

# FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE



## CATALOGUE OF GLIDER AEROBATIC FIGURES (GAF)

Adopted by the FAI Aerobatics  
Commission (CIVA), 1990

Third Edition

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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## Introduction and Acknowledgements

The FAI Catalogue of Glider Aerobatic Figures was approved by CIVA at its meeting in London in November 1990. It will be used for all glider aerobatic competitions from 1991 on. These pages are printed in a different color so they can be easily differentiated from the white pages that appear in the FAI Aerobatic Catalogue. These pages can be inserted into the plastic sleeves in the catalogue or used separately. Please note that the pages are numbered the same as the FAI Catalogue and, therefore, gaps may seem to exist in this document. They do not. The same is true for certain figures that have been omitted from the GAF. The gaps are intentional.

It should be noted that the K factors appearing in the "Description of Catalogue" and "Method of Evaluation" of the FAI Aerobatic Catalogue do not always apply to the FAI Catalogue of Glider Aerobatic Figures. However, the enumeration system is the same. Adjustments to K factors have been made by CIVA to take into account the difficulty in flying figures in gliders versus powered aircraft.

CIVA pays special tribute to Heinz Clasen of Germany who, in 1977, created the "Bewertungssystem ALFA für Segelkunstflug" which was the basis on which subsequent glider aerobatic contests were held. Collaborating on this system with him were Victor de Beauclair, Josef Hoessl, and Helmut Laurson, all from Germany. The ALFA catalogue was replaced by a decision of CIVA in 1991 by the FAI Catalogue of Glider Aerobatic Figures.

The adaptation of the FAI Aerobatic Catalogue for use in glider aerobatics was undertaken in 1990 by the following: Karl Berger, Chairman, Austria; Madelyne Delcroix-Katona, France; Manfred Echter, Germany; Bob O'Dell, USA; Gerd Ottensmann, Germany; and Ray Rose, USA. Our thanks to these people for their hard work.

Michael R. Heuer  
President  
FAI Aerobatic Commission (CIVA)

Cordova, Tennessee, USA  
January 1991

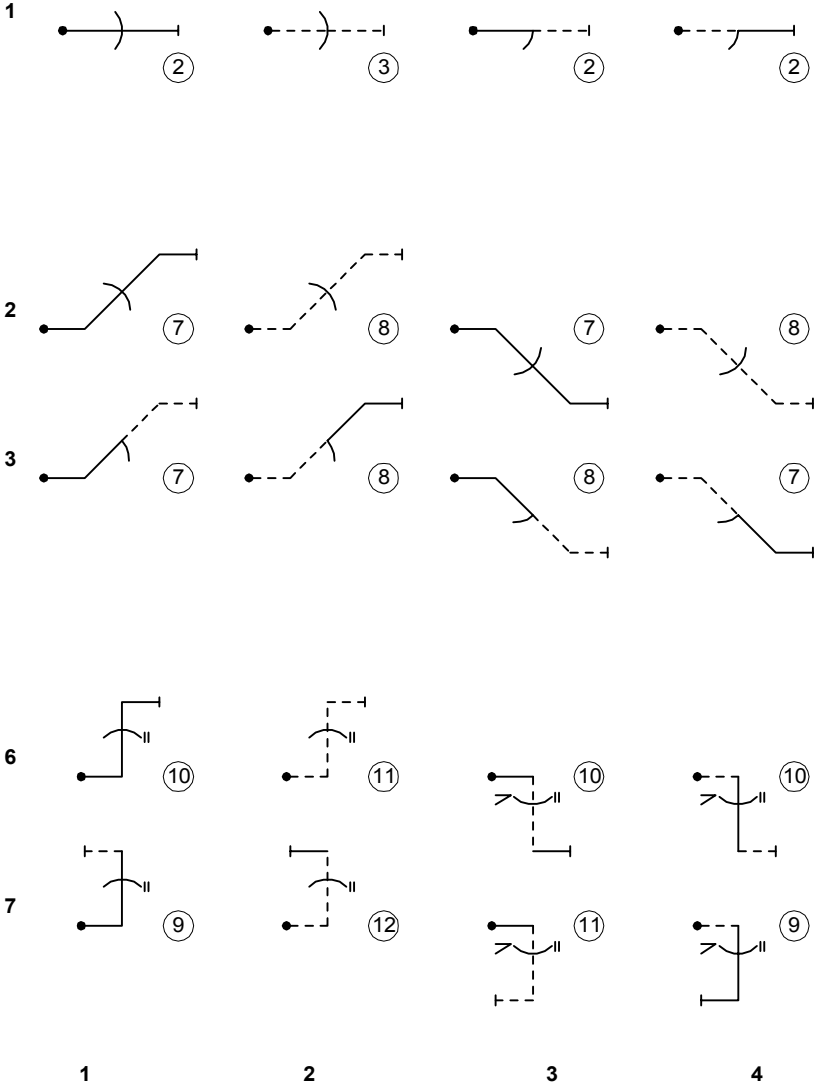


# **FAI CATALOGUE OF GLIDER AEROBATIC FIGURES**

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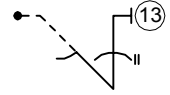
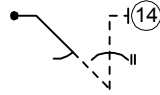
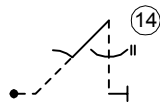
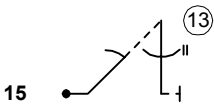
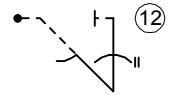
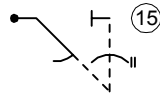
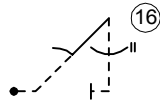
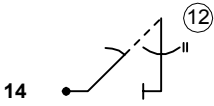
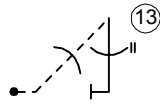
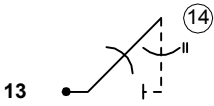
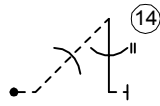
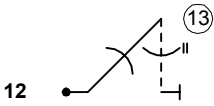
# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## 1. LINES AND ANGLES



# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

1.



