn pilots are to fly the same aircraft.

3.2.1.4. The adjusted sequence of flights for Programme #1 will then be split into 5 sections (A, B, C, D and E) as equally sized as possible. In case the total number of competitors is not a multiple of 5, the section(s) with one more competitor than section E will be section A, then section B, and then section C, etc. if necessary.

3.2.1.5. The list of competitors within a given section remains fixed for Programmes #1 to #5 (except for Programme #4 and #5 in case 3.2.1.9 applies).

3.2.1.6. The sequence of sections will follow a varying scheme as follows:

	Prog #1	Prog #2	Prog #3	Prog #4	Prog #5
ORDER OF FLIGHTS ↓	Section A	Section B	Section C	Section D	Section E
	Section B	Section C	Section D	Section E	Section A
	Section C	Section D	Section E	Section A	Section B
	Section D	Section E	Section A	Section B	Section C
	Section E	Section A	Section B	Section C	Section D

3.2.1.7. For each Programme (#2 to #5), the initial sequence of flights within each section will be subject to an **electronic drawing of lots**.

3.2.1.8. The sequence of flights for each Programme (#2 to #5) may then be adjusted by the International Jury as for Programme #1 (3.2.1.3), considering the whole sequence regardless of sections.

3.2.1.9. In case a cut is necessary in Programme #4 and #5 as per 2.1.2.2, the section concept is continued, but all the pilots cut are removed from the new order of flight (regarding the normal order of flight without cut).

3.2.1.10. In the course of the contest, the sequence of flights may be altered by the jury if special circumstances require. In any case, there must be a minimum of two flights or 15 minutes between engine shut-off and the next start-up on the same aeroplane. If this time period causes a gap in the continuity of flying, the Contest Director shall inform the Chief Judge accordingly.

3.3. Performance zone

3.3.1.1. Programmes will be flown with reference to the longitudinal and lateral axes **visibles** on the ground. The performance zone must be clearly defined with **existing details on the ground (runway, taxiway, etc). In addition,** some marking strips will be added if necessary. The zone must be located adjacent to a suitable emergency landing area; details of this (as well as the

average distance of the board of judges from the adjacent box edge for all planned positions, as per 1.3.2.6.b) will be provided by the Organiser in an event bulletin.

3.3.1.2. The jury will determine any change of the Official Wind Direction (hence main axis) as may be necessary, and ensure that the Organiser notify the change to pilots.

3.3.1.3. The **additional** markers must be visible from any height within the performance zone. The colour of the marking strips must be in distinct contrast to the ground and other airfield markings, which should be removed if possible.

3.3.1.4. Aerial pictures of the box, taken along both axes, must be distributed to the jury and competitors to determine the correctness of the box geometry and to facilitate familiarization with the physical references.

3.4. Warm-up flights

Not applicable, except:

Box demonstration procedure:

a) Prior to the commencement of contest flying each day, the Chief Judge shall brief and direct the first pilot in the order of flights to demonstrate:
- i) the 'low' and 'disqualification' heights around the performance zone (in case there is no precision height measuring device available);
- ii) the box boundaries.

b) This demonstration will normally comprise:
- i) flight along the four boundary lines, rocking the wing above the corners and the centre points;
- ii) flight along the two main axes, rocking the wing above the 'T's and the centre marker.

c) If applicable the Chief Judge should clearly announce to all judges the low or 'disqualification' height being flown.

d) The Chief Judge should draw attention to the appearance of the demonstrating aeroplane with particular reference to:
- i) its proximity to the ground, to assist later assessments of low flying (in case there is no precision height measuring device available);
- ii) indications of the box boundaries with respect to notable local / surrounding features, to provide a sound basis for assessment of the positioning mark.

3.5. Video/Audio devices

Same as CIVA Code 6.3.5.

3.6. Meteorological conditions

3.6.1. Daylight

Same as CIVA Code 6.3.6.1.

3.6.2. Minima

3.6.2.1. The minimum height of the cloud base must be 50 m above the maximum height determined for each competition flight. For the Final Freestyle Programme #5, the minimum height of the cloud base **must be 650 m**.

