



## **AGENDA ITEM #8**

### **Recommendations for Rule Changes for the Year 2006 (Powered Aerobatics)**

The CIVA Rules and Judging Sub-Committees met in Burgos, Spain on 22 June 2005 to consider various NAC proposals for 2006. The attendance at the meeting was as follows:

**Present:** Mike Heuer, Jiri Kobrle, Osmo Jalovaara, John Gaillard, Alan Cassidy, Lars Frölander, Vladimir Popov, LG Arvidsson, Mikhail Mamistov, Robert Chomono, Liz Cook

**Apologies:** Helmut Stas, Philippe Jean

**Observers:** Michel Dupont, Ann Salcedo, Greg Dungan, Elena Klimovich

The following is a summary of the proposals, which are recommended for adoption at the 2005 CIVA plenary meeting in Germany. These proposals are for Section 6 and Parts 1 and 3, CIVA Regulations (Unlimited and Advanced Categories). The Glider Aerobatics and Catalogue Sub-Committees will report separately.

The proposals, which were adopted or modified, are presented below in boxes. Those not recommended by Sub-Committee will not be considered by CIVA during the plenary meeting.

## **CANADA**

**Proposal #1** Canada proposes that CIVA set up a working group, composed of specialists, that would submit their recommendations/approval to CIVA, after analyzing all the Advanced 'Q' programmes submitted to Plenary.

Their approval of the 'Q' programme need not be limited to just one entry. The final choice will be decided by the CIVA Delegates at the Plenary meeting.

Similar Working Groups could also be formed, should CIVA, in the future, ever oversee any other categories other than Unlimited.

Sub-Committees agreed with the proposal to set up a working group to analyze the Advanced 'Q' programme. Sub-Committees rejected the proposal to set up additional working groups.

## FRANCE

### **Proposal #1 Drawing of lots for Q programme, ("A" and "U")**

During the drawing of lots for Q programme, all pilots who ranked from first to tenth place during a Continental or World championship of the same category, during the two previous years will draw their lots separately. This will mean that they will not be among the first pilots to fly in the flight order.

THEREFORE, the first ten numbers will be set aside, allowing the separate drawing of lots by those ten pilots. Then, those ten numbers will be added back into the other numbers for the remaining drawing of lots by the other pilots.

Sub-Committee rejected the proposal – refer Italian proposal #1

## ITALY

### **Proposal #1 Order of Flight**

Parts 1 and 3

1.1.7.2. For Programmes 1, 2 and 3 the competitors will be divided into 3 equal groups. The groups will be based on the provisional accumulated overall results after the previous programmes. The results of Programme Q will only be used with respect to Programme 1. The order of flight in each group will be determined by drawing of lots as described in paragraph 1.1.7.1. The flight order between groups is reversed to their rank. (The flights start with the group of the lowest rank). Nevertheless, for the last expected programme in case of time shortage, the flight can start with the top-ranking group. The lowest ranking group would fly only if the time left permits it.

Sub-Committees agreed with the proposal.

### **Proposal #2 Positioning K Factor**

Reduce K factor for positioning to 30 in Unlimited and 20 in Advanced when there is no line judges.

Sub-Committees referred this to plenary as the vote was tied (5-5).

### **Proposal #3 K Factor Limit for Free Program in Unlimited**

As there is no software restriction, the limit of 99 K for figures in the Unlimited Free Programme should be eliminated.

Sub-Committees agreed with the proposal.

#### **Proposal #4 Hard and Soft Zeros**

1. Change the conception of Hard and Soft zeros. Regard matters of fact as hard zeros and matters of perception as Soft ones. In this case it will be possible to view HZ on video.
2. A judge must mark a reason for HZ score on his / her score sheet. It will allow the Chief Judge to determine whether HZ stands even if one judge is right and eliminate judges conferences in most cases.
3. HZ will be determined not by majority of judges but by establishing a fact.