1

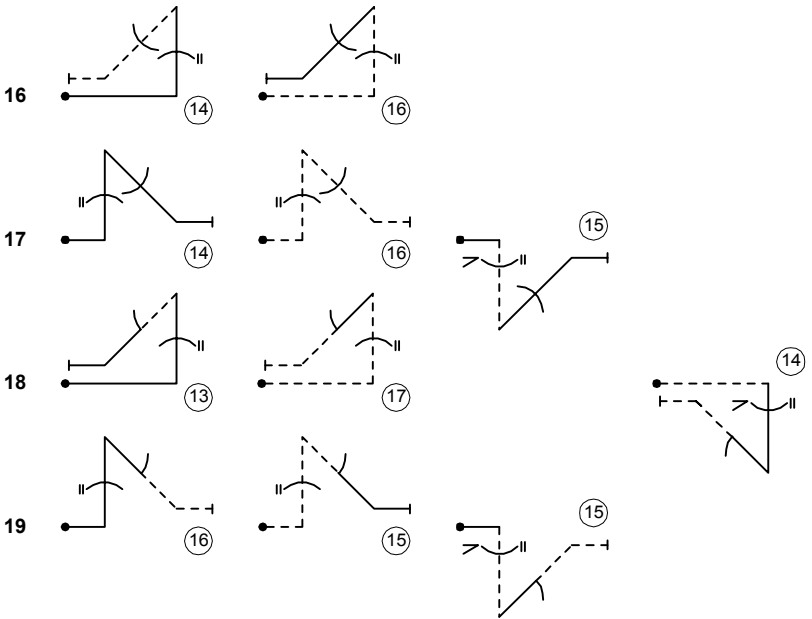
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3

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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

1.



1

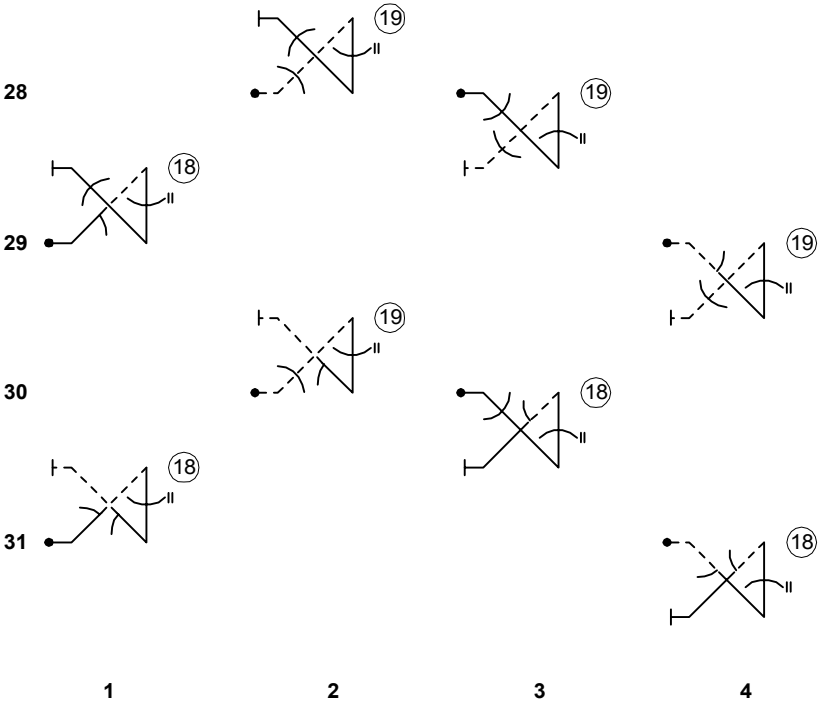
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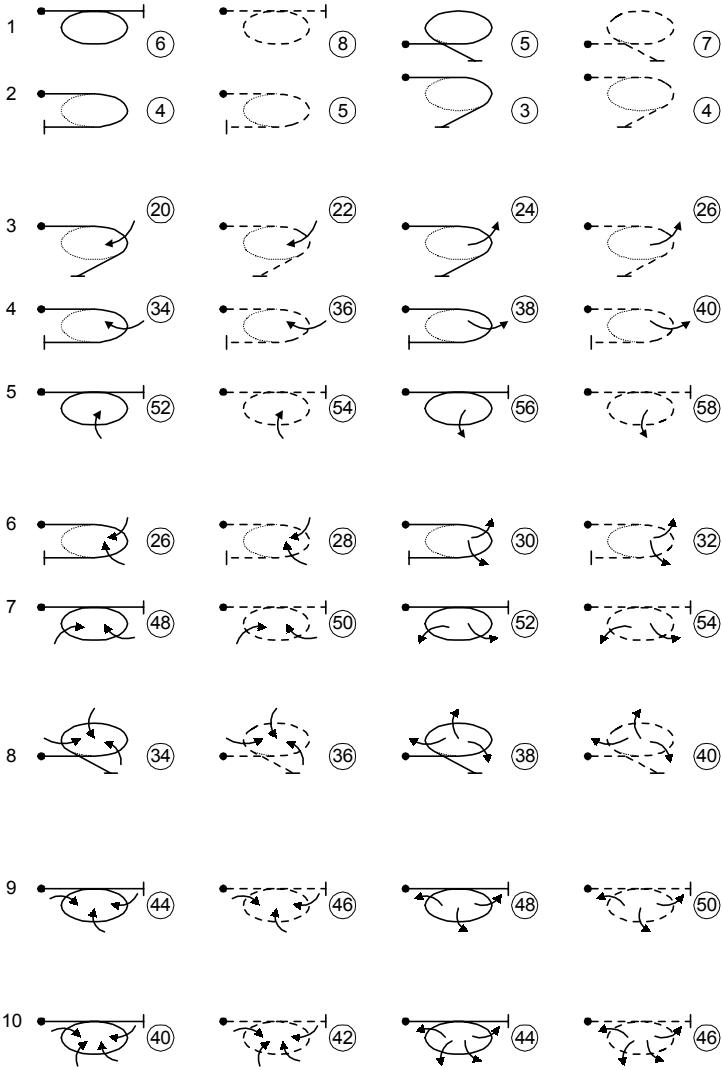
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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## 2. TURNS AND ROLLING TURNS



