

ORIGAMI ARTIST MICHAEL LAFOSSE

Paper player

LITTLE-PIG MAN: Michael LaFosse used one sheet of 12-inch-square handmade paper – and no glue or scissors – to make this piece.



JOHN NORDELL – STAFF

WHAT Michael LaFosse can do with a single sheet of paper is magic, though it's not called that.

His specialty is origami. You may have tried this art form, which is a Japanese word meaning "paper folding," but until you see a master like Mr. LaFosse in action, the possibilities are hard to imagine.

In less than two minutes, using one sheet of paper, he can create all the illustrations for a "story-gami" about visiting a boy in the mountains of Japan. When he folds the paper one way, it's a snow-covered peak. When he folds it some more, it's an animal footprint or a bird's pointy beak. The story ends with the sighting of a large bird, a crane, that flaps its wings (the paper wings flap when he pulls the tail) and flies off. The story is a sure-fire way to calm a crying toddler on an airplane, LaFosse says.

LaFosse has been folding paper with a purpose for 40 years, ever since his Uncle Norman made him a paper airplane when LaFosse was 5. His creations range from designs so simple that children in early grades can do them to ones so advanced that engineers lose the trail.

The origami artist has invented more than 100 kinds of paper airplanes. He's also crafted hundreds of animals and plants and geometric objects just for fun.

Some origami modelers like their paper-airplane designs to resemble actual airplanes. But too much realism can mean planes that don't fly very well. He prefers function over form in this case, even if his airplanes look abstract or futuristic.

LaFosse has a collection of origami books that is worth thousands of dollars. He knows origami styles the way art lovers know painting styles.

He came up with his first unique paper-airplane design in college, where he studied marine biology. LaFosse still thinks his "Art Deco wing" is one of his best designs.

Standing at his eighth-floor dormitory window at the University of Tampa, Fla., he would simply let go of the wing and watch it float for blocks. Seeing it soar out of sight was a thrill, he says.

As a young boy, LaFosse thought of origami as a mechanical hobby. It was like doing a crossword puzzle. That view changed at age 12, when he read an article about Akira Yoshizawa, a Japanese origami master.

The story was illustrated with a photograph of Mr. Yoshizawa as well as a self-portrait he had crafted from folded paper. LaFosse's eyes were opened. Now he saw how origami could combine his interests in science as well as art. Origami, he realized, could provide his "path through life."

That explains the name of his Origamido Studio in Haverhill, Mass., north of Boston.

The name combines "origami" with "do" (pronounced "doh"), which means "the way" in Japanese.

LaFosse says that, to his knowledge, his is one of only two origami studios in the world that are regularly open to the public. Origamido is a combination studio and store. People can come in to admire the impressive origami artworks. They can also buy instructional books (some written by LaFosse) and handmade papers, a specialty.

On the day of the Monitor's visit, he was working with his young Japanese papermaking apprentice. Barely out of his teens, Satoshi Kamiya is already recognized as one of world's top origami designers. Now he is learning how to make custom papers sturdy enough to last for centuries.

Origami design and papermaking is a rare combination of skills. LaFosse, who began making his own paper as a teenager, is dedicated to imparting his knowledge. He conducts many workshops for young people.

If you enjoy handcrafts, are comfortable manipulating material, and have a good spatial sense, LaFosse says, you'd probably enjoy origami – regardless of your age.

The mistake many make, however, is assuming that origami is child's play. Origami can be learned with a little persistence, but it's important to begin with projects suited to one's skill level. He tells

of an origami activity that McDonald's once put on a Happy Meal box. It prompted a flood of complaints from people who couldn't figure out how to do it.

He cringes when he thinks of school classes folding paper cranes after reading "Sadako and the Thousand Paper Cranes" (by Eleanor Coerr, 1977). The cranes are too difficult for beginners, he says.

