Revolution Mega-Fly Figures

Revolution Mega-Fly Figures

Introduction

The wonderful thing about flying a Revolution kite is that you can fly shoulder to shoulder with strangers and soon you are laughing with friends.

The purpose of this document is to make it easier for two or more quad-line fliers to enjoy an impromptu team fly or mega-fly. All they need is the information in this manual and the same length lines. The standard is 120 foot lines, which allow enough room for several fliers to maneuver simultaneously in the sky.

On the Internet you can watch videos of quad and dual line teams from all over the world. Several of the same figures are flown by many different teams. In this document, I've collected some of the most common figures and created text and diagrams to explain how they are flown. I've even figured out a system for deciding which way to turn during 180s in order to avoid twisted lines.

Each figure is titled with the most commonly used name. This will give all kite fliers a standard vocabulary and make it easier for us to discuss these moves and collaborate on new ones.

Spread the word!
All Revolution kite fliers should carry this manual and a set of 120' lines in their kite bag. Then, when we meet at a park, beach, or festival, we'll have everything we need to fly in formation together. World peace, one kite flier at a time.

Thanks to John Barresi of iQuad for proofreading the first draft of this manual.

Online Resources

Some online resources for quad flying can be found here:

Revolution Forum: http://www.revkites.com/forum/
Quad Heads on Kitelife: http://kitelife.com/forum/index.php?showforum=13

Suggestions?

If you would like to contribute to this document, check out the forum at
http://www.revkites.com/forum/index.php?showforum=14

You can contact me at
mikekory@revkites.com

How a Mega-Fly Works

The Mega-Fly works like this: the lead flier, in position number 1, calls out a figure and then yells "go!" The other fliers should wait for the "go!" before flying to the new position. For example, a caller might say "Horizontal Line, go!...Pinwheel 90° Clockwise, go!... Evens Face Left, go!...To The Edges, go!...180 and Return, go! ..."

The caller may also call "Stop" at any time.

Numbering

From the flier's point of view, looking at the kites, fliers are numbered from right to left, like so:

6   5   4   3   2   1
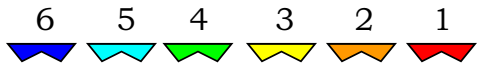
The caller may call a move just for "even numbers" or "kites 1 through 3"

Horizontal and Vertical Lines

The caller may call out "Horizontal at 50%" or "70%." This is a measure of how high to go. 100% would be as high as possible. Unless told otherwise, horizontal lines are formed with the kites facing up, as in the diagram above.

Vertical lines should be called with the direction the kites should face.

To The Edges

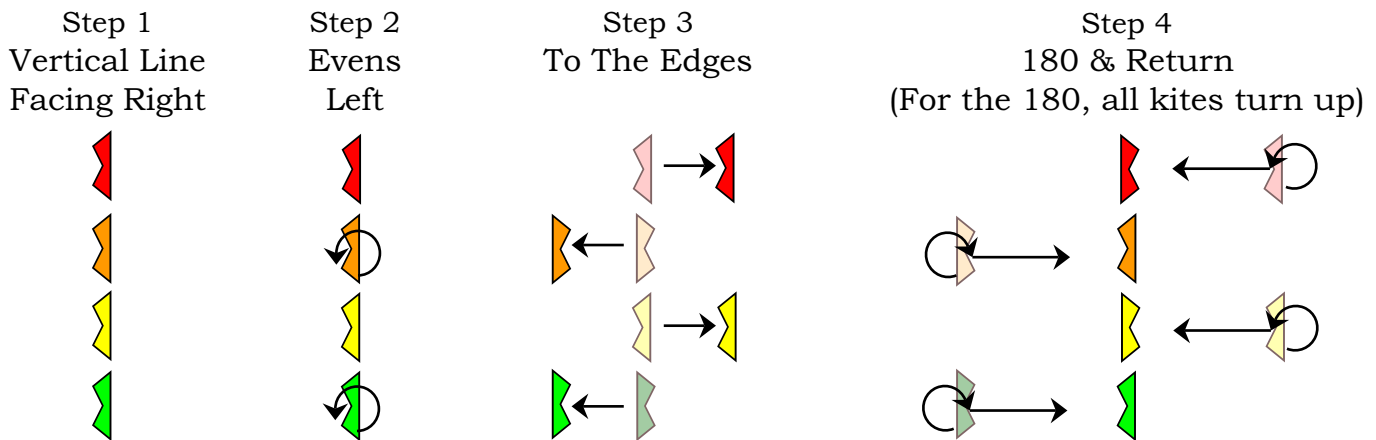Start from a vertical line, with alternate kites facing opposite directions.
Fly out to the edge of the wind window and stop. The caller may or may not call the stop.
To return to the line, caller usually calls "180 Return, go!"
All kites do a 180 and then fly back to the vertical line.

Caller may call "Threading Through" or "Passing Through," in which case fliers return and fly to the opposite side.

Or "Passing Through With a Pause," in which case fliers return to the vertical line and pause for a moment before continuing to the other side.

Step 1	Step 2	Step 3	Step 4
Vertical Line	Evens	To The Edges	180 & Return
Facing Right	Left		(For the 180, all kites turn up)

Follow

Simply follow kite #1 around the sky. Usually you will be doing variations on figure 8s, but the leader may get fancier. Try to keep a constant speed and even spacing between kites. Follow the leader's path and turn points; don't cut corners. The Pez diagram later in this document is a good example of a follow.

If the lead kite catches up to the trailing kite for a short time it creates a nice effect. However, if the lead kite follows the trailing kite for too long, the twisting lines of 8 kites (x 4 lines per kite) will lock up everyone's lines and you'll have eight kites in a tangled mess on the ground!

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Pez

This is an example of a "follow" move.

All kites fly forward, then the lead kite stops and drops down. The other kites follow, each stopping and dropping down at the same point as the first kite. Kites do an upside down side slide to exit.

