



NHB responses

*Fédération
Aéronautique
Internationale*



CIVA Rules, Judging, and Glider Aerobatics Committee Meetings

Rule Proposals for 2022 (Power and Glider Aerobatics)

Version 1.0 / 31 July 2021

INTRODUCTION

The deadline for the submission of Sporting Code “Normal Proposals” to CIVA (1 July 2021) has now passed. CIVA Delegates responded accordingly and these proposals will now be examined by the relevant Committees.

‘Normal Proposals’ – the scope of this document¹ – are proposals potentially affecting our CIVA Sporting Code (Section 6 Parts 1 & 2), which are submitted each year by Delegates or the President of CIVA in accordance with our normal rules process and deadlines. By extension such proposals may be submitted on request of CIVA by appointed Working Groups.

CIVA has the following rule related Committees in 2021 (elected each year at Plenary, each composed of five members plus a Chairman):

- CIVA Rules Committee (RC): Matthieu Roulet, Chairman (FRA)
- CIVA Judging Committee (JC), Pierre Varloteaux, Chairman (FRA)
- CIVA Glider Aerobatic Committee (GAC), Manfred Echter, Chairman (GER)
- CIVA Catalogue Committee (CC), Manfred Echter, Chairman (GER)

Due to the continuing pandemic crisis, the GAC and RC/JC meetings will be held virtually this year, as in 2020. Nevertheless they will remain open to observers as for the usual regular physical meetings and with the same guidelines (observers are not allowed to participate to the debates unless invited to do so by the Chairman on a specific topic). More details will be forwarded to Delegates in due time.

The RC/JC on the one hand, and the GAC on the other hand, will strive to harmonize decisions on rule proposals wherever this makes sense, in order to avoid as much as possible diverging options in Parts 1 and 2.

Comments on the enclosed rule proposals are welcome. After holding their virtual meetings in the summer of 2021, the Committees will issue their conclusions to the Plenary meeting of CIVA.

The new version of Sporting Code, incorporating those changes, will take effect on 1 January 2022.



Matthieu Roulet
Chairman, CIVA Rules Committee

31 July 2021

¹ This document does not include “*Safety Proposals*” (SP) that may come in usually after Championships and which relate to safety problems and merit consideration by plenary at CIVA’s next meeting ; nor “*Expedited Proposals*” (EP), i.e. proposals for minor changes which do not require full Committee consideration and usually submitted as a result of experience at Championships; nor “*Correction Proposals*” (CP) which are merely editorial remarks (e.g. typos, missing reference,...) that can be sent anytime to the RC or GAC Chairman as appropriate. “*Urgent Proposals*” submitted after Championships, in accordance with a deadline set by the CIVA President each year, are classified as a SP, EP, or NP (and in this latter case set to be examined by the relevant Committees in the following year), at the discretion of the President.

RC 2021:

- *M. Roulet (Chairman)*
- *N. Buckenham*
- *M. Gallaway*
- *E. Klimovich*
- *Ph. Kuchler*
- *H. Rohner*

JC 2021:

- *P. Varloteaux (Chairman)*
- *M. Delcroix*
- *J. Gaillard*
- *E. Klimovich*
- *Ph. Kuchler*
- *M. Mamistov*

GAC 2021:

- *M. Echter (Chairman)*
- *M. Delcroix*
- *P. Havbrandt*
- *Ph. Kuchler*
- *J. Makula*
- *F. Toth*

CC 2021:

- *M. Echter (Chairman)*
- *A. Belov*
- *R. Fhal*
- *P. Havbrandt*
- *B. Howard*
- *P. Varloteaux*

RULE PROPOSALS CHECKLIST

Highlighted in Yellow: Proposals for which the GAC and the RC/JC should aim for a common position.

