

# CIVA “Known Free” Working Group proposal, 2015



## Purpose

CIVA agreed at the 2014 plenary meeting to 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 for example the Known Free Programme.”

This proposal represents a major change to the structure of CIVA championships, and many long established aspects of both power and glider events will be affected if it is approved. CIVA and its plenary must therefore be careful to identify and review any other items that may become affected by these changes, to avoid unintended consequences that could adversely affect the sporting nature of World and European championship aerobatic events.

## Original aims

See Appendix 1

## Proposal - the new ‘Known Free’ programme 1.

1. The existing 2015 programmes 1 (the ‘Known’) and 2 (the ‘Free’) at CIVA power and glider championships will be replaced from 2016 forwards by a single new programme 1 titled the ‘**Known Free**’.
2. Sequences for this new programme will be designed by each competitor, and for both power and glider will combine all five (5) figures from a new Known ‘master set’ selected at the CIVA plenary each year for their category plus five (5) Free figures that each competitor must add, as described below.
3. When this change is implemented –
  - a. For power - programmes 2, 3 and 4 will become a succession of Free Unknown sequences, the existing regulations being adapted to provide for Advanced an increasing level of difficulty (individual figure K limits and sequence K total), and for Unlimited the current unrestricted solution.
  - b. For glider - programme 2 will become an unknown compulsory sequence similar to the existing programme 4 and 5 structure, the Free Unknown becoming programme 3.

## The ‘Known’ figures

In order to achieve the above, the KAWG (Known Analysis Working Group) for power and the GASC (Glider Aerobatics Sub Committee) for gliders will henceforward receive sets of five (5) Known figures in any category from NAC’s, from which they will select at least two (2) sets of figures per category that in their view represent the best options. These sets can be either as submitted by one or more NAC’s, or alternatively the KAWG / GASC will be

entitled to provide a selection or amalgamation of figures drawn from sets that have been submitted by more than one NAC; in the latter case the experience of KAWG / GASC members should be directed to select figures from all NAC submissions in order to provide the best possible solutions for review by plenary. The CIVA plenary will be asked to approve one 'master' set of Known figures per category each year for use during the following year.

In the first year only, i.e. for plenary 2015, the KAWG will be empowered to refer to the Known sequences submitted by NAC's and select from within them up to two (2) sets of five Known figures as further options for the Advanced and Unlimited power Known figure sets.

The KAWG / GASC should refer to the Free figure requirements for each category, and aim to provide at least some of the figure elements from the 'must include' sections so that competitors are encouraged to add a balanced range of their own additional Free figures.

### **The 'Free' figures**

Power and glider competitors must add five (5) Free figures to the given five (5) Known figures in order to design a ten (10) figure sequence in accordance with current (2015/6) CIVA programme 2 regulations for their category, such that the entire sequence satisfies those regulations. There should be little need to change existing programme 2 regulations except to edit and retitle them as necessary to meet the revised programme 1 structure.

### **Power programme 1 revisions**

The existing programme 1 structure enables organisers to schedule the first Free Unknown figure selection to follow the completion of programme 1, and competitors may currently practice any figures before and after completing their Known sequence without restriction, within the allowed 10 minutes time period.

Adoption of the Known Free format will make it necessary to schedule the first Free Unknown (programme 2) figure selection process either at or closely following the first contest briefing to give sufficient time for competitors to design, submit and select their preferred sequence.

### **Pre-sequence 'practice'**

Because the programme-2 figures will already have been selected when competitors are flying the Known Free programme, to prevent those figures being explored the fixed 10 minute period with free practice before and after the complete programme-1 sequence is flown and judged (Section-6 para 4.2.6.1) will be eliminated. To provide an equivalent degree of practice in its place, CIVA is requested to discuss and approve one of the following suggested options that pilots would be entitled to fly before commencing their sequence:

- a. Two (2) half rolls plus any one, two or three (1, 2 or 3) of the existing training figures (see Section-6 part-1 para 4.3.1.1).
- b. A version of (a) above plus up to the first five (5) figures from their sequence. Note that the judges will at that time have their copy of the pilots sequence ready for use and will thus be easily able to monitor what is flown. Should a pilot fly any

alternative figure(s) then a standard penalty should be applied for each one equivalent to a figure insertion in that category; flight of any of the selected programme-2 figures however would result in disqualification from programme-1 of that pilot.

