



*BRITISH AEROBATIC ASSOCIATION*

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To:

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**British Aerobatic Association Proposals for CIVA Rule and Catalogue Changes  
2001/2002**

This document contains the UK proposals for Rule changes for discussion in 2001 and implementation in 2002. Also included are proposed Q Programmes for Advanced and Unlimited for 2002.

FAI HQ is requested to distribute this paper as per CIVA working practice.

All questions or comments should be addressed to Alan Cassidy, British delegate, at the address given above.

Yours sincerely,

Alan Cassidy  
British Delegate to CIVA

## British Proposals for Changes to Regulations

### **Form A Template**

Currently the conventional Form A template is in landscape (wide) orientation. It is proposed that it should also be acceptable for Form A to be in portrait (tall) orientation. A sample alternative Form A is attached at page 5.

### **Rationale**

Adoption of this Form A layout will permit much more extensive automation in the computer compilation of Form A from Form B. Software changes to exploit this will be available at the end of 2001 and can be demonstrated at the CIVA plenary meeting if required.

## CIVA Regulations - Parts 1 and 3

### **Paragraph 2.1.4.4, to read:**

The competitors should try to perform their programmes within the confines of the performance zone and in symmetry about the secondary axis. Depending on the aircraft's height and on the nature of the figure being flown, there is also 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.

### **Rationale**

Expands description of good positioning.

### **New Paragraph 2.1.4.5, to read:**

When Line Judges are not used, it is particularly important for each judge to consider the precise placement of each figure against the ideal and also in relation to the limits of the performance zone. The highest marks will be given if the central point of a competition flight is above the secondary axis, and if each figure is optimally placed inside the performance zone. A more full explanation of the principles of the judging of positioning is given at the end of Appendix 1.

### **Rationale**

Continuation of expanded paragraph above, plus pointer to new judging explanation in Appendix 1.

## CIVA Regulations - Part 3

### **Paragraph 2.1.4.4, to read:**

For every obvious and visually recognized infringement of the lower height limit during the performance of any programme, the competitor will be given 200 penalty points; *an additional 200 points will be given for each figure flown completely below the lower height limit; for an infringement of the upper height limit, 30*

### **Rationale**

To bring wording in line with Part 1 regarding whole figures below the lower limit. Also, to introduce a high penalty, as in Part 1, now that the HHMD is coming into use.

*penalty points are given. A competitor flying lower than 100 metres will be disqualified (from the current programme) for causing a dangerous situation.*

## **Appendix 1**

### **POSITIONING**

Positioning is scored in one of two ways: mechanically, by means of a tracking device; or by the individual judges.

Positioning refers to the placement of the figures in relation to the boundaries of the performance zone. Additionally, positioning relates to the placement of each figure at its optimum range from the judges, taking into account the height of the aircraft and the nature of the individual figure being flown. Lastly, positioning also refers to the symmetrical placement of the sequence, as a whole, to the left and right of the judges' position.

#### **Performance Zone Boundaries**

When Line Judges are used at a contest, infringements of the performance zone will be directly penalised and judges need pay less attention to such infringements when considering a grade for positioning. When Line Judges are not used, however, a much higher K factor is applied to the positioning score and judges must make additional reductions to the grades given when a pilot flies figures in a position that is clearly outside the confines of the performance zone.

In this latter case, the K factor is specifically chosen so that one less mark for the positioning grade equates to two figures being flown outside the performance zone. Thus, if a judge considers in these circumstances that four figures have been flown outside the zone, a deduction of 2 marks should be made from the positioning grade, in addition to any deductions made under the terms of the following paragraphs.

#### **Optimal Placement of Figures**

Even though figures are flown within the performance zone, judges must still consider their positioning in relation to an optimum position where clarity of execution and geometry are at their greatest. This optimum position will vary depending on the aircraft's height and the nature of the figure.

Consistently accurate flying is best assessed when the elevation of the judge's sight line from the horizontal is reasonably constant. This means that when an aircraft is at the greatest height, it should be also at its furthest distance away from the judging position along the secondary axis. Consequently, when an aircraft is low, then it should be closer to the judges to give the same viewing perspective.

In even the best positioned sequence, however, some variations in the judges sight line elevation are inevitable. These different viewing angles also affect the optimum position for figures of different kinds. For example, looping shapes and 45-degree climbing or descending lines are much easier to judge accurately if the sight angle in relation to the horizon is small. Conversely, such figures are difficult to assess if flown high up and close to the front of the performance zone.

Further, such fine points as the accuracy of hesitations in an 8-point roll are much easier to judge when the figure is close to the judges and fairly low, rather than over a kilometre away at the rear of the performance zone – let alone outside it.

Consideration of all the parameters in the few short paragraphs of this section will enable a judge to make a clear decision about any figure that is clearly flown in other than its optimum position. Judging of the particular figure will be difficult, and such bad presentation should be reflected in the positioning grade for the sequence. It would be appropriate to deduct at between 0.5 and 1 mark for any such misplaced figure, depending on the severity of the difficulty incurred.