CIVA#	NAC	#	Subject	Allocation	Page
NP2022-1	FRA	1	Programme 4: Order of flights in case of cut	RC	4
NP2022-2		2	Safety manoeuvres	RC / JC	5
NP2022-3		3	Interruption penalty	RC / JC	6
NP2022-4		4	Shorter Programme 4 sequence	RC	7
NP2022-5	GBR	1	Warm-up and practice figures	RC / JC	9
NP2022-6	GER ²	1	Video/Audio devices	GAC / RC	12
NP2022-7	RUS	1	Drawing of lots	RC / GAC	13
NP2022-8		2	Number of flick rolls in Advanced Unknowns	RC	14
NP2022-9		3	Number of flick rolls in Unlimited Unknowns	RC	15
NP2022-10		4	Flick rolls in Advanced Unknowns	RC	16
NP2022-11		5	Official video recording	RC / JC / GAC	17
NP2022-12		SPA	1	Figures in Unlimited Unknowns	RC
NP2022-13	2		Figures in Unlimited Unknowns	RC	19
NP2022-14	3		Figures in Unlimited Unknowns	RC	20
NP2022-15	4		Figures in Unlimited Unknowns	RC	21
NP2022-16	5		Figures in Unlimited Unknowns	RC	22
NP2022-17	6		45° up rotations in Unlimited Unknowns	RC	23
NP2022-18	7		Remove PZ	JC / RC / GAC	24
NP2022-19	8		Flick / Aileron roll combinations in Unknowns	RC	25
NP2022-20	9		Remove limitation in number of flick rolls in Unlimited Unknowns	RC	26
NP2022-21	10		Number of flick rolls in Unlimited Unknowns	RC	27
NP2022-22	11		Number of flick rolls in Unlimited Unknowns	RC	28
NP2022-23	12		Number of flick rolls in Unlimited Unknowns	RC	29
NP2022-24	13		Unknown sequences	RC	30
NP2022-25	14		Number of flick rolls per figure in Unlimited Unknowns	RC	31
NP2022-26	15		Figures in Unlimited Unknowns	RC	32

² In addition, Germany submitted a proposal to amend FAI By-Laws to allow election of Alternate Delegates as Vice-Presidents of an Air Sport Commission. This proposal on FAI governance has no connection to the CIVA Sporting Code, hence cannot be in the scope of the Committees review, subject of this document. Therefore and in order to avoid any confusion, that proposal is not included in this document.

NP2022-1

RC

**FRANCE PROPOSAL #1**

Document: Section 6 Part 1

Subject: **Programme 4: Order of flights in case of cut****Proposal**

Modify 3.2.1.9. as follows (changes underlined):

3.2.1.9 In case a cut is necessary in Programme 4 as per 2.1.2.2, the section concept is discontinued, maintained, and a new drawing of lots is carried out among all pilots making the cut. The pilots who are not making the cut are withdrawn from the flight order.

Rationale

A new drawing of lots among the pilots making the cut can lead to a situation where a pilot may fly first in more than one program:

If a pilot is in group C, flies first of his group, so first of the entire program 3 and there's a cut in program 4 he could be first again.

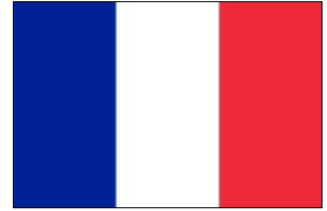
In the same case pilots from the group D could never fly in the first spots.

The idea of the section philosophy is to make everyone fly in all the quarters of the list for more fairness.

NP2022-2

RC

JC

**FRANCE PROPOSAL #2**

Document: Section 6 Part 1

Subject: **Safety manoeuvres****Proposal**

Modify 3.9.1.1. as follows (changes underlined):

- 3.9.1.1 Before the wing-rocking at the start of each competition flight it is recommended that all pilots perform safety manoeuvres and warm-up figures as follows. The safety manoeuvres are optional, their aim is to check the condition of both the pilot and the aircraft and to prepare the pilot body for the sequence. They can be anything as long as they are not clearly aerobatics figures. ~~These~~ The warm-up figures are optional but, if flown, (...)

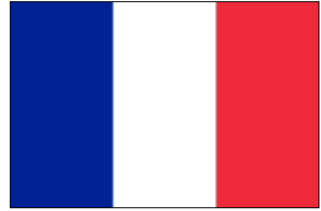
Rationale

It is important to ensure that a pilot testing his seatbelts and warming up his body with some manoeuvres will not receive any penalty.

It is not safe to check that there's no floating object or that the seatbelts are correctly fastened with a half roll, it is therefore important to have the possibility to check everything with some minor g-load.

RC Chairman Note: To be discussed in conjunction with United Kingdom proposal #1 (NP2022-5) on same subject.

While accepting the safety principle, it will however be difficult for Judges to identify and differentiate between 'allowed' figures and 'optional' figures as the former must all be verified as acceptable, or penalties enforced.



