X-Wing Instructions
Origami by Mark R. Leeper
Transcribed by Phil

Tough to put into words but there is a familiar inflatable frog. The X-wing is a minor variation. Some terminology. A kite shape is what you get is what you get if you fold two consecutive edges of a square to the diagonal that lies between them. Well that is one way to get the shape. A kite is like a square with one corner pulled away from the cross of the diagonals. We will call that corner the point of the kite. The axis is a line around which the figure is symmetrical. Start with a large piece of paper or starting step 6 it will become very difficult.

1. Start as if you are going to fold the flapping bird. Mountain fold the square in half side to side, valley fold the diagonals, then fold it up like an umbrella. We will call the point that used to be the center of the square and is now the top, C. The figure should now be a square with C as the top, if it is a triangle with C as a right angle it is inside out.

2. Fold each flap as if it is the flapping bird, but from C. This is really lifting each flap, pulling the sides apart, crushing from the top. Do it four times and you have a kite shape like you would with the flapping bird, but the point is C. It should be at the top of the figure as you look at it..

3. Take the center of the base of the top isoceles triangle and pull it up toward C. The sides should collapse in toward the axis. When you flatten it you have a new kite shape on the top layer with its point at the end of the figure away from C. The top layer is a kite shape with point away from C, the next layer down is a diamond, and the whold figure is a kite with point at C.

4. Repeat step 3 three more times, the underside and the two sides. Now the whole figure is the diamond shape and on each side you see a kite.

[You have just finished the frog base ---Phil]

5. On the top turn one page to the right. Turn the figure over and repeat. Now you have a diamond shape with a smooth top and bottom. The angle at C and at the end away from C is each 22.5 degrees.

6. Make a narrow kite in the following way. At the point away from C, fold the two edges to the center axis. Do it all the way around. You now have a narrow kite with the end away from C being 11.25 degrees. At C it is 22.5 degrees. Now at the C also fold the two edges to the axis. Do it all the way around. You now have a very narrow diamond 11.25 degrees at each end of the axis.

7. Point again at the top, turn one page to the right, turn the figure over and turn one page to the right.

8. Form the legs as you want, I think you said you could see how from the figure. Then blow into the base of the figure to inflate it.

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Since I had already duplicated his wings, Mark just sent me directions on the rest of the ship. Let's see if I can describe it as well. . . 9. At the point away from C, Inside Reverse Fold the thin legs out, perpendicular to the center axis, as far as they will go. Repeat on all four sides. These are now the wings.

10. Inside Reverse fold the wing perpendicular, about 1/3 of the way from the main body. This will be *away* from point C, seemingly counterintuitive. Repeat on all four wings.

11. Inside reverse Fold the backward-facing points forward 180 degrees. Repeat.

12. Open the 'lasers' out. This is really difficult to describe without a drawing. . .

Any questions/problems with this, write to Phil. Praise and adoration can go to Mark Leeper. Mark's homepage: http://www.geocities.com/Hollywood/6960/