

## **KAWG report.**

### **Dear CIVA Delegates.**

We have received for the next year:

- 9 proposals for Unlimited (A to I)
- 13 proposals for Advanced (A to M)
- 7 proposals for Yak52/Intermediate (A to G)

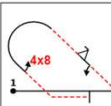
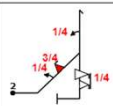
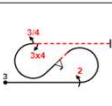
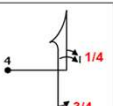
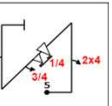
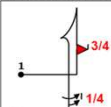
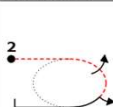
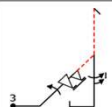
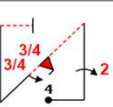
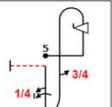
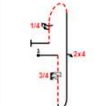
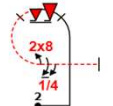
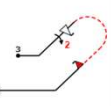
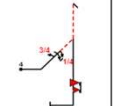
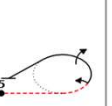
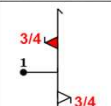
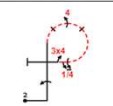
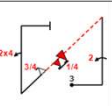
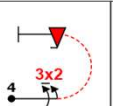
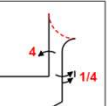

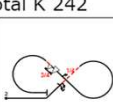
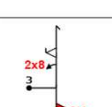
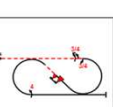
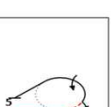
Opinions of KAWG experts were very diverse in some cases.

You can find the full analysis in the attached Excel file. The mark 'X' means that a set was either not considered or not ranked or not accepted by an expert.


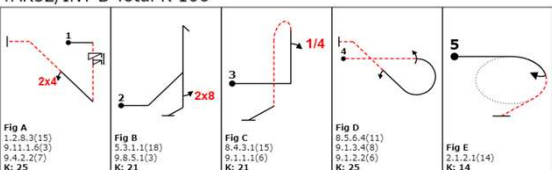
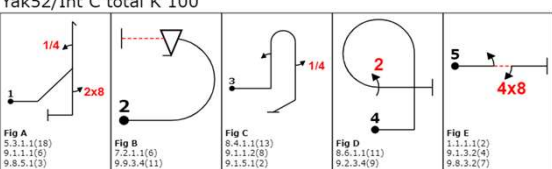
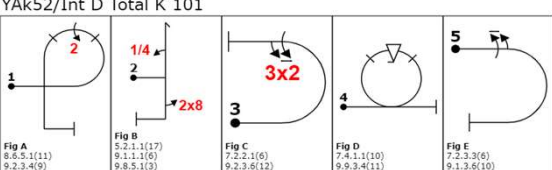
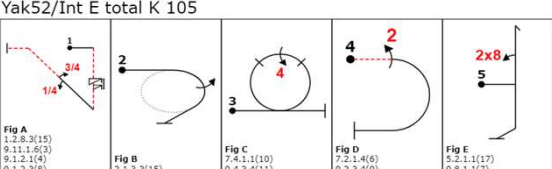
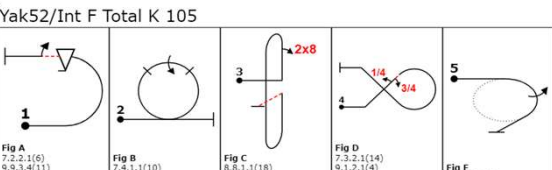
The following short lists have been created including sets which at least one of KAWG experts ranked 1 through 3.

We hope this report can help you to make the right decision for pilots to enjoy the challenge.