1

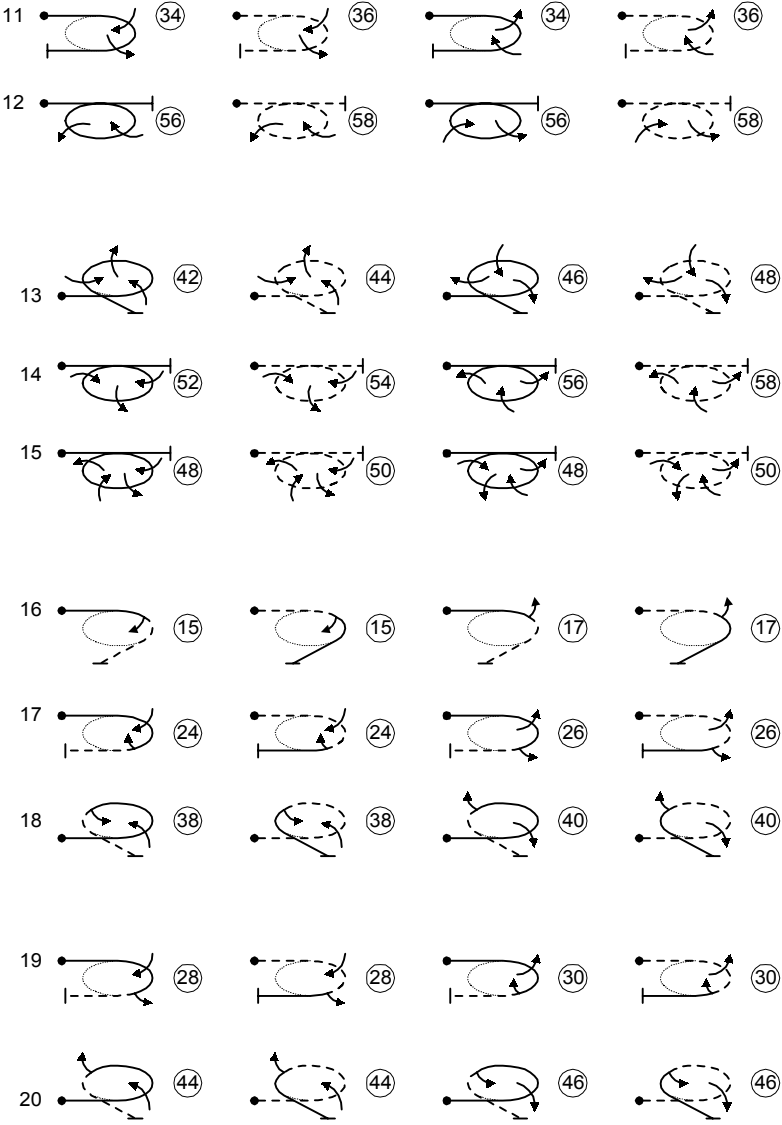
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3

4

# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

2.



1

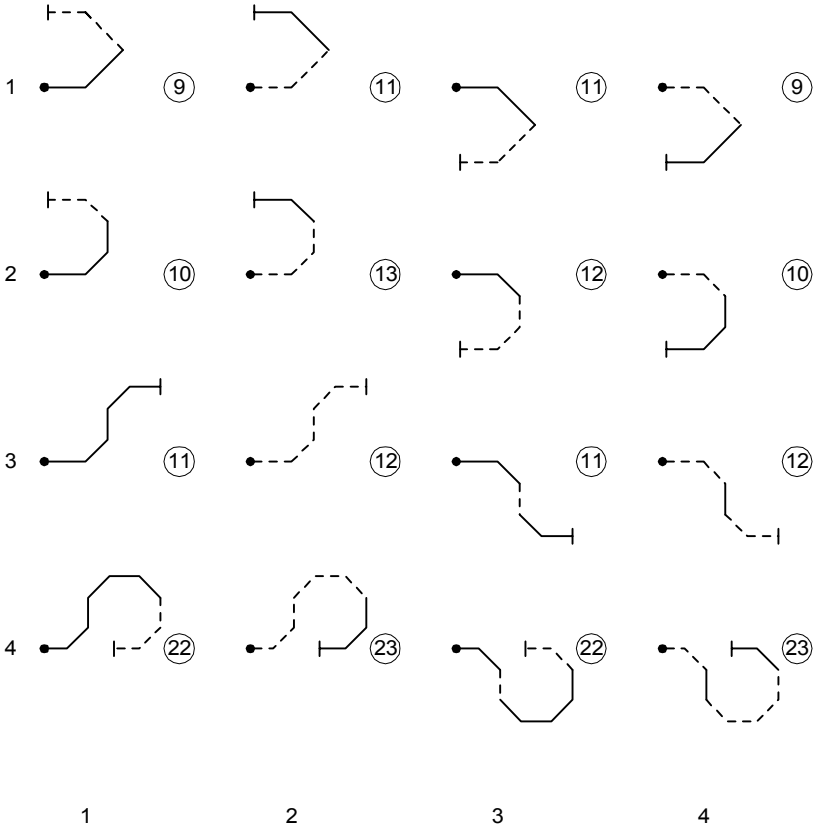
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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## 3. COMBINATIONS OF LINES

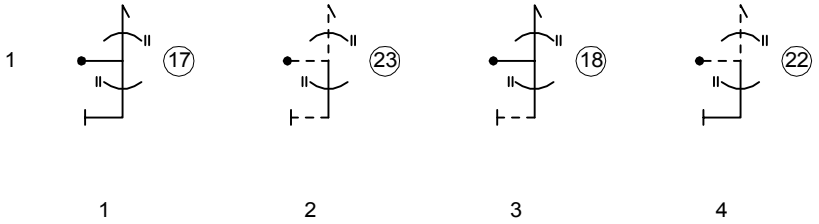


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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## 5. STALL TURNS

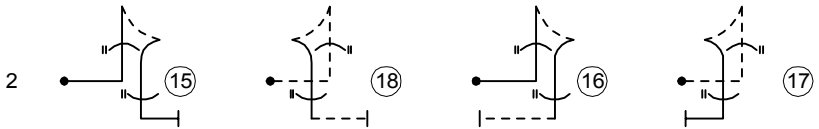
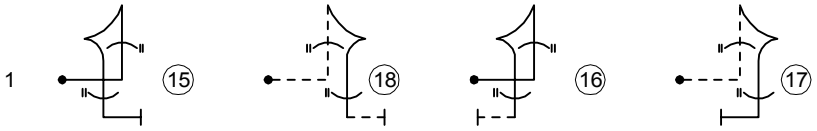


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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## 6. TAILSLIDES



