Fédération Aéronautique Internationale

CIVA Rules, Judging, and Glider Aerobatics Sub-Committee Meetings

Rules Proposals for 2015 (Power and Glider Aerobatics)

GASC Meeting to be held in
Torun, Poland
13.30, 21 July 2014

RSC and JSC Meetings to be held at the
Slávnica Airfield (LZDB)
Dubnica nad Váhom, Slovakia
09.00, 6 August 2014

Version 2 / 05 July 2014

Introduction

The deadline for the submission of rules proposals to CIVA has now passed. Proposals were due by 1 July 2014. CIVA Delegates responded accordingly and these proposals now go to Sub-Committees.

This is one of CIVA most important jobs; to examine our experiences and lessons learned from the various Championships we hold each year and to introduce improvements into the FAI Sporting Code, the rules that are the basis for our sport.

Proposals can take three different forms:

Normal Proposals (NPs): These are proposals submitted each year by Delegates in accordance with our normal rules process and deadlines. These are normally due by the 1st of July.

Safety Proposals (SPs): Proposals to be submitted which relate to safety problems and merit consideration by plenary at CIVA's next meeting. These usually come in after Championships.

Expedited Proposals (EPs): Proposals to be submitted as a result of experiences at Championships and merit discussion by plenary at CIVA's next meeting. The guideline here would be minor changes which are either editorial in nature or of such importance that full Sub-Committee consideration is not required.

"Urgent" proposals submitted after Championships, in accordance with a deadline set by the CIVA President each year, are classified as an NP, SP, or EP at the discretion of the President.

CIVA has the following Sub-Committees, elected each year at plenary, and made up of skilled and experienced specialists. Each has five members plus a Chairman with the exception of the Glider Aerobatics Sub-Committee which is larger. The committees are as follows:

- CIVA Rules Sub-Committee (RSC): Mike Heuer, Chairman (USA)
- CIVA Judging Sub-Committee (JSC), John Gaillard, Chairman (RSA)
- CIVA Catalogue Sub-Committee (CSC), Alan Cassidy, Chairman (GBR)
- CIVA Glider Aerobatics Sub-Committee (GASC), Manfred Echter, Chairman (GER)

Comments on the enclosed rules proposals are welcome. After holding their meetings in the summer of 2014, the Sub-Committees will issue their recommendations to the plenary meeting of CIVA. That meeting will be held in Wroclaw, Poland on 8-9 November 2014. The new version of Sporting Code, incorporating those changes, takes effect on 1 January 2015.

Michael R. Heuer
Chairman, CIVA Rules Sub-Committee
Collierville, TN USA
3 July 2014

RULES PROPOSAL CHECKLIST

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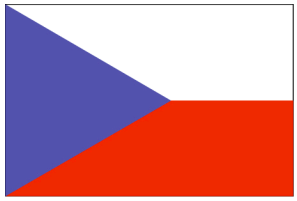
Notes:

- Proposals for Glider Aerobatics Sub-Committee in **blue.**
- Proposals or reports that do not have an "NP" number have been referred to plenary and/or working groups.

NP 2015-1



CZECH PROPOSAL #1

Document: Section 6, Part 2

Subject: HMD Operation & Penalties Output Valuation

Proposal

Treat HMD output as box outs penalty. Competitor will be awarded by 2 points of Outs penalty for every second over or below altitude limits. Low penalty will be given when majority of Judges consider the flying dangerously below lower altitude limit. In example, when HMD indicates infringement of lower limit where glider is on vertical line down etc.

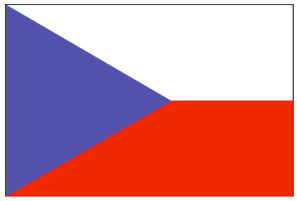
Rationale

HMD system used at glider Championships is an excellent reference to evaluate vertical position of the glider in the box. However its output is currently considered as a precise decision making tool to give penalty to the Competitor. Penalties should act as a motivation for the Competitor to fly inside defined altitude limits, respectively to motivate him to make necessary precautions rather than to go below safe altitude. As with other penalties, like Faulty Wing Rock, Missed Slot etc., penalties are designed to be given when there is no doubt. There are cases where HMD is deciding final results where pilot is unable to be in control of situation.

Example of false penalty: Programme starts with spin and there can be thermals present. When glider is entering the spin, HMD indicates a short infringement of upper altitude limit, let's say one second. Flight can be exact and precise, but Competitor will never be able to fight for top results. Same example is valid for rolls or rolling turns at the bottom of the programme. It's obvious that flight is safe and maybe even inside specified limits, but pilot is penalized anyway.

HMD by its nature is a tool. Precise but with limitations of physics laws. Environment temperature, local changes in atmospheric pressure, fact that barometric sensor is located inside glider cockpit are parameters which affects barometric altitude indication. Most important seems to be a location of barometric sensor without connection to glider's static pressure ports. Reading of static pressure when glider is in knife edge flight or similar attitude can significantly influence those readings (e.g.. in 4-point rolls, rolling turns, spin, flicks etc.).

NP 2015-2



CZECH PROPOSAL #2

Document: Section 6, Part 1 and 2

Subject: Removal of Programme 2 (Free Programme)

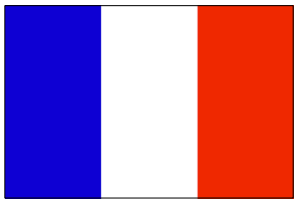
Proposal

Remove Programme 2 (Free programme) from Continental and World Championships for power as well as glider. Increase number of Unknown (respectively Free Unknown) programmes by one.

Rationale

Programme 2 have currently same meaning as Programme 1. Since Programme 1 is included in overall results, there is no advantage for having competitor's skills comparison by this "second known" programme. Biggest focus of comparison should be given to Unknown programmes, since they really prove pilots skills. Removal of Programme 2 will allow flying more Unknown programmes and significantly reduce paperwork demands. This will make Championship more cost and time effective, remove problems with free sequence submissions and make Championship more demanding even in case of adverse weather conditions.

NP 2015-3



FRANCE PROPOSAL #1

Document: Section 6, Part 1

Subject: Wind Limits

Proposal

- In case the main axis component of the wind 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 International Jury), the International Jury may decide to extend the main axis component limit to 14 m/s (with the cross axis component limit unchanged) with the following conditions:

    - Boundary judging is suspended;
    - A 20-minute notice is given when changing from the "12 m/s mode" to the "14 m/s mode" and vice versa (in particular, when an excess wind is measured while a flight is performed under the "12 m/s mode", the pilot is free to land, before being required to fly under the "14 m/s mode" no less than 20 minutes later).

Note 1: Detailed wording to be worked out – e.g. on whether boundary judging suspension is only for the "14 m/s mode" period or for the entire programme.

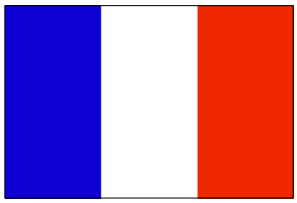
Note 2: Proposal option for consideration: Allowing a free break in the "14 m/s mode" in addition to (or instead of ?) boundary judging suspension.

Rationale

Management of wind limits extension at WAC'2013 was really hectic. A sound solution needs to be implemented in the rules to allow proper completion of contests while still limiting allowed wind speed to acceptable levels and with adequate provisions.

RSC Chairman Note: This proposal was submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

NP 2015-4



FRANCE PROPOSAL #2

Document: Section 6, Part 1

Subject: Order of Programmes

Proposal

- Change the order of Programmes: Known, Unknown 1, Free, Unknown 2.
- Delete the "10-minute free slot" principle for the Known, make the Known a programme like the other ones in terms of allowed figures prior to flying the sequence – consequently ensure availability of practice in the box for all competitors in the days before the start of the contest (subject to weather). *Proposal option: Or any other solution solving the issue of contest timing with reference to drawing of lots for first Unknown figures (see rationale below).*
- Modify rule of 60% safety cut: A judge would note "Unsafe" at the completion of the sequence if he/she considers the pilot is not apt to safely fly subsequent programmes. A majority of "Unsafe" notes (with the CJ having a casting vote) would result in disqualification of the pilot for subsequent programmes (note that this can be applied to all programmes, not only the Known).

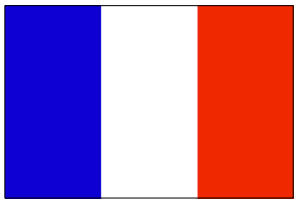
Rationale

As WAC'2013 unfolded, due to unfavourable weather conditions there was an increasing risk that the contest would have to be validated without any Unknown flown – in fact it was a close shave, and it made a number of pilots and teams uncomfortable, as there is wide agreement in the community that Unknown programmes are the most challenging ones and therefore the most relevant ones to determine who would deserve the overall champion title. In view of this experience CIVA should think about changing the order of programmes and fly the first Unknown earlier. This change would have consequences on two other aspects:

- The safety rule of 60% performance on either the Known or the Free to be judged apt to continue the competition into the Unknowns would have to be modified.
- The current unconditional training allowed in the 10-minute slot of the Known would create an issue in terms of contest timing vs drawing of figures for the first Unknown.