Elena Klimovich, KAWG secretary

Free Known figures 2022 proposals Unlimited		Expert name					Notes on possible problems
		Alan Cassidy (AC)	Claude Bessiere (CB)	Mikhail Mamistov (MM)	Rob Holland (RH)	Nigel Hopkins (NH)	
A	Unlimited A Total K 241	 <b>Fig A</b> 8.4.22.1(15) 9.1.2.2(6) 9.9.2.2(13) 9.8.4.2(7) K: 41	 <b>Fig B</b> 5.3.1.1(18) 9.1.2.1(4) 9.10.2.3(15) 9.1.1.1(6) 9.9.5.5(13) K: 56	 <b>Fig C</b> 7.5.2.1(15) 9.2.3.4(9) 9.9.9.2(13) 9.1.3.3(6) 9.4.3.3(8) K: 51	 <b>Fig D</b> 6.2.1.1(15) 9.1.1.5(14) 9.1.5.3(6) K: 35	 <b>Fig E</b> 1.3.13.1(22) 9.4.1.2(9) 9.9.4.5(13) 9.1.4.3(6) 9.1.1.2(8) K: 58	<b>AC</b> Fig. A very low flick entry speed; Fig. B flick entry from knife-edge leading to judging variability; Fig. D un-necessarily very high entry speed <b>MM</b> Fig. A, B give advantage to more powerful aircraft; <b>NH</b> Fig. B High difficulty, possible energy problem for low power aircraft, positive snap same as 2021.
		3	1	7	1	1	
C	Unlimited C Total K 234	 <b>Fig A</b> 6.2.1.1(15) 9.10.6.3(19) 9.1.5.5(9) K: 43	 <b>Fig B</b> 2.2.3.4(26) K: 26	 <b>Fig C</b> 5.3.2.1(24) 9.1.2.4(10) 9.9.2.6(16) 9.1.5.6(10) K: 60	 <b>Fig D</b> 1.3.11.1(20) 9.2.1.4(13) 9.10.4.3(13) 9.1.4.3(6) K: 52	 <b>Fig E</b> 8.8.1.1(18) 9.9.1.4(15) 9.1.5.3(6) 9.1.1.5(14) K: 53	<b>AC</b> Flick on slide leads to great judging variability <b>CB</b> Random tail slide <b>NH</b> Fig. A Tricky flick into tail slide. Fig. B Roller impacts positioning. Fig. C Possible energy problems for low power aircraft.
		2	4	2	4	4	
D	Unlimited D Total K 235	 <b>Fig A</b> 8.8.6.3(21) 9.1.1.7(13) 9.4.1.2(9) 9.1.5.5(9) K: 42	 <b>Fig B</b> 8.6.17.1(14) 9.10.8.6(19) 8.8.3.1(3) 9.1.3.5(9) K: 45	 <b>Fig C</b> 8.4.18.1(14) 9.2.2.4(11) 9.9.2.4(13) 9.10.4.2(13) K: 51	 <b>Fig D</b> 5.3.2.1(24) 9.1.2.3(8) 9.1.2.5(11) 9.10.5.6(16) K: 59	 <b>Fig E</b> 2.3.6.2(38) K: 38	<b>AC</b> Fig. C too high flick entry speed <b>NH</b> Fig. C Advanced figure, height loss Fig. E Another 90° roller?
		7	3	3	2	3	
E	Unlimited E Total K 244	 <b>Fig A</b> 5.2.1.1(17) 9.10.6.3(19) 9.4.1.2(9) 9.9.5.3(11) K: 47	 <b>Fig B</b> 8.8.4.1(14) 9.1.1.4(12) 9.4.3.4(11) 9.1.3.5(9) 9.4.3.3(8) K: 54	 <b>Fig C</b> 1.3.1.2.1(21) 9.2.1.4(13) 9.10.4.5(15) 9.9.9.3(13) 9.4.1.2(9) K: 71	 <b>Fig D</b> 7.2.3.1(8) 9.2.3.6(12) 9.10.3.4(13) K: 33	 <b>Fig E</b> 6.2.2.1(15) 9.4.1.4(15) 9.1.5.5(9) K: 39	<b>AC</b> All figures have very high entry speed. Sequence will have a lot of height loss in lower-powered aircraft <b>MM</b> Fig. C - start 3/4 pos.flick with "lower pedal" <b>NH</b> Fig. C very high K for single figure.
		1	2	5	3	5	
I	Unlimited I Total K 242	 <b>Fig A</b> 6.2.1.1(15) 9.9.1.3(15) 9.1.5.3(6) K: 36	 <b>Fig B</b> 7.8.8.1(19) 9.1.2.6(12) 9.1.2.1(4) 9.9.2.2(7)(18) K: 53	 <b>Fig C</b> 5.2.1.1(17) 9.8.1.1(7) 9.9.1.2(15) 9.10.5.3(13) K: 52	 <b>Fig D</b> 7.5.2.4(15) 9.1.3.7(11) 9.1.3.3(6) 9.10.7.6(21) 9.4.3.4(11) K: 64	 <b>Fig E</b> 2.3.6.4(37) K: 37	<b>AC</b> Fig. A Flick on slide leads to great judging variability; Fig. B flick from knife edge leading to variable judging <b>CB</b> Random tail slide <b>NH</b> Fig. D loss of altitude figure. Fig. E Another 90° roller?
		5	6	1	No	2	

