Presidents' Proposals 2018

(version 2 – item 'A' revised)

A: Paragraph 4.1.5 – Marking of Flight Positioning and Symmetry *(for existing text see Appendix-1)*

New instructions for the marking of Positioning and Symmetry were introduced in 2011. This year we have seen instances where different judges have awarded positioning marks for the same flight ranging from less than three to nearly ten, a very poor outcome. Clearly the current wording is either not being applied correctly or is not properly understood.

At the very least we should try to improve the current regulation wording. In the revised script below there is no intention to change the underlying principles, the text has been re-phrased to avoid multiple terms with the same meaning like "placement" and "location" so that the "positioning" instructions can be interpreted easily and consistently. Existing para 4.1.5.1 has been deleted as it has no relevance in this context.

4.1.5. Marking of flight Positioning and Symmetry

4.1.5.1. Positioning refers to the 3D placement of each figure relative to the performance zone and to the judges. A position mark will be given by each Judge.

4.1.5.2. A column headed "Pos" on the Form A (respectively R, L) marks sheet shall be used to record the positions of figures that are not optimally placed, as they are flown.

4.1.5.3. Depending on the aircraft's height and the nature of the figures, there is an optimum X and Y axis position for each figure where the requirements of the sequence are satisfied and any geometric errors will be clear to the judge and therefore easy to assess. This position may be central or toward the right or left within the performance zone, and nearer to or further from the judge as dictated by the design of the sequence and the height and performance of the aircraft.

4.1.5.4. The position of a figure is somewhat or considerably "non-optimal" when it adversely affects the judge's ability to assess it, is poorly positioned when considered within the design of the sequence, or its position dictates that subsequent figures will not be flown at optimal positions and may therefore be difficult to assess. Otherwise the position shall be considered satisfactory and no position downgrade is required.

4.1.5.5. 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 positioned laterally and at an appropriate distance from the judges within the performance zone. The judge's positioning marks will take into account any imbalance between non-optimally positioned figures to reflect the left-to-right symmetry of the sequence flown by the competitor.

4.1.5.6. For each figure the judge shall add a reference in the "Pos" column describing the position of the figure if this is observed to have been non-optimal. The shape and size of the figure and the location of any manoeuvres within it shall be compared to the

optimum position of the whole figure when considered within the design of the sequence. Where the position of a figure is somewhat or considerably non-optimal because it is too much to the left or the right or too near or too far away, the following annotations (or their local / national equivalent) shall be used:

Figure position:	The 'Pos' annotation: Somewhat non-optimal	Considerably non-optimal
Left of the optimum position:	"L"	"LL"
Right of the optimum position:	"R"	"RR"
Too near to the judge:	"N"	"NN"
Too far from the judge:	"F"	"FF"

4.1.5.7. At the end of the sequence the annotations in the "Pos" column shall be used by each judge to determine a sequence positioning downgrade based primarily on these recorded observations. Each single letter is taken as equivalent to a half mark and each double letter equivalent to a full mark downgrade. For example, the figure "Pos" annotations L, R, N, FF, LL and R would combine as a downgrade of 4.0 marks.

The Judge is entitled to revise his final positioning mark up or down by a maximum of 1 point if he considers there were other relevant factors which should be taken into account to reduce or increase the downgrade.

4.1.5.8. The K factor for positioning marks in Programmes 1, 2, 3 and 4 will be as follows:

a) Unlimited: 40K

b) Advanced & Intermediate / Yak 52: 30K

B: Paragraph 4.5.4 – The Official Video Recording

Paragraph 4.5.5.1 has: "After the completion of the championships, the recording may be released by the Organiser for use in training".

After the EAC this year the organisers made all of their video flight recordings available in an online folder system, and are to be congratulated on this most useful step. I propose that para 4.5.5.1 be extended to read "After the completion of the championships the recordings shall be released by the Organiser ~~for use in training~~ and made available online, and attendees notified of the access details".