RSC Chairman Note: This proposal was submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

NP 2015-5



FRANCE PROPOSAL #3

Document: Section 6, Part 1

Subject: Order of Flights

Proposal

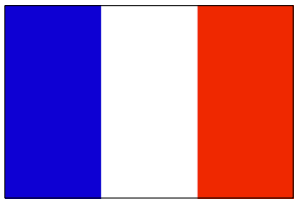
- Change the "full random draw" rule after the Known, to a "two-group" rule: A random draw would be made in each half of the rankings, with the higher ranking group flying last.

Rationale

WAC'2013 has exemplified that the "full random draw" for each programme is certainly not a panacea and leads to cases where pilots with very close number of points can fly the next programme under very different weather conditions: this cannot be considered an appropriate way of differentiating competitors. The "luck of the draw" principle is well understood but the current rule goes probably too far in making the WAC a lottery. At the same time the shortcomings of the previous "three-group" rule are acknowledged. The proposed new rule is not meant as a perfect solution, but is submitted as an improvement, a compromise limiting the major weaknesses of both extremes.

RSC Chairman Note: This proposal submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

NP 2015-6



FRANCE PROPOSAL #4

Document: Section 6, Part 1

Subject: Known Programme

Proposal

- Revert to the Known programme not counting towards final results save for exceptional circumstances when only two programmes can be completed (i.e.. revert to the rule before 2013).

Rationale

WAC'2013 has shown that it is likely that the first 10-15 pilots to fly the first programme (the Known) in the contest receive comparatively lower marks than subsequent pilots, a possible explanation being that judges might tend to be initially "conservative" in their marks in anticipation of potential better flights later on. Such a bias used to be mitigated in the past by having the Known / Q not counting towards final results (save for exceptional circumstances), but this is no longer the case. What we observed this year is understood as an unexpected, unintended consequence of having the Known count, therefore we would like to resubmit the case and challenge the move adopted last year in the light of those new findings.

RSC Chairman Note: This proposal submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

GERMANY PROPOSAL #1

Document : Guidelines for Championships Organisation

Subject: Championships Dates

Proposal

Not a rules change, this is a recommendation to be amended to the guidelines for planning international events.

Text

International Championships to be published two years in advance

Rationale

With growing number of international championships (new events for single type and Intermediate will be established besides Unlimited and Advanced) it turns more and more difficult to arrange national championships in between or around them.

As NAC aim to give chance to all categories taking part in domestic Nationals, it is pretty difficult to place Nationals not conflicting with international championships.

Even though organisation and preparation of domestic championships is a shorter business than doing so for internationals, it would be more than helpful to know international data when preparing for the next season. That means after 30th of June for the next year.

GERMANY PROPOSAL #2

Document : CIVA Internal Regulations & Policies

Subject: Events Calendar

Proposal:

Not a rules change, this is a recommendation to be amended to by laws of CIVA.

Text

There may not be an interaction between calendars of events of different air sports. No air sport is allowed to influence or even change other air sports events.

Rationale

The reason is evident and does not need too much explanation: different sports, different and independent schedules! This year such undue interference has led to a critical situation at least in Swiss. The SNAC-2014 was planned free of conflicting any international aerobatic event, even at the end of CIVA plenary meeting 2013. In early spring 2014 period for Unlimited European was shifted and SNAC and EAC were overlapping all of sudden. It is said, the reason for this date shifting was race calendar of RBAR, showing an event during the originally planned period of EAC-2014.

NP 2015-7

GERMANY PROPOSAL #3

Document : Section 6, Part 1, 4.1.3.1.

Subject: Entry Fees – Accommodation

Proposal

Reference 4.1.3.1.

In local rules it shall be written more precisely what is covered by entry fee.

Rationale

It must be unambiguously clear, how many nights for example, are covered by entry fee, so entrants to the event can calculate the amount of additional nights during training period in advance of the championship.

On events where opening ceremony is in the evening of the first competition day, nobody really knows if the night before is covered or not.

Note: There are FAI-Sports in which the Contest Period starts with the opening ceremony only.

GERMANY PROPOSAL #4

Document : CIVA Internal Regulations and/or
Guide to Contest Organisation

Subject: Championships Communication

Proposal

Not a rules change, this is a recommendation to be amended to by laws of CIVA

Any information, especially concerning international events shall be published effectively.

Rationale

Information about changes in programmes or changes in schedules (calendars) shall be announced to the aerobatics community, by using effective and reliable means.

To spread information is not fulfilled by placing information at some place in the internet or in some social network.

To spread information means bringing the information to the dedicated person or group, in nowadays by use of electronic means as email.

NP 2015-8

GERMANY PROPOSAL #5

Document : Section 6, Part 3, World Air Games

Subject: Rules for World Air Games – Glider Aerobatics

Proposal

The following changed paragraphs should be incorporated in Sporting Code 6, Part 3, World Air Games:

4.3 Programmes for World Air Games Aerobatics – Gliders

4.3.6 Programme G1 – Free

4.3.6.1 The Free Programme is composed by the competitors based on the Aresti-System, Glider Version.
There is no limit to the number of figures in the sequence. However, figures not flown, apart from being marked HZ, will draw 150 penalty points.
Catalogue numbers may be used only once without exception. No more than two figures each from families 2 through 6 may be used.
There is no upper limit to the sum of figure coefficients, but the minimum is 250 K.
The Free Programme may be started and finished in upright or inverted level flight and in any direction as indicated on the sequence sheet.

4.3.6.2 Versatility

Each sequence must contain at least:
– one rolling turn of 180° or more,
– one stall turn,
– one tail slide,
– one full positive flick roll,
– one half negative flick roll.

4.3.6.3 Sequence Submission

Not later than the end of the Opening Briefing, each competitor must submit a computer file of his Free Programme in an accepted format to the Contest Director for verification of compliance with the relevant rules.
The file must contain complete pages of Forms A, B and C i.a.w. para 4.3.3.5 of Sporting Code 6, Part 2.
Checking will be done i.a.w. para 4.3.3.6 of Sporting Code 6, Part 2.

4.3.7 Programme G2 – Unknown

4.3.7.1 Competitors draw lots to determine the order of figure selection. Each competitor then selects one figure from the list of unknown figures published in Sporting Code 6, Part 2, Section 9.

4.3.7.2 The International Jury, assisted by the Chief Judge, selects at least six figures from those drawn by the competitors to compose the Unknown Programme. They may add no more than two figures from the Aresti System, Glider Version, to aid in sequence construction and/or to fulfil the minimum K.
The final sum of figure coefficients shall lie between 190 and 210 K.

4.3.7.3 The completed sequence will be given to the competitors not later than 12 hours before the planned start of Programme G2.

4.3.8 Programmes G3 and G4 – Freestyle

4.3.8.1 The duration of the Freestyle Programme shall be no less than 3 minutes. Use of music and smoke is desirable.

4.3.8.2 Release height for Programmes G3 and G4 is 1200 m AGL. Competitors may perform a low pass at a minimum height of 50 m AGL on request.

4.3.8.3 There will be no submission of forms containing the sequence of figures for these Programmes.

4.3.8.4 In Programme G4, pilots may repeat the sequence flown in Programme G3 or may make changes as they wish.

4.3.8.5 Marking criteria for Freestyle Programmes see Annex A.

Annex A

Marking Criteria for Glider Freestyle Programmes

1. General

1.1 Glider Freestyle Programmes will be judged under three main headings. A mark of up to 10 points, in increments of 0.5 will be given under each of the ten sub-headings.

2. Technical Merit (160 K)

The technical merit of a Programme will be assessed by the fulfilment of the following objectives:

2.1 Utilization of the flight envelope – 40 K

The pilot should, within reasonable limits, demonstrate the flight envelope of his/her glider in terms of airspeed as well as accelerations, both positive and negative. The dynamic character of glider aerobatics must be considered and excessively hard manoeuvering avoided. High-alpha, beyond-stall-manoeuvres and autorotations should also be demonstrated.
Points are to be deducted accordingly, if any of these areas is missing.

2.2 Exploitation of attitudes and planes of flight – 40 K

The pilot should show manoeuvres around all axes of the glider in a variety of different attitudes and in all planes of flight. Repetition of particular attitudes or flight paths should be downgraded as well as under-utilization of certain planes of flight.

