

CLEOBURY MORTIMER CANARD Dorothy Roake


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We hold club fly-ins each month (winter included) at various sites. These are informal events and are a great way of meeting other MKF members.

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Your membership card may help you obtain discounts for purchases from kite retailers in the UK, and gain you entry to events and festivals free, or at a reduced cost.

Please keep them safe.

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A claim may be refused if the flier was found to be flying a kite dangerously - e.g. using unsuitable line, in unsuitable weather; flying over people, animals, buildings or vehicles. This insurance does not cover you for damage to, or loss or theft of members' kite/s.

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## References Cited

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## [57]

ABSTRACT
This invention relates to a parachute of the ram air canopy type wherein a canopy is made from a skin formed into a series of elongated, inflatable parallel cells disposed in side-by-side relation to constitute an airfoil when inflated. The inventive concept of the application is the formation of openings in the top and in the bottom wall of each of the cells to form an air passage. These air passages in the bottom and in the top walls of the cells are of greatest capacity in the two outside cells and become of progressively smaller capacity towards the centre of the airfoil. Adjacent cells in the airfoil are in communication with each other through a port in their common wall. The combinaion of passages in the top and the bottom wall of each cell as aforesaid and the port between adjacent cells greatly improves the stability of the parachute, especially under conditions of vertical descent.

## 2 Claims, 9 Drawing Figures

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SHEET 1 OF 2


## SHEE 2 OF 2




FIG. 8


FIG. 7

## PARACHUTE

This invention relates to a parachute having a ram-air canopy. Parachutes having a canopy made from a skin formed into a series of elongated inflatable parallel cells disposed in side by side relation to constitute an airfoil when inflated are well known. Each of the cells is open at its front end whereby to provide for the admission of inflating air thereto, in flight. The open ends are the leading edge of an airfoil and the "ramming" or compressing of the air provides the inflation to form and retain the airfoil shape of the canopy.

The large surface area to low mass weight of the canopy sets up a "drag" which reduces the rate of descent of the payload which has a small surface and high mass weight. In addition to this drag, however, there is a lifting force derived by the passage of air over and under the airfoil shaped canopy which gives a "flight" characteristic.
Parachutes of this general type are manoeuverable so long as an air speed can be maintained. There is little difficulty in achieving a steady rate of descent of about 14 feet per second at an air speed of $25 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. However, for complete control it is often desirable to descend with less forward motion and the chutist has flight control means which permit him to stall or near stall the airfoil whereby to cause loss of forward motion. Such a manoeuver is a very useful one from a control point of view because it permits nearly vertical or increased rate of descent but it can be dangerous because in such a condition the canopy tends to fall uncontroilably to the right, to the left or back leaving the parachutist in an uncontrollably increasing rate of descent.
This invention provides a means for reducing the rate of descent of a ram-air parachute under conditions of braking and nearly vertical descent, without materially affecting its manoeuverability under conditions of full forward flight.
Generally speaking a parachute according to this invention comprises a canopy, suspension lines extending from said canopy, said canopy comprising a skin formed in a series of elongated inflatable parallel cells disposed in side by side relation to constitute an airfoil when inflated, said cells being open at their front ends whereby to provide for the admission of inflating air thereto in use, said front ends of said cells, forming the leading edge of said airfoil, said cells each having a top wall and a bottom wall joined by side walls, said top walls of said cells forming the upper surface of said airfoil, said bottom walls of said cells forming the bottom surface of said airfoil, said bottom walls being formed with an air passage, said top walls being formed with an air passage, said air passages in said bottom walls and said air passages in said top walls constituting a passage for air through their respective cells effective under conditions of substantially vertical descent of said canopy to stabilize the descent of said parachute. The invention will be clearly understood after reference to the following detalled specification read in conjunction with the drawings.

In the drawings:
FIG. 1 is a perspective view of a parachute according to this invention with the canopy in full flight;
FIG. 2 is a side view of FIG. 1;
FIG. 3 is an illustration of the canopy partly broken away to illustrate the leading edge and the air passage
which are formed therein and which will be described in the specification;

FIG. 4 is a sectional view of the canopy under full flight;