1

2

3

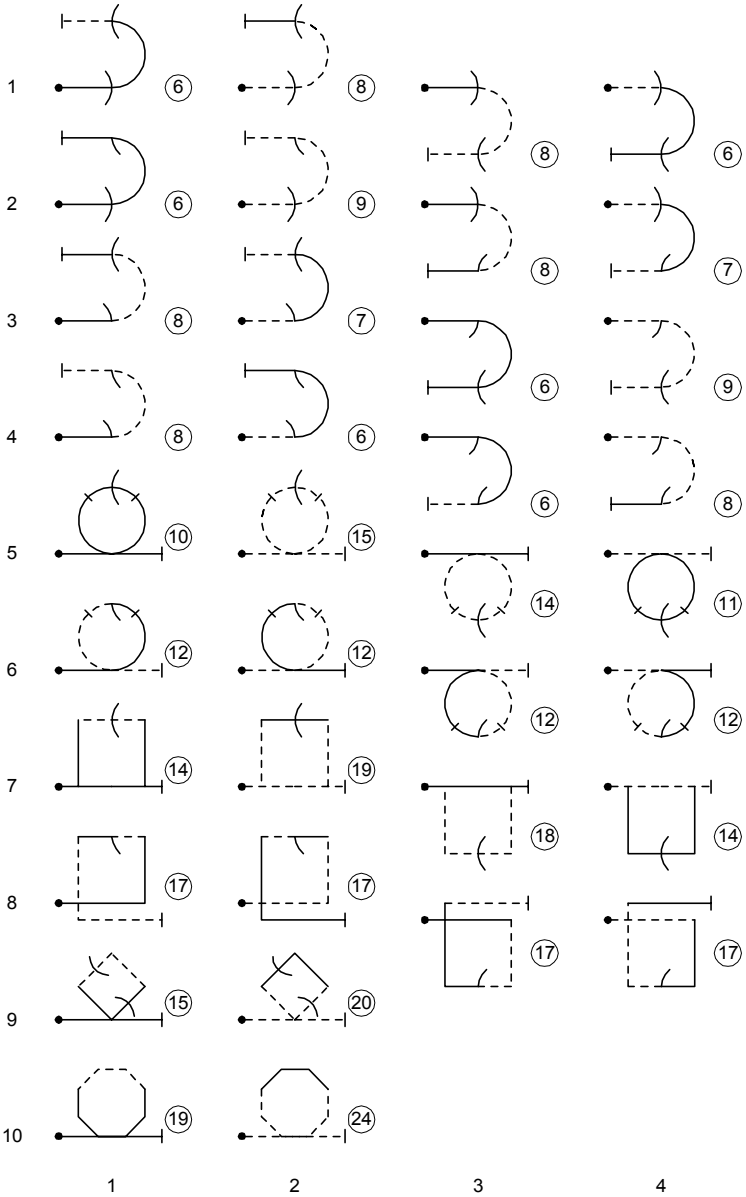
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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES



# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## 7. LOOPS AND EIGHTS

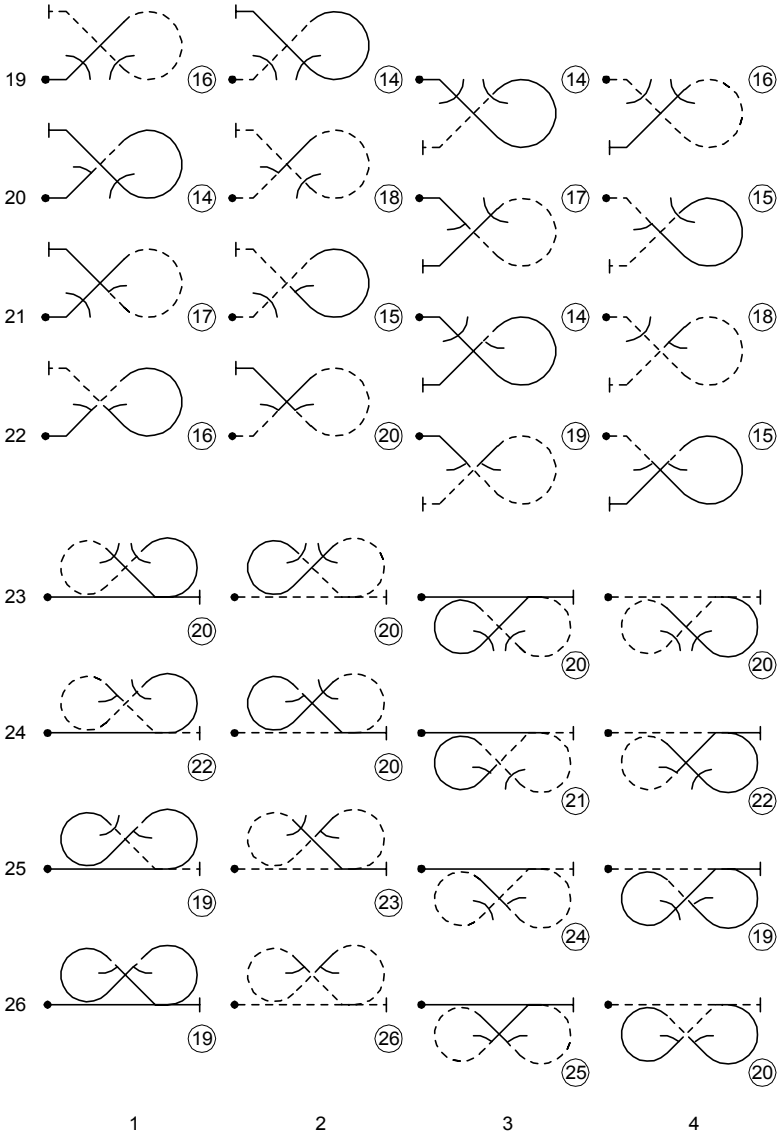



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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

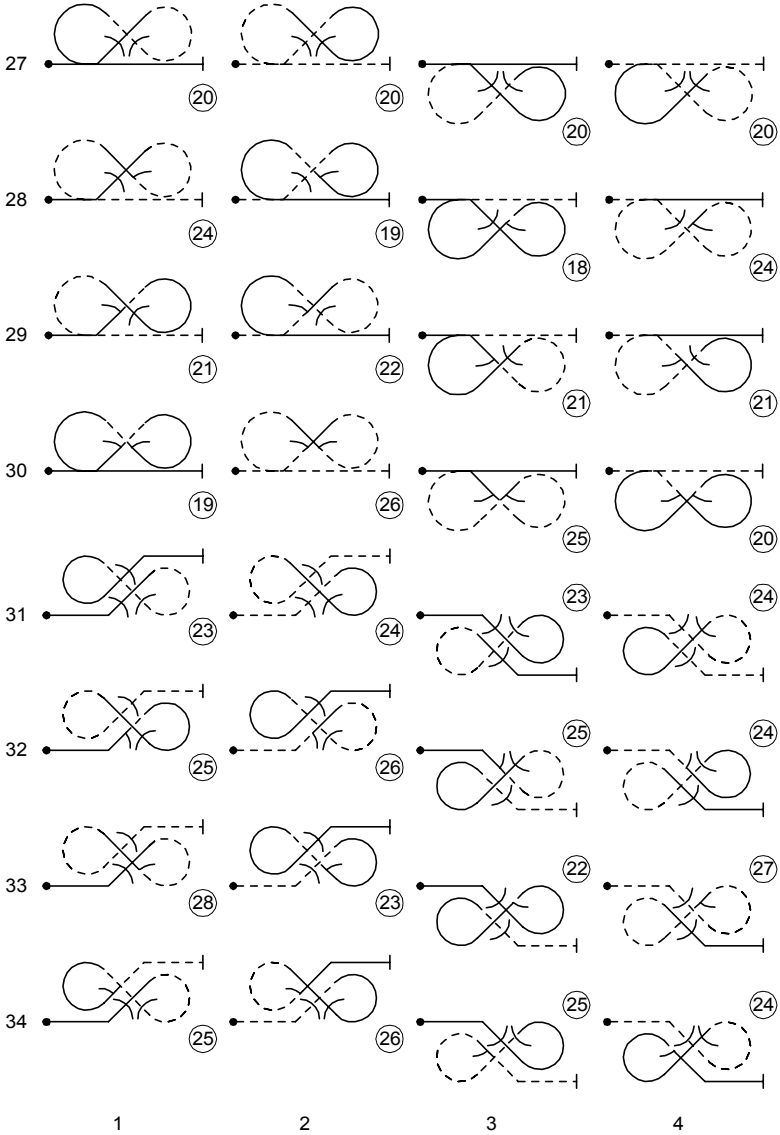
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NOTE: At the sign  only half-rolls permitted.