Step 1

Step 2

Step 3

Step 4

Step 5

Step 6
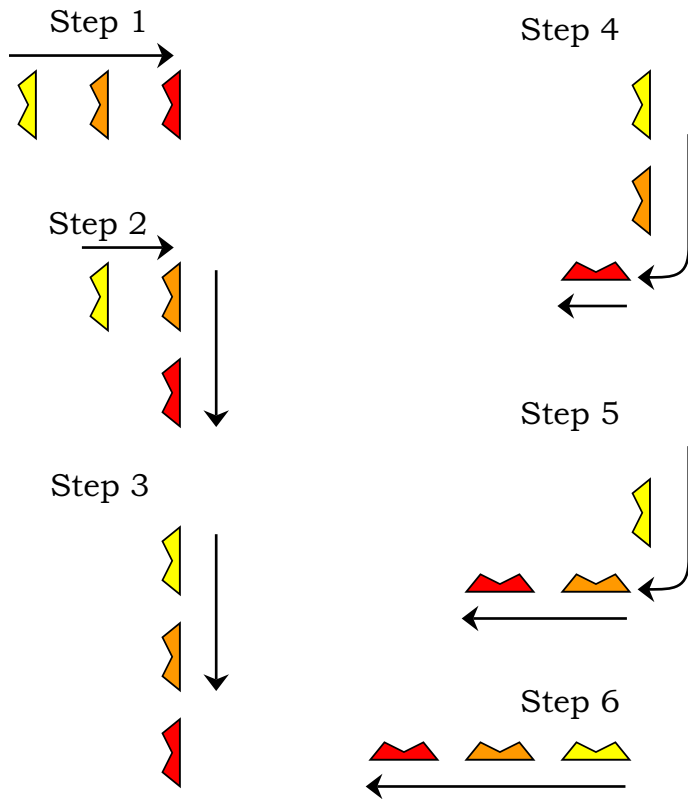
Radar 90°, "off the bottom"

All kites fly forward, rotating around the bottom kite.
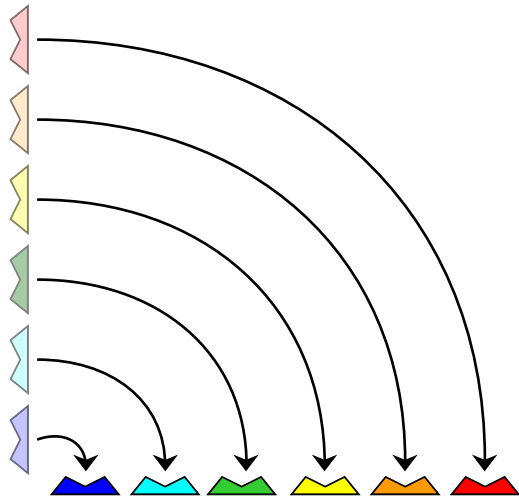
Radar 180°, "off the left"

All kites fly forward, rotating around the leftmost kite.
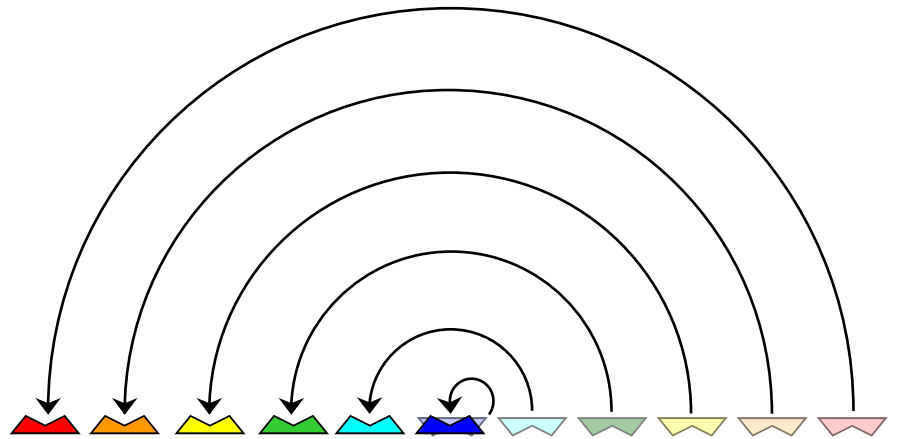
Pinwheel 90°, Clockwise

Half the kites fly forward, half fly in reverse. May be called as clockwise or counter-clockwise. In British English, counter-clockwise is called anti-clockwise.
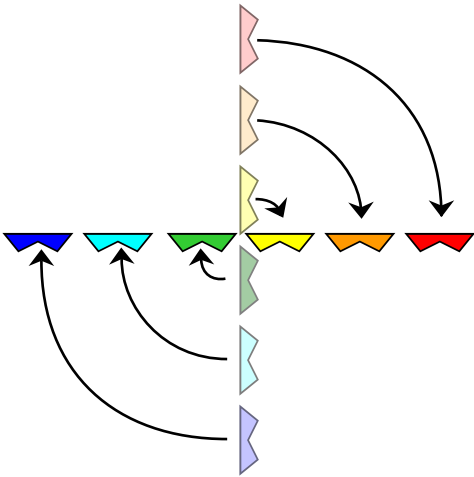
Note: In diagram #1 below, the kites doing reverse flight are also flying up. It is more difficult to fly in reverse against gravity. Therefore, with the kites initially facing right, it's better to call a counter-clockwise pinwheel (#2 below).