**Sub-Committees agreed with the proposal.** Amend Family 6 – Tailslides, Appendix 4 11.3 and 11.4

#### **Proposal #5 Permitted Breaks**

Allow a pilot to make one unpenalized break in case of low clouds.  
Eliminate the necessity of an optional break to be marked on Form A, B, C.  
Change regain height to readjust height because a losing of height can be necessary to the second part of the sequence.

Parts 1 and 3

##### **1.4.2.6. Permitted Breaks**

- a) If during the performance of Programmes Q, 1, 2 or 3 the height of the cloud base is between the height of 1050 m and 800 m above aerodrome level, the International Jury may allow flights to be made in two parts, the competitor being allowed to readjust height without penalty to commence the second part.
- b) When an interruption occurs along the y axis, the competitor must resume his or her flight in the same direction of flight.
- c) If the cloud base subsequently rises to 1050 m pilots may no longer interrupt their flights without penalty; with due warning, i.e. at least 10 minutes in advance, pilots will be advised by the Contest Director (or his staff), following advice to him from the International Jury, when they are to fly without interruption.

Note: even though an interruption may be allowed without penalty by the International Jury, there is no obligation for pilots to interrupt their flight.

**Sub-Committees agreed with the proposal.**

#### **Proposal #6 Minimum Time For A Pilot To Get Ready For A Flight**

There should be not less than 15 minutes between the engine shut off and the next start up on the same airplane. The eligibility for a delay with start up must be confirmed by starter (problems with refueling, seat change and so on).

**Sub-Committees agreed with the proposal.**

#### **Proposal # 7 Time Limit for Programme Q**

If a pilot chooses to use a permitted weather break during the Programme Q flight, the time limit should be changed to 11 min.

Part 1, 1.4.6.1. Time Limits, a)

Part 3, 1.2.2.4.

Programme Q will have a time limit of 10 minutes maximum from “lift off” to exit from the box (wing dips at completion of flight). If a pilot chooses to use a permitted weather break during

the Program Q flight he/she will be allowed an extra 1 min in the box. During the flight, the pilot will be permitted to fly practice figures prior to and after the actual performance of Programme Q. The end of the allowed time will be clearly announced by the Chief Judge to the pilot by means of radio. Each Programme Q figure performed after allowed time will not be marked by the judges.

Sub-Committees rejected the proposal.

#### **Proposal #8 Cap-231 EX**

Addition of CAP-231 EX in the list of admitted aircraft for the Advanced category  
This airplane has not been used in the Unlimited category for at least a few years. In addition to this, there are only 3-4 of these airplanes still flying.

Sub-Committees rejected the proposal.

## **RUSSIA**

Proposal #1 Order of Flight

Sub-Committees agreed with the proposal. (Refer Italian proposal #1)

#### **Proposal #2 Positioning K Factor**

Sub-Committees referred to plenary. (Refer Italian proposal #2)

#### **Proposal #3 K Factor Limit For Free Program in Unlimited**

Sub-Committees agreed with the proposal. (Refer Italian proposal #3)

#### **Proposal #4 Hard and Soft Zeros**

Sub-Committees agreed with the proposal. (Refer Italian proposal #3)

#### **Proposal #5 Permitted Breaks**

Sub-Committees agreed with some of the proposal. (Refer Italian proposal #5)

#### **Proposal #6 Minimum Time For A Pilot To Get Ready For A Flight**

Sub-Committees agreed with the proposal. (Refer Italian proposal #6)

#### **Proposal #7 Time Limit For Programme Q**

Sub-Committees rejected the proposal. (Refer Italian proposal #7)

#### **Proposal #8 Drawing Of Lots To Submit Unknown Figures**

a) Amended proposal – National Aero Clubs having 3 or more pilots have priority.

Reasoning is the same as in Advanced.