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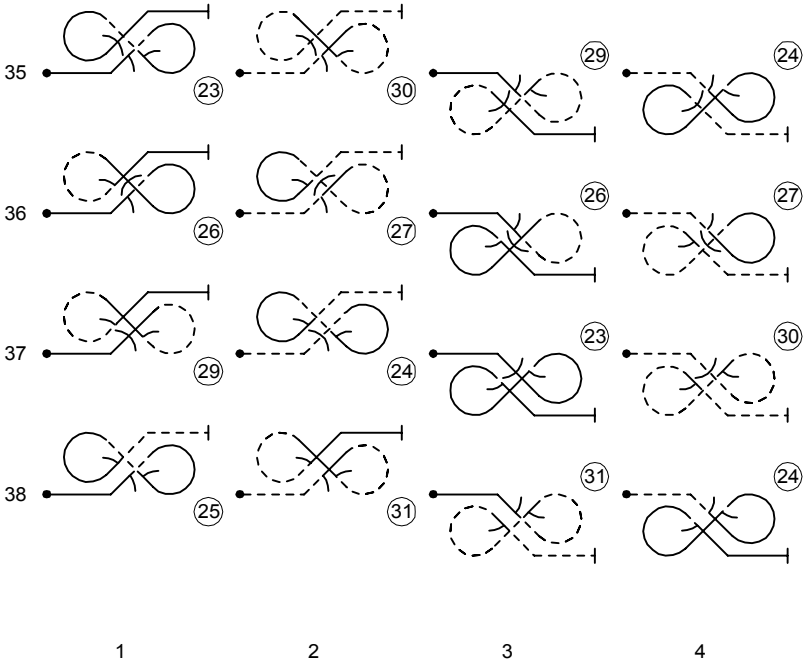
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


NOTE: At the sign only half-rolls permitted.

# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

7.



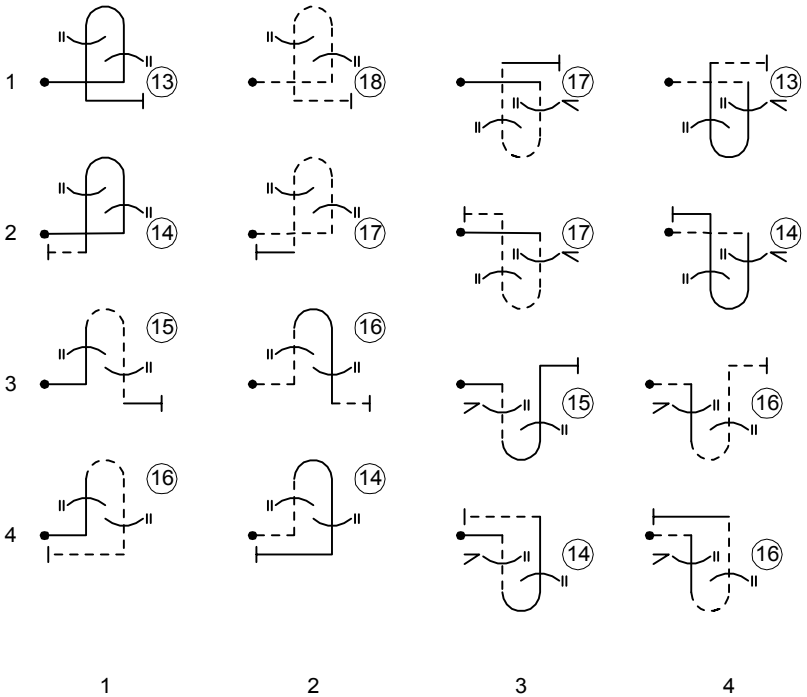
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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## 8. COMBINATIONS OF LINES, ANGLES AND LOOPS



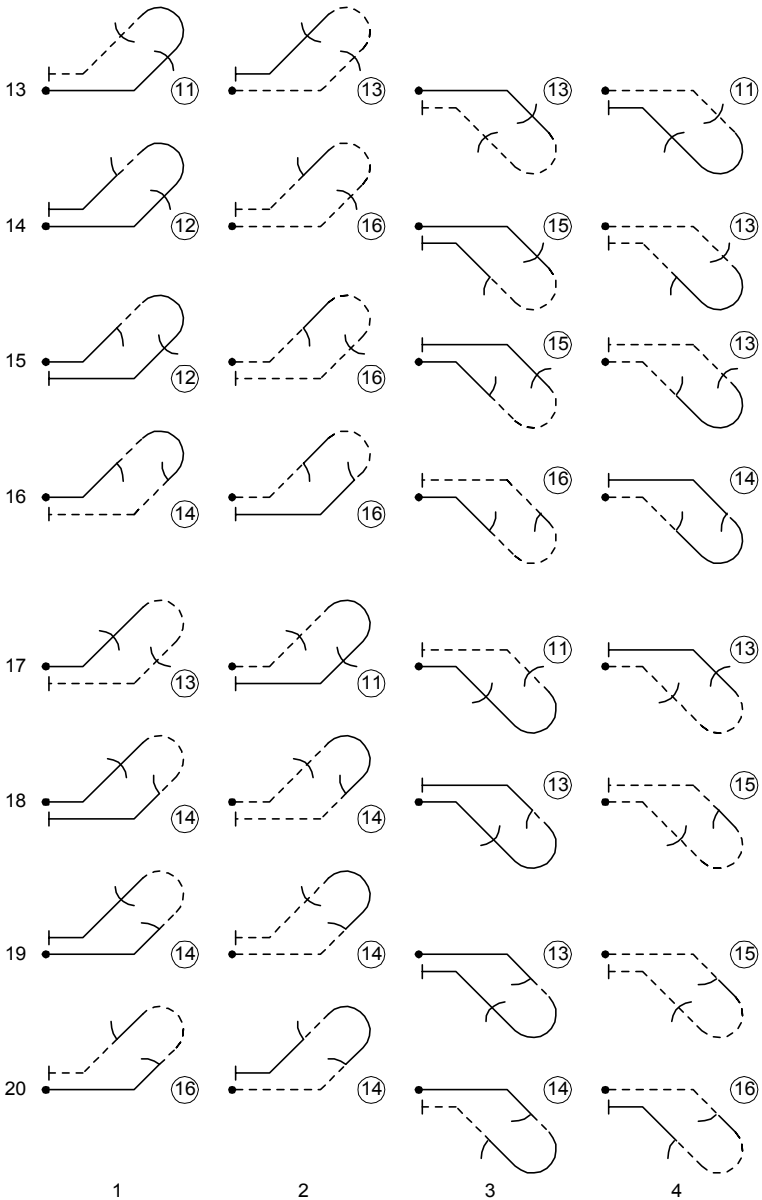
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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

8.