NP2022-3

RC

JC

FRANCE PROPOSAL #3

Document: Section 6 Part 1

Subject: **Interruption penalty****Proposal**

Modify 4.3.8.4. as follows (changes underlined):

4.3.8.4 The insertion of a figure to a sequence (...)

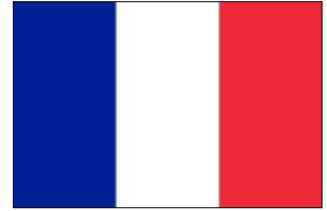
Interruption or Insertion	Unlimited	Advanced	Yak 52 / I
Penalty point tariff	<u>150</u> 100	<u>100</u> 80	50

Rationale

Presently, if pilots are in difficulty in terms of energy, they have two options: interrupting and being sure of losing 150 points (example of Unlimited), or dangerously continuing in hope of not getting caught by the judges. In our opinion we should encourage people to make the safest choice by making the interruption not as costly.

NP2022-4

RC

**FRANCE PROPOSAL #4**

Document: Section 6 Part 1

Subject: **Shorter Programme 4 sequence****Proposal**

Modify 2.3.1.1 to 2.3.1.4 as follows (changes underlined):

2.3.1.1 For the Free Unknown Programmes, figures will be chosen from Appendix A. A maximum of 10 figures may be submitted for Programmes 2 and 3 and a maximum of 7 figures for Programme 4. A representative of every NAC which has at least one pilot competing (except as *Hors Concours*) may submit one figure, unless there are more than 10 NACs participating (more than 7 NACs for Programme 4). In this case, the procedure to determine which NACs will submit figures will be as in paragraph 2.3.1.2. 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	<u>22 35</u>	No limit

- 2.3.1.2 If there are pilots competing from more than 10 NACs (more than 7 NACs for Programme 4), a group of 10 such NACs (7 NACs for Programme 4) will be selected to nominate figures for each Unknown Programme. This procedure will be applied separately for Programmes 2, 3 and 4. In this rule, in a), b) and c), NACs are meant worldwide, or from the Continent in case of Continental Aerobatic Championships. (...)
- 2.3.1.3 If there are pilots from fewer than 10 NACs participating (fewer than 7 NACs for Programme 4), their representatives will still select only one figure each. (...)
- 2.3.1.4 Sequences for Programme 2, or 3 or 4 are to be composed using the 10 officially approved figures submitted by the National Teams, and additional figures from the

Aresti System (Condensed) as currently amended by CIVA, solely to aid in composition. These additional figures may contain repetitions despite rule 2.3.1.1.

Sequences for Programme 4 are to be composed using the 7 officially approved figures submitted by the National Teams, and additional figures from the Aresti System (Condensed) as currently amended by CIVA, solely to aid in composition. These additional figures may contain repetitions despite rule 2.3.1.1.

- a) (...)
- b) (...)
- c) At least one additional figure, up to a maximum of four for Programmes 2 and 3, and a maximum of three for Programme 4, 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 in Programmes 2 and 3, and a maximum of 18K in programme 4. (...)
- d) Sequences will consist of no more than 14 figures in Programmes 2 and 3, and no more than 10 in Programme 4.
- e) (...)

Rationale

The intent is to shorten the length of Programme 4 as a trial and consider applying this to Programmes 2 and 3 in the future.

- 14 figures is very long for judges, pilots, audience and general organization, especially towards the end of the competition.
- 10 figures are less physically demanding for pilots.
- We believe that the audience would find shorter programmes more attractive and enjoyable.
- Shorter programmes decrease the odds of having a cut.
- The technical challenge is maintained with the limitations stated in 2.3.1.4 a).
- To maintain interest in Programme 4 and to compensate the total K of this shorter programme we propose that the K for each figure of Programme 4 gets an increase of 30%.

1. Why make this programme less demanding?

2. If the K-factors are multiplied by 1.3 (including the Link figures?) then with no limit to the figure K this may lead to over-complex figures being selected, with possibly the same judging effects as evidenced in the old Free sequences with fewer figures - the tendency is to mark them too high because there are too many places to downgrade and judges miss some of them or habitually stick to the 6.0 to 8.0 range.

NP2022-5

RC

JC



UNITED KINGDOM PROPOSAL #1

Document: Section 6 Part 1

Subject: **Warm-up and practice figures**

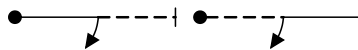
Proposal

Modify 3.9. as follows (changes underlined):

3.9. Safety, Warm up and Practice Manoeuvres

3.9.1.1. Before the wing-rocking at the start of each competition flight it is recommended that all pilots perform as a minimum the safety figures manoeuvres as follows.

Safety Figures



These figures are flown to check the aircraft's inverted fuel and oil systems are operable, there are no loose articles in the aircraft and to ensure that the pilot is properly harnessed in.