2.3 Clarity of execution of manoeuvres – 40 K

It should be clear to the judges that all manoeuvres flown were intended and fully controlled by the pilot. Start and finish of individual manoeuvre elements should be clearly recognisable. Poorly executed manoeuvres and apparently uncontrolled phases of flight must be downgraded under this heading.

2.4 Number and variety of manoeuvres – 40 K

The pilot should show as many different manoeuvres as possible in the available height. Repetition of specific manoeuvres and inefficient utilization of energy must be downgraded.

3. Artistic Impression (160 K)

3.1 Harmony – 40 K

The ideal of harmony in a glider freestyle programme is fulfilled, when it gives the impression of a "dance in the air". The succession of figures and manoeuvre elements should be an elegant flow, where each figure naturally emerges from the previous one. To present this impression, the pilot must expertly manage the available energy without having to speed up or slow down visibly between figures or manoeuvres.

3.2 Rhythm – 40 K

It is expected that the pilot alternates gracefully between high-speed elements or rapid rotations and more gently flowing manoeuvres in order to present a pleasing variation of pace, again similar to a dance.

3.3 Orientation and position – 40 K

The ideal programme is presented so that all elements of the performance are optimally oriented and positioned for the judges and spectators to watch and assess. Any elements which are flown in an unfavourable position or orientation must be downgraded.

3.4 Matching with music – 40 K

A glider freestyle programme without accompanying music is lacking an important emotional element. The competitor should carefully choose the music which fits the character of his programme. Ideally, the pace of the programme should match the rhythm and pace of the music as much as possible.
If there is no accompanying music, the mark under this heading is 0.0.

4. Positioning (80 K)

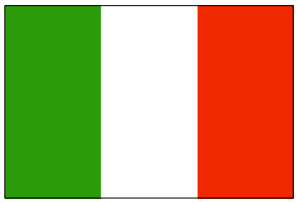
4.1 Symmetry – 40 K

Highest marks will be given when the sequence as a whole is balanced evenly to the left and right of the judges' direct line of vision towards the centre of the performance zone. Points should be deducted if, by design or by influence of the wind, a pilot's programme is noticeably biased to left or right.

4.2 Utilization of the performance zone – 40 K

The flight should be positioned so that the available lateral space is efficiently used without spreading the programme too far out. Elements flown unnecessarily far away from the judges and spectators show poor position management and must also be downgraded.

NP 2015-9



ITALY PROPOSAL #1

Document: Section 6, Part 2

Subject: Rules for Freestyle

Proposal

FREESTYLE EVALUATION AT THE HIGHEST LEVEL
(What follows is a simplified version of the Italian Rules)

Abstract:

The freestyle program in Italy was developed since 1996 with the mission in remarking the competitive and spectacular factors typical of “glider aerobatics" and therefore distinct from the traditional “power aerobatics”.

These factors may be sorted as follows:

a) absence of the engine and thus crucial in the importance of the ability to manage the energy.

b) silence of the flight that makes it particularly suitable to musical accompaniment

c) large moments of inertia due to the fact that the masses are not concentrated near the center of gravity (for the absence of the engine and larger wingspan, also) which results in a particularly elegant flight.

Notwithstanding, in the above points, the presence of smoke trails (made by smokes mounted on the tips of the wings) get enormous importance for the following reasons:

- Possibility to demonstrate the ability to manage energy regardless of the movements of the air.

- At height release of 1200m, the smokes will show recognisable figures, understandable by normal spectators, which could best appreciate the show.

- Since, once fired, smokes always emit the same amount of smoke and there is no way to modulate or switch them off, this will show the ability of the pilot to create special effects, for example by calculating the difference in consistency and persistence of the trails, depending on the speed and also, since the smokes are placed on the wing tips, to the ability to create "special effects", for instance with flicks in which the trails may differ from each other because the tips of the wings have different speed.

- Other effects are created passing trough the trails left earlier or by creating "the impossible" playing with perspective, in which, for example, figures made on an axis of 45° respect to the observer can transform an ellipse in a circle.

Expectations:

- by the pilot, a draw and a brief description of the program he want to fly and any adjustments according to the environmental situation that may occur (wind, descent or climb thermals, light and sun position);

- by the judges, the following evaluation criteria:

Note A: this is similar to the "Power Freestyle" but mostly based on elements which take into account the peculiarities of the glider flight.

Note B: Judges may ask clarifications on the program and how the figures will be performed directly to the pilot.

1 TECHNICAL MERIT (K 160)

- Versatility in relation to figures in the GAF catalog (K 40)

- Combinations of figures taken form GAF catalog to produce "desired effects" such the shapes of "Italian 8" or shapes like the “Heart” or “Sunflower” (K 40)

- Execution of "new" figures as they should be (as described in the freestyle forms) and not performed randomly (K 40)

- BOX management (K 40)

2 ARTISTIC IMPRESSION (K 90)

- Use of smokes on tip of the wings to create "desired effects" such as shapes of "Heart", "Sunflower", "Rainbow" and so on. (K 30)

- Tricks of perspective to produce "desired effects" for example use of "elliptical loopings" made at 45 degrees in front of the judges (K 30)

- Appropriate Music in accordance with the program personality and the elegance of the glider flight (K 30)

3 ENERGY MANAGEMENT (K 60)

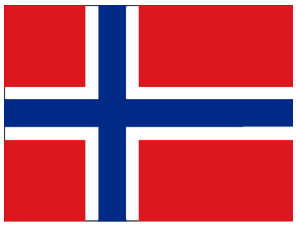
- Clearly highlighted by the smokes trails in well-defined shapes such "Italian 8" (K 20)

- Management of speeds in the combinations of figures taken form GAF catalog to produce "desired effects" such the shapes of "Italian 8" or shapes like the “Heart” or “Sunflower” (K 20)

- Smart management of the energy in order to execute rich programs with the possibility of variations according to the environmental situation (for example unpredicted situations due to wind component or vertical movements of air) (K 30)

NP 2015-10

NORWAY PROPOSAL #1



Document: Section 6, Part 1

Subject: Unknown Figures

Proposal

9. List of figures for programmes 3 and 4

9.17. Family 8.6.1 to 8.6.8

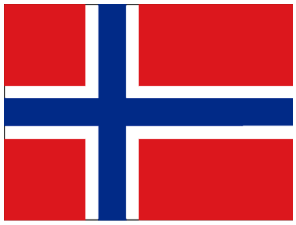
9.17.1.5. Advanced: From 8.6.5 to 8.6.8: No flick rolls on vertical down lines ~~after a roll in the loop~~.

Rationale

SAFETY - Remove last part of sentence. A normal size loop followed by a reasonable line will very easily lead to a speed well in excess of safe flick speed. A loop with no roll on top does not influence this significantly.

NP 2015-11

NORWAY PROPOSAL #2



Document: Section 6, Part 1

Subject: Unknown Figures

Proposal

Establish a working group to expand the list of figures for programmes 3 and 4. Norway was planning to submit a proposal with added figures, but decided it was too ambitious for us alone. There are many suitable unused figures among the following that may be considered:

7.4.8.x through 7.5.8.x
8.5.9.x through 8.5.12.x and 8.5.17.x through 8.5.20.x
8.6.9.x through 8.10.2.x

Rationale

Expand the repertoire of figures in programmes 3 and 4 for more variety and making the programmes more versatile.

NP 2015-12

RUSSIA PROPOSAL #1

Document: Section 6, Part 1

Subject: Drawing of Lots

Proposal

Make Drawing of Lots manual for all programs. To save time it can be done during one briefing.

Rationale:

- Better psychologically for pilots;
- Pilots can better plan their preparation for all programs;
- Organizers can make necessary paperwork well in advance for each program;
- Small changes can be made later to separate pilots flying the same airplanes and to remove "cut pilots" for the second unknown if any. To make fewer changes the Jury can plan judges breaks;
- To secure time between flights if necessary set time for pilots in question after which he/she is supposed to be flying. No need to change the number, just advise the judges which pilot is to fly.

RSC Chairman Note: This proposal submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

NP 2015-13

RUSSIA PROPOSAL #2

Document: Section 6, Part 1

Subject: Wording Change – Positioning Text

Proposal

Change "ideal" to "optimum" in placement annotation.

5.1.4.4. Depending on the aircraft's height and on the nature of the figure being flown, there is an optimum range from the judges for the placement of each figure. At this range, the geometrical errors in the figure, and the precise nature of the figure, are both clear and easy to assess.

And then optimum is changed to ideal which is not technically correct:

5.1.4.7. A column headed "Pos" on the Form A marks sheet shall be used to record by exception the positions of figures that are not ideally placed, as they are flown.

> *placement: annotation:*
> Somewhat: left of the ideal position: "L"
> right of the ideal position: "R"
> too near to the judge: "N"
> too far from the judge: "F"
> Considerably: left of the ideal position: "LL"
> right of the ideal position: "RR"
> too near to the judge: "NN"
> too far from the judge: "FF"

An optimum placement of each figure depends, besides others, on the wind. The ideal position is something unreachable most of the time.