#1

No!
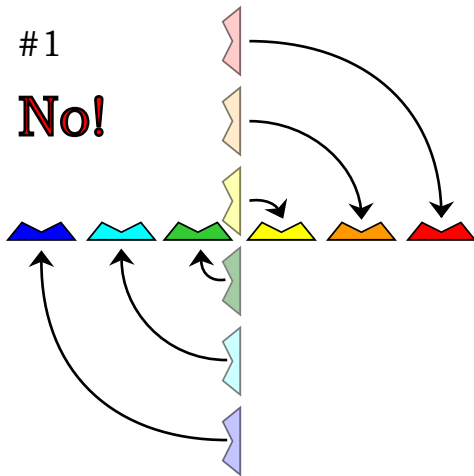
#2

Yes!
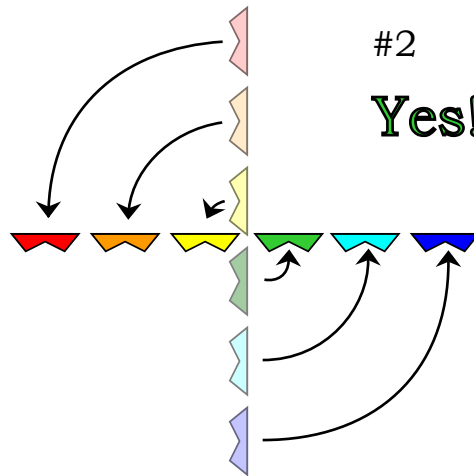
Propeller (variation of Pinwheel)

Also called "Prop." All kites fly forward. For a clockwise Prop, start with the top 3 kites facing right, and the bottom 3 facing left.
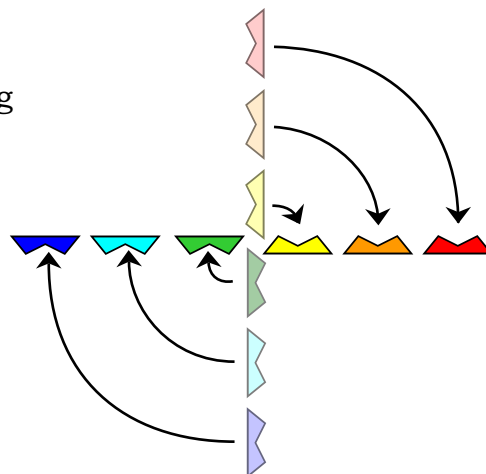
Ball

8 kites
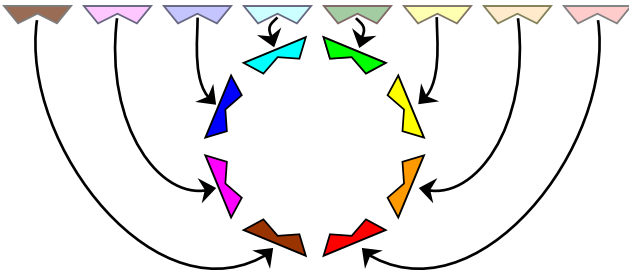
3 kites
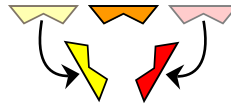
4 kites
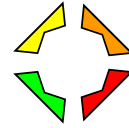
5 kites

6 kites

7 kites
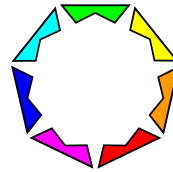
Burst

May be called as "slow burst" or "fast burst."

To return from a burst into a ball, back in with reverse flight.

The kites coming up from the bottom will only be able to fly slowly, so the top kites should slow down and try to match their speed to the bottom kites.
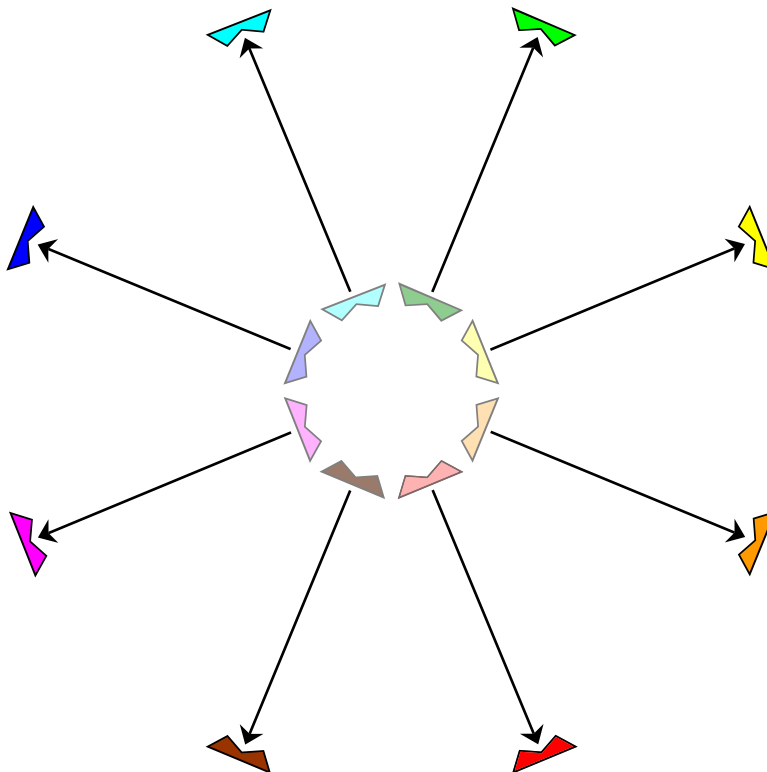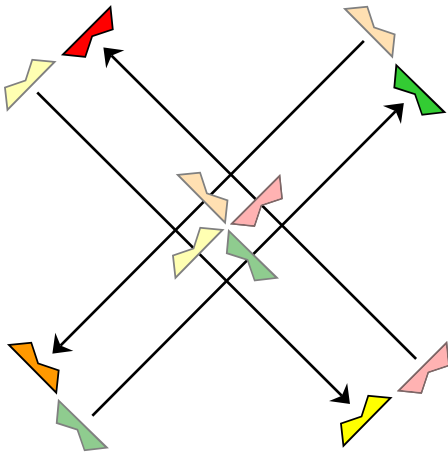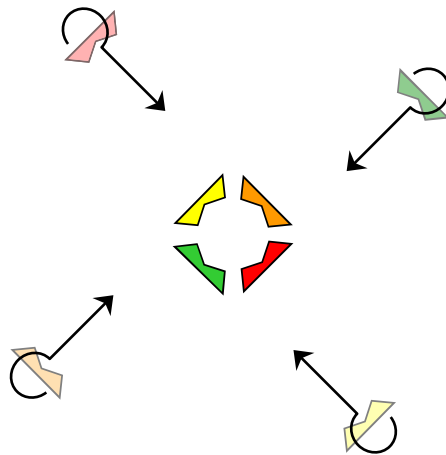
Fly Through Burst