3.6.2.2. The minimum prevailing flight visibility, determined with reference to ground features from the midpoint of the contest area at the maximum height for the competition flight, must be 5 km.

3.6.2.3. The maximum permissible average wind speed components (measured with local devices or with web informations) are:

Altitude	Direction	Maximum permissible
Surface	Any	**15 m/s**
	Crosswind (reference runway)	**7 m/s**
	Tailwind (reference runway)	**5 m/s (runway > 1000m)**
300 m and 600 m	Headwind (reference box main axis)	**15 m/s**
	Crosswind (reference box main axis)	8 m/s
	Tailwind (reference box main axis)	3 m/s

3.6.2.4. In case the following conditions are fulfilled:

a) The main axis component of the wind at 300 m or 600 m exceeds 12 m/s, or is close to the 12 m/s limit so that normal flight operations are expected to be significantly disturbed, at the discretion of the Jury.
b) and there is a distinct risk that the contest cannot be validated under the standard wind main axis component limit rule (see above), at the discretion of the Jury,

then the Jury may decide to extend the wind main axis component limit at 300 m and 600 m to 16 m/sec and the cross axis component limit to 10 m/s.

3.6.2.5. For the “Low clouds Knowns” used as described in .2.1.4., the maximum permissible average wind speed components, ceiling and visibility are:

Altitude / Distance	Direction	Max/Mini permissible
Surface	Any	**Max 12 m/s**
	Crosswind (reference runway)	**Max 6 m/s**
	Tailwind (reference runway)	**Max 5 m/s (runway > 1000m)**
500 m	Headwind (reference box main axis)	**Max 12 m/s**
	Crosswind (reference box main axis)	Max 8 m/s
	Tailwind (reference box main axis)	Max 3 m/s
Ceiling		**Min 2000’ / 600 m**
Visibility	All direction, and clear horizon	**Min 5 Km**

3.6.3. Weather information

3.6.3.1. The Contest Director must provide the competitors, the Chief Judge, the Board of Judges and the Jury with **hourly** information on weather conditions and, at shorter intervals, on wind speed and direction at 300 m and 600 m height if required due to meteorological developments. In addition, the Contest Director must provide the Official Wind Direction to the competitors at the beginning of each contest day and anytime that Official Wind Direction is changed.

3.6.3.2. The wind speed and direction must be measured on the site of the competition, or in the immediate vicinity. The wind speed and direction must be measured either:

a) by a qualified weather station crew using the appropriate tools: radar or balloon ascent.
b) or with a drone, using equipment, operations and software as specified in a separate document approved by the CIVA Bureau.

3.6.3.3. The weather bulletin with information on actual wind speed and direction, along with the Official Wind Direction for all competitors, by the Contest Director, **by any means.**

3.6.4. Adverse weather

3.6.4.1. If the meteorological conditions do not meet the requirements of 3.6.2, the Chief Judge after consultation with the **Contest Director** will discontinue competition flights. Such decision may be taken:

a) if the information in the bulletin from the aerodrome weather service was obtained in accordance with 3.6.3.2.
b) if there is information available from competitors who have just finished or discontinued a flight owing to weather conditions which, in the opinion of the pilot, were outside the prescribed limits.
c) if the conditions are judged independently by members of the Jury, the Chief Judge or the competitors to be outside the prescribed limits.

3.6.4.2. In such cases the members of the Jury should use **any means available to follow the weather evolution.**

3.6.4.3. After an interruption for the wind exceeding the limit above, flying shall not be resumed until the wind speed has stabilized at or below the limits for 30 minutes.

3.6.4.4. In circumstances where intermittent low cloud is passing through the Performance Zone, followed by clear patches of weather, the Contest Director in conjunction with the Chief Judge, may waive the time limit for the completion of the programme, thus allowing a competitor to orbit if so desired, until the Zone is clear.