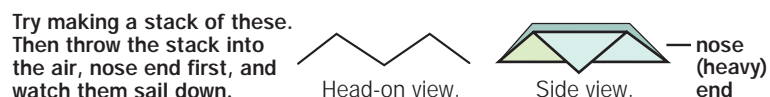
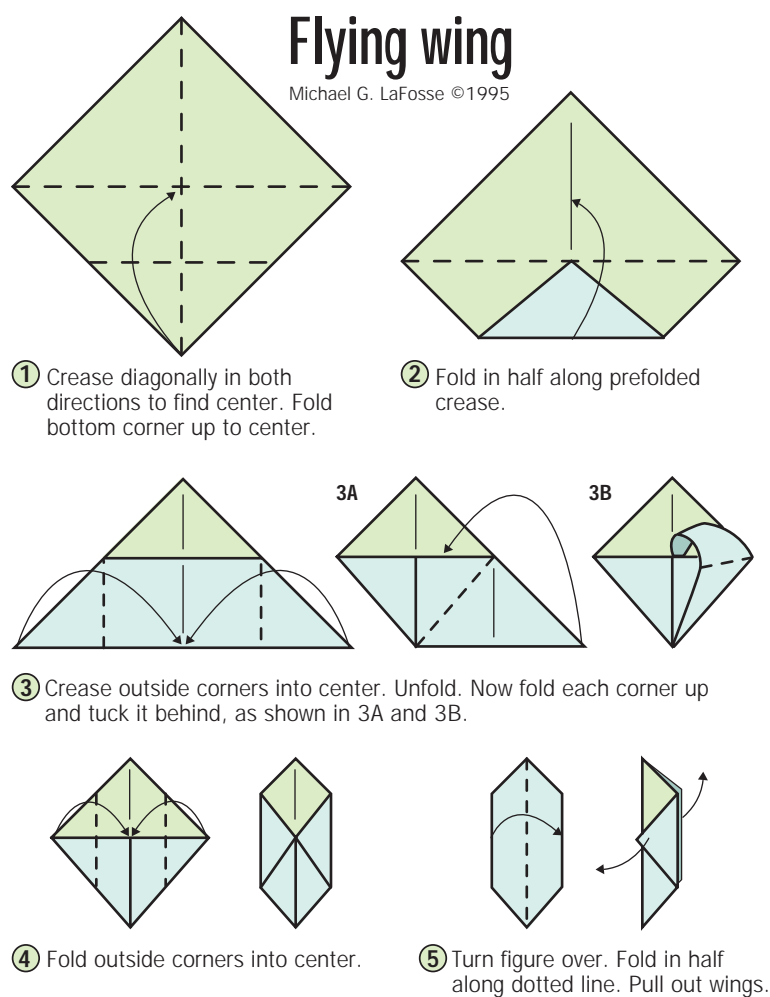
Looking around his studio, LaFosse points to a paper goldfish he refined in three hours of intense work. He spent 8-1/2 years perfecting a bat. Both are made using a fine-art technique called wet folding. By lightly wetting the paper, it's possible to make softer shapes. Dry-folded shapes (like those in the projects shown here) are more rigid and geometric.

This is a golden age for origami, LaFosse says. There is a tremendous amount and variety of paper available and lots opportunities for learning to fold it. About 25 new origami books are published each year. Videos are a good way to see the steps in making a project.

LaFosse is also enthusiastic about other applications for origami techniques. What about designing space-saving items or innovative highway maps? Yes, to an origami master, even the "mountain" and "valley" folds of a well-designed map are a thing of beauty.

Ross Atkin

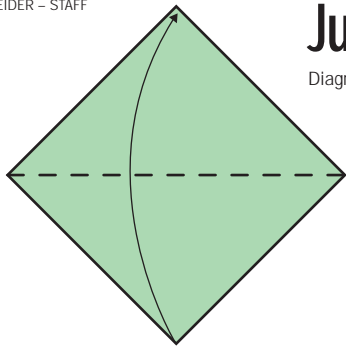
AT AGE 12, LAFOSSE SAW HOW ORIGAMI COULD COMBINE HIS INTERESTS IN SCIENCE AND ART.