**Sub-Committees agreed with the proposal.**

1.2.4.1. For the first Unknown Compulsory Programme, figures will be chosen from Appendix 3.

Repetition of any figure with the same catalogue number is not allowed. A maximum of 10 figures may be submitted by National Aero Clubs, which have a pilot (or pilots) competing in Programme 2. Each figure will have a minimum K of 15. The Clubs with 3 or more pilots in both male and female Teams will have the first priority; the Clubs with at least 3 pilots in any of the Teams will have the second priority to submit a figure. If more than 10 Clubs have the first priority, the Jury will conduct a drawing of lots to determine which of these Clubs shall nominate figures and in which order. If fewer than 10 Clubs have first priority those Clubs with at least 3 pilots in both male and female Teams will automatically have the right to submit a figure. A first draw will then be made to determine which of the Clubs with at least 3 pilots in one of the Team will join the 2 x 3 - pilot Teams (If fewer than 10 Clubs have at least 3 pilots in any of the Team this drawing of lots will be made for the Clubs with less than 3 pilots Teams). Then a second draw among these 10 Clubs will determine the order of submissions.

**Sub-Committees rejected the proposal.**

#### **Proposal #9 Flight Regulations and Local Flight Rules**

English transcription of applicable Flight Rules published by the Aviation Authority of a country organizing international competitions, Local Regulations must be published by the organizer in a bulletin or on the event web-site.

**Sub-Committees agreed in principle with the proposal.** (Section 6 1.6.3.1)

#### **Proposal #10 YAK-52 Championships Free Programme**

**a) The Free Programme** may be composed of a maximum of 12 figures or combinations of figures. A combination will be taken as one figure. All figures must be taken from the FAI Aerobatic 4 Catalogue as currently amended by CIVA. The total difficulty coefficient of all figures and combinations of figures shall not exceed 225.

Versatility:

In order to achieve versatility in the design of Programme 1, it is a mandatory requirement that competitors shall include the following. Programmes not including these figures will not be accepted:

- a) At least one figure from Family 2.3 to 2.20
- b) At least one figure from Family 5
- c) At least one figure from Family 7
- d) At least one figure from Family 8
- e) At least one figure each from Families 9.1. through 9.8
- f) At least two figure from Family 9.9
- g) Only one figure from Family 9.11 or 9.12
- e) At least one figure with opposite rolls

Sub-Committees agreed with the proposal.

**b) Unknown Programme Refer original proposal.**

Proposal was amended to exclude Family 1.6 to 1.15 for the initial competition. Position to be reviewed.

Sub-Committees agreed with the amended proposal.

**c) Technical Inspection**

Competing airplanes must pass the technical inspection of wing attachment units. They must have the g-load limit of +7/-5 and equipped with checked and sealed accelerometers. For exceeding g-limit a pilot will be disqualified for the competitions.

Sub-Committees agreed with the proposal.

## SWEDEN

**Proposal #1 Line Judges in Unlimited Category** Proposal withdrawn

**Proposal #2 K Factor for positioning with reduced number of Line Judges**  
Proposal withdrawn

**Proposal #3 GPS based tracking device**

In addition to the options of the electronic instruments in 2.1.4.1 CIVA should investigate the use of a GPS based electronic tracking device.

Sub-Committees agreed with the proposal

**Proposal #4 International Judges visual acuity**

It is proposed that all CIVA judges attending international and continental championships demonstrate visual acuity to the standard of a private pilots' licence.

Sub-Committees rejected the proposal.

## UNITED KINGDOM

**Proposal #1 1.1.7.2 Order of Flight**

Delete "10" replace it with 'top one-third of the field of' ..(2 occasions)

Sub-Committees rejected the proposal.

**Proposal #2 1.4.6.1.a) Interruption of Q Programme**

Add new sentence to the end of the existing paragraph:

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

Sub-Committees agreed with the proposal

**Proposal #3 Appendix 1, Family 5**

Amend the judging criteria to read:

1. All looping radii must be the same.
2. The vertical lines must be flown with the zero lift axis vertical (see Figure 2).
3. Any deviation from the vertical or 45 degree lines will result in the standard deduction of 1 point for every 5 degrees.
4. All added rolls must be centred on their respective lines.
5. The lengths or the various lines need not be equal.
6. During the climb and descent, the wings...

