

RECORD OF AMENDMENTS

| Date | Amdt. No. | Revision details | Changed Pages |
|---------------|-------------------------|--|---------------------------------|
| 1987-1997 | 1-4 | Revisions of original 1987 version | |
| January 1999 | 2 nd Edition | Completely revised edition with deletion of Family 4, addition and modification of figures in Families 1, 8 and 9. | |
| January 2001 | 3 rd Edition | Changes to Family 8 and some textual amendments. | 12 to 14 29 & 30 39 to 48 |
| November 2001 | Version 2002-1 | Changes to Family 1 | 17 to 22 |
| November 2002 | Version 2003-1 | Deletion of cross-over spins | 55 & 56 |
| November 2004 | Version 2005-1 | Changes to paragraphs 23, 25 and 26 | 7 & 8 |
| December 2005 | Version 2006-1 | Changes to Families 8.55 and 8.56 | 46 |
| December 2006 | Version 2007-1 | Additional figures in Family 5 | 29 |
| December 2007 | Version 2008-1 | Changes to coefficients for Family 2 Changes to Glider Tail Slides | 12, 13, 23, 24 |
| November 2008 | Version 2009-1 | Changes to representation of hesitation rolls | 4 to 6, 9, 14 |
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| | | | |
| | | | |
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EXTENT OF ROTATIONS

8. Rotation is in multiples of 90° but may not be greater than 720°. Odd fractions of continuous rolls are shown as “1/4”, “3/4” etc. The number and extent of hesitations are shown as “AxB”, where A is the number of roll segments flown and B is the number that would occur in 360° of roll, except for 360° hesitation rolls which just have the “B” annotation.

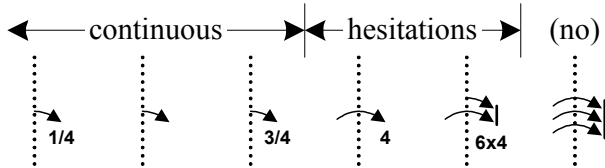


Figure 8

COLOUR CONVENTIONS

9. When drawings are printed in colour, negative lines, negative flick (snap) rolls and negative spins may be shown in red instead of black. Corresponding positive elements are invariably shown by black lines and white triangles.

‘CORNER’ CONVENTIONS

10. All basic figures except Family 1.1 depict a flightpath that has looping portions. When such a looping element has at least 180° of pitch, it is depicted in the diagrams as a curve. When it is less than 180°, the element is shown as a ‘corner’. Despite being drawn for convenience in this manner, all such corners are to be interpreted as being flown in a continuous curve of constant and significant radius.

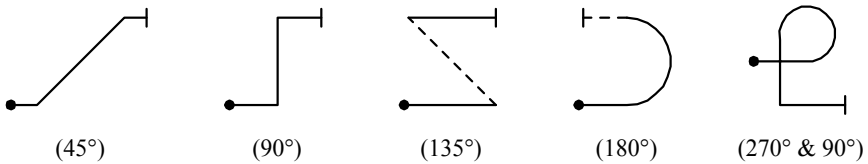


Figure 9

CATALOGUE NUMBERS AND DIFFICULTY COEFFICIENTS

11. All the basic figures in Families 1 to 8 are defined in accordance with a 3-number system. The first number indicates the Family to which the figure belongs. The second figure shows the row, and the third the column, in which the figure is placed. The numbers are separated by dots.



ARESTI AEROBATIC CATALOGUE (CONDENSED)

PART I – DESCRIPTION OF CATALOGUE

12. As a general rule, figures in columns 1 and 2 ascend, those in column 1 starting in upright flight, column 2 inverted. Figures in columns 3 and 4 descend, column 3 starting in upright flight, column 4 inverted.

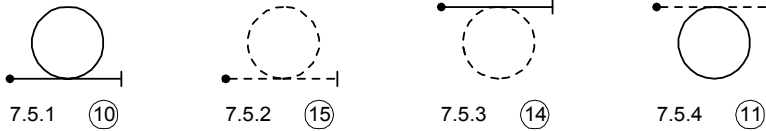


Figure 10

13. Each of the complementary rotation elements from family 9 is defined in accordance with a 4-number system. The first number is always a 9. The second number corresponds to the type of rotation, the third (row) to the direction of the underlying flightpath and the fourth (column) to the extent of rotation in multiples of 90°.