3.6.4.5. If the cloud is at least 800 m above aerodrome level, and if a majority of **pilots** agree, the Jury may relax the visibility and wind limitations stated above in the interests of completing the first three competition programmes before the end of the contest period.

3.6.4.6. If in his or her opinion the weather conditions do not comply with the competition rules, a competitor may discontinue his or her flight before starting the sequence or, during the programme, in level flight at the end of a figure i.e.:

a) If during any programme the horizontal visibility deteriorates to less than 5 km.
b) If the cloud height in the performance zone is lower than the height in the following table

Break if lower than:	Low level Knowns	No flying if lower than:
1050 m	800 m	600 m

c) If precipitation becomes apparent. In this case, members of the Jury should use **any evidence** to check the weather conditions in the performance area and to reach a decision on the possible repetition of the competition flight. This applies to Programmes #1 to #5.
d) If the wind exceeds the limits specified in 3.6.2: if a competitor during a flight is not able to observe such changes and he or she completes the flight – i.e. if the competitor made his or her flight under conditions which were disadvantageous as compared with other competitors - this competitor is entitled to repeat the flight, except in Programmes #2 to #4.
e) The marking for the repetition flight for a competitor will be continued from the figure immediately following the break.
f) If a competitor discontinues his or her flight without sufficient reason, no repetition flight will be allowed.

3.6.5. Permitted breaks

Same as CIVA Code 6.3.6.5.
With: International Jury = Jury for COTS

3.6.6. Penalised breaks

Same as CIVA Code 6.3.6.6.

3.7. Conduct of competition flights

Same as CIVA Code 6.3.7.
With: International Jury = Jury for COTS

3.8. Height limitation

Same as CIVA Code 6.3.8.
Except local regulations, and specific heights allowed by the Contest Director for Programme #5, with:
- Low pass during Freestyle programme #5: **no lower than 30 m, with no change of angle of bank**

3.9. Safety and practice manoeuvres

Same as CIVA Code 6.3.9.

3.10. Duration of flights and signalling start and finish

3.10.1. Time limits

3.10.1.1. Programme #1 to #4 will have a time limit of 10 minutes from the moment the aircraft is observed in flight by the Chief Judge / timers. Programme #1 can be subjected to have a bonus time of 5 minutes as mentioned in 1.4.3.2.

3.10.1.2. In the event that a pilot takes a permitted weather break, the timing will be stopped on the third wing rock at the start of the break and re-started on the third wing rock signalling the beginning of the second part of the broken sequence.

3.10.1.3. In Programme #5 here is a time window of between 3 minutes 30 seconds and four minutes in which to complete the programme, without penalty, after signalling the start of the sequence.

3.10.1.4. The Chief Judge will not necessarily indicate by call or signal the time during which the Judges must watch and mark a programme. Each judge must follow the flight, from the safety figures to the end.

3.10.2. Signalling

Same as CIVA Code 6: 3.10.2.

3.11. Danger of collision

Same as CIVA Code 6: 3.11.

3.12. Mechanical issues

3.12.1. Defects on the ground

Same as CIVA Code 6: 3.12.1.

3.12.2. Defects in flight

Same as CIVA Code 6: 3.12.2.

3.13. Change of aircraft by a competitor

Same as CIVA Code 6: 3.13.

3.14. Protests

3.14.1.1. Protests will be accepted from competitors. All protests must be submitted to the Jury in writing, either directly or through the Contest Director, with a deposit, not later than two hours after the occurrence, decision or publication of results which causes the protest to be made. "Non-working" hours, as defined in local regulations for the specific championships or competitions will not be counted. Every protest must refer to the rule or rules to which it relates. The amount of the deposit shall be stated in the local regulations for the championships or competition. It should not exceed US$100.

3.14.1.2. All protests will be dealt by the Jury. Decisions taken by the Jury are final and must not be changed later.

3.14.1.3. The deposit will be returned if the protest is upheld.

4. EVALUATION OF COMPETITOR FLIGHTS

Same as CIVA Code 6

5. AWARDS

5.1. Titles definition

5.1.1.1. The winner of the COTS is the male or female pilot with no gender distinction who gains the highest total number of points accumulated during the participation of **2 COTS events** (for 2021).