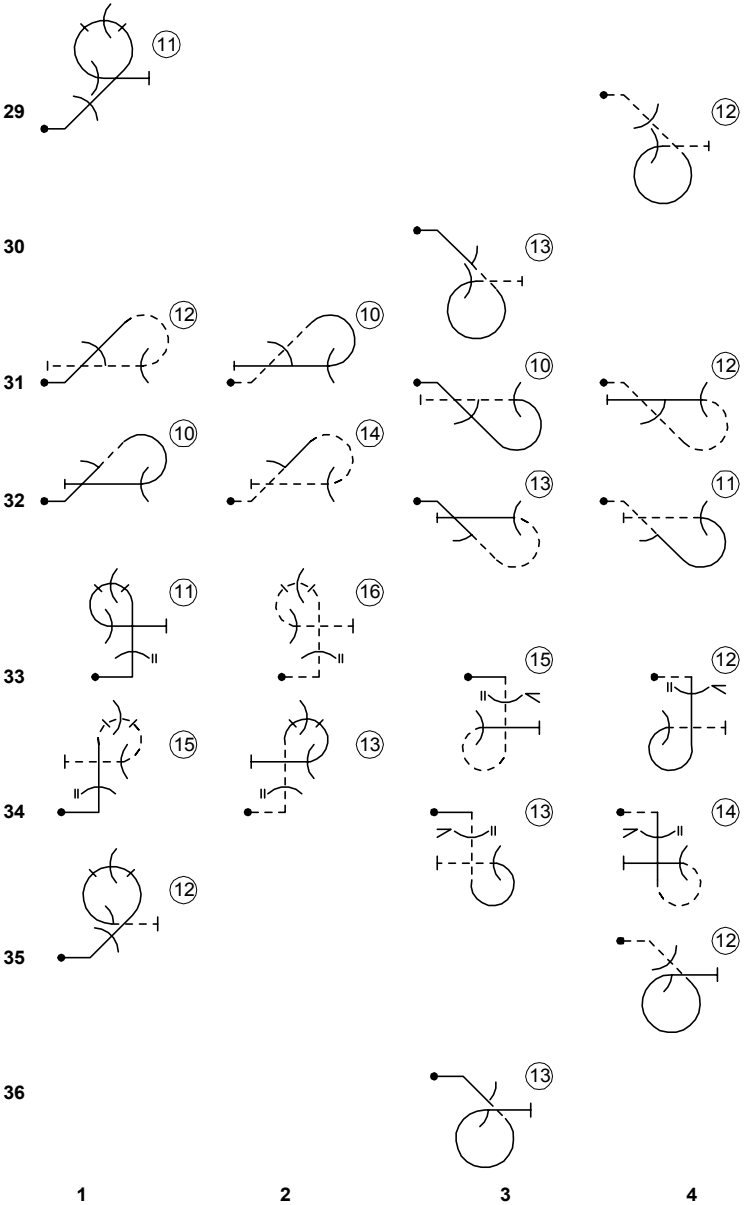


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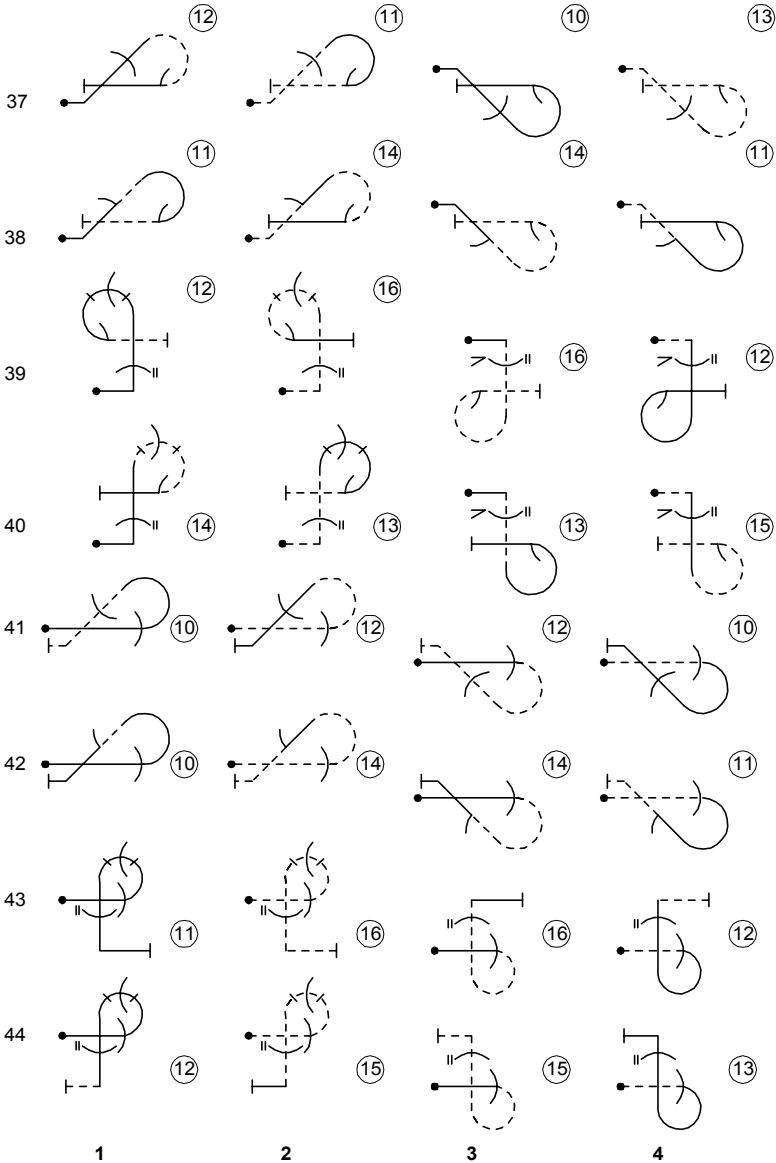
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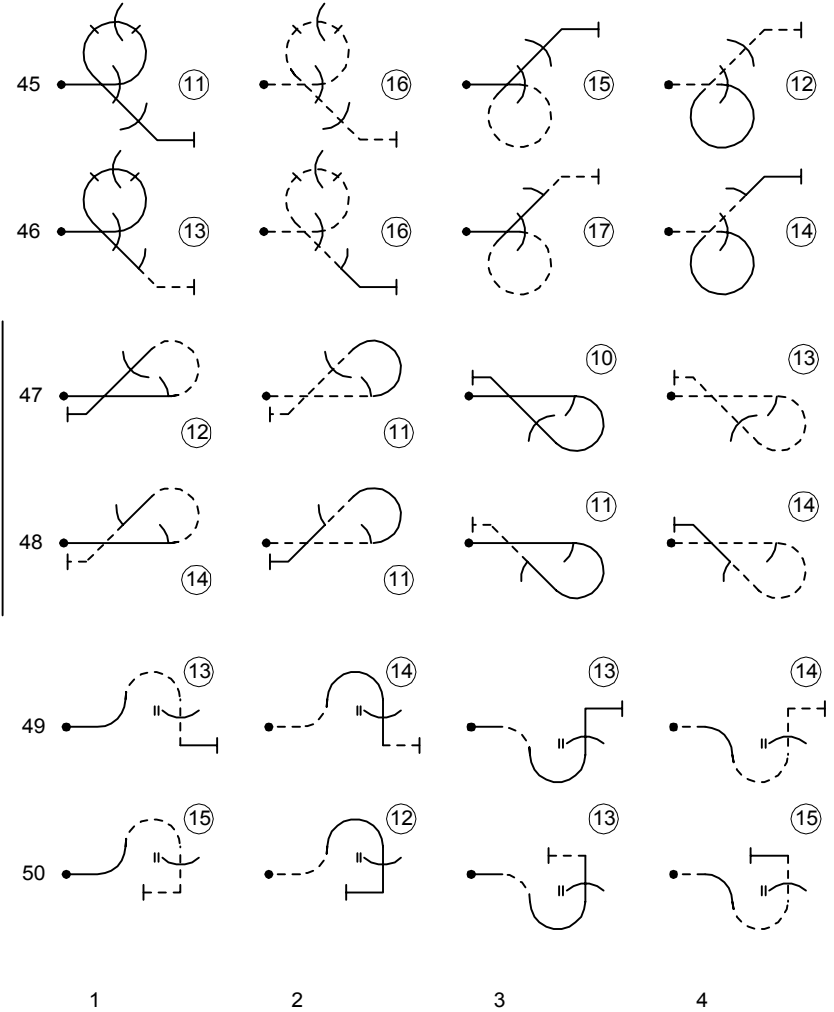
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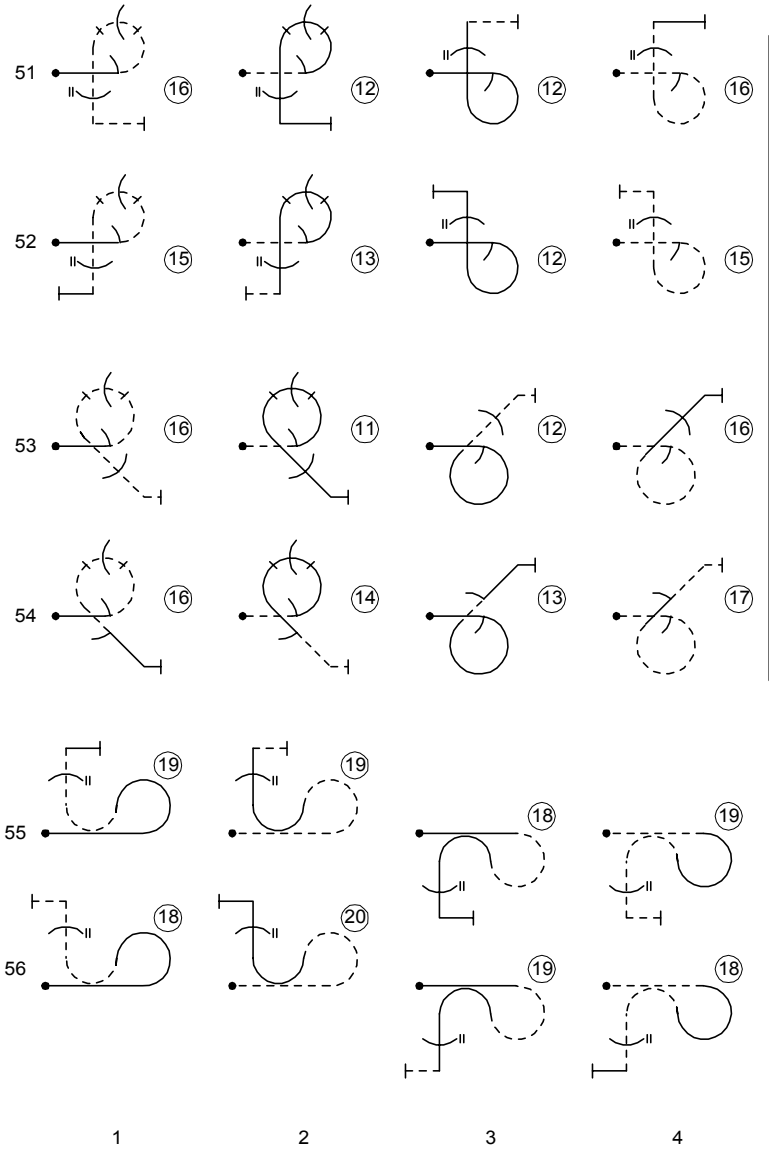