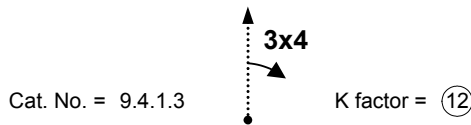


Figure 11

14. Difficulty coefficients (K factors) for basic figures are shown in circles beside the symbols. Those for Family 9 are shown in tabular form.
15. When a basic figure and one or more complementary elements are combined to form a complex figure, the total K-factor for the figure is the sum of the difficulty coefficients for the individual parts.

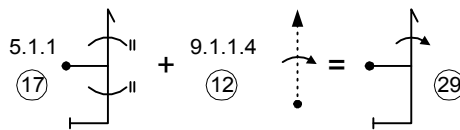


Figure 12

MULTIPLE, OPPOSITE AND UNLINKED ROTATIONS

16. Multiple continuous rotations are shown by the tips of the symbols being linked by a small line.

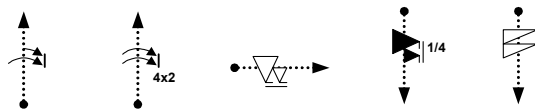


Figure 13



17. Figure 3 showed the various symbols used to show where rotation elements may be included. Paragraph 7 illustrated how these should be shown on drawings. Wherever a rotation sign appears,

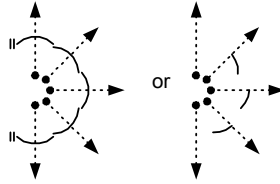


Figure 14

the rotational element may consist of a single item,



Figure 15

or a combination of two (not more) items.



Figure 16

18. By definition, there are three types of rotation (see also paragraph 5):

- 18.1. Aileron Rolls (continuous or hesitation),
- 18.2. Flick Rolls (positive or negative) and
- 18.3. Spins (positive or negative)

19. Where two rotational elements of the same type are combined, the rotations must be in opposite roll directions, as shown by the position of the tip of the symbol.

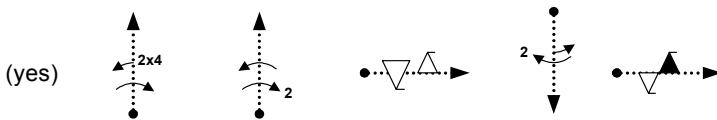


Figure 17

If the rotational elements are of differing types, they may be opposite,

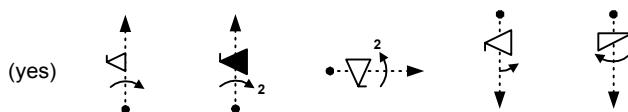
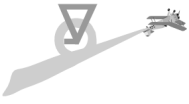
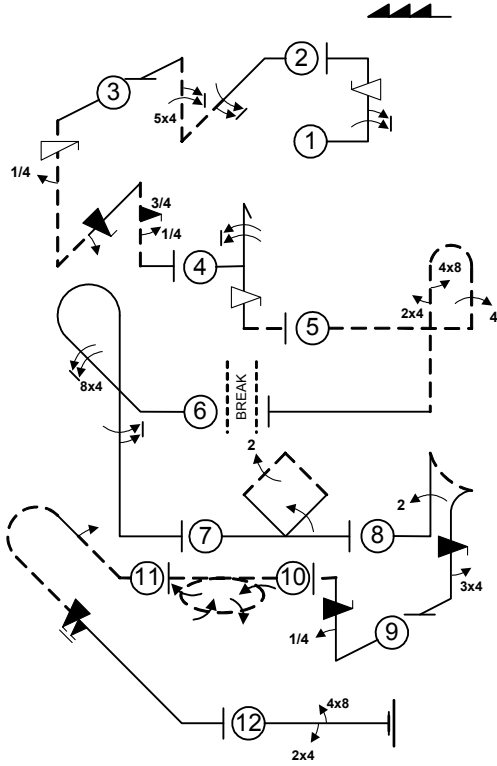