Step 1.
Start with a burst.
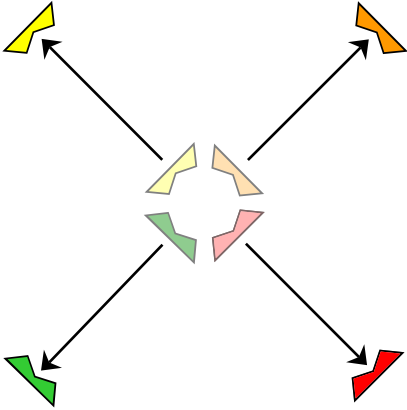
Step 2.
All kites do a counter-clockwise 180, pivoting slightly to the outside. Continue to Step 3 without a pause.
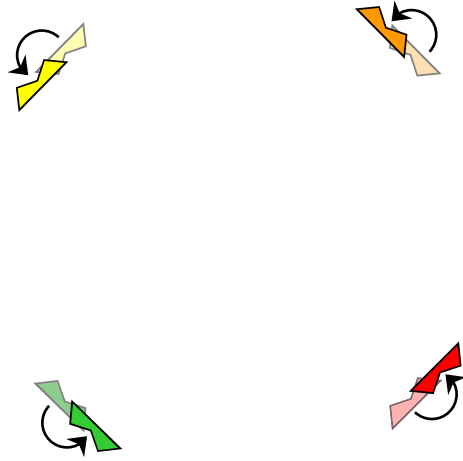
Step 3.
Fly to the opposite side. The caller may call for a pause in the center.

Step 4.
All kites do a clockwise 180 and return towards the center. Fly just past the center and turn slightly to return to a ball.

Twister

Step 1.
Start with a burst.
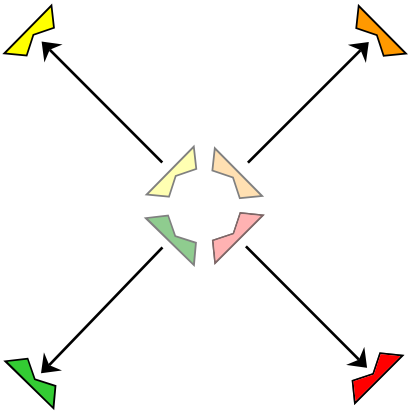
Step 2.
All kites turn counter-clockwise and fly to a corner in one smooth motion...
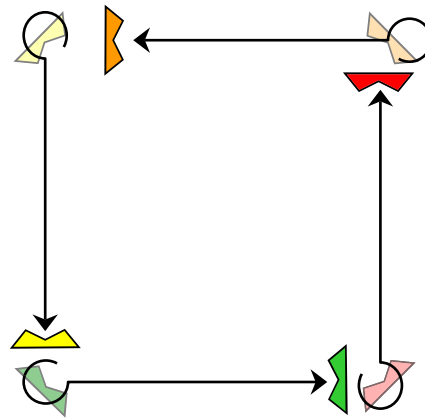
Step 2, continued.
Don't stop actually stop, but continue to "twist" by flying to three corners, ending in this position. To keep the diagram simple, only the path of the red kite (kite #1) is shown.

Step 3.
All kites do a 180, pause, and retrace their steps back to the start. Again, only the flight path of the red kite is shown.
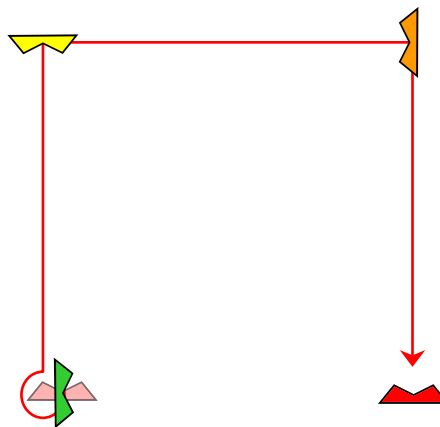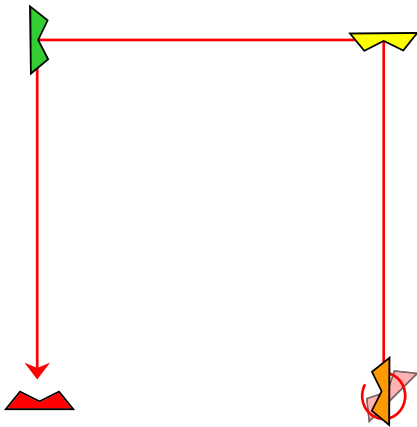
Dosey-Do

This move is for an even number of kites, two or more.
Odd numbered kites should start with their kites on the left edge of the window, even numbered kites on the right. The lines of the odd numbered kites will be crossing above the lines of the even numbered kites.
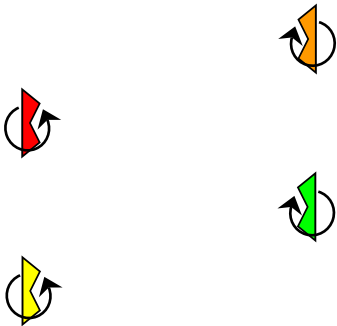
Step 1.
Fly to the center.
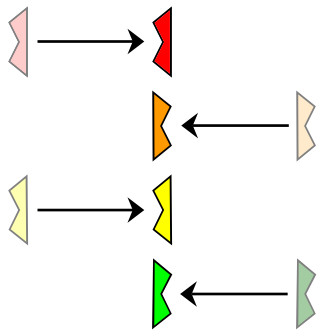
Step 2.
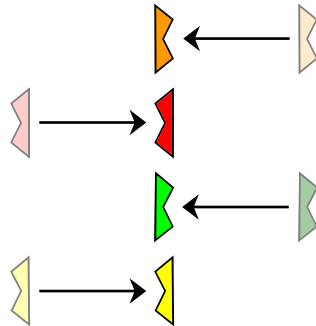Pairs swap places and continue to step 3 without a pause.
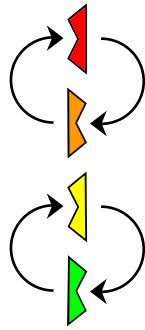
Step 3.
Fly to edges.
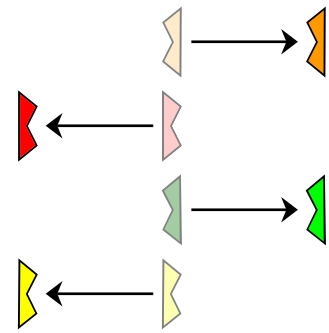
Step 4.
180s--turn down.