C: Paragraph B.9.24.4 – Multiple unlinked and opposite rolls *(for existing text see Appendix-2)*

Paras B.9.24.4.c) and B.9.24.4.d) require the pause or check between the two rolling elements to be respectively "brief but perceptible" and "minimal", but no instruction is given regarding the downgrade to apply if the pause is significantly longer. For an excessive pause the judge must decide whether the figure has been separated into two parts and award an HZ. Note that the pause between roll direction changes in rolling turns is separately handled in the Rules Committee Report and has therefore been struck-through here pending acceptance of that proposal.

I propose that paragraphs c) and d) should be revised and paragraph f) added –

B.9.24.4.c) With unlinked rolls no line links the symbols, though their tips are drawn pointing in the same direction, i.e., on the same side of the line. They must have a brief but perceptible pause between them as described in para (f) below, and are to be flown in

the same direction of rotation.

B.9.24.4.d) Opposite rolls may be either of the same or different type. In opposite rolls the tips of the symbols are drawn on opposite sides of the line, indicating they are to be flown in opposite directions of rotation. The pilot may elect to fly the first roll in either direction, but the second roll must be opposite in direction to the first. If the two rolls are of the same type, they must be flown in opposite directions if they are not linked. Opposite rolls, ~~including those in rolling turns,~~ should be flown as one continuous manoeuvre with a brief but perceptible pause between the opposite rotations as described in para (f) below. If the two rolls are of the same type, they must be flown in opposite directions if they are not linked. (Figure 46).

B.9.24.4.f) The brief but perceptible pause between the rolling elements should be similar in duration to a hesitation in a point roll. If there is a longer pause the Judge should apply a downgrade of one (1) point for a small but noticeable increment, rising to a maximum of three (3) points if the pause is particularly long. However if the Judge determines that the pause is of such a length that two separate figures have been flown, an HZ must be given for the figure.

D: Paragraph B.9.8 Family 7.2 – Half Loops with Rolls

When paragraph B.9.8.2 was proposed it was specifically to clarify the downgrading of unwanted lines between half loops and rolls, and in practice it has successfully resolved the assessment of those situations. A range of other Aresti figures exists however where rolls are placed adjacent to the start and/or end of a looping segment, and the principles of B.9.8.2 and B.9.8.3 apply equally to them all. In the current regulations the B.9.8 downgrading principle is referred to only three times (in B.9.12.4, B.9.13.2 and B.9.15.1) whereas a more thorough set of Aresti references would indicate that the same principle applies in all cases.

I propose that a new paragraph should be added as B.9.8.4:

B.9.8.4. The foregoing principles for downgrading unwanted lines between rolls and looping segments must be applied in the same manner when rolls are placed adjacent to looping segments in the following families of figure:

Family 7.4	Reversing whole loops
Family 7.5	Horizontal and vertical S's
Family 7.8	Horizontal and vertical 8's
Family 8.5	Half Cuban eights
Family 8.6	P-loops and reversing P-loops
Family 8.7	Q loops
Family 8.10	Reversing 1¼ loops

E: New design for CIVA medals

The medals currently awarded at CIVA aerobatic championships are of two types –

- The larger type is the FAI 64mm medal, available in gold, silver and bronze versions
- The smaller type are FAI and CIVA 50mm medals, also available in gold, silver and bronze

These medals are all purchased by CIVA from FAI in Lausanne, whose source is the Swiss company Faude and Huguenin who have been providers of fine medals since 1868. CIVA underwrites a moderate stock of its own medals (i.e. not the 'FAI' variety) that is held by FAI. Planning to dedicate the appropriate medals for our championships each year starts many months in advance, though this 'shopping list' can be adjusted up to about six weeks prior to each event. Each medal has its dedication 'engraved' on the rear face, and this appears to be black printing or laser-etching; the dedications are removable with the correct solvent but leave behind a trace of the original letters. The lanyards are all the same style, with a 34mm wide flexible band in royal blue with 'gold' edging.