Referred to Plenary as this proposal would only be necessary if new Stall Turns are added to Family 5.

**Proposal #4 Appendix 1, Family 7.31-7.38**

Re-Word as follows:

"Besides possessing the unique characteristic of containing three 45 degree lines on which rolls may potentially be placed, these sub-families should be judged as 7.32 to 7.30 but with the addition of an extra 45° line.

Radii of the entry/exit 1/8 loops and the two 3/4 loops must all be equal. The two 3/4 loops must have the same diameter and occur at the same altitude. The horizontal entry/exit heights must coincide with the top and bottom of the loops, except when the first or last 45° lines contain multiple linked, unlinked or opposite rolls, when they may be extended (not shortened) above or below the extreme of the 3/4 looping segments. Any rolls placed on any 45° line must be centred. (Figure 34)

Sub-Committees agreed with the proposal

**Proposal # 5 1.2.2 Programme Q – The Qualifying Programme (Name clarification)**

Sub-Committees agreed with the proposal

**Proposal #6 1.2.3 Programme 1 – The Known Programme**

1.2.3.1 The Known Programme will be composed of 12 figures taken from the FAI Aerobatic Catalogue as currently amended by CIVA. The total difficulty co-efficient of all the figures shall not exceed 480.

1.2.3.2 Programme 1 of a World Championship will be selected and made known by CIVA at least six months prior to the beginning of that World Championships.

Other consequent changes would be required in other paragraphs, which are not further listed here.

Sub-Committees rejected the proposal.

**Proposal #7 Appendix 3, Family 5 (Refer to original proposal)**

Referred to Plenary

**Proposal #8 1.2.3.1 Free Programme**

The Free Programme may be composed of a maximum of 12 figures...

Sub-Committees agreed with the proposal.

**Proposal #9 1.2.3.6.f Free Programme Versatility**

Change “one” to “three”

Sub-Committees agreed with the proposal.

**Proposal #10 Appendix 3, Family 5**

Add new figures permissible for Unknown (Subject to Catalogue Amendment)

Referred to Plenary as this proposal would be applicable if new Stall Turns are added to Family 5.

## USA

**Proposal #1 Unknown figures**

Amend Part 1 and Part 3, Appendix 3 to add the 9.1.3.1 (1/4 slow roll), 9.1.3.3 (3/4 slow roll), and 9.4.3.3 (3 of 4 hesitation roll).

Sub-Committees agreed with the proposal.





### **Proposal #2 Mandatory Line Judges**

The USA proposes to make Line Judges mandatory at all World Championships with the following provisions:

#### **Amend Section 6, section 2.1.11:**

"If an electronic tracking device is not operated, line judges will be used. In this case, the use of line judges is mandatory at World Championships and may only be waived under special circumstances, by prior application to the Bureau of CIVA. Line judges should, if possible, be ....."

#### **Amend Parts 1 & 3, section 2.1.4.2:**

"If an electronic tracking device is not operated, infringements of the performance zone will be recorded by Line Judges. The use of line judges at World Championships may only be waived under special circumstances, by prior application to the Bureau of CIVA."

#### **Amend Parts 1 & 3, section 2.2.3.1:**

"....infringements may be recorded by a technical device or by four Line Judges. Contest organizers may decide to dispense with the recording of performance zone infringements in all but World Championship competition. The use of line judges at World Championships may only be waived under special circumstances, by prior application to the Bureau of CIVA. In any case, should recording of performance zone infringements be waived, the highest K factors will be used for positioning marks (see 2.1.4.5). The decision....."

Sub-Committees agreed with the proposal.

## **CATALOGUE SUB-COMMITTEE**

FAI Aresti Aerobatic Catalogue Family 2, 5 and 8 (refer original proposal)

Referred to Plenary

## **FAIR PLAY SYSTEM**

APPENDIX 2 to CIVA REGULATIONS The CIVA Fair Play System

Referred to Plenary

Updated: 24 October 2005