Step 5.
Fly to the center.

Step 6.
Pairs swap places and continue to step 7 without a pause.
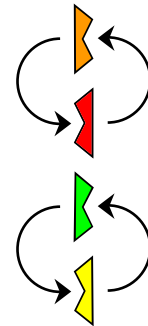
Step 7.
Fly to edges. Done!
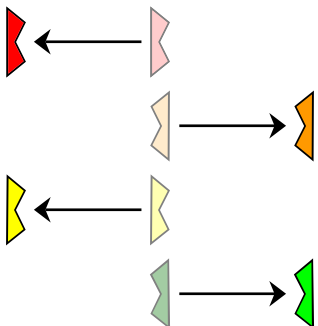
Benefits

Can be done with any number of kites. The top kite weaves its way down; all kites do a 180, then the same kite weaves its way back up. All flying is forward, pivoting around the kite's tip.

All kites turn down for the 180 in step 4 except when flying an odd number of kites. In that case, all kites turn down except for kite #1 (red kite); it should turn up.
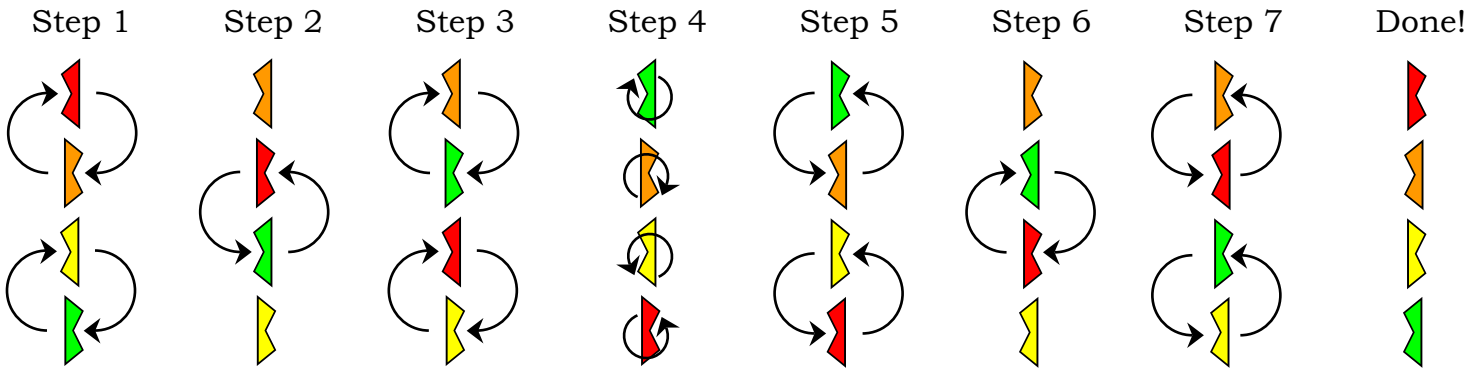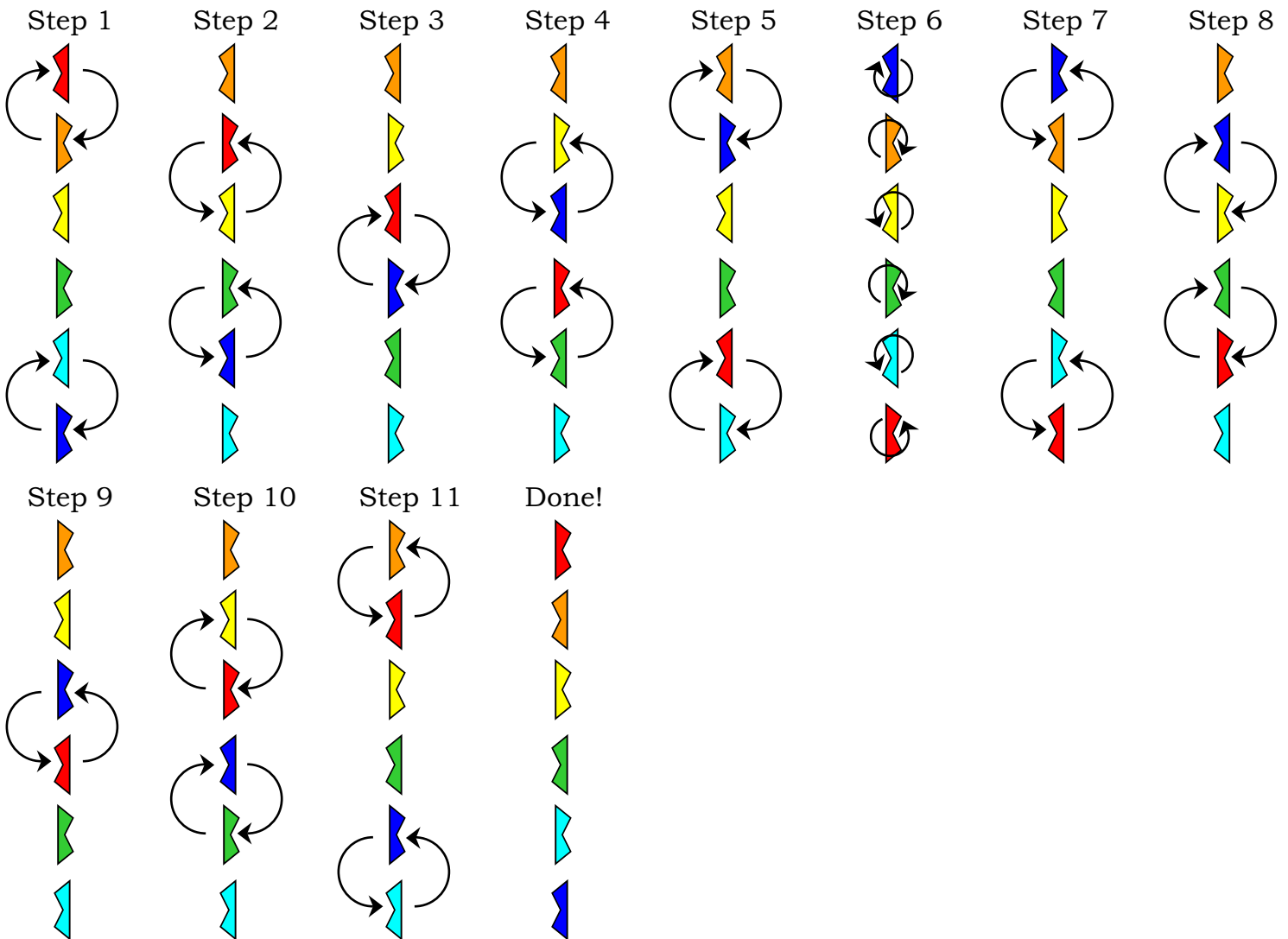
Step 1	Step 2	Step 3	Step 4 Turn down	Step 5	Step 6	Step 7	Done!
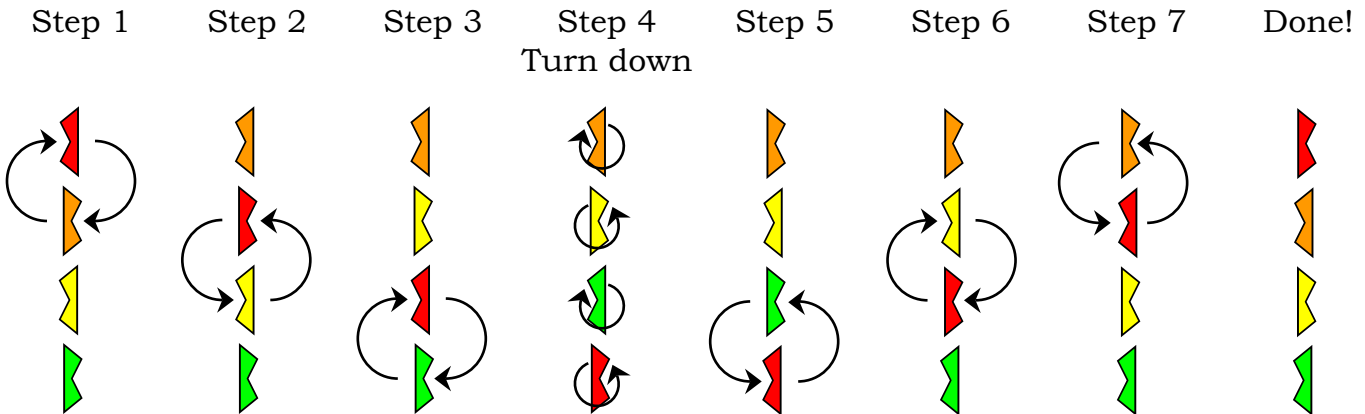
Compound Benefits