RSC Chairman Note: This proposal submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

NP 2015-14

RUSSIA PROPOSAL #3

Document: Section 6, Part 1

Subject: Boundary Judges

Proposal

Remove boundary judges from the World and Continental championships.

Reasoning:

- To avoid double penalty for a mistake. With boundary judges a pilot gets penalized twice – with a downgrade for positioning (pretty high K-factor) and with a penalty for being out of the box.
- To lessen championships expenses and Entry Fee ($15,000 at the WAC-2013 according to CD).
- To lessen the time needed for coming to agreement in case the wind limit has to be lifted/increased at an event (WAC 2013 experience).
- Application of the penalty for box outs is not fair at the power aerobatic competitions – a pilot who has crossed the boundary line gets the same penalty as the one who performs a whole figure far out of the box.
- Pilots of the same skill can fly in very different wind conditions from 3 mps tailwind to 14.42 mps right/left quartering head wind (and even more if the wind limits are increased).

RSC Chairman Note: This proposal submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

NP 2015-15

RUSSIA PROPOSAL #4

Document: Section 6, Part 1

Subject: Alternate Proposal to RUS #3

Proposal

In case RUS #3 is not accepted:

Mandatory conditions for lifting (increasing) the wind limit in order to save the competitions (to make competitions valid) if such a need arises:

- no boundary judges for programs with increased wind speed limit;
- the wind limit at 500 m can not be increase to more than 14 mps head wind;
- agreement of the majority of Team managers/representatives:
- the decision to increase the wind limit and to remove boundary judges accordingly is valid for all subsequent programs.

Reasoning: to save time for discussion on site (WAC 2013 experience). Lifting the wind limit automatically leads to removing boundary judges.

RSC Chairman Note: This proposal submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

NP 2015-16

RUSSIA PROPOSAL #5

Document: Section 6, Part 1

Subject: Alternate Proposal to RUS #3

Proposal

In case RUS #3 is not accepted:

In case of adverse weather conditions in order to save the competitions (to make competitions valid), the International Jury can let the organizer increase the wind limit at 500 m to 14 mps head wind for all subsequent programs which will lead to automatic removing the boundary judges for all subsequent programs.

Reasoning: Lifting the wind limit automatically leads to removing boundary judges. No need for Chief Delegates' meeting, Jury's decision is sufficient.

Saves time even more.

RSC Chairman Note: This proposal submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

NP 2015-17

RUSSIA PROPOSAL #6

Document: Section 6, Part 1

Subject: Order of Flight

Proposal

To give ten top ranked pilots (flown programs combined results, no gender distinction) opportunity not to fly among first 10 in the next program.

Drawing of lots procedure:

- remove first 10 numbers from the pool and let current ten top ranked pilots draw the lots;
- add first 10 numbers to the pool, mix thoroughly and let the rest of pilots draw the lots;
- adjust the order of flights to separate pilots flying the same airplane.

Reasoning:

- no groups thus no psychological pressure to the Judges;
- none of the leaders get disadvantage of flying at the beginning of a program, especially unknowns. In this sense they fly more or less in the same conditions.

RSC Chairman Note: This proposal submitted to CIVA as an urgent proposal in October 2013. Referred to Sub-Committee as an NP for 2015 by decision of President.

NP 2015-18

USA PROPOSAL #1

Document: Section 6, Part 1, para 9.8.1.3.
Subject: Unknown Roll Limits on Family 5.3.1 & 5.3.2

Background

When the 45-Stall Turns (Families 5.3.1 and 5.3.2) were first added to the allowable Unknown figures in 2009, there were no opposite rolls allowed on 45 lines and the rotational limit on combinations of ascending aileron rolls on those figures was set at 450°/4 stops. When opposite rolls on 45's became legal for Unlimited Unknowns in 2011, a new row was added to the table in 9.2.2.2 to address the 45° up lines, but the fact that change made 9.8.1.3 ambiguous was missed.

CIVA Rule 9.8.1.3 sets a limit on the extent of rolling allowed on Stall Turns, Families 5.3.1 and 5.3.2, used in Unlimited Unknown sequences. It currently states:

Unlimited: Combinations of climbing aileron roll elements (45-degrees plus vertical) in

9.2.2.2. 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	450°	4
45° Up	540°	4
Vertical Down	360°	3

Families 5.3.1 and 5.3.2 must not exceed the maxima specified in 9.2.2.2.

The maxima specified in 9.2.2.2 are as follows:

The issue being addressed by this proposal is not the actual rotational limits, but rather the ambiguity present in 9.8.1.3. That rule can be, and has been, interpreted in two very different ways:

1) The limit on the total rotation for all ascending rolls is independent of whether there are rolls on only the vertical up line, only on the 45° line, or on both lines, and that total rotation may not exceed 450 degrees and 4 stops for the two lines together.

Or

2) Different limits apply depending on whether there are rolls on only the vertical up line (limit = 450°/4 stops), only on the 45° up line (limit = 540°/4 stops), or if there are rolls on both lines (limit for all rolls combined = 450°/4 stops).

Proposed Change

Depending on which of the interpretations presented above is agreed upon by the RSC/JSC, two options to edit 9.8.1.3 in order to remove the current ambiguity are provided below. It is proposed that only the chosen option go forward to plenary.

Option #1

9.8.1.3 *Unlimited: The combined total for all aileron roll elements on either or both the 45° and vertical up lines in Families 5.3.1 and 5.3.2 must not exceed 450° of rotation and/or 4 stops.*

Option #2

9.8.1.3 *Unlimited: In Families 5.3.1 and 5.3.2, for aileron roll elements on both the 45° and vertical up lines total rotation may not exceed 450° and/or 4 stops total. Aileron roll elements present on only the 45° or vertical up lines, must not exceed the maxima specified in 9.2.2.2.*

Summary

Either of the proposed wordings remove the ambiguity of 9.8.1.3, but a decision must be made as to which of the two currently possible interpretations is desired.

The following examples are provided to ensure clarity of the two options in this proposal:

Examples If Option 1 Is Chosen

Ex (1): A 5.3.1 begins with a half roll and 2x4 opposite roll on the 45° line (360° and 3 stops). That would leave 450°-360°=90° and one stop available for the vertical line. Therefore the most which could be added to the vertical up line and remain a legal figure would be a 9.1.1.1 quarter roll.

Ex (2): A 5.3.2 has a single half roll (180° plus 1 stop) on the 45° line. An additional 450°-180° = 270° plus 3 stops (e.g., a 3x4) would be legal on the vertical up line.

Ex (3): A 5.3.1 has a single full roll on the 45° line followed by a single full roll on the vertical up line (720° and 2 stops). This combination exceeds the 450° limit and makes the figure illegal.

Examples If Option 2 Is Chosen

Ex (1): A 5.3.1 has no rolls on the 45° line, but a 2x4 roll, opposite 3/4 roll on the vertical up (450° with 3 stops). This is a legal figure per 9.2.2.2.

Ex (2): A 5.3.2 begins with a 2x4 roll, opposite 2-point roll (540° with 4 stops) on the 45° line no rolls on the vertical up line. This is a legal figure per 9.2.2.2.

Ex (3): A 5.3.1 begins with a 1-1/4 roll, opposite 2x8 on the 45° line followed by a 1/4 roll on the vertical up line (total rotation = 630° with 4 stops). This is an illegal figure per 9.8.1.3.

NP 2015-19

USA PROPOSAL #2

Document: Section 6, Part 1, para 4.2.2.6(b)
Subject: Permitted Breaks

Background

CIVA Rule 4.2.2.6.b) currently states:

The pilot may choose where to take this break without stating so in advance, and such break need not be marked on Forms B or C. However, second or subsequent breaks will be penalized in accordance with paragraph 5.2.5. ***When an interruption occurs along the y-axis, the competitor must resume his or her flight in the same direction of flight.***

However, there is no penalty specified if the flight is resumed not in the same direction of flight.

Proposed Change

4.2.2.6.b) *The pilot may choose where to take this break without stating so in advance, and such break need not be marked on Forms B or C. When an interruption occurs along the y-axis, the competitor must resume his or her flight in the same direction of flight. However, second or subsequent breaks, or failure to resume flight on the y-axis in the prescribed direction, will be penalized in accordance with the penalty point tariff provided by paragraph 5.2.5.4.*

Summary

Any time a rule levies a requirement, there must be a specified penalty should there be a failure to comply with that requirement. This change provides a penalty consistent with all other break penalties.