FIGS. 5, 6 and 7 are views taken along the lines 5, 6 and 7 of FIG. 3 showing the canopy under conditions of braking;
FIG. 8 is a view similar to FIG. 5 showing the crosssection of the canopy in a stall position; and
FIG. 9 is a plan view of the canopy illustrating the relative arrangement of the vents.
The parachute illustrated in the drawings has a canopy generally indicated by the numeral 10 and suspension lines generally indicated by the numeral 12 extending therefrom for supporting a parachutist 14 or other load.
The canopy 10 is made from a skin of substantially air impervious material formed into a series of elongated cells 16 disposed in side by side relation to constitute an airfoil when inflated as illustrated in FIGS. 1, 2 and 3. It will be appreciated that the parachute is folded according to usual practice and that it inflates as illustrated in use. Parachutes of the type under consideration are often called ram-air parachutes because their airfoil shape is achieved by the ramming or compressing of air into the cells 16 through the open forward ends of the cells.
The trailing edge of the canopy is substantially sealed to insure the maintenance of the pressurized inflating force within the cells. In some cases, however, slight venting at the rear edge is provided depending upon the particular design of the canopy.
In FIGS. 1 and 2, the parachute has been illustrated in full flight. It will be noted that the trailing edge of the airfoil is fully up. Under such conditions a parachute of this type has a forward air speed. FIG: 4 is a longitudinal cross-section through one of the cells 16 illustrating the passage of air across the upper and lower surfaces of the airfoil, in a manner that develops lift in the same fashion as a typical aircraft wing. Under such conditions of forward flight it is possible to turn the chute in either direction by depressing the toggle that controls the flap on one side or the other to cause sufficient drag to turn the parachute. Numeral 17 refers to downwardly depending flare stabilizers which extend from the side walls of the cells and connect with the suspension lines.
It is also possible to brake the forward speed by depressing the toggles that control the height of the trailing edge of the airfoil and in this connection the rear two control lines each control one half of the trailing edge. Both control toggles would be depressed simultaneously to uniformly lower the trailing edge of the airfoil as illustrated in FIGS. 5, 6 and 7. Under these conditions the parachute loses forward air speed and descends in a nearly vertical path.
It is under conditions of braking and stalling that the present invention is useful. The present invention includes openings in the top walls 18 and bottom walls 20 of the cells $\mathbf{1 6}$ designed to constitute a passage for air through their respective cells that is effective under conditions of substantially vertical descent of the airfoil to stabilize and slow up the descent of the parachute.

FIG. 5 is a cross-section of an outside cell 16. The bottom wall 20 is formed with an opening 22 adjacent its forward end and top wall 18 is formed with an open-
ing 24 adjacent its back end. Under conditions of vertical drop as indicated by the arrow 26 air is forced through opening 22 to cause a build up of pressure within the cell due to the descent that retards the rate of descent. The air that is guided through the cells 16 under these conditions would in the absence of the opening 22 and 24 spill from the edges of the airfoil with little or no buoyant effect on the parachute. By providing for a build up of pressure due to the passage of air through the cells, an increased drag effect is achieved under conditions of substantially vertical descent. Under conditions of forward flight as illustrated in FIG. 4 of the drawings, venting through passages 22 and 24 is negligible.

It will be noted that the location of the holes similar to holes 22 and 24 varies from cell to cell. FIG. 6 is an illustration through a cell midway between the center of the airfoil and the outer edge. It will be noted that in this case, the holes in the lower wall 22 and the upper wall 18 are substantially aligned with each other and in the case of these holes, the air substantially passes in a vertical direction therethrough.
FIG. 7 is an illustration showing the location of the holes adjacent the center of the airfoil and it will be noted that in this case the air can enter through a hole in the bottom wall 22 that is near the back of the airfoil and leave the airfoil through a hole that is located adjacent the leading edge of the top wall 18 of the airfoil.

Adjacent cells have a cross vent port 25 in their common wall so as to tend to equalize the pressure in the cells across the airfoil. Cross vent ports $\mathbf{2 5}$ are located midway of the length of the airfoil exclusive of the flap portion.

The arrangement of the openings $\mathbf{2 2}$ qnd $\mathbf{2 4}$ on the lower and the upper surface of the airfoil is illustrated in FIG. 3. It will be noted that the holes 22 on the under side of the airfoil are arranged in a $\mathrm{V}_{0}$ shape with the apex of the $V$ adjacent the rear of the airfoil and that the holes 24 in the upper surface of the airfoil are arranged in a V shape of similar height with the apex of the V adjacent the front end of the airfoil. Cross vent ports are located midway of the height of the $V$ shapes. The relationship of the $V$ formation and the cross vents is illustrated in FIG. 9. The flap area is the area behind the V formation.
It will also be noted that the vent holes are largest in the cells adjacent the two outside edges of the airfoil and that they decrease gradually towards the center cells of the airfoil.
This arrangement tends to increase the pressure in the outside cells the most.
It is difficult to be precise or isolate the effects of the individual venting holes in each of the cells. It will be recalled that the cells communicate with each other through the wall vents and that there is a certain amount of evening off of pressure within the cells.
The vent openings 22 and 24 have a screen mesh thereover so that air passes over them as indicated in FIG. 4 under conditions of normal flight.
FIG. 8 illustrates the section of a cell with the trailing edge of the airfoil depressed to a greater extent than it is in FIGS. 5 and 7. It is approaching a stall and under these conditions the descent is substantially vertical so that the drag effect achieved by the passage of air
through the openings 22 and 24 is increased over and above that to what is illustrated in FIGS. 5 to 7.