3.9.1.2. In addition, the pilot may perform up to 4 of the following turns as warm up manoeuvres, separately or in one continuous turn:

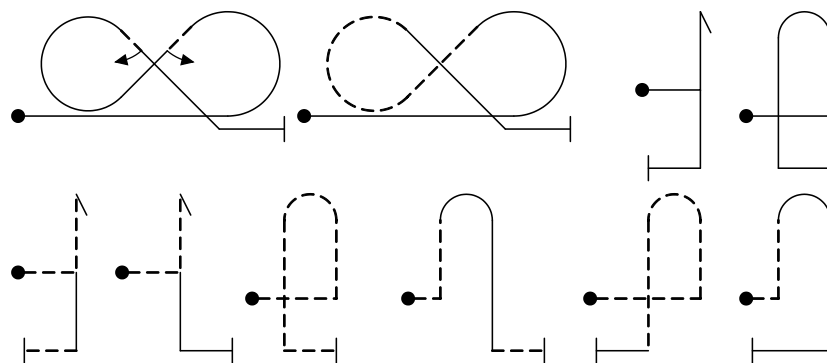
Warm up Figures

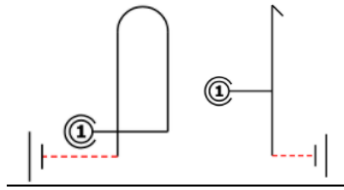


These figures are flown to help prepare the pilot for the upcoming g-loadings and to help reduce the risk of g-loc.

3.9.1.3. The pilot may then perform up to three (Programme 1), or one (Programmes 2 to 5), of the following practice figures:

Practice Figures



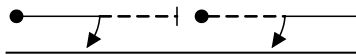


These figures provide additional preparation for g-loadings and allow the pilot to assess the wind direction and drift in the performance zone.

These figures are optional but, ~~if flown,~~ may be flown only once, in any order unless a figure starting inverted is used (see below), and continuously on the same axis.

- a) ~~Figures of Families 5 and 8 that start or finish inverted are not permitted in Yak 52.~~
- b) ~~When flown, a figure above 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.~~

If required, the pilot may perform up to 2 of the following figures to ensure the correct orientation of entry into their first chosen practice figure and to return to erect level flight after the last figure:



3.9.1.4. These safety, warm up and practice figures may be flown before the commencement of all the Programmes.

3.9.1.5. ~~They~~ All figures must be flown inside the performance zone.

3.9.1.6. Prior to the actual performance of Programme 1, in addition to safety, warm up and practice figures manoeuvres according to 3.9.1.1-3, 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.

3.9.1.3. Violations of safety, warm up and practice manoeuvres will be penalized in accordance with paragraph 4.3.2..

Rationale

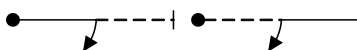
Purpose

To allow competitors additional safety figures before each programme to maximise physical preparedness (g-tolerance) for the flight ahead and specifically to combat g-loc.

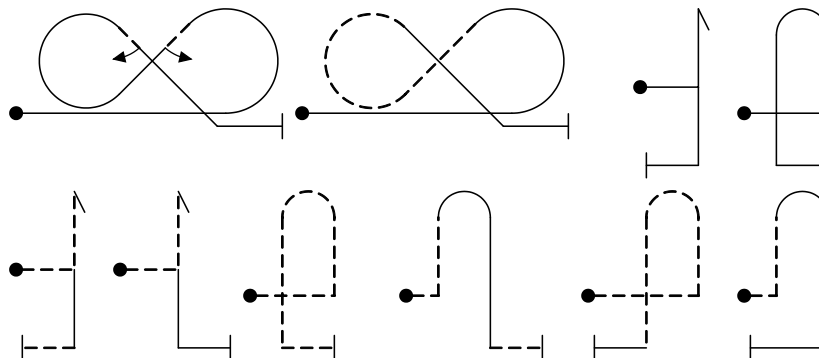
Existing Rule

3.9. Safety and Practice Manoeuvres

3.9.1.1. Before the wing-rocking at the start of each competition flight it is recommended that all pilots perform safety manoeuvres as follows. These figures are optional but, if flown, may be flown only 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:



and up to three (Programme 1), or one (Programmes 2 to 5), of the following:

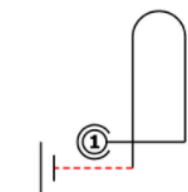


- a) Figures of Families 5 and 8 that start or finish inverted are not permitted in Yak 52.
- b) When flown, a figure above from Family 5 or 8 that starts inverted shall be inserted after the first half roll. In that case, if the figure is one that finishes positive, the second half roll is not flown.