NP 2015-20

USA PROPOSAL #3

Document: Section 6, Part 1, para 9.12, & 9.13
Subject: Permitted Yak 52/Intermediate Unknown Figures

Background

CIVA Rule 4.3.4.1 currently puts K-factor limits on Yak 52/Intermediate Unknown figures as follows:

Category	Programme	Minimum K	Maximum K
Yak 52	3	12	20
	4	15	25

However, paragraphs 9.12 and 9.13 show some figures which, when the minimum K (Family 9.1) mandatory rolls are added, exceed the maximum values specified in 4.3.4.1 and therefore should not be shown as legal Yak 52/Intermediate figures.

Proposed Change

The following figures must be removed from the list of legal Yak 52/Intermediate Unknown figures because they exceed the maximum K requirement of both Programmes 3 and 4:

Paragraph 9.12
7.8.4.1 (minimum K possible = 27)

Paragraph 9.13
7.8.8.1 (minimum K possible = 31)
7.8.13.1 (minimum K possible = 35)
7.8.15.3 (minimum K possible = 31)
7.8.16.1 (minimum K possible = 43)
7.8.16.4 (minimum K possible = 36)

Summary

The proposed changes bring the allowable Yak 52/Intermediate Unknown figures depicted in paragraphs 9.12 and 9.13 into compliance with rule 4.3.4.1.

NP 2015-21

USA PROPOSAL #4

Document: Section 6, Part 1 & Part 2, para 2.1.3.2.b)
Subject: Deadline for Judge and Assistant Study Course

Background

CIVA rule 2.1.3.2.b) currently states (wording in Part 2 is slightly different, but with the same meaning):

Before the championship is held, all judges and assistants must also have completed a study course as well as a judging test on the current rules and regulations. The study course and the judging test will be composed and administered by CIVA. They can either be completed in advance of the championship or on the contest site. They will be available no later than four months prior to the beginning of the championship.

The option to complete the study course on the contest site and the four month deadline for the availability of the referenced study course was set prior to the course being put online. Because the study course cannot be written until the current year Parts 1 and 2 are complete, must then be reviewed by the JSC for accuracy, and finally must be transformed into an online format, the four month deadline is not only very difficult to meet, it is unnecessary given that the online format provides instant results. Additionally, because the study course is available online and can be completed prior to arrival at the contest site, the judges' briefing on the contest site can be shortened considerably.

Proposed Change for Both Parts 1 and 2

2.1.3.2.b) *Before the championship is held, all judges and assistants must also have completed a 'Judge Questionnaire' covering judging criteria and the current rules and regulations for both power and glider competition. The 'Judge Questionnaire' will be composed and administered by CIVA. The Questionnaire will be available online no later than 60 days prior to the beginning of the championship.*

Summary

The proposed change will provide a realistic deadline for making the 'Judge Questionnaire' available, make completion prior to the championship mandatory, and provide no additional hardship on the judge to meet the submission deadline.

NP 2015-22

USA PROPOSAL #5

Document: Section 6, Part 1, para 1.2.7.
Subject: Disqualification of Competitors

Background

Fortunately, violations of safety at CIVA competitions are rare, but at WAC 2013 and at WGAC 2012, competitors violated local safety regulations and did things expressly forbidden by the CD.

What this has exposed is a startling lack of rules coverage in Sporting Code. The Contest Director does not currently have the authority in Section 6, Part 1, to disqualify (DQ) a competitor, but he does have this in the FAI General Section of the Sporting Code, which is the ultimate rules document with which all air sports must comply. Here is what General Section says:

5.2	PENALTIES AND DISQUALIFICATIONS
5.2.1	The Director of a Sporting Event may penalise a competitor as described in the rules for the event. These penalties may be in the form of an operational disadvantage, deduction of points, alteration of placing order, disqualification, or any other penalty designated by the Air Sport Commission concerned.
5.2.2	SEVERITY OF PENALTIES. The severity of the penalties which may be imposed may range from a minimum loss of points to disqualification indicated below, as appropriate to the offence.
5.2.2.1	Technical Infringements. Technical infringements of rules or failure to comply with requirements caused by mistake or inadvertence where no advantage has accrued or could have accrued to the competitor concerned should, as a guide, carry penalties leading to a reduction of not less than 2% of the best score or maximum available score for the task.
5.2.2.2	Serious Infringements. Serious infringements, including dangerous or hazardous actions or repetitions of lesser infringements should, as a guide, carry minimum penalties leading to a reduction of not less than 5% of the best score or maximum score for the task.
5.2.2.3	Unsporting Behaviour. Cheating or unsporting behaviour, including deliberate attempts to deceive or mislead officials, wilful interference with other competitors, falsification of documents, use of forbidden equipment or prohibited drugs, violations of airspace, or repeated serious infringements of rules should, as a guide, result in disqualification from the sporting event.
5.2.3	PUBLICATION. Penalties shall be listed on the score sheet of the day on which the penalty was given.

As is evident, this language is very weak. "Dangerous or hazardous actions" carry a minimum penalty of 5% of the maximum score. Cheating or unsporting behavior can result in a DQ, but not necessarily so for a safety hazard in flight. As a result of this language, acting in an unsportsmanlike manner carries a bigger penalty than endangering lives.

Proposed Changes

1.2.7. Air Safety

1.2.7.1. All competitors must observe and adhere to the regulations currently in force in the organiser's country for air safety as well as the special regulations in force at the contest aerodrome. To facilitate this, the organiser must ensure that an English translation of applicable rules, issued by the Aviation or Customs Authorities of the host country, is available in advance in a bulletin or on the competition website.

1.2.7.2. To enable the pilot to watch over his or her own safety, an accelerometer must be installed in each competing aircraft.

1.2.7.3. Any competitor required to interrupt a competition flight due to danger of collision with conflicting air traffic or a bird, should be treated in the same manner as if a mechanical defect (paragraph 4.2.7) had taken place. If the pilot is required to orbit to avoid any such hazard, the Chief Judge will allow additional time if required.

1.2.7.4. Any violation of the safety regulations in force may at any time render the offender liable to exclusion from the contest. No responsibility will be undertaken by the organisers for any such violation by competitors or others.

1.2.7.5. The Chief Judge ~~may exclude~~ has the authority from take-off through landing to disqualify a competitor who is not flying safely, whose flying might reasonably be judged to be the imminent cause of an unsafe situation, or who violates any regulation currently in force in the organiser's country for air safety or any special flying regulations in force at the contest aerodrome. The Chief Judge may exclude the competitor from either the flight programme in progress at the time only, or the remainder of the competition, based on the Chief Judge's evaluation of the severity of the infraction.

1.2.7.6. The Contest Director has the authority to disqualify from further competition any competitor found to be in violation, at any time, of the regulations published for the contest operations, including safety violations during ground operations of the competitor's aircraft. The Contest Director will consider any and all input from other Contest Officials, including Starters and the Chief Judge, to assist with the determination of any such violation.

1.2.7.7. Any decision to disqualify a competitor may be appealed to the Contest Jury in accordance with Paragraph 1.5 of these regulations. The Contest Jury will use all available resources including testimony from the Contest Officials involved, the disqualified pilot, and official video (if applicable) to evaluate the merits of the protest.

Summary

Although partially covered by the FAI General Section, the ability to enforce contest regulations through the process of disqualification is largely missing in Section 6. Specifically, Section 6, Part 1, does not address in any manner the authority of the Contest Director to disqualify a competitor because of rule violations and is somewhat vague in when and how a Chief Judge may exclude a competitor. Additionally, while most contest officials ensure they are thoroughly familiar with the regulations found within Section 6, many are unfamiliar with the FAI General Section, Chapter 5. For these reasons, it is imperative for the continued safety of aerobatic competitions, that Section 6 be modified as proposed. As an alternative, we also call attention to paragraph 5.2.7.1 in Part 2 which has very good language on this subject.