In this figure, the top kite (kite #1) performs just as in the standard Benefits, weaving its way down and up. At the same time, the bottom kite weaves its way up and down.

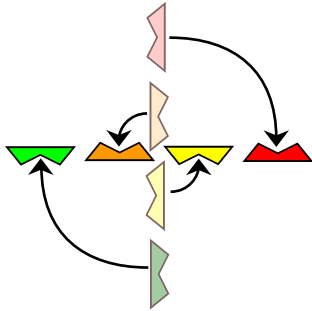For the 180s, the end kites turn down and the middle kites turn up.

4 Kites

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Done!

6 Kites

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8

Step 9	Step 10	Step 11	Done!

Short Blender

All kites are flying forward: there is no reverse flight.
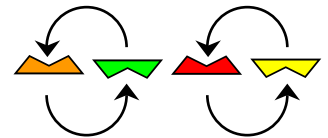
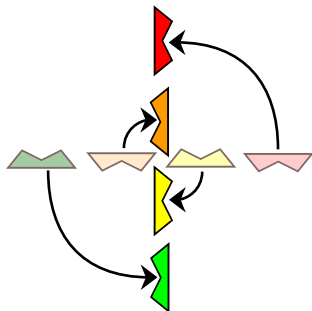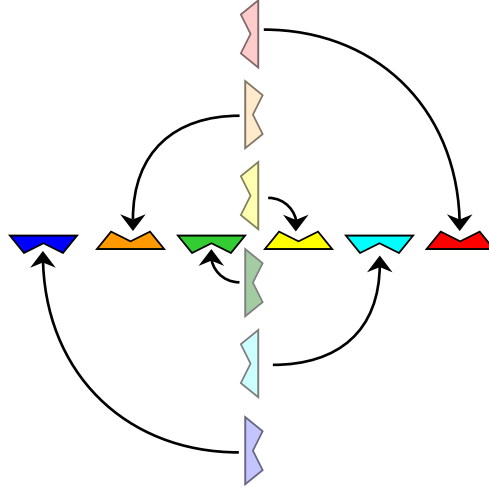| Start	Step 1 Fly forward to horizontal line	Step 2 Swap with your neighbor
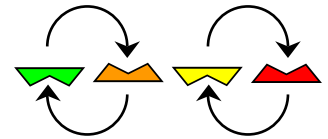
Step 3 Right kites: Counter-clockwise 180s Left kites: clockwise 180s	Step 4 Swap with your neighbor
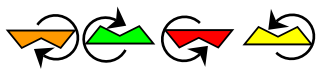
Step 5
Fly forward to vertical line and finished!

Blender

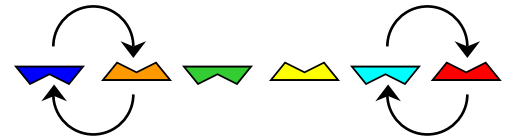All kites are flying forward: there is no reverse flight.