Under all conditions the cells remain inflated and in order to remove the parachute from its brake or stalled condition, it is merely necessary to remove the tension on the trailing edge by loosening the rear control lines. The airfoil will again assume the position illustrated in FIG. 4 and recommence full flight.

The vent holes 22 and 24 are largest at the outer arms of the V shapes and reduce gradually to about half size at the apex of the V shapes. They will range from say 15 inches to 7 and one-half inches in size but will vary depending on the load and size of the airfoil.

What I claim as my invention is:

1. In a parachute, a canopy, suspension lines extending from said canopy,
said canopy comprising a skin formed in a series of elongated inflatable parallel cells disposed in side by side relation to constitute an airfoil when inflated,
said cells being open at their front ends whereby to provide for the admission of inflating air thereto in use,
said front ends of said cells forming the leading edge of said airfoil,
said cells each having a top wall and a bottom wall joined by side walls,
said top wall of said cells forming the upper surface of said airfoil,
said bottom walls of said cells forming the bottom surface of said airfoil,
control means for controlling the height of the trailing edge of said airfoil in flight,
said bottom walls being formed with an air passage,
said top walls being formed with an air passage,
said air passages in said bottom walls and said air passages in said top walls constituting passage for air through their respective cells effective under conditions of substantially vertical descent of said canopy to stabilize and retard the descent of said parachute,
said air passages in said bottom walls being of greatest capacity in the two outside cells and becoming of progressively smaller capacity towards the centre area of the airfoil,
said air passages in said top walls being of greatest capacity in the two outside cells and becoming of progressively smaller capacity towards the centre area of the airfoil,
adjacent cells in said airfoil being in communication with each other through a port in their common wall,
the air passages in the top wall and the bottom wall of said cells being spaced apart longitudinally of their respective cells in at least most of said cells.
2. In a parachute as claimed in claim 1 in which said air passages in said bottom walls of adjacent cells are arranged in $V$ shape with the apex of said $V$ adjacent the rear of said airfoil and in which said air passages on said top wall of adjacent cells are arranged in a $V$ shape with the apex of the $V$ adjacent the front of said airfoil.


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1s a child, George Peters considered himself "just a cowboy in the 1950s" who enjoyed acting out his favorite spaghetti western scenes, looking to the sky to catch glimpses of airplanes cruising over his home, and spending most of his time "making stuff." Growing up in Richmond, Virginia, he remembers the day his dad came home and announced, "We are moving to Phoenix." The change of scenery suited the family, and in the Wild West, their new backyard was large enough for grapefruit trees and kiteflying. George and his aeronautical engineer dad made many box and diamond kites. Here and there, George picked up a few other kites from the local sundries store, A. J. Bayless. "Gosh, I don't think there was a time before kites," he says, while admitting there was about a decade when his childhood backyard, building model sailing ships, and other interests was lost to adolescence.

George in bis studio, sewing "Wrap Man" (above).

As a teen, George moved to Los Angeles to attend the Art Center College of Design where he studied graphic design, illustration, and figure drawing. He had aptitude for visual arts and thrived at art school, learning the fundamentals of his craft. Perhaps more importantly, he learned how to identify, cultivate, and hone creative ideas. When an ad for a study-abroad program caught his eye, it opened his world-an opportunity to "Spend a Summer in Greece" studying "painting, sculpture, performing arts, and dance" on a tiny island near Athens. "I could barely afford it," he says, "and I had never flown on a plane before, but I just decided, let's go!" He signed up for a six-week summer semester and off he went.

Fully immersed in a $24 / 7$ all-encompassing learning environment, George enjoyed his time.
"I started doing strange things at the school, not to garner attention but to get people wondering 'Who the hell hung all the chairs from the tree in the sitting area in front of the school, along with the forks, knives, napkins, and plates?" The installation, he said, "took me all night, with string, so it is kind of like kites." From there, the fun never stopped and he stayed for a second s ession during the last half of the summer. "I made so many friends there including a life partner that I met there named Clare." The people who ran the school wanted him to stay and offered him a teaching position. "I had my own class, I had my own students. I was like 23 years old. We just played. We had fun. Especially outside the classrooms."