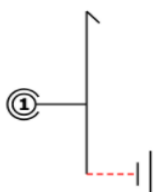
Background

There is evidence that flying several warm-up figures, especially combining positive/negative ‘g’ figures, ahead of starting the scored programme helps to build g-tolerance and prevent g-loc. This has a significant safety advantage. This is a practice used by the military to improve g-tolerance prior to engaging in air combat. In a sense it is preparing the body for the upcoming ‘g’, similarly to any other sporting warm-up.

The existing rule does not allow for outside or inside level turns which are particularly effective at combating g-loc. It would be beneficial to allow up to 4 of these figures in the Safety Manoeuvres. Additionally, there are two other practice figures which are useful and are not included in the existing list. These are:



and



This proposal was rejected by many senior people in the UK, on the basis that there are already sufficient figures with push elements in the standard set to provide the suggested negative testing moments.

Also the feedback was that pilots don't wish to take more than the absolute minimum from their starting "bank" of energy and ability as when it's gone it is gone, and later in the sequence it will surely be needed ...

To accommodate the possible combinations of practice manoeuvres chosen by each pilot, two additional level half rolls should also be permitted.

It is proposed that the safety, **warm up** and practice figures be increased to include up to 4 half rolls, up to 4 90° level turns (inside or outside) and 3 of the permitted practice figures from the expanded list before **each** of the Programmes.

RC Chairman Note: To be discussed in conjunction with France proposal #2 (NP2022-2) on same subject.

NP2022-6

GAC

RC

**GERMANY PROPOSAL #1**Document: Section 6 Part 2 / **Part 1 ***Subject: **Video/Audio devices****Proposal**

Modify 3.6.1.3 as follows (changes underlined):

3.6.1.3 ~~Unfair pilot aids during flight will render the competitor liable to disqualification from the contest. Such unfair aids include:~~

Receiving any kind of audible information addressed to the competitor from anyone other than the Chief Judge or Air Traffic Control will render the competitor liable to disqualification from the contest.

~~Any electronic device or software other than that normally required for the safe conduct of the flight (e.g. audio information from the on-board G-meter is permitted, as well as passive items such as cockpit and wing sight gauges).~~

~~If electronic device(s) are installed in a glider the use of which may be considered unfair under the above rules, the competitors must declare this to the International Jury before the start of the contest. The device(s) must be made unusable for the duration of the contest. This must be verified by the Technical Commission.~~

Rationale

Prohibiting electronic devices on board which may be used to aid the pilot is obsolete, considering the capabilities of today's smartphones.

If a competitor so wishes, he can have practically any conceivable assistant function loaded on his smartphone and carry it in their pocket. Under these circumstances it is impossible to enforce any such rule.

*** RC Chairman Note:** Potentially applicable to Part 1 as well (3.5.1.3).

We still need to ensure that putting a visual guidance device on the panel is prohibited, otherwise a rolling feed of figure instructions could be located in the panel instead of a paper sequence diagram.

NP2022-7

RC

GAC

**RUSSIA PROPOSAL #1**

Document: Section 6 Part 1 / Part 2 *

Subject: **Drawing of lots****Proposal**

Add a paragraph in 3.2 “Sequence of Flights (Drawing of Lots)” as follows:

The objects on which the number is applied must have a rotation that is not under the control of the organizers. Objects should be shuffled automatically or in a manner agreed by the team managers.

Rationale

To avoid possible manipulation.

*** RC Chairman Note:** Potentially applicable to Part 2 as well (3.3.1.1).

NP2022-8

RC

**RUSSIA PROPOSAL #2**

Document: Section 6 Part 1

Subject: **Number of flick rolls in Advanced Unknowns****Proposal**

In the table of 2.3.1.4.a), increase number of allowed snap rolls in Advanced as follows (changes underlined)

Family 9.9: (...) ~~max 4~~ max 5 in Programme 3, max 6 in Programme 4**Rationale**

To increase programmes difficulty and variety.

NP2022-9

RC

**RUSSIA PROPOSAL #3**

Document: Section 6 Part 1

Subject: **Number of flick rolls in Unlimited Unknowns****Proposal**

In the table of 2.3.1.4.a), increase total number of allowed snap rolls in Unlimited as follows (changes underlined)

Total of Families 9.9 and 9.10 not to exceed six seven in Programme 3, eight in Programme 4, (...)

Rationale

To increase programmes difficulty and variety.