CIVA 50mm bronze and
FAI 64mm silver medals

CIVA 50mm gold medal with logo

CIVA Roland Küng glider trophies

While we are not entitled to alter and presumably would prefer to continue to award the larger FAI medals, I propose that plenary authorises a design study to create an entirely new-style CIVA medal in place of all 50mm requirements. Such a study by a design specialist might be entirely free if we could find a suitably competent designer who would donate his services for nothing, though this might be a risky approach. I have discussed the project with the UK designer who was commissioned to create the World Unlimited and Advanced aerobatic glider championship trophies funded by Roland Küng some years ago and have been extremely well received – his estimate for this medals project is just over £2,000 GBP and that amount can be funded from the CIVA reserve account. The design remit should allow considerable freedom to research and provide 4-5 concepts, and would include consideration of the best solution to carry out the dedication on each medal and the most appropriate design of lanyard. I have also found that a small computer-driven engraving machine to physically engrave the dedications would cost less than £500 GBP. Clearly there are many aspects to be resolved.

In 2017 CIVA purchased from FAI 156 medals (36 x 64mm and 120 50mm) that were awarded at 5 World and European championships, at a total cost of approx. 5,800 EUR including the DHL shipping costs. My best estimate is that the 64mm medals cost 42 EUR and the 50mm versions 36 EUR each. I am confident that a realistic bulk purchase of alternative 'new design' CIVA medals (e.g. for 5 years) should bring the unit cost down to not more than 25 and possibly 20 EUR, providing a break-even timescale of less than 4 years before the shipping and occasional customs costs are added.

If approval is received we should expect this project to be handled by the bureau, with the initial concepts available for review during probably the second quarter of 2019. This review could be operated through an online exchange with all delegates, and the feedback used by the designer to refine the options down to a smaller number for presentation at the 2019 plenary. The successful solution could then be in place before the 2020 championship season begins, and be introduced once the existing fairly low stock of CIVA medals has been run down.

F: Eligibility of competitors at CIVA European Championships

A recent hot topic in the CIVA bureau has been the potential for revising the status of our European Aerobatic Championships to 'Open', e.g. "The European Open Advanced Aerobatic Championship", with the aim of broadening the competitor base so that pilots from outside Europe would be eligible to compete without the need to fly Hors Councours – but on a specifically defined basis. This would follow the example provided by various other sporting genres such as golf, tennis etc. where national championships are 'open' to competitors from other nations, although such competitors are ineligible to win the "National Champion" title – they can be "Winner of the XXX Championship" etc. and the highest placed competitor of the host nation will become the event Champion.

Our aim would be to retain the highly respected title and history of these FAI European (Continental) championships, some of which have been running since the 1970's and 80's, while broadening the competitor base so that non-Europeans would be entitled to compete and be fully ranked in the results. They would be eligible to receive medals for the top ranking individual and team positions, but excluded from the "European" individual and team titles – the winner, if a non-European national, would be for example “Winner of the European Open Advanced Aerobatic Championship”. This move would be of direct benefit to organisers of our European championships, who sometimes face dwindling numbers of entrants and consequently increased difficulty in balancing their budget.

Discussions with US and various other non-European pilots has revealed that a small but valuable number would be very keen to enter these events, which for them would provide a well-organised and extremely attractive aerobatic competition environment in the intervening years between our World Championships. The option to run World events every year does not convey the same attraction and brings significant drawbacks, as it would in effect put an end to the great history that European Championships have compiled and in any case the prospect of organising World class competitions every year is probably beyond the means of most nations.

Discussions with FAI are ongoing, and we expect to present a workable solution for general discussion at this plenary.

NHB
October 2018

Appendix-1

4.1.5. Marking of flight Positioning and Symmetry

4.1.5.1. If an electronic, radar or radio-controlled tracking instrument is operated, the observance of the performance zone and the positions of the individual figures are recorded.

4.1.5.2. Positioning refers to the 3D placement of each figure relative to the judges.

4.1.5.3. The positioning mark will be given by the Board of Judges.

4.1.5.4. 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.