For his first teaching project, George took a huge roll of butcher paper and in a moment of
inspiration, said, "Let's make kites." He remembers, "the students were really into it and we spent about a week making kites. I knew nothing about kites, but I kind of had a sense just from my youth, about what makes them fly." It was infectious fun. One student made a giant tetrahedron in the classroom that was too big to get outside, but the rest of the students brought their kites out into the 110-degree heat. The students "ran around in circles with these kites bumping the dirt and stirring up dirt and collapsing in laughter." Fun, frolicking, and with a dash of mayhem, George recalls how that day, that class, and that island experience, "kind of sewed a seed in me at that time."

A few years later, George was working at Disneyland as a portrait artist. Stifled and tired of capturing park goers in watercolor, he decided to end the madness of what was a clearly a cul-de-sac job for the prospects of tapping into the art scene in Hawaii. The idea came from a friend he had worked with at Disneyland. She told him he would succeed in Hawaii, assuring him, "you can make a killing out here. Come and try it out." After landing in Honolulu, he says he "almost instantly got a job in Waikiki at the International Marketplace painting portraits."

Variety, experimentation, and new adventures appeal to George, and he remarks that, "As an artist, I like to do a lot of things." When he spotted Tal Streeter's The Art of the Japanese Kite book in a local kite store in Waikiki's International Marketplace, George remembers that "it just fascinated me and I had the urge to become an Japanophile. In fact, I wanted to become a Japanese kite master." He admits, at the time, he didn't yet know what "made them fly or anything so I just kind of looked at the pictures and the way they were bridled." Curious, George started making Edo and Hamamatsustyle kites. "A couple of years later, one actually flew. And by that time it was too late, I was already hooked. I just loved making kites and it was a way of doing something different than portraits." He says his studio and other work kept him indoors, but kites "just got me outside. In Hawaii, it is a crime to spend time inside because it is so beautiful there." Playing in the

water, boogie boarding, surfing, and walking in the bamboo forest were at the top of his daily activities, and kiteflying was an easy addition.

As his kiting interest grew, George started picking up technical skills by experimentation and observation. He spent a lot of time reading books, examining what could be done with kites, and gaining inspiration from other kite artists. He recalls Los Angeles kite artist Tom Van Sant's influence and enjoyed seeing his early experimentations with modern

Aegina, Greece, 1973 (above). Honolulu craft fair, 1979 (below).

nylons, ripstop, taffeta nylon, and fiberglass tubing. George remembers flying in Kapi'olani Park when Van Sant showed up. Tom put on "his own personal festival, flying an exhibition of his kites. He was well known in Hawaii, but at the time, I had never really heard of him. I put my kite down and went 'Oh my god, now that is a kite!" The kites were a 20 -foot delta with 60 -foot twin tail ribbons and a giant dragon kite. "I saw his show and helped him bring down a centipede kite that was overpowering him."

From top: Sketch book ideas; "Beetle" kite in construction; and 1984 display of "Cloud Bird" kites and "Square Flyers."

George introduced himself, "struck up a friendship," and later, ended up teaching kitemaking classes with Van Sant at the Otis Art Institute in Los Angeles. The friends shared a love of the visual arts and while George admired Tom's kites, he also appreciated his sculptures and public art works. George recalls a project Tom undertook where he positioned mirrors in the Mojave Desert that could be seen from space. The overexposed circles of light reflected in just the right way that, from passing satellites,
it produced a dotted line running seven miles long. Long experienced in the conceptual arts, George is forever impressed with people like Tom who can execute and pull off elegantly ingenious installation work.
Since George really enjoyed kite work, he says, "I gave myself the assignment that I really wanted to make kites. And that led to me being a kite craftsman. I started making them as a craft and joined a craft organization called Hawaii Craftsman." The group went to different craft markets during the year, and at these fairs, George displayed his wares. People came by, inquiring about prices, and tried to haggle with him. It was hard to make a living on the craft market circuit, so he began making custom kites for other kite-crazy people. He also made a catalogue of all his kite designs and says, "I got flooded with orders, but I missed designing kites. It was too much." To find a balance, he began teaching kitemaking workshops to kids at local schools. "Keeping kiting a personal pleasure" was a win-win for George and gave him the opportunity to teach again. Looking back, he jokes, "I think I taught just about every child in the state."