RC Chairman Note: To be discussed in conjunction with Spain proposals #9 to #12 (NP2022-20 to -23) on same subject.

NP2022-10

RC

**RUSSIA PROPOSAL #4**

Document: Section 6 Part 1

Subject: **Flick rolls in Advanced Unknowns****Proposal**

In A.23, allow the following snap rolls in Advanced in all Unknown Programmes:

9.9.1.2 , 9.9.1.3 , 9.9.1.4 *Half, 3/4 and full positive flicks upwards on vertical lines*

Rationale

To reduce the gap between Advanced and Unlimited categories.

NP2022-11

RC

JC

GAC

**RUSSIA PROPOSAL #5**Document: Section 6 Part 1 / **Part 2 ***Subject: **Official video recording****Proposal**

Modify 4.5.5.1 as follows (changes underlined):

- 4.5.5.1. An official video recording from the Judges' position must be made of every individual competition flight in a World or Continental Aerobatic Championship. The official recording must be available to the International Jury to assist their decision on any protests regarding the evaluation of a competition flight. The recording shall not be available to competitors or Team Officials at a World or Continental Aerobatic Championship, except in conjunction with the International Jury's decisions on protests and with their agreement. After the completion of the championships, the recording may be released by the Organiser for use in training. The official video recording will be posted (will be available) online following the conclusion and publication of final results of each Programme.

Rationale

In order to popularize the competition in a near real-time format, as well as to analyse errors by competitors during the championship.

*** RC Chairman Note:** Potentially applicable to Part 2 as well (4.6.5).

The video file per flight is in the region 0.7 to 1GB, so for e.g. a WAC with 50 competitors there would be 4x50 files each of up to 1GB to upload, plus a menu to access each one individually. It's a great idea but the practicalities are daunting.

If the upload capability of the local internet feed is for example 10Mbps (i.e. 1.25MB/sec) then 200GB of video files will take more than 20 hours to upload ... simply not possible. Also the online storage requirements would be quite high, and would probably need a dedicated server space for all events and all sequences.

We have looked at this in the past and not found a practical solution.

NP2022-12

RC

**SPAIN PROPOSAL #1**

Document: Section 6 Part 1

Subject: **Figures in Unlimited Unknowns****Proposal**

Add the 1 ½ two-point roll (**A.20. Family 9.2, Two-point rolls, fig. 9.2.4.6**) in the figures accepted for Programmes 2,3 and 4.

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

NP2022-13

RC

**SPAIN PROPOSAL #2**

Document: Section 6 Part 1

Subject: **Figures in Unlimited Unknowns****Proposal**

Add the 3/4 four-point roll (**A.21. Family 9.4, Four-point rolls, fig. 9.4.4.3**) in the figures accepted for Programmes 2,3 and 4.

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

NP2022-14

RC

**SPAIN PROPOSAL #3**

Document: Section 6 Part 1

Subject: **Figures in Unlimited Unknowns****Proposal**

Add the 1/4 eight-point roll (**A.22. Family 9.8, Eight-point rolls, fig. 9.8.4.1**) in the figures accepted for Programmes 2,3 and 4.

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

NP2022-15

RC

**SPAIN PROPOSAL #4**

Document: Section 6 Part 1

Subject: **Figures in Unlimited Unknowns****Proposal**

Add the following figures (**A.23. Family 9.9, Positive Flick Rolls**) in the figures accepted for Programmes 2,3 and 4:

- Three quarter positive flick roll in a 45 degree positive line up (**9.9.2.3**)
- Three quarter positive flick roll in a horizontal positive line (**9.9.3.3**)
- Three quarter positive flick roll in a 45 degree positive line down (**9.9.4.3**)
- Three quarter positive flick roll in a 45 degree negative line up (**9.9.7.3**)
- Three quarter positive flick roll in a horizontal negative line (**9.9.8.3**)
- Three quarter positive flick roll in a 45 degree negative line down (**9.9.9.3**)

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

NP2022-16

RC

**SPAIN PROPOSAL #5**

Document: Section 6 Part 1

Subject: **Figures in Unlimited Unknowns****Proposal**

Add the following figures (A.24. Family 9.10, Negative Flick Rolls) in the figures accepted for Programmes 2,3 and 4:

- Three quarter negative flick roll in a 45 degree negative line up **(9.10.2.3)**
- Three quarter negative flick roll in a horizontal negative line **(9.10.3.3)**
- Three quarter negative flick roll in a 45 degree negative line down **(9.10.4.3)**
- Three quarter negative flick roll in a 45 degree positive line up **(9.10.7.3)**
- Three quarter negative flick roll in a horizontal positive line **(9.10.8.3)**
- Three quarter negative flick roll in a 45 degree positive line down **(9.10.9.3)**

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

NP2022-17

RC

**SPAIN PROPOSAL #6**

Document: Section 6 Part 1

Subject: **45° up rotations in Unlimited Unknowns****Proposal**

Modify A.2.2.3 as follows (changes underlined):

A.2.2.3. Combinations of aileron roll first, and then flick roll, may be added in Families 1, 7 and 8 on 45° up lines. The combined extent of rotation shall not exceed 540° with not more than 3 4 stops.