## **Sequence Symmetry**

The previous sections have considered figures placed outside the performance zone and figures flown too close to, or too far away from, the judging position. The last consideration in assessing the positioning grade for the sequence is its symmetry about the secondary axis. Particularly in conditions of a strong headwind, or perhaps a slight but legal tailwind, some pilots might have difficulty in placing the sequence symmetrically about the secondary axis.

In a sequence of 12 figures, for example, 6 figures flown upwind and 6 downwind of the centre would present an ideal flight. A less even balance, perhaps 4 and 8, would represent a lower level of skill and would attract a further deduction of one mark from the positioning grade. Further imbalance than this, 3 to 9, or 2 to 10, should progressively attract greater downgrading of the positioning grade.

## **Summary**

The judge's final decision on a grade for positioning is not a simple one. It must take in to account deductions for asymmetry of the sequence, non-optimal placement of individual figures and, in the case where Line Judges are not used, figures clearly flown outside the performance zone. Whilst a particularly well designed and positioned sequence might still merit a grade of 8.5 or so, a badly flown sequence could well deserve a very low grade from 0 to perhaps 2 or 3.

This extra burden placed on the judging panel deserves as much consideration as the grading of individual figures if the differences between good and bad flights are to be fairly assessed.

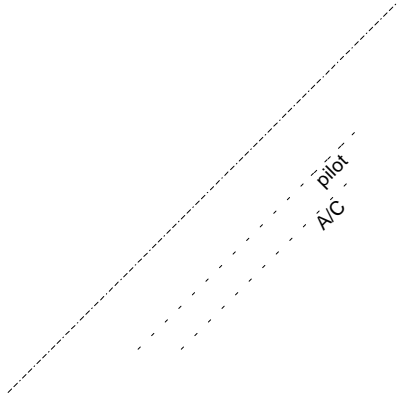
## **Proposed Q Programmes for 2002**

Proposed Q programmes for Advanced and Unlimited Power are at following pages 6 and 7.



	<b>Form A</b>
	Flight No.

No	Symbol	Catalogue No.	K	Total K	Score	Remarks	Item	K	Score
1							<b>Positioning</b>		
2							<b>PENALTIES</b>	Interruptions	
3						Insertions			
4						Too high			
5						Too low			
6						Outs			
7						Other			
8						Disqual Fig #			
9							T/O time		
10							End time		
11							Fig K	Total K	
12									
13							Judges Details		
14							Signature		
15							Name		
16							Number		





British Proposal to CIVA 2002 FORM B

AWAC Programme Q

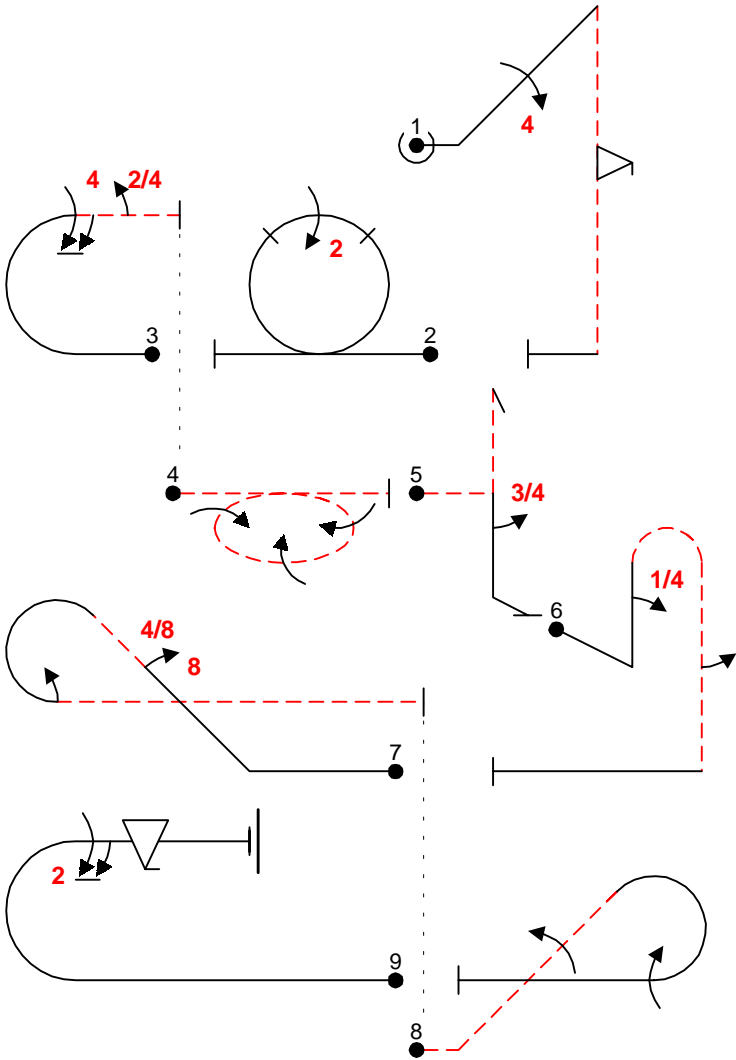
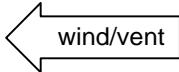
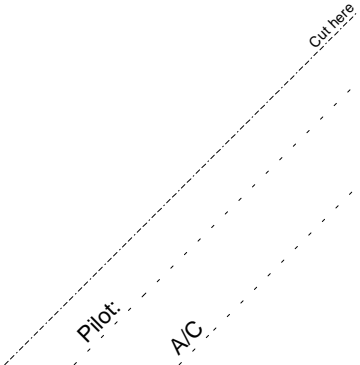