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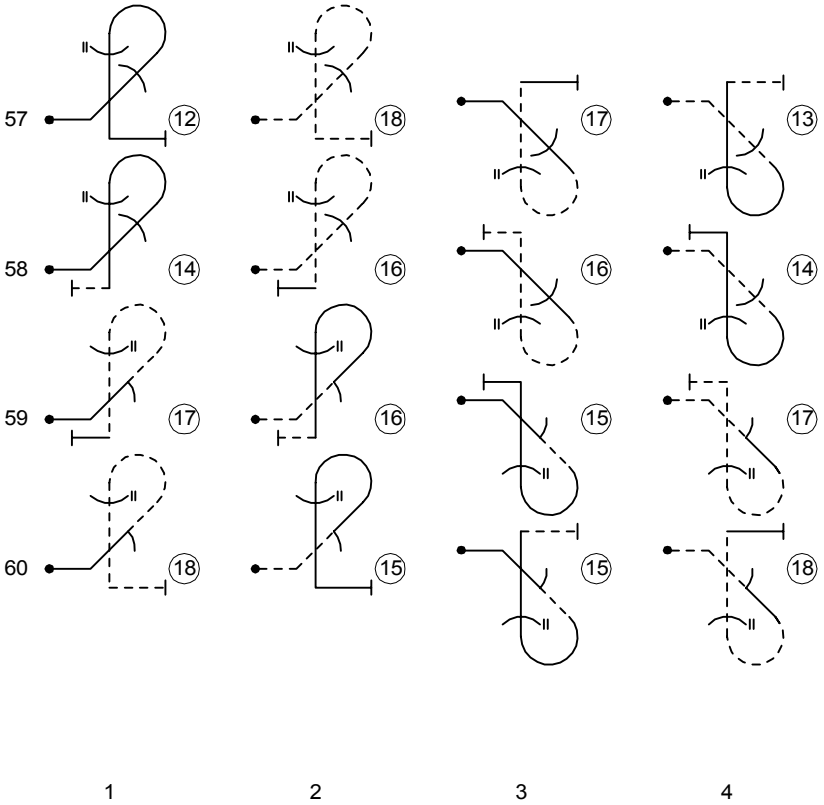
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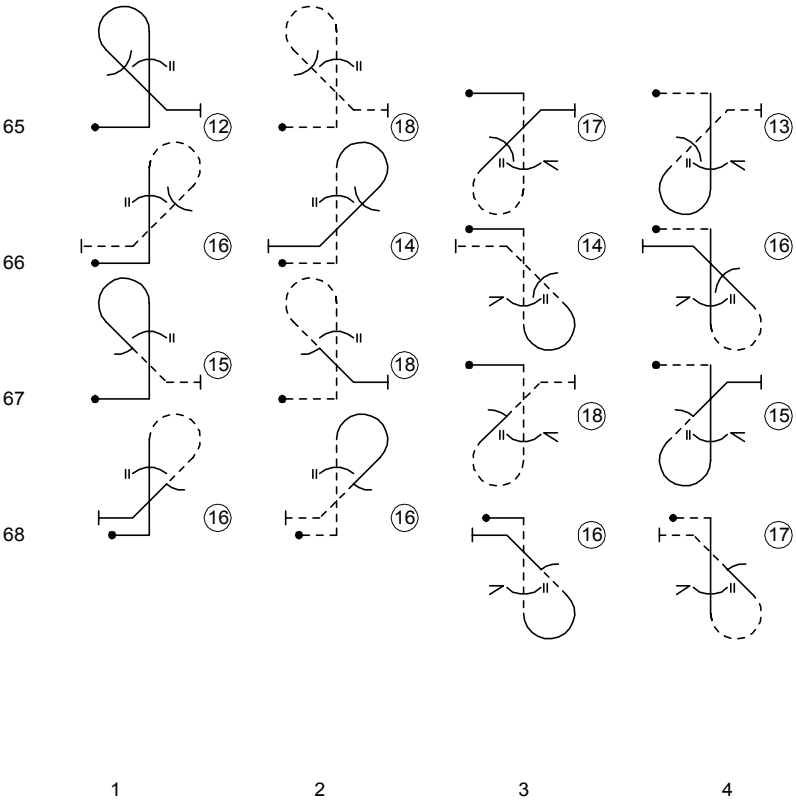
# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