In 1982, George moved to Boulder, Colorado. Around that time, he learned about Betty Street and Bill Lockhart's Junction Kite Retreat in Texas. "I just kind of wrote to them and said,
'T'd love to come, and I could teach a class but mostly I just wanted to be there." Betty and Bill jumped at his offer and invited him to teach. Seasoned by teaching college art students in Greece and schoolchildren in Hawaii, George took to teaching adult kitefliers in Texas with the same spirit of fun and coaching: "My main thing was just to get people to relax" and tap into their imaginations. He asked them to "make a new kite," that no one had seen before. "I wanted them to take over their own instincts and just start making things." To jumpstart creativity and break the ice, George asked his Junction students to make cardboard hats "to wear to the cafeteria for lunch." The hat making workshop "just took off," people loved it, and it went on for years. While his lessons certainly involved plenty of kitemaking, he also enjoyed leading a popular blow dart workshop. He also had students make small boats from paper and cardboard scraps; they'd sail them on the Llano River that meanders through the campus grounds. "A lot of them sank," George says, but it did not matter. People were making things, reveling together, and enjoying being at Junction. Fun of all sorts went late into the night, and "in Junction, everyone was proud of not sleeping," a way to squeeze more adventure and excitement out of the retreat.

On his quest to master the art of kitemaking, George decided to contact Tal Streeter. At the back of Tal's book, he spotted the author's contact information and realized he might be "fishing for other kitemakers and other artists" to reach out to him. The pair became kite pen pals and over the years, Tal encouraged George, asking him about the work he was doing and sharing photos of his kitemaking and art projects. With double interests in kites and art, the conversations were inspired. Eventually, Tal asked George to come to upstate New York to join him and his circle of artist friends at Lake George for the Ice and Air Show. In the deep of winter, 1983, a group of mostly installation artists pushed the limits on sculpture made to fit the outdoor environment of the expansive frozen lake surface. George created an 84 -foot diameter circular sculptural tent from triangular sails. It looked like a flying saucer. At night he lit it with red flares. The winter sculptures still remain a
"very magical" memory to George, and a classic outing with Tal where the pair bonded over art and aerial interests.

Not only wed to Asian kite traditions, George also made sport kites. He was inspired by Peter Powell kites, and tinkered and made adjustments to eliminate the hard flapping sounds that thundered behind stunt kites of the day. After a visit to Maui, he started designing a version with battened sails to improve sail shape and reduce the drag. His kites were fast and "really, really fun. I loved it, but a lot of people just made better stunt kites than what I had." He let the experiment pass, "but I still enjoy flying mine."
He founded a kite company under the name "Flying Colors," which drew on his craftsman fair days in Hawaii. The business helped him earn a living and served as a way to get his kites to people who wanted them. The custom kite market was primed, and with his
 love of color George challenged himself to use a palette of only primary-colored ripstop nylon to see what he could come up with. He got scrap ripstop from sailmakers and constructed "orange slices" from the remnants by

From top: "Pterosaur," 1989; Ice and Air Show Snowfake tent, 1983; and a sampling of bis creations. sewing many stripes together in order to create




Fabricating "Boulder Bubble" sculpture for eTown Hall, Boulder, 2013.

"Land and Sky" sculpture, CoBank Corporate Headquarters, Greenwood Village, 2015.
George also creates aerial sculptures. "Trade Winds" for TD Ameritrade Corporate Headquarters, Omaba, 2014. ITING
graphic patterns in a large enough format for kites. "That is how I became known as the stripy kite guy," George says.

He then started purchasing bolts of fabric. Even with long rolls of materials, George "started cutting them up into strips." He let his creative imagination go and started making very complex designs that "nobody in their right mind would copy." For years, his strategy worked; his kites stood recognizable and uncopied until a recent crop of
knockoffs trickled in from overseas. Since copyright objections fall on deaf international ears with these sorts of matters, it took the wind out of commercial sales and business revenue.

George notes, "work is play for me." Bumps in the road do not stop him and dollars are not his chief motivation. He is a kitemaker, an artist, and someone who is compelled to make and create. For him, the rewarding aspect of kiting and two things keeps him engaged and involved: "taking a break from the production aspect of being a kitemaker" and teaching. "I really like what teaching has done. I have made a lot of people into kitemakers." In his experience, George found that if someone "buys a kite, they will fly it once and they'll put it in their closet. But if I teach them to make their kite and they trust themselves to follow their own instincts, then they will be a kiteflier and kitemaker their whole lives. That is what really excites me: the sharing, the community. That I like the best."
Even though he loved kites and community, George never joined AKA. With kiting he says, "I like the art of it and the celebration of it," but not formal kite organization membership. Once, though, he accidentally
showed up