Figure 18



SAMPLE SEQUENCE CONSTRUCTION



| | | | |
|---------------|---|------------------------------------|----|
| Fig 1 | 1.6.1 9.1.1.6 9.9.1.4 | 10 15 15 | 40 |
| Fig 2 | 1.14.3 9.1.4.6 9.4.1.5 | 15 10 18 | 43 |
| Fig 3 | 1.39.3 9.11.1.4 9.1.5.1 9.1.2.2 9.10.7.4 9.10.5.3 9.1.5.1 | 25 5 2 6 17 13 2 | 70 |
| Fig 4 | 5.1.3 9.1.1.8 9.9.5.4 | 18 18 11 | 47 |
| Fig 5 | 8.2.2 9.4.1.4 9.8.5.2 9.4.5.2 | 17 15 7 5 | 44 |
| Fig 6 | 8.57.1 9.4.2.8 9.1.5.6 | 12 22 10 | 44 |
| Fig 7 | 7.9.1 9.1.2.4 9.2.4.4 | 15 10 9 | 34 |
| Fig 8 | 6.2.1 9.2.1.4 9.10.5.4 9.4.5.3 | 15 13 13 8 | 49 |
| Fig 9 | 1.7.1 9.1.1.1 9.10.1.4 | 9 6 17 | 32 |
| Fig 10 | 2.15.4 | 25 | 25 |
| Fig 11 | 8.16.2 9.1.2.2 9.10.4.6 | 16 6 16 | 38 |
| Fig 12 | 1.1.1 9.4.3.2 9.8.3.2 | 2 5 7 | 14 |
| Total K = 480 | | | |

Figure 26



ARESTI AEROBATIC CATALOGUE (CONDENSED)

PART II – METHOD OF EVALUATION

FAMILY 9

12. The points given for rotations are full K-factors and are not divided by 10.
Two rolls linked, on any line, are given 50% more than a full roll:

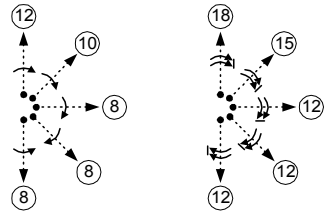


Figure 12

13. For hesitation rolls, one point is added for every stop:

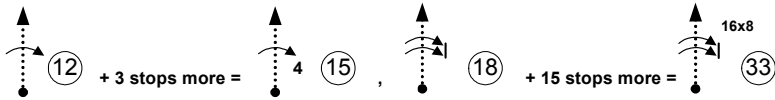


Figure 13

14. For opposite rolls the full value of each roll is taken, for example:

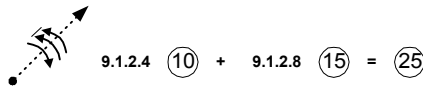


Figure 14

15. For spins, the difficulty is independent of the extent of the rotation, except for $1\frac{1}{4}$ and 1 turns, where the final flightpath is much less vertical. One point is added for each 90° less than $1\frac{1}{2}$ turns.

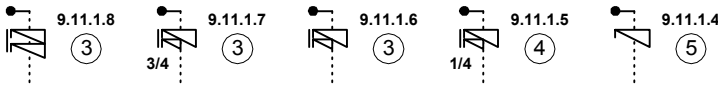


Figure 15

TOTAL COEFFICIENT OF EACH BASIC FIGURE

16. Except for Family 9, all the values are divided by 10 and then rounded to the nearest single figure:

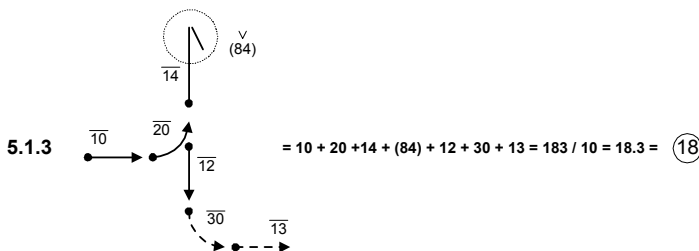


Figure 16