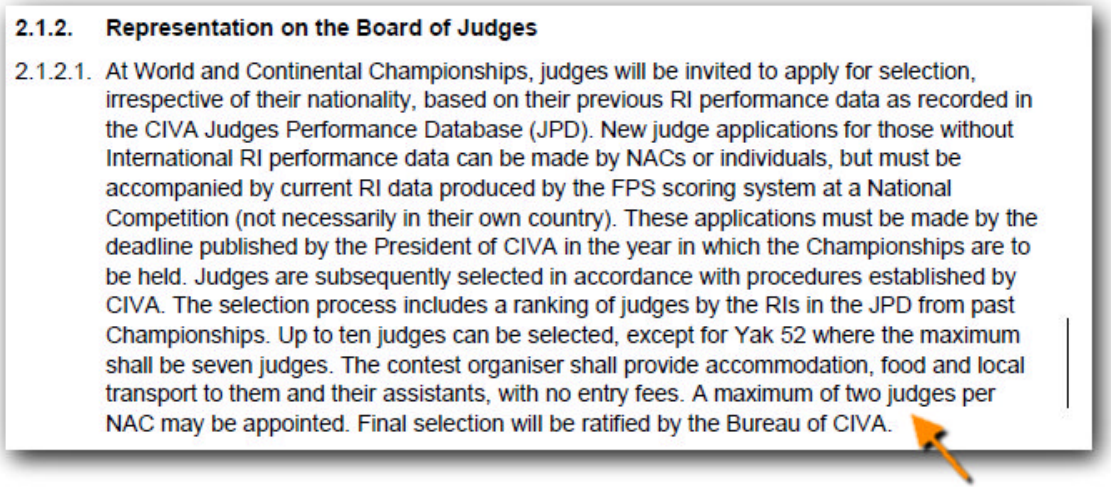
NP 2015-23

USA PROPOSAL #6

Document: Section 6, Parts 1 and 2, para 2.1.2.
Subject: Selection of Judges

Background

Current rules regarding selection of Judges for Championships are as follows:



2.1.2. Representation on the Board of Judges

2.1.2.1. At World and Continental Championships, judges will be invited to apply for selection, irrespective of their nationality, based on their previous RI performance data as recorded in the CIVA Judges Performance Database (JPD). New judge applications for those without International RI performance data can be made by NACs or individuals, but must be accompanied by current RI data produced by the FPS scoring system at a National Competition (not necessarily in their own country). These applications must be made by the deadline published by the President of CIVA in the year in which the Championships are to be held. Judges are subsequently selected in accordance with procedures established by CIVA. The selection process includes a ranking of judges by the RIs in the JPD from past Championships. Up to ten judges can be selected, except for Yak 52 where the maximum shall be seven judges. The contest organiser shall provide accommodation, food and local transport to them and their assistants, with no entry fees. A maximum of two judges per NAC may be appointed. Final selection will be ratified by the Bureau of CIVA.

New rules allowing the selection of more than one Judge per country were adopted by CIVA at its plenary in 2008.

Recently, however, the constraints of the CIVA budget have not permitted the payment of travel expenses (TA's) to a full panel of ten (10) Judges. This can effectively limit the Board of Judges to seven (7) if Judges do not pay their own expenses. However, the maximum of two per NAC has remained.

In addition, there is no rule which would require organizers to support a full panel of ten Judges. While many have done so in the past during the bidding process, we cannot be assured this will continue in the future, especially at smaller Championships where Entry Fee income is not as great.

Therefore, "new" Judges who wished to begin a career in international judging or others who wish to improve their RI's may be shut out of the process. Permitting the selection of two Judges per country to remain in the rules, regardless of the size of the Board of Judges, would damage the development of future Judges.

Proposal

That 2.1.2.1 be amended as follows:

A maximum of two judges per NAC may be appointed when a full panel is supported by CIVA and the organiser (10 for Unlimited and Advanced; 7 for Yak-52/Intermediate; 10 for Glider

Championships). If only the minimum is supported, then a maximum of one judge per NAC may be appointed.

Rationale

In addition to the arguments above, it should be mentioned that Championships must not only be fair, objective, and held in strict accordance to the rules, but they also must be *perceived* to be so by the competitors. Having two judges from one country on a minimum-sized Board of Judges would be perceived to be very unfair.

Report of the CIVA FairPlay Working Group, 2014

History

The FPS W/G was tasked at the 2012 plenary with establishing whether the existing FPS algorithm setup and criteria were appropriate, and later by general agreement to determine whether the appointment of more than one judge per country might lead to any inappropriate effects at a championship.

Following the 2013 plenary membership of the W/G was revised to Nick Buckenham (GBR)– Chair, Doug Lovell (USA), Gilles Guillemard (FRA), Mikhail Mamistov (RUS) and Vladimir Machula (CZE), with the single remit to review the process of judges' evaluation and assessment.

1. FPS algorithms and criteria

There was a lengthy series of exchanges regarding revisions necessary to the wording of the FPS Chapter 8 in Section 6, and these have been incorporated by Matthieu into the 2014 publication.

2. The number of Judges per country

Some detailed analysis has been carried out by AC,GG and NB and others, using as the basis data from many CIVA championships including the 2013 WAC in Texas, where among the ten international judges appointed by CIVA were two from Russia and two from France – the remaining six judges each being from a single countries.

The analysis showed that while there was a detectable shift in the overall favour given to some pilots each time one of the above French or Russian judges was removed from the WAC-13 panel and the results recalculated, it was also clear that the exclusion of any one of the other single country judges was likely to influence the results to a greater or lesser extent in a variety of different ways. In other words the exclusion of the marks from any judge led to changes in the results, and this influence could be reviewed from a number of different viewpoints:

- By comparison with the Team from the judges' country.
- When linked to the country of each competitor.
- With reference to the type of aeroplane.
- With reference to the programme being flown.

A further influence throughout this analysis derives from the differing degrees of recognition by each judge of the identity of the pilots they see, indeed whether they even seek to determine the identity or prefer as they should to simply judge what they see. It seems likely that such recognition would prevail more in the major teams than otherwise, though this would be hard to assess in any meaningful way.

While there is clear evidence to show that the interplay between the nationalities of judges and pilots does have a detectable influence, this shift may also be a function of aeroplane type and the assumed nationality of its pilot. This effect can be observed at many championships

where a non-Team pilot flies a recognisable 'Team' aeroplane, and for some judges the probable misinterpretation of the pilots' nationality can be seen to influence their perception of how well the figures are flown to meet the required criteria.

In summary the W/G found that even where a standard CIVA panel of ten judges is in operation, after the judges means and averages have been balanced and with any statistical 'outliers' resolved, when any of the judges is excluded and the results re-calculated it is likely that there will be a small but detectable influence on the overall results that will remain unresolved by FPS. It is however equally clear that some single country judges can exert a more destabilising influence than even two judges from the same country.

It is thus unreasonable to suppose that simply advocating one judge per country on a CIVA panel would necessarily produce a more accurate result. It must also be noted that the term 'accurate' has little meaning without taking into account the many other factors that influence the output of every judge – in practice it is thus effectively not possible to determine which judge is right and which is not.

For CIVA the most appropriate procedure remains to base the selection of judge upon as much historically cumulated RI data as possible, and then to take the overall average of the FPS treated judges to create the final results.

As a footnote, the FPS W/G would like to make it clear that the data developed in support of the findings reported above can be extracted by anyone through use of the freely obtainable ACRO software used in conjunction with the many available championships files, including those where more than one judge has served from a single country as well as those where this is not the case. That supporting data does not however accompany this report due to its sensitive and personal nature.

3. The FPS Working Group in 2014

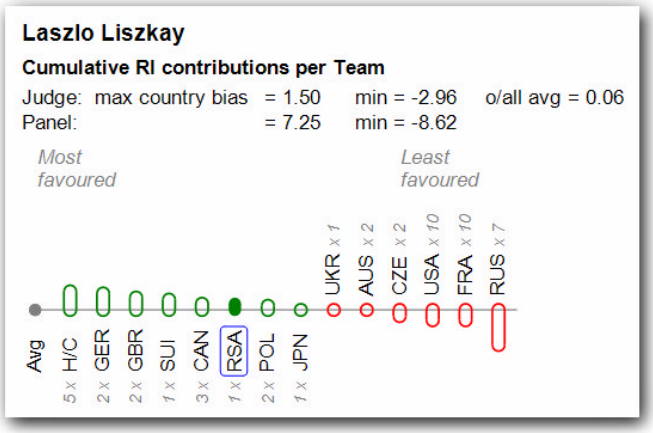
The remit of the 2014 CIVA FPS Group as set by the president is primarily to review the way FPS is used and presented through the scoring software:

- For Pilots: for printed check-sheets and the web-page pop-ups, could the printed and web output be revised or improved?
- For judges: especially via the printed analysis and assessment pages, could the output be revised or improved?
- For the general online viewing public: could any of the presentation be simplified or improved to advantage?

As a result the following developments and improvements have been adopted in the ACRO software for the 2014 championships –

- Every online pilots' score-sheet now bears a diagram of the sequence flown, complete with header description and indication of the relevant wind direction.
- The whole online page appearance has received a general make-over to present each one in a clearer and more colourful style, and the added sequence diagrams on each pilots score-sheet will also give a broader understanding of how the marks apply to the figures flown.

- The individual judge analysis has been extended beyond the RI analysis page to carry a new graphic that utilises the existing RI data re-modelled to depict the + / - bias determined for each judge by FPS as related to the pilots of each represented nation. By this means each judges RI data is shown in an easily assimilated 'snapshot', though great care must be taken to view the result within the context of the structure of the event. Here is an example graphic for one judge derived from the WAC-13 programme 1 Known sequence:



Nick Buckenham
CIVA FPS Working Group Chairman, 2014

RSC Chairman Note: This report by the Working Group does not require any action by the RSC or JSC and is presented here for information and discussion.