5.2. Points for each COTS events

5.2.1. The points gained in each COTS event are relative to the final rank (rank after the last programme is flown).

5.2.2. As defined in 1.2.5., the minimum number of participants is 10, the maximum of participants is 20.

5.2.3. The points gained in each COTS event are decreased / increased relative to the number of participants, as follow:

COTS POINTS / RANK & NUMBER OF PARTICIPANTS											
	Number of participants ↓										
Rank ↓	10	11	12	13	14	15	16	17	18	19	20
1	20	20	20	20	20	20	20	20	20	20	20
2	16	16	17	17	17	17	18	18	18	18	18
3	13	13	14	14	15	15	15	16	16	16	16
4	10	11	12	12	13	13	13	14	14	14	15
5	8	9	10	10	11	11	12	12	12	13	13
6	7	7	8	9	9	10	10	11	11	11	12
7	5	6	7	7	8	8	9	9	10	10	11
8	4	5	6	6	7	7	8	8	9	9	10
9	3	4	5	5	6	6	7	7	8	8	9
10	2	2	3	4	4	5	5	6	6	6	7
11		2	2	3	4	4	4	5	5	6	6
12			1	1	2	2	3	3	4	4	6
13				1	2	2	2	3	3	4	4
14					0	0	1	1	1	2	3
15						0	1	1	1	2	2
16							0	1	0	0	1
17								1	0	0	0
18									0	0	0
19										0	0
20											0

First pilot: 20 points. Then formula is (e.g for the 2nd pilot in the rank): Points of the first pilot - ((points of the first pilot) / (number of participants/2)) For pilot n°3: Points of the 2nd pilot - ((points of the 2nd pilot) / (number of participants/2)), Etc. All numbers set to the first round number.

See:
https://docs.google.com/spreadsheets/d/1jfxDSwOfwkHfMRY6LpYvkYfKRJBdwM6pIp8KUjI2qXc/edit#gid=0

APPENDICES

APPENDIX A: LIST OF FIGURES FOR PROGRAMMES #2, #3 AND #4

A.1. Color coding

Not applicable

A.2. Roll, flick and spin combination

A.2.1.1. Unlinked and opposite rolls are permitted on straight horizontal lines, with a maximum of 10 stops.

A.2.1.2. On vertical and 45° up lines, opposite aileron rolls may be added as long as neither the total extent of rotation nor the number of stops exceed the limits shown in the table below.

Line direction	Total rotation	Stops
Vertical up	720°	4
45° up	720°	4
Vertical down	720°	3

A.2.1.3 Unlinked and opposite rolls **are** permitted on 45° down lines.

A.2.1.4. Combinations of aileron roll first, and then flick roll **are allowed**. Flick rolls **can end or start at 90° of angle of bank.**

A.2.1.5. An aileron or flick roll element may be added after a spin.

A.2.1.6. All families, lines and rotations are allowed.

A.2.1.7. No limitation of number of flick rolls.

A.2.1.8. 2 flick rolls maximum per figure.

APPENDIX B: CRITERIA FOR JUDGING AEROBATIC FIGURES

B.1 to B.10

Same as CIVA Code 6 Appendix B.1 to B.10

B.11. The Final Freestyle Programme (Unlimited Only)

B.11.1 Generalities

B.11.1.1. The mark awarded to each Judging Area (see below) of every performance represents the judges' personal view of its merit by comparison with corresponding aspects of other competitors' performances. Judges should award the highest marks where the performance is exceptional, and conversely where the quality of execution is without merit or exhibits poor control the mark should be significantly lower or even zero.