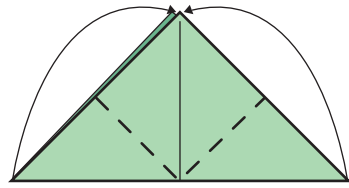
ILLUSTRATIONS BY
KAREN SCHNEIDER - STAFF

Jumping frog

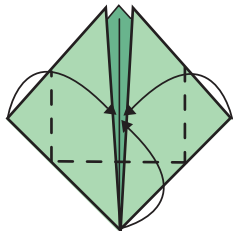
Diagrammed by Michael G. LaFosse ©1995



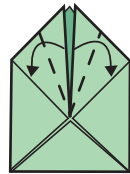
① Fold in half diagonally.



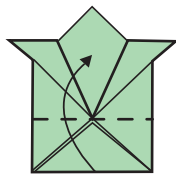
② Fold outside corners to meet at top.



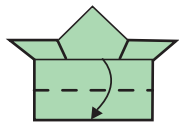
③ Fold both outside corners and bottom corner into center.



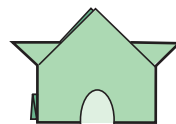
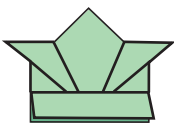
④ Fold out as shown.



⑤ Fold up along dotted line.



⑥ Fold down along dotted line to make figure shown at right.



⑦ Turn the figure over. To make the 'frog' jump, press down on area shown and release.

How the history of this art unfolded

PAPER-FOLDING has been practiced for centuries, but its history is shrouded in mystery. The reason, says origami master Michael LaFosse, is that for much of its existence the tradition was passed along by one person showing another. Not much was written down.

Paper was invented in China about 2,000 years ago. The Asian art of paper-folding probably began soon afterward. From China it caught on in Korea and then Japan. A few of the ancient origami designs have survived. They are simple pieces that don't require complex written instructions.

The paper arts still enjoy a special place in Asian cultures.

Paper-folding spread to Europe around AD 700. Leonardo da Vinci (1452-1519), the famous Italian painter, scientist, architect, and engineer, is sometimes credited with making the first paper airplane. If that's true, it probably was an example of pure folding, with no cutting or gluing. That would make it consistent with today's origami, in which no scissors, glue, or tape is used. (Multiple sheets of paper are OK, though.)

Origami's popularity with children grew with the kindergarten movement, begun by 19th-century German educator Friedrich Froebel. The idea of using instructional booklets and standardized pieces of paper (15 centimeters, or about 5-3/4 in., square), for paper-folding was especially well received in Japan. There, modern paper-folding fused with traditional Japanese origami. Mr. Froebel reportedly was unfamiliar with the word "origami."

During the 20th century, Akira Yoshizawa of Japan helped establish origami as a serious art form. He has created more than 50,000 origami works. With American Sam Randlett, he is also credited with developing the lines-and-arrows notation used in origami instruction.

Tips from a master folder

- Start simply. Choose origami books with simpler designs and fewer folds until you get familiar with how to follow the diagrams.

- Don't use expensive origami paper at first. Sheets of newspaper and pages from magazines work fine, as do old catalogs and computer printer paper. Gift wrap has vivid colors and designs. (It also has a 'front' and a 'back,' making it easier to follow directions.) Construction paper is too thick and won't fold cleanly.

- Start with squares. Cut paper into squares that are 6 inches or 10 inches on a side. More important than the size is the squareness. Misshapen paper can lead to folding problems.

- Practice a piece by using one sheet of paper. Don't worry about multiple trial creases, but replace the paper when it's worn out. Once you've practiced, use a fresh sheet for the final folding.

- Make a series of 'step folds' to help you remember a complex project. Fold a sheet of paper up to Step 3, for example. Label it and make any helpful notes on it. Take another sheet and fold it to Step 6, and so on. File the 'steps' together in a resealable plastic bag and refer to them for review. Origami artist Michael LaFosse keeps crates of these tutorials.