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

NP2022-18

JC

RC

GAC

**SPAIN PROPOSAL #7**Document: Section 6 Part 1 / **Part 2 ***Subject: **Remove PZ****Proposal**

Remove the Perception Zero as an element of judging, and return to the previous system, in which any figure incorrectly flown in respect to a geometrical criterion or technical criterion (i.e. all the PZ cases, according 4.4.2.1) would be HZ.

Rationale

The scoring system has been changing in CIVA permanently, to arrange always judging issues as i.e. political influence, unfair competition...

The judging process, even though we understand that it is a subjective process, must have consistent results regardless of the judge. If there are discrepancies, the decision of the majority must prevail. Divergencies of criteria must not exist on the judging line, because the judges must judge according the criteria in the rules. And these criteria expressed in the rules are unique and clear.

Let's say that, on a judging line of 10 judges, only one scores a PZ to a pilot for a "incorrect" tail slide. If 9 judges consider the manoeuvre correct, and only one does not, the error, usually manifested in the minority, should be discarded, and the minority notified. Multiple notifications could affect the judge's performance qualification. This proposal does not intend to prosecute judges, it is meant to reduce subjective valuations and ensure that scoring is fair.

*** RC Chairman Note:** Potentially applicable to Part 2 as well.

The interpretation of the PZ given above is incorrect.

In FPS, when one or more judges award a PZ to a figure, each one is separately assessed as a zero value grade by comparison with the judges' marking pattern for this figure vs. the normalised marks awarded by all other judges. Where a PZ fails the FPS criteria the judges original grade is replaced by a simple average of the non-zero judges grades for this pilot/figure, to the nearest half-mark. The judges RI remains unaffected, i.e. this adjustment is excluded from the RI assessment process for the judge; this is to encourage the use of PZ's where the perception criteria for the figure are not met.

If the PZ is discarded and the HZ used instead we would be back to the situation where a figure that would have been awarded a PZ for perception reasons (flick, slide, spin criteria, flicking in rolling circles or for gliders stalling in looping segments) would have to receive the HZ instead, making it not possible to subsequently determine for which reason the figure has been zeroed. The value of the PZ is that it clearly separates downgrades for perception from other geometry / attitude criteria. In the past there was notable resistance to awarding the HZ where for example the flick characteristic was perceived as inadequate but the rest off the figure was acceptable, thus many instances went un-recorded. The later use of a small mark (0.5) instead was instituted only because the scoring software in use at that time could not incorporate a better solution, whereas ACRO has this ability.

NP2022-19

RC

**SPAIN PROPOSAL #8**

Document: Section 6 Part 1

Subject: **Flick / Aileron roll combinations in Unknowns****Proposal**

Modify A.10.1.1 (in APPENDIX A: LIST OF FIGURES FOR PROGRAMMES 2, 3 AND 4) as follows (changes underlined):

A.10.1.1. All Categories: No flick rolls permitted on the horizontal entry lines of figures in columns 1 and 2, nor on the horizontal exit lines of figures in columns 3 and 4, of 7.2.1 to 7.2.4.

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

The speed at the exit of these figures can be controlled perfectly in any plane to perform a safe flick roll, by any pilot. Safety is not an issue in these type of figures for the standard pilot. These figures have even less possibilities to overload the planes than, for example, vertical flick rolls in P-Loops, since the pilot has 90° more in the loop part, to reduce the speed and reach an appropriate speed for the flick roll.

NP2022-20

RC

**SPAIN PROPOSAL #9**

Document: Section 6 Part 1

Subject: **Remove limitation in number of flick rolls in Unlimited Unknowns****Proposal**

In the table of 2.3.1.4.a), remove the following paragraph:

~~Total of Families 9.9 and 9.10 not to exceed six, at least one of which must be vertically climbing~~

NOTE: If this proposal (Spain Proposal #9) is accepted by CIVA, Spain proposals #10, #11 and #12 will be retracted.