Report of the CIVA Strategic Planning Group, 2014

The duty of the Strategic Planning Group (SPG) is to take an unrestricted 'blue sky' view of CIVA's existing regulations and operating practices, to see whether alternative and potentially better solutions might be developed and implemented to the benefit of the commission in the staging of Continental and World championship aerobatic events.

For 2014 the SPG makes the following proposals:

SPG Proposal #1: Form a Working Group to consider the development and possible adoption of a single new programme format to replace the existing Known and Free programmes, to be called the "Free Known Programme".

At present, as has been for a great many years:

- As the first sequence in each category (Unlimited, Advanced, Yak-52 and now Intermediate) pilots fly a "Known" programme that is selected by a small working group each year from sequences submitted by many nations. This approach has great merit in that the selected sequence will have been the subject of critical review before its adoption, and should thus provide a safe but suitably challenging test.

  An inevitable consequence of this, especially at the highly popular Advanced championships, is that we have a large number of flights of the same sequence. In time this repetition of identical sequences becomes somewhat boring to judge and can thus be subject to poor maintenance of judging standards through inattention and fatigue. It also positions the sequence as difficult to present through existing media channels, as the differences between good and not-so-good flights are all in the detail and perceptible only to 'expert' judges and/or skilled commentators.

- Pilots fly as the second sequence a "Free" programme that is designed by each pilot in accordance with a set of rules that have been carefully developed over many years. This format certainly demands from competitors good sequence design skills to complement their ability to execute the figures well.

  Unfortunately however it also encourages pilots into an exercise in 'damage limitation', as it is commonly believed the best result will be achieved from a series of non-challenging and easy-to-fly figures that may be designed to hide shortcomings in pilots' skills; difficult or testing figures are thus normally avoided in favour of predictably high-scoring but simpler ones. As a result these Free sequences are unlikely to represent the sort of challenge that each pilot should face at World or Continental championships – we are after all seeking to identify World or Continental champions at these events, and to become a worthy champion should be a tough challenge.

The SPG proposes that CIVA should consider combining the more interesting aspects of these two programmes into a single new "Free Known" programme, the format of this new process being for example:

- Nations would be requested to submit up to 5 figures to the Sequence Working Group

by some specific time, probably three months before the plenary. The figures would be unrestricted but should be appropriate for the relevant category, as are those used in the Known programmes at present.

- The WG would recommend some – perhaps three – of the submitted figure sets to plenary for the eventual selection of one set.

- Pilots will add five figures of their own choice to the selected set of five, in order to compose a ten figure sequence in accordance with rules that would be based upon those existing for Free sequence design and probably cover all ten figures in each final Free Known sequence; these rules would not be as restrictive as those for the Free Unknown sequences.

- The maximum-K for each category (to be decided) would be around 450-460 for Unlimited, 300-320 for Advanced and 180-200K for Y52/Intermediate.

- The existing Programme-1 Known style 10 minute time span from take-off to the cessation of judging would be maintained, the new Free Known format therefore continuing to allow pilots to utilise the pre- and post-sequence spare flight time in the box for free practice.

Such a new "Free Known" format could achieve a number of valuable goals:

- It would replace the existing Known and Free programmes with a mildly tougher but more interesting test of sequence design and piloting skill.

- It would reduce the likelihood of an event not reaching the point at which a championship result could be declared, for example due to poor weather, with one less sequence to fly before the Free Unknowns would start.

- It would provide the 'front end' to a better designed series of aerobatic flying skill tests that would lead to more worthy champions being declared.

- It would provide a broader-based, more varied and thus more interesting test of judging skills, leading to less judge staleness and fatigue in long sessions and thus better consistency in judging standards.

- It would lead to swifter commencement of the Free Unknown sessions, generally thought to provide the best test of piloting skills en-route to the declaration of champions.

- To maintain a 4-sequence championship format, there would need to be up to three Free Unknown programmes - surely a greater test of piloting skills and mental capability.

Aspects that would require attention:

1. Regarding the scheduling of figure selection briefings for Free Unknowns; currently the time taken to run through the existing programme-2 Free sequence following completion of the programme-1 Known provides sufficient opportunity to schedule

the first Free Unknown figure selection briefing, the subsequent approval of sequence submissions, and their selection by all pilots. With only the proposed programme-1 Free Known sequence to complete before the programme-2 first Free Unknown could commence, the programme-2 Free Unknown figure selection briefing would have to be held at an earlier time.

2. In order to provide every pilot with the same set of opportunities, it would be necessary that the programme-2 Free Unknown figure selections be completed *before* the start of the Free Known – otherwise pilots flying earlier would not know these figures but those flying later would. The figure selections for the programme-2 Free Unknown would thus most suitably be combined into the initial contest briefing. While this briefing would become more comprehensive, it would reduce the need to get everyone together yet again by one occasion during the event.

3. Pilots would naturally continue to be allowed to fly any figures during the 'free practice' time before and after flying the new Free Known programme, and would thus be entitled to fly any of the nominated first Free Unknown figures. The Free Unknown figure selections for the subsequent programmes 3 and 4 would not have been made at that time. The WG would need to establish that this is acceptable, or propose an alternative solution. The SPG suggests that there is no practical reason why pilots should not be allowed this opportunity for figures from the first Free Unknown alone; it is simply by historic convention that our regulations prevent such practice of ‘unknown’ figures from occurring.

4. The pressure on the registration and scoring offices is slightly increased, as the all-different Free Known sequences must be received, approved, entered into the scoring system and at least some sets of this judging paperwork created before the very start of flying. With the much improved scoring software that we now enjoy this would be simple to resolve.

SPG Proposal #1 therefore is that CIVA approve the formation of a Working Group that will develop a suitable format and structure for this new "Free Known Programme”. This would subsequently be considered by plenary as a potential replacement for the existing Known and Free programmes. No further action will be required until this WG reports to CIVA.

SPG Proposal #2: Create a new "Super Advanced" level between Advanced and Unlimited

This proposal is aimed at reducing the sometimes barely manageable entry at Advanced category events by encouraging the better pilots to participate in a tougher and more challenging event, which would be held concurrently with but separate from the Unlimited championship. On current experience this could attract perhaps 15-20% of the more skilled / experienced Advanced pilots to transfer their efforts to this tougher category, and would also aim to persuade some of the less successful Unlimited pilots to target this simpler championship as they would there stand a better chance of success.

By this means the 80+ number of pilots seen for example at the 2010 WAAC in Radom, Poland and the 2012 event in Nyiregyhaza, Hungary could be reduced to more manageable proportions, and the scale of existing Unlimited events bolstered by the addition of a new and

interesting class of high-quality pilots who cannot yet – or have previously been unable to – succeed at Unlimited level contests.

The goals for this Advanced -> Super-Advanced -> Unlimited structure would be:

- Fill the gap between Unlimited and Advanced, not limiting Unlimited or advancing Advanced.

- Attract Super-Advanced pilots to participate concurrently at Unlimited level World and Continental Championships. This would provide a better financial situation for organizers and a chance to make the Entry Fee lower.

- Provide an opportunity for the higher scoring Advanced pilots to try more difficult programmes and thus get better competition experience, without overloading themselves and their aeroplanes with Unlimited programmes.

- Provide an opportunity for the lower scoring Unlimited pilots to participate with a better chance of success in a new category that is tougher than Advanced.

Considerable further work would be necessary to define the new Super Advanced structure. This work should be the responsibility of a new CIVA Working Group, which would consider the proposal in detail and provide a report summarizing their findings and any further / consequent proposals for attention at the CIVA plenary in 2015.

Nick Buckenham
CIVA Strategic Planning Group chairman, 2014

RSC Chairman Note: This report by the Working Group does not require any action by the RSC or JSC in 2014. It is presented here for information and discussion. This report is also referred to plenary as it calls for the creation of Working Groups to discuss and to write rules proposals for these new concepts for presentation to Sub-Committees and the CIVA plenary in 2015.