B.11.1.2. The K factors used in CIVA international contests are divided by 2

B.11.1.3. The programme #5 / Final Freestyle points will be added to the final score

B.11.2. Assessment of Artistic Impression (80K)

The Artistic Impression of a flight shall be assessed by its fulfilment of the following objectives:

B.11.2.1 Judging Area #1: Programme design and artistic rendition – 40K

A wide-ranging mix of interesting freestyle and traditional or classical manoeuvres is expected, employing a broad variety of flight paths on many axes. Maximum and minimum flight regime speeds should be explored to demonstrate a high level of agility. Dull, uninteresting or apparently unplanned periods should be downgraded. Where possible the use of audio/music and/or smoke to effectively highlight flight paths and figures or individual elements is encouraged.

Each aspect of Judging Area #1 has equal importance:

a) Comprehensive variety of freestyle and classical maneuvering with high dynamic range.
b) Combinations of traditional elements and fresh or original manoeuvres.
c) Interesting diversity of flight-paths not restricted to classical main/crossbox axes.
d) Avoidance of dull or boring periods that might indicate lack of planning.
e) Effective and sympathetic use of smoke and / or any accompanying audio track.

B.11.2.2. Judging Area #2: Integration of flight paths and attitudes – 40K

Throughout the performance the judge should expect to see smooth and flowing integration of each element. All parts of the performance should integrate pleasingly with the preceding and subsequent parts, individual characteristics being harmoniously linked together. A wide variety of upward, downward and level flight paths and attitudes on many axes using straight and curving lines and vectors should be employed to demonstrate individual features to their best advantage.

Each aspect of Judging Area #2 has equal importance:

a) Smooth and flowing execution with good control.
b) Consecutive periods with different characteristics harmoniously linked.
c) Use of many vectors and curving flight paths to present individual features.

B.11.3. Assessment of Technical Control (80K)

The level of technical control exhibited during a flight shall be assessed as follows: B.11.3.1.

B.11.3.1 Judging Area #3: Technical excellence and dynamic range – 40K

The purpose of each element throughout the performance should be clear – are the pilot's intentions understandable and successfully accomplished? Thorough exploration should be made of high and low speed areas of the flight envelope, including forward and backward flight. Any errors and/or corrections should be minimal and should not disturb the presentation, and there should be no obvious moments where control is perceived to be diminished or temporarily lost.

Each aspect of Judging Area #3 has equal importance:

a) Clarity of intentions and accuracy of presentation through all flight regimes.
b) Exploration of fast and slow speed regimes, forward and backward flight.
c) Freedom From Obvious Corrections,uncontrolled or unplanned departures.

B.11.3.2. Judging Area #4: Aerodynamic controls and propeller-driven elements – 40K

The performance should demonstrate flight using the widest possible range of well controlled positive and negative attitudes or angles of attack. Slow, fast and hesitation rolls should be accurately executed. Variations in the aircraft's three principal axes – yaw, pitch and roll – should be precisely controlled. Normal and unusual flick rolls with a range of differing rotations should be expected. A range of interesting tumbling elements driven principally by well controlled gyroscopic propeller influences should be included.

Each aspect of Judging Area #4 has equal importance:

a) Good use of full range of positive and negative angles of attack.
b) Accurate slow, fast and hesitation rotations, use of yaw, pitch and roll axes.
c) Wide variety of positive and negative flicks and unusual rotations.
d) Interesting range of propeller-driven gyroscopic elements and tumbling.

B.11.4. Assessment of Positioning (40K)

The positioning of the aircraft during a performance shall be assessed as follows:

B.11.4.1. Judging Area #5: Use of the performance zone and allowed time to maximum advantage – 40K

The full width, height and depth of the performance area should be exploited in a well- balanced manner. Each element and transition should be executed at a height, distance and lateral position and orientation for maximum effect and to enable clear assessment of its features. Any wind effects should be imperceptible or hidden. The competitor should make effective use of the time available to display a wide and interesting range of elements and manoeuvres.

Each aspect of Judging Area #5 has equal importance:

a) Imaginative and balanced use of the width, height and depth of the performance area.
b) High and wide elements not too close, low elements not too distant to assess.
c) Manoeuvres and transitions positioned and orientated for best impact.
d) Imperceptible handling of wind effects.
e) Good use of the available time to demonstrate a wide range of manoeuvres.