Free Known figures 2022 proposals Advanced		Expert name					Notes on possible problems
		Alan Cassidy (AC)	Claude Bessiere (CB)	Mikhail Mamistov (MM)	Rob Holland (RH)	Nigel Hopkins (NH)	
A	Advanced A Total K 174						AC Not suitable. G-loc on fig A CB rolling circle difficult for advanced
B	Advanced B Total K 170						AC Not suitable. G-loc on fig A NH Fig. A Long pull after neg G spin. Fig. B Long outside roller. Fig. E altitude loss.
C	Advanced C Total K 173						CB rolling circle difficult for advanced NH 180 roller impacts positioning
F	Advanced F Total K 174						
G	Advanced G Total K 170						NH Fig. E Altitude loss, energy potentially high after flick, roll combo
H	Advanced H Total K 169						AC Fig C will have judging variability CB rolling circle difficult for advanced NH 180 roller, positioning test
I	Advanced I Total K 167						AC Large height/energy loss on Fig.B in lower-powered aircraft NH Fig. D altitude loss.
L	Advanced L Total K 175						AC Not suitable. G-loc on fig C NH Fig. A Vert roll requires high energy for low power/roll rate aircraft, maybe not possible. Fig. C Long pull after neg g spin, good test
M	Advanced M Total K 170						AC Judging too variable on Fig.B; 3 figs with very high ntry speeds, favours higher powered aircraft NH Fig. B possibly low energy after rolls and loop up before flick for low power aircraft. Fig. C Continuous direction for positioning and Altitude loss. Fig. D altitude loss. Fig. E Energy required for low power aircraft.

Free Known figures 2022 proposals Yak-52/Intermediate		Expert name				Notes on possible problems	
		Alan Cassidy (AC)	Claude Bessiere (CB)	Mikhail Mamistov (MM)	Nigel Hopkins (NH)		
							Order of preference
A	Yak52/Int A Total K 110		5	X	1	4	AC g-loc risk on fig 1. CB Inverted spin not interesting for Yak-52
	Fig A 1.2.5.4(14) 9.12.1.4(7) 9.2.2.4(11) K: 32	Fig B 1.1.2.1(7) 9.9.2.4(13) K: 20	Fig C 7.2.2.1(6) 9.8.3.2(7) K: 13	Fig D 5.2.1.1(17) 9.8.1.1(7) K: 24	Fig E 7.4.1.1(10) 9.4.3.4(11) K: 21		
B	YAK52/INT B Total K 106		6	4	5	1	AC g-loc risk on fig 4. MM Fig.E is difficult to perform on Yak -52
	Fig A 1.2.8.3(15) 9.11.1.6(3) 9.4.2.2(7) K: 25	Fig B 5.3.1.1(18) 9.8.5.1(3) K: 21	Fig C 8.4.3.1(15) 9.1.1.1(6) K: 21	Fig D 8.5.6.4(11) 9.1.2.4(8) 9.1.2.2(6) K: 25	Fig E 2.1.2.1(14) K: 14		
C	Yak52/Int C total K 100		3	3	6	2	AC judging on Fig 2 likely to be rather inconsistent MM Fig.A is difficult to perform on Yak -52
	Fig A 5.3.1.1(18) 9.1.1.1(6) 9.8.5.1(3) K: 27	Fig B 7.2.1.1(6) 9.9.3.4(11) K: 17	Fig C 8.4.1.1(13) 9.1.1.2(8) 9.1.5.1(2) K: 23	Fig D 8.6.1.1(11) 9.2.3.4(9) K: 20	Fig E 1.1.1.1(2) 9.1.3.2(4) 9.8.3.2(7) K: 12		
D	YAK52/Int D Total K 101		2	1	4	3	AC Too much of the rolling at low speed. NH Fig. E altitude loss
	Fig A 8.6.5.1(11) 9.2.3.4(9) K: 20	Fig B 5.2.1.1(17) 9.1.1.1(6) 9.8.5.1(3) K: 26	Fig C 7.2.2.1(6) 9.2.3.6(12) K: 18	Fig D 7.4.1.1(10) 9.9.3.4(11) K: 21	Fig E 7.2.3.3(6) 9.1.3.6(10) K: 16		
E	Yak52/Int E total K 105		1	X	2	7	CB Fig A too difficult climbing NH Fig. A Difficult test for intermediate, energy for rolls. Fig. D Altitude loss
	Fig A 1.2.8.3(15) 9.11.1.6(3) 9.1.2.1(4) 9.1.2.3(8) K: 30	Fig B 2.1.3.3(15) K: 15	Fig C 7.4.1.1(10) 9.4.3.4(11) K: 21	Fig D 7.2.1.4(6) 9.2.3.4(9) K: 15	Fig E 5.2.1.1(17) 9.8.1.1(7) K: 24		
F	Yak52/Int F Total K 105		4	2	3	5	AC Lots of high-speed entries, favouring higher powered mounts. Too much of the rolling at low speed
	Fig A 7.2.2.1(6) 9.9.3.4(11) 9.1.3.2(4) K: 21	Fig B 7.4.1.1(10) 9.1.3.4(8) K: 19	Fig C 8.8.1.1(18) 9.8.1.1(7) K: 25	Fig D 7.3.2.1(14) 9.1.2.1(4) 9.1.2.3(8) K: 26	Fig E 2.1.3.3(15) K: 15		