4.1.5.5. 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. The judge's final decision on a mark for positioning must take into account deductions for asymmetry of the sequence, and non-optimal placement of individual figures.

4.1.5.6. The K factor accorded to positioning marks will be as follows

a) Unlimited – Programmes 1, 2, 3 and 4: 40K

b) Advanced & Yak 52 – Programmes 1, 2, 3 and 4: 30K

4.1.5.7. A column headed "Pos" on the Form A (respectively R, L) marks sheet shall be used to record by exception the positions of figures that are not optimally placed, as they are flown.

4.1.5.8. When dictating the mark for each figure to the scribe, the judge shall where appropriate add a comment in the "Pos" column regarding the placement of the figure if this is considered to have been not optimum. In arriving at this comment the shape and size of the basic figure and the location of any manoeuvres within it shall be assessed against the 'optimum' placement of the whole figure in the context of the positional scope of the sequence. Where the judge assesses that figure placement is sufficiently sub-optimal to be recorded then the following annotations (or their local / national equivalent) shall be used:

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

4.1.5.9. At the end of the sequence the annotations in the "Pos" column shall be used by each judge to determine a sequence positioning downgrade based on these recorded observations. Each single letter is taken as equivalent to a halfmark and each double letter equivalent to a full mark downgrade. For example, the figure "Pos" annotations L, R, N, FF, LL and R would combine as a downgrade of 4.0 marks.

Appendix-2

B.9.24.4. Multiple rolls may be linked, unlinked, or opposite.

a) When rolls are in continuous rotation, the tips of the symbols are linked by a small line. When flying linked rolls there is no pause between them. (Figure 44)

b) Unlinked rolls must be of different types, the two types being defined as follows:

i) Aileron rolls (slow rolls and hesitation rolls)

ii) Flick rolls (positive and negative)

c) With unlinked rolls, no line links the symbols, though their tips are drawn pointing in the same direction (i.e., on the same side of the line). They must have a brief but perceptible pause between them and they are to be flown in the same direction of rotation. (Figure 45)

d) Opposite rolls may be either of the same or different type. In opposite rolls, the tips of the symbols are drawn on opposite sides of the line, indicating they are to be flown in opposite directions of rotation. The pilot may elect to fly the first roll in either direction, but the second roll must be opposite direction to the first. Opposite rolls, including those in rolling turns, should be flown as one continuous manoeuvre - the brief check between opposite rotations should be minimal. (Figure 46) If the two rolls are of the same type, they must be flown in opposite directions if they are not linked.

e) Either aileron or flick rolls may follow spin elements (Family 9.11 or 9.12). When a spin and a roll are combined on the same vertical down line they will always be unlinked; may be flown in either the same or opposite direction, as shown by the position of the tips of the symbols on the Form B or C (respectively R or L); and the combination may not exceed two rotational elements. (For example, it would be illegal to combine two opposite direction aileron rolls with a spin element.)

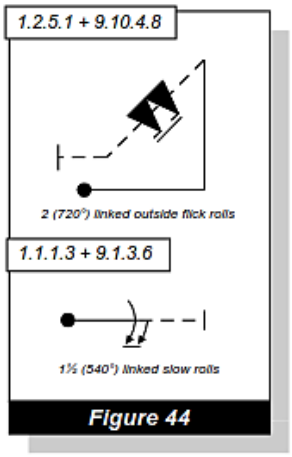

Figure 44

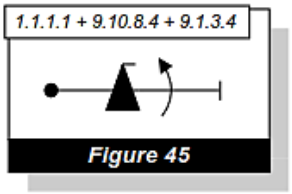

Figure 45

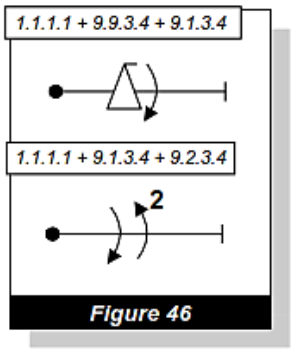

Figure 46