KNOWN PROPOSALS FOR 2015 – GLIDERS

PROPOSAL 'A'	2015	FORM B
Pilot ID #	Advanced Glider Known	Flight #

wind/vent

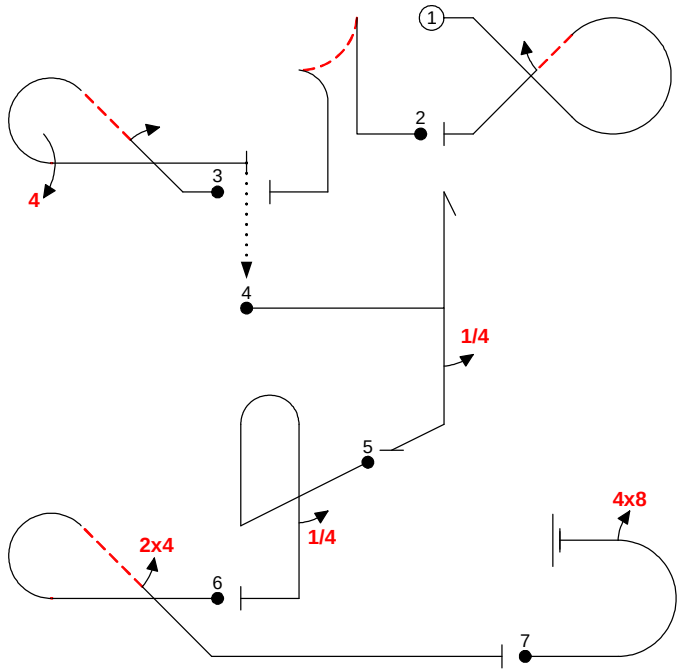


Fig 1	7.3.3.3 9.1.4.2	14 6	20
Fig 2	6.2.2.1	17	17
Fig 3	8.5.2.1 9.1.2.2 9.4.3.4	10 9 17	36
Fig 4	5.2.1.1 9.1.5.1	17 3	20
Fig 5	8.4.1.1 9.1.5.1	13 3	16
Fig 6	8.5.6.1 9.4.4.2	10 8	18
Fig 7	7.2.2.1 9.8.3.2	6 11	17
Total K = 144			

pilot

A/C

	PROPOSAL 'B'	2015	FORM B
Pilot ID #	Advanced Glider Known		Flight #

wind/vent

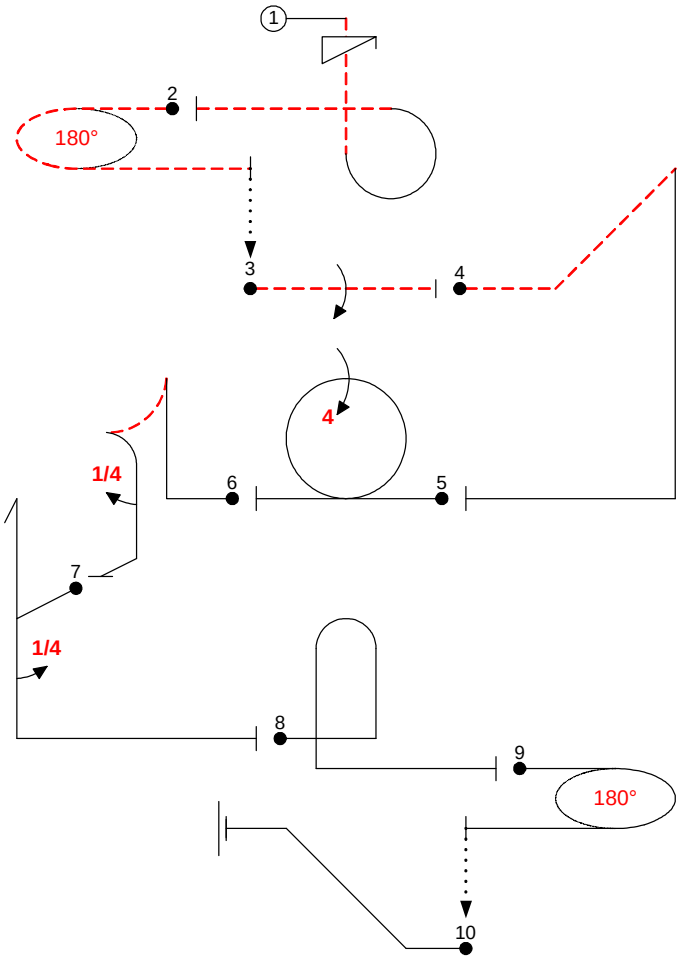


Fig 1	8.6.3.3 9.11.1.4	13 5	18
Fig 2	2.2.1.2	5	5
Fig 3	1.1.1.2 9.1.3.4	3 12	15
Fig 4	1.2.2.2	13	13
Fig 5	7.4.1.1 9.4.3.4	10 17	27
Fig 6	6.2.2.1 9.1.5.1	17 3	20
Fig 7	5.2.1.1 9.1.5.1	17 3	20
Fig 8	8.4.1.1	13	13
Fig 9	2.2.1.1	4	4
Fig 10	1.1.2.1	7	7
Total K = 142			

pilot

A/C

	PROPOSAL 'C' 2015	**FORM B**
Pilot ID #	**Advanced Glider Known**	Flight #

wind/vent

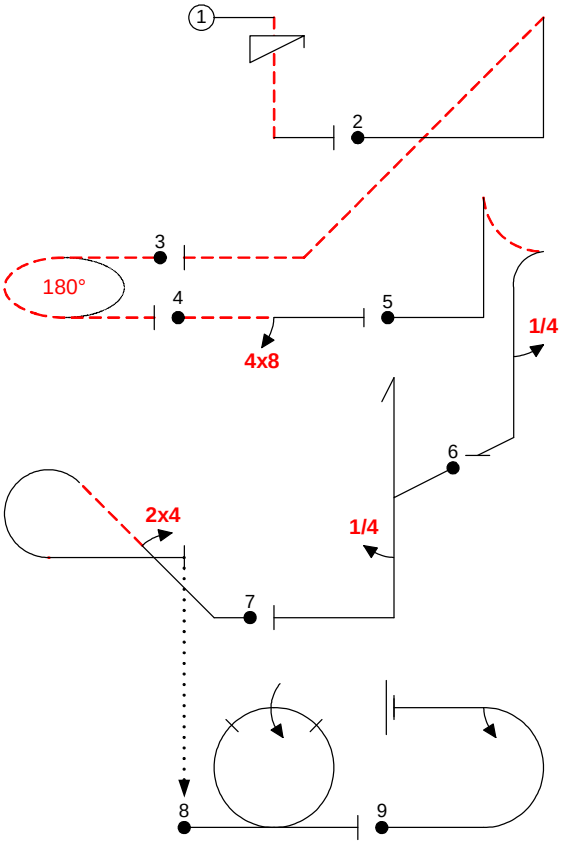


Fig 1	1.1.6.3 9.11.1.4	10 5	15
Fig 2	1.2.5.1	14	14
Fig 3	2.2.1.2	5	5
Fig 4	1.1.1.4 9.8.3.2	2 11	13
Fig 5	6.2.2.1 9.1.5.1	17 3	20
Fig 6	5.2.1.1 9.1.5.1	17 3	20
Fig 7	8.5.2.1 9.4.2.2	10 11	21
Fig 8	7.4.1.1 9.1.3.4	10 12	22
Fig 9	7.2.2.1 9.1.3.2	6 6	12
Total K = 142			

pilot

A/C

	PROPOSAL 'A' **2015**	**FORM B**
Pilot ID #	**Unlimited Glider Known**	Flight #

wind/vent

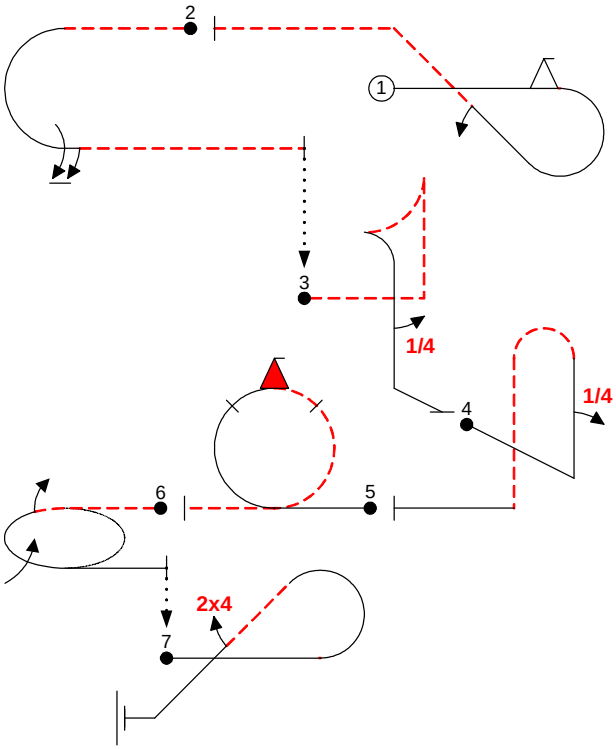


Fig 1	8.5.8.3 9.9.3.2 9.1.2.2	11 12 9	32
Fig 2	7.2.2.4 9.1.3.6	7 15	22
Fig 3	6.2.2.4 9.1.5.1	22 3	25
Fig 4	8.4.3.1 9.1.1.1	15 9	24
Fig 5	7.4.2.1 9.10.8.2	12 18	30
Fig 6	2.2.7.4	39	39
Fig 7	8.5.6.1 9.4.4.2	10 8	18
Total K = 190			

pilot

A/C