Start

Step 1
Fly forward to horizontal line

Step 2
Swap with your neighbor.

In a 6 kite version, the middle
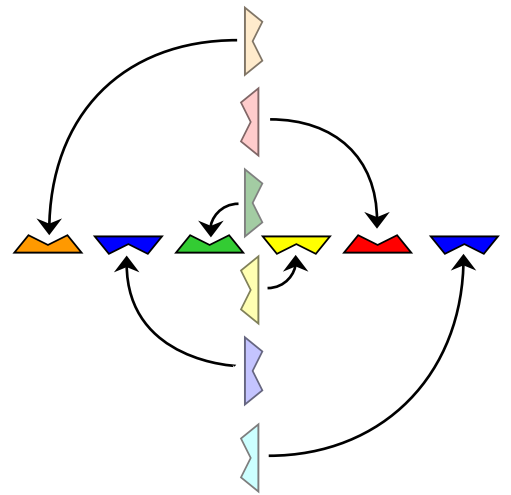two kites do NOT swap.
In the 4 and 8 kite versions,
all kites swap.

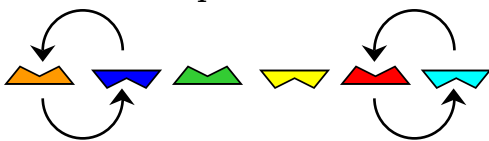**Step 3**
Fly forward to vertical line
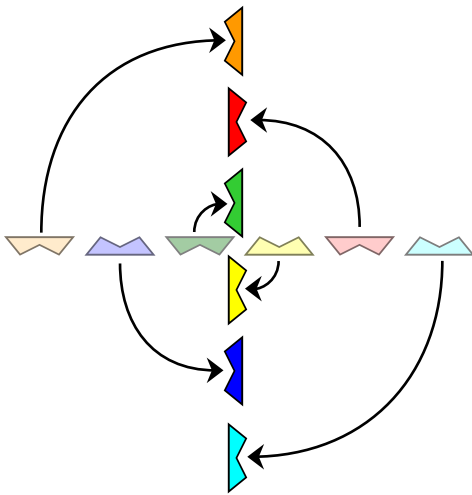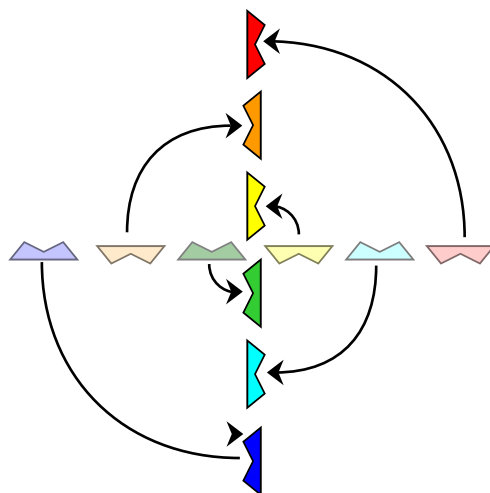
Step 4
180s--all kites turn down

Step 5
Fly to horizontal line

Step 6
Swap with your neighbor

In a 6 kite version, the middle
two kites do NOT swap.
In the 4 and 8 kite versions,
all kites swap.

Step 7
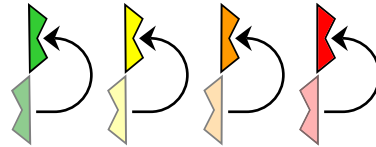Fly to vertical line and finished!

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Tip Pivots Up / Tip Pivots Down

This figure may be done with the kite moving up or down the window.
Only the "up" move is illustrated.

Step 1.
Start in a horizontal line, all kites facing
to an edge of the window.

Step 2.
All kites pivot around their top wing tip.
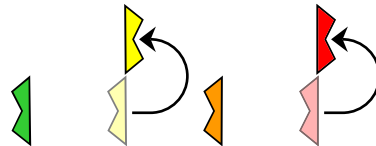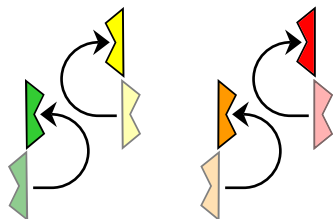This step is usually repeated a few times.

Variation
Step 1.
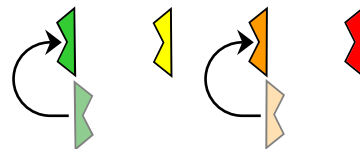Start in a horizontal line, all kites facing
to an edge of the window.

Step 2.
Caller calls "odds only."

Step 2.
Then all kites pivot.
This step is usually repeated.

Step 3.
Caller calls "bottoms only."
Only the bottom row of kites pivot up
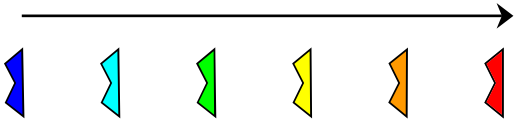to finish with all kites in a horizontal line.
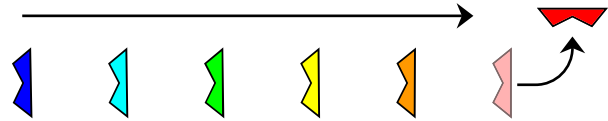
1 by 2 by 3

This move is for 6 kites

Step 1.
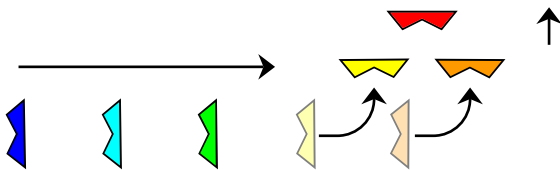Start in a horizontal line, all kites flying towards an edge of the window.
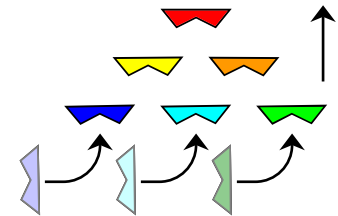
Step 2.
1 kite turns up (kite #1)

