‘Jack in-the-box’ Draws Raves

Anke Sauer Invents Ingenious Kite; A Question: Is It Unique, a Generic?

By Ben Ruhe

Anke Sauer

....flying a foldup kite

Connoisseurs agree Anke Sauer’s “Jack-in-the-box” foldup kite is one of the most exciting new kites of the last few years, but as to its generic category there is no consensus as yet.

For those who have not seen the creation-----Anke had made just 13 of them by early summer 2003--------it’s easy enough to describe. Anke, from near Aachen, Germany, takes stiff paper, bends the paper into either a four- or six-sided pyramid with bases facing outward at the bottom of each side, glues the bases together until a rectangle of pyramids is formed, attaches bridle lines to the tip of each pyramid, and *voila*-----she has herself a kite ready to fly.

She calls it “Jack-in-the-box” because the kite folds up on itself, accordion-style, and can be carried in a small box.

Requiring a strong wind, the kite is flown upright against the wind, like a Japanese Edo, rather than on top of the wind, like a Delta. Since each pyramid has its own bridle line, the kite is quite strong.

Because she can vary the colors of the pyramid sides, and because she can omit pyramids here and there and can also make the creation asymetrical, viz. not retangular, it is quite a lovely kite to view in the air. The kite requires no tail; rather, the bottom portion, particularly if it has omitted sections, acts as an effective tail.

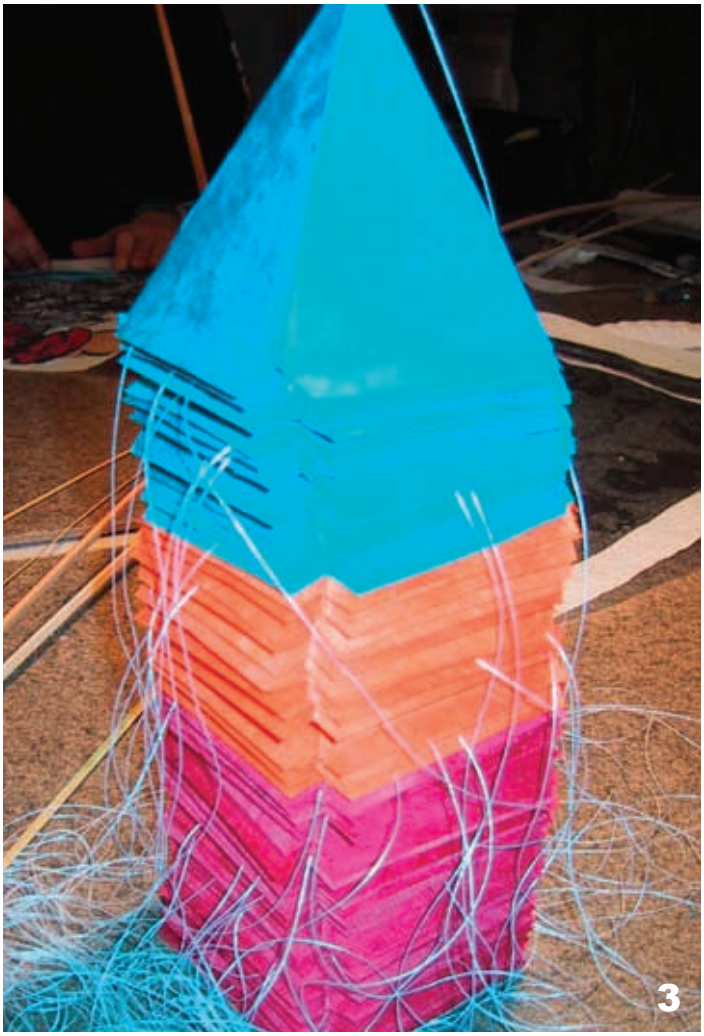
So how to categorize this invention of some two years? “Because it’s made of paper but is rigid,” notes Scott Skinner, president of the Drachen Foundation and an expert in the field of kites and kiting, “it’s almost a cross between a Tetrahedral variation and a Parafoil variation. It’s certainly not a Sled because it has no real rigid members. And it’s not an actual soft Parafoil because it doesn’t turn into an airfoil by inflation.

“It’s closer to a Cellular kite, a Boxkite, than anything else. I think that’s where I’d put it as to kite category. Although it resembles an inflatable kite, it’s not an effective one. It actually flies more like a billboard. The Flying Billboard, I’d call it.”

It is worth noting that the kite needs constant wind pressure to fly. Denied that, it collapses and tumbles into a ball.

Skinner makes an interesting point: “It’s unique to its material, paper. It almost certainly cannot be made of fabric, which can never be stiff enough unless it becomes impossibly heavy. I like that about the kite.

“As to its foldup ability, this is a wonderful piece of elegance. If it didn’t have this property, the kite would be almost un-portable, sort of like the boat that gets built in the basement and then proves too big to move out.”



1. A partially folded pyramid kite by Anke Sauer. 2. The foldup fits conveniently into a box for transportation and security. 3. Stacked pyramids with bridle lines attached await assembly into colorful flying kites.

Renowned "Legs" kite designer Martin Lester, of England, joins Skinner in praising the kite. "It's the perfect summation of structure," he says. "The bridle is both a physical and intrinsically esthetic part of the kite. The kite is minimal. The bridle holds the kite in shape as well as in position."

"It's not a soft kite, and it's not a flat kite," he notes, "because the load is transmitted down the edges of the pyramids. I have to think about how to categorize it."

Because the panels of the individual pyramids can vary in color, depending on the inspiration of the maker, "Jack-in-the-box" kites are often quite beautiful.

Because of its paper construction, Lester points out there is a limit to the size the kite can be made. The larger the kite, the stiffer the paper required-----until some weight limit is reached. "It's the first kite I've seen in a long time that really gets me excited. I really want to have a go at making one myself."

How did this invention occur? Anke, noted for her innovative, beautiful kites, is a bit vague. "It was a stupid, rainy weekend," she recalls. "I had paper and some white glue and I made a pyramid. Maybe I had an ancient Egyptian pyramid in mind. I made more pyramids and glued them together. 'Oh, it looks very nice,' said my sister Kisa, 'but you'll have a transportation problem with it.' I discovered though that when pushed together the pyramids contracted into a small volume, and that's when I named it "Jack-in-the-box."

If four-sided pyramids are built, the kite contracts in a corkscrew manner, if six-sided it contracts like an accordion.

"I've discussed patenting the idea with friends, but decided against it," she says. "It's an idea that should be open to everyone, and anyway, they're hard to make. It took me two days to construct one with 80 pyramids, plus another half-day to bridle it."

Anke passes on whether the kite is a unique or generic model (Flat, Malay Diamond, Sled, Boxkite, Parafoil, Flexifoil, etc.), or fits into a kite category. She does point out it may have some relationship to new airplanes with rippled skin.

Innovation, rather than theory, she makes clear, is her big thing.

Attending a miniature paper kite workshop and contest held by the Drachen Foundation and a Japanese paper company in Seattle last spring, Anke won first prize with one of her pyramid kites. Unwilling to sell any of them, Anke finally parted with three when tempted by a very expensive guitar she coveted. She subsequently donated another "Jack-in-he-box" to a kite festival auction in Sunderland, England. Kite experts there confirmed the interest in her creation. The small kite drew a large winning bid of $500.