Fig 1	1.12.1 9.4.2.4 9.9.10.2	13 13 13	39
Fig 2	7.5.1 9.2.3.4	10 9	19
Fig 3	7.1.1 9.1.3.6 9.4.3.2	6 10 5	21
Fig 4	2.9.2	23	23
Fig 5	5.1.4 9.1.5.3	22 6	28
Fig 6	8.3.1 9.1.1.1 9.1.5.2	15 6 4	25
Fig 7	8.38.1 9.8.2.2 9.1.3.2	10 9 4	23
Fig 8	8.31.2 9.1.2.4 9.1.3.4	10 10 8	28
Fig 9	7.2.1 9.2.3.6 9.9.3.4	6 12 11	29
Total K = 235			





British Proposal to CIVA 2002 FORM B

Unlimited Programme Q

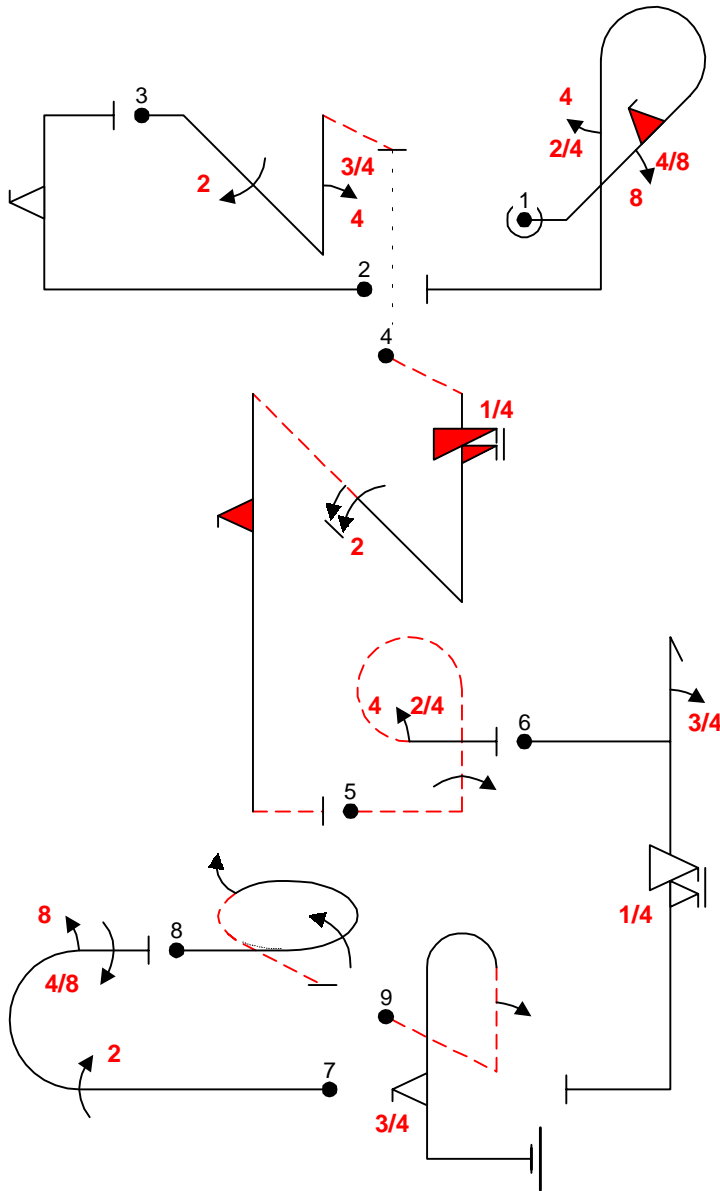
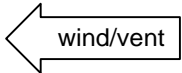


Fig 1	8.57.1 9.8.2.2 9.10.2.2 9.4.5.2	12 9 15 5	41
Fig 2	1.6.1 9.9.1.2	10 15	25
Fig 3	1.13.3 9.2.4.4 9.4.1.3	12 9 12	33
Fig 4	1.35.4 9.12.1.5 9.2.2.6 9.10.10.2	21 6 14 15	56
Fig 5	8.39.2 9.1.1.4 9.4.3.2	14 12 5	31
Fig 6	5.1.1 9.1.1.3 9.9.5.5	17 10 13	40
Fig 7	7.2.1 9.2.3.4 9.8.3.2 9.1.3.4	6 9 7 8	30
Fig 8	2.20.1	22	22
Fig 9	8.4.2 9.1.1.2 9.9.5.3	14 8 11	33
Total K = 311			

