



Free Known & Free Sequence Rules

For Entry and Graduate you are given a Known Sequence by the AAC that will be flown for the year at most state comps and the National Championships, so practice makes perfect.

For Sportsman you have the opportunity to fly a free in Program 2 which is listed further down.

For Yak 52/Intermediate, Advanced and Unlimited your free is part of Program 1 and is called the Free Known.

Programme 1

The world governing body CIVA issues 5 figures that are compulsory in Programme 1, the pilot must then add 5 figures of their own choice to make the full 10 figure sequence.

The completed sequence must meet the following rules:

(copied from CIVA Section 6: Part 1 Powered Aircraft 2020)

2.2.1.4. The total difficulty coefficient of all figures of Free Known sequences shall not exceed the limits given in the table below.

	Known Set Minimum Total K	Known Set Maximum Total K	Sequence Maximum Total K
Unlimited	225	245	450
Advanced	160	175	320
Yak 52 / Intermediate	100	110	200

2.2.1.5. The start and finish of Programme 1 must be carried out in normal or inverted level flight. Competitors may begin and finish their programme at any height between the upper and lower limits given in Rule 3.8.1.1.

2.2.1.6. Any figure or combination of figures which is selected must bear the catalogue reference number(s) and the difficulty coefficient(s) (K) stated in the Aresti System (Condensed) as currently amended by CIVA. The numbers and coefficients in the Aresti System (Condensed) will be taken as definitive.

2.2.1.7. **In a given sequence, a catalogue reference number may be used only once.**

2.2.1.8. Versatility

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

Family	Yak 52 / I	Advanced	Unlimited
1	Not required	At least one Figure	
2	At least one from either 2.1.2 to 2.1.3, or 2.2.2 to 2.2.7, or 2.3.2 to 2.3.6, or 2.4.2 to 2.4.8		At least one from either 2.2.3 to 2.2.7, or 2.3.2 to 2.3.6, or 2.4.2 to 2.4.8
5	At least one Figure		
6	Not Required		At least one figure
7	At least one Figure		
8	At least one Figure		
9.1 to 9.8	At least one from each sub-family		Not specified

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9.9 & 9.10	At least one Figure	At least two, no sub-family specified	At least two from each sub-family
9.11 & 9.12	At least one figure from either		
Opposite Rolls	At least one instance with elements from Families 9.1 to 9.10		

2.2.1.10. Checking

- a) It shall be the duty of the Contest Officials to check each competitor's sequence validity:
- i) correct use of the Known 'master set', non-repetition and versatility requirements;
 - ii) catalogue reference numbers and difficulty coefficients on Form A (respectively R and L) with respect to the symbols on Forms B and C (respectively R and L), taking the reference numbers in the Aresti System (Condensed) as the basic criteria for deciding compliance with the Rules of this section.
- b) **The final responsibility for the correctness and compatibility of Forms A, B, C, R, L lies with the competitor.** Any inaccuracies in the drawing of symbols or in the quoting of coefficients, or the discovery of any cases of repetition of figures, will be referred to the competitor's Team Manager so that the forms may be corrected and resubmitted.

Sportsman Programme 2 (Free / Repeat of the Known)

From AAC Regulations:

2.59.2 Sportsman competitors have the option of re-flying the Known sequence in lieu of a Free designed in accordance with Table 2.59.1 and Table 2.59.2 below for Programme 2.

Table 2.59.1

Category	Maximum No. of Figures	Maximum "K" Factor
Sportsman	12	Same as Current Known

2.59.4 The Free Programmes may be composed using a maximum number of figures or combination of catalogue number and/or a maximum "K", depending on category. A combination will be taken as one figure. All figures must be taken from the Aresti System (Condensed).

2.59.5 Any figure or combination of figures, which is identified in the Aresti System (Condensed), may be selected to compose the Free Programme.

2.59.6 Any figure or combination catalogue numbers, which is selected, must bear the Catalogue reference number(s) and the difficulty coefficient(s) (K) stated in the Catalogue. The numbers and coefficients in the Aresti System (Condensed) will be taken as definitive.

2.59.7 The character and composition of basic figures must not be changed when combining other figures with them.

2.59.8 The direction of rotation of rolls is not prescribed, however:

- a) When rolls are in continuous rotation, the tips of the symbols are to be linked by a small line.
- b) In un-linked rolls performed in the same direction, no line links the symbols but the tips must be drawn pointing in the same direction.
- c) In opposite rolls the tips of the symbols must be drawn pointing in opposite directions.

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2.59.9 Un-linked rolls in the same direction must be of different types. The two types of rolls are defined as follows:

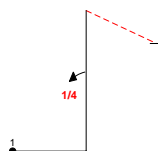
- a) Aileron rolls (slow rolls and hesitation rolls).
- b) Flick rolls (positive and negative).

2.59.10 Repetition of catalogue reference numbers is allowed from Families 1 and 9 for these categories only, providing that there is no repetition of the combination figure used. For example this will allow the competitor to use both:



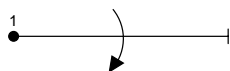
1.7.1.

and



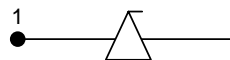
1.7.1. + 9.1.1.1

OR



1.1.1. + 9.1.3.4.

and



1.1.1. + 9.9.3.4.

to compose the Free sequence.

2.59.11 In order to achieve versatility in the Free programme, it is mandatory that a competitor in Sportsman includes the following:

Table 2.59.2

Sportsman Category Program 2 requirements

Family 1	At least one figure
Family 2	2.1 - 2.2 At least one figure
Family 5	At least one figure (added 2020)
Family 7	At least one figure
Family 8	At least one figure
Family 9	9.1 - 9.4 At least one figure
Family 9	9.11 or 9.12 Only one figure

So as can be seen above, the rules state what must be included in a Free or Free Known Sequence, it does not exclude any figures from the Aresti (condensed) Catalogue.

For the brave and adventurous in Sportsman, Yak 52/Intermediate & Advanced it means you can put tail slides and negative snaps in your sequence. For the serious competitor I would suggest the KISS principle.

(Keep it SIMPLE stupid)