Step 3.
#1 continues to fly up, then the next 2 kites turn up (kites #2 & #3)

Step 4.
#1, #2, #3 continue to fly up, then the last 3 kites turn up (kites #4, #5, #6), forming a pyramid.
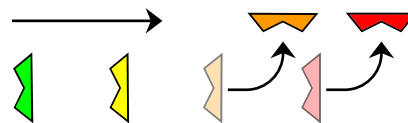
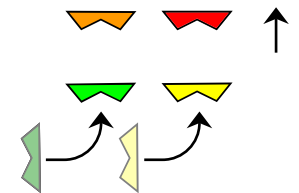# 1 by 2

Like above, except for 3 kites

2 by 2

For 4 kites. #1 and #2 turn up, then #3 and #4, forming a square
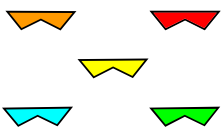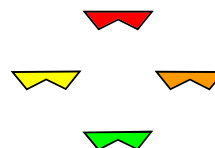
Step 1.

Step 2.

2 by 1 by 2

For 5 kites. #1 and #2 turn up, then #3 turns up, and finally #4 and #5.

1 by 2 by 1

For 4 kites. #1 turns up, then #2 and #3, then #4, forming a diamond.

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Where To Turn?

Here is how to calculate which direction to turn during 180's for figures like the Blender and Benefits. The goal is to have the figure end with each kite's lines untwisted.

You may have noticed that turning a Revolution UP doesn't put any twists in your lines. Turning DOWN does add a twist. By assigning a number value to each quarter turn, we can determine the optimal direction for the 180 in the middle of the figure. Clockwise 90° down-turns are +1; counter-clockwise 90° down-turns are -1. All up-turns are 0. See the diagrams:
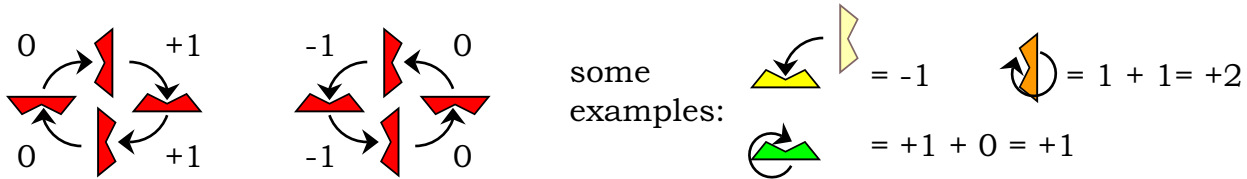
This system isn't as hard as it first seems. Here's how to do it with a 4-kite Short Blender.
Step 1: Figure out the number for each turn *except the 180*.
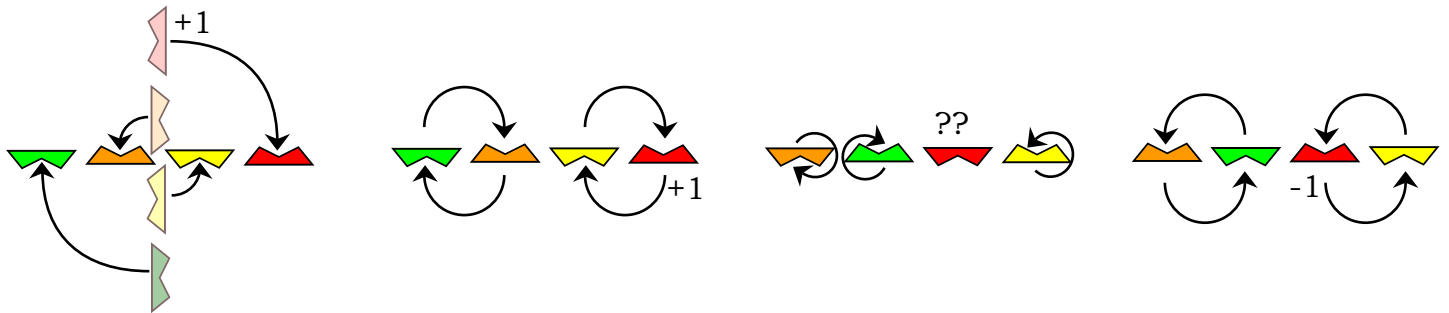
Step 2: Add the numbers. We get +1.

Step 3: Assign a number to the 180 so we get a total of 0, i.e no twists. We need a -1. From the position the red kite is in before the 180, to get a -1, we need to do a counter-clockwise 180.

Here's another example with the 4-kite Benefits:
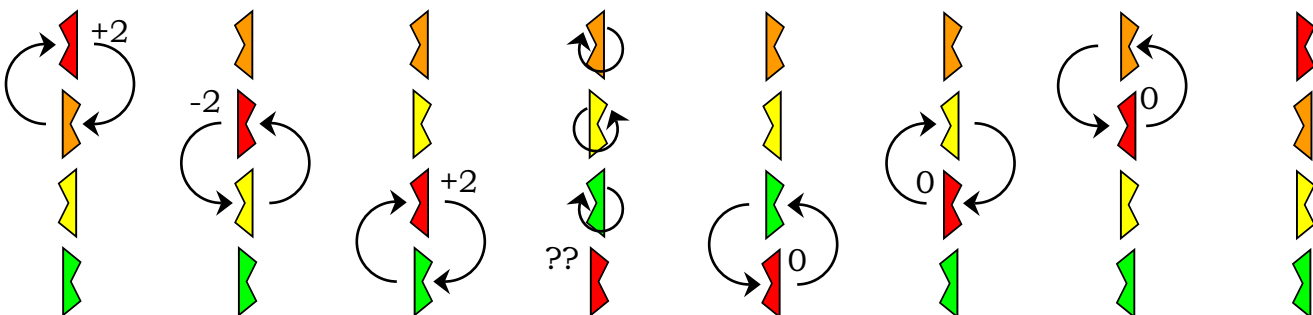
The total before the 180 is +2, so we need a -2 and get that by doing a counter-clockwise 180.