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# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

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







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




## 9. ROLLS AND SPINS

### FAMILY 9.1 (SLOW ROLLS)



<b>9.1</b>		$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	<b>1</b>	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	<b>2</b>
<b>1</b>		9	12	15	18				
<b>2</b>		6	9	12	15		18		
<b>3</b>		3	6	9	12	14	15	17	18
<b>4</b>		3	6	9	12		15		
<b>5</b>		3	6	9	12				
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>

# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## FAMILY 9.2 (2-POINT ROLLS)






9.2					1		1½		2
1					20				
2					17				
3					14		18		23
4					14		18		
5					14				
		1	2	3	4	5	6	7	8

## FAMILY 9.3 (3-POINT ROLLS)

9.3					1		1½		2
3					17				28
4					17				
		1	2	3	4	5	6	7	8






# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## FAMILY 9.4 (4-POINT ROLLS)

9.4			$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
1			14						
2			11						
3			8	12	17	20	23	26	28
4			8	12	17				
5			8	12					
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>











# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## 9.8 FAMILY 9.8 (8-POINT ROLLS)

9.8		$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
1		11							
2		8	14						
3		5	11	17	23	27	32	36	41
4		5	11						
5		5	11						
		1	2	3	4	5	6	7	8











# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## FAMILY 9.9 (POSITIVE FLICK ROLLS)

9.9			$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
<b>1</b>			18	20	22				
<b>2</b>			15	17	19				
<b>3</b>			12	14	16	19	21	24	25
<b>4</b>			12	14	16	19	21	24	25
<b>5</b>			12	14	16	19	21	24	25
<b>6</b>			18	20	22				
<b>7</b>			18	20	22				
<b>8</b>			15	17	19	22	24	27	30
<b>9</b>			15	17	19	22	24	27	30
<b>10</b>			12	14	16	19	21	24	25
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>






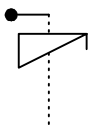
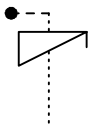
# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## FAMILY 9.10 (NEGATIVE FLICK ROLLS)






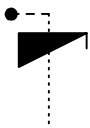
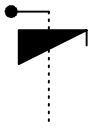
9.10			½	¾	1	1¼	1½	1¾	2
1			21	23	25				
2			18	20	22				
3			15	17	19	22	24	27	30
4			15	17	19	22	24	27	30
5			15	17	19	22	24	27	30
6			21	23	25				
7			21	23	25				
8			18	20	22	25	28	31	34
9			18	20	22	25	28	31	34
10			15	17	19	22	24	27	30
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>

# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## FAMILY 9.11 (POSITIVE SPINS)


									
					1	1¼	1½	1¾	2
<b>1</b>		<b>Upright Entry Line</b>			5	6	7	8	8
<b>2</b>		<b>Inverted Entry Line</b>			6	7	8	9	9
					4	5	6	7	8

## FAMILY 9.12 (NEGATIVE SPINS)

									
					1	1¼	1½	1¾	2
<b>1</b>		<b>Inverted Entry Line</b>			7	8	9	10	10
<b>2</b>		<b>Upright Entry Line</b>			8	9	10	11	11
					4	5	6	7	8

# FAI CATALOGUE OF GLIDER AEROBATIC FIGURES

## FAMILY 9.13 (SUPER SLOW ROLLS)

<b>9.13</b>			$\frac{1}{2}$		<b>1</b>		$1\frac{1}{2}$		<b>2</b>
<b>3</b>			8		16		20		
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>