### **Safety monitoring**

The existing practice of monitoring each competitors flight safety and score achieved (Section-6 para 1.3.1.1.a) will continue unchanged with reference to programme 1. The working group suggests however that Section-6 para 1.3.1.1.b be deleted, as the Chief Judge and the Jury are empowered to disqualify any pilot for unsafe flying in any programme and the arbitrary disqualification of a pilot for scoring less than 60% is de-facto unnecessary.

### **Glider programme 1 revisions**

As the glider regulations do not permit 'free practice' within a set time period for any programme, the organisers may schedule the figures selection process for unknown programmes 2, 3, 4 and 5 at the earliest time consistent with prudent operation of the event, i.e. no change from the current procedure, except the numbering of programmes.

### **Timescale**

This proposal will be considered for adoption by CIVA at the plenary in Budapest from 23-25 October 2015, and if adopted there must also be available at that time from the KAWG and GASC suitable sets of Known figures for use within Known Free programmes –

- Unlimited power and glider
- Advanced power and glider
- Intermediate / Yak-52 power

from which plenary will select and approve one set per category.

Prior to the 2015 plenary therefore CIVA must in good time inform NAC's of the opportunity to create and send to the KAWG (chairman: Claude Bessiere: [claude.bessiere@gmail.com](mailto:claude.bessiere@gmail.com)) –

- Known sequences in all categories as usual, for consideration in the event that this proposed programme 1 structure is not adopted.
- Sets of five (5) suitable Free Known figures in any or all of the categories listed above for handling as required.

### **Sequence and figure K factor limits for all programmes**

In order to meet the above restructuring of programme formats, it is appropriate to make some changes to the maximum K value that will be allowed for each power sequence and to the existing figure max/min K-factors for each programme within each category. The proposals for these revisions are set out in the table below:

<b>Power categories</b>	<b>Programme 1</b> <i>Known Free</i> <b>Sequence K</b>	<b>Programme 2</b> <i>Free Unknown 1</i> <b>Figure K</b>	<b>Programme 3</b> <i>Free Unknown 2</i> <b>Figure K</b>	<b>Programme 4</b> <i>Free Unknown 3</i> <b>Figure K</b>	<b>Programme 5</b> <i>Final Freestyle</i> <b>3m30s – 4m00s</b>
Unlimited 10 figures	Max 450	Min 22 No max	Min 22 No max	Min 22 No max	-
Advanced 10 figures	Max 320	Min 15 Max 30	Min 15 Max 35	Min 15 Max 40	-
Yak-52 / Int 10 figures	Max 200	Min 12 Max 20	Min 12 Max 25	Min 12 Max 30	-

<b>Glider categories</b>	<i>Known Free</i> <b>Sequence K</b>	<i>Unk.Compulsory</i> <b>Figure K</b>	<i>Free Unknown</i> <b>Figure K</b>	<i>Unk.Compulsory</i> <b>Figure K</b>	<i>Unk.Compulsory</i> <b>Figure K</b>
Unlimited	Max 230 §	Min 15 Max 40	Min 15 Max 40	Min 15 Max 40	Min 15 Max 40
Advanced	Max 175 §	No min Max 35	No min Max 35	No min Max 35	No min Max 35

§ - Up to three (3) figures in these glider sequences may be reduced by 1k each in accordance with Section-6 part 2 para 4.3.3.1.b in order to meet the max sequence K allowances.

## **Appendix 1**

### **SPG Working Group proposal #1 to CIVA plenary 2014**

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

- Nations would be requested to submit up to 5 figures to a Sequence Working Group, probably by three months before the plenary. These unrestricted figures should be appropriate for the relevant category, as are those 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 to compose a ten figure sequence in accordance with new rules that would be based upon those existing for Free sequence design.
- 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.

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 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.
- 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 likelihood of judge staleness and fatigue in long sessions and thus better consistency in judging standards.
- 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 particular attention:

1. With the figure selection briefings for Free Unknowns necessarily one programme ahead of their commencement, the programme-2 Free Unknown figure selection briefing would have to be combined into the initial contest briefing.
2. As the first Free Unknown programme figures would thus be selected prior to the start of this new style Free Known sequence, it would be necessary that this opening programme be revised to exclude free practice time before and after the sequence is flown. The format thus becomes similar to a 'Known' in the original style, with normal warm-up figures only.
3. The pressure on the registration and scoring offices is essentially unchanged, as the Free Known sequences – which would very likely all be different – must like the existing Free programme sequences be received, approved, entered into the scoring system and adequate sets of judging paperwork created before flying can commence.

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CIVA Free Known Working Group 2015