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

RC Chairman Note: This proposal and following ones (Spain proposals #10 to #12, NP2022-21 to -23) to be discussed in conjunction with Russia proposal #3 (NP2022-9) on same subject.

NP2022-21

RC

**SPAIN PROPOSAL #10**

Document: Section 6 Part 1

Subject: **Number of flick rolls in Unlimited Unknowns****Proposal**

Modify paragraph in table of 2.3.1.4.a) as follows (changes underlined):

Total of Families 9.9 and 9.10 not to exceed six nine, at least one two of which must be vertically climbing

NOTE: If this proposal (Spain Proposal #10) is accepted by CIVA, Spain proposals #11 and #12 will be retracted.

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

NP2022-22

RC

**SPAIN PROPOSAL #11**

Document: Section 6 Part 1

Subject: **Number of flick rolls in Unlimited Unknowns****Proposal**

Modify paragraph in table of 2.3.1.4.a) as follows (changes underlined):

Total of Families 9.9 and 9.10 not to exceed six eight, at least one two of which must be vertically climbing

NOTE: If this proposal (Spain Proposal #11) is accepted by CIVA, Spain proposal #12 will be retracted.

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

NP2022-23

RC

**SPAIN PROPOSAL #12**

Document: Section 6 Part 1

Subject: **Number of flick rolls in Unlimited Unknowns****Proposal**

Modify paragraph in table of 2.3.1.4.a) as follows (changes underlined):

Total of Families 9.9 and 9.10 not to exceed six seven, at least one two of which must be vertically climbing

Rationale

To increment the number of possible figures for the Free-Unknown Programmes. To increase the flexibility, diversity and interest of Programmes and flights for sportsmen and audiences.

NP2022-24

RC

**SPAIN PROPOSAL #13**

Document: Section 6 Part 1

Subject: **Unknown sequences****Proposal**

Modify 2.3.1.5. and 2.3.1.6.c) as follows, and remove 2.3.1.6.e) (changes underlined):

2.3.1.5 The contest Organiser shall provide copies of the list of figures to all competing NACs, and each NAC may submit to the International Jury a maximum of two one sequences, composed of these figures, for each Programme. The contest Organiser will determine the deadline for submitting proposed sequences. (...)

2.3.1.6.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 one of the submitted sequences will be selected through a drawing of lots. This sequence will be flown by all the pilots.

~~2.3.1.6.e) At least 1 hour before the start of each Programme, the Organiser shall provide each NAC with a list of the Free Unknowns chosen by each competing pilot.~~

Rationale

The bases are:

- Each country proposes one sequence only, instead of the maximum of two permitted today
- International Jury checks and approves the sequences, as today.
- Drawing of lots of the proposed sequences, selecting one, at least 12 hours before it's first flight, as today.
- All pilots fly the same sequence.

Rationale: To provide a logical and fair way to compare performance of all pilots. With the present system, pilots choose the simplest and easiest sequence available or produce their own one. This proposal aims to equalize the competition under the same terms and difficulty to all participants. As well, simplifies the competition paperwork and processes, making the system more fail proof. Additionally, it increases the attraction and understanding for fans and the ability to compare is significantly simplified.

A clear benefit of the existing Free Unknown system is that the submitted figures remain identical in each sequence, even if oriented differently, thus helping to maintain judges' attention, and providing great scope for sequence designers to use the mandatory figures in imaginative ways to maximise their pilots grades. The option for any pilot to select any sequence directly involves them all in sequence assessment and understanding. There is no need to simplify the paperwork, the required systems are now well developed.

NP2022-25

RC

**SPAIN PROPOSAL #14**

Document: Section 6 Part 1

Subject: **Number of flick rolls per figure in Unlimited Unknowns****Proposal**

Modify 2.3.1.4.b) as follows (changes underlined):

2.3.1.4.b) There will not be more than 4 flick rolls (Family 9.9 or 9.10) per figure.**Rationale**

Increment the number of variations of figures in Unknown programmes. Figures with more than one flick roll are usual in Free Known Programmes. There is not a safety issue with it. It is just question of skill.

NP2022-26

RC



SPAIN PROPOSAL #15

Document: Section 6 Part 1

Subject: **Figures in Unlimited Unknowns**

Proposal

Remove A.17.1.7.

~~A.17.1.7 Unlimited: From 8.6.5 to 8.6.8: No flick rolls on vertical down lines after a hesitation roll in the loop.~~

Rationale

Increment the number of variations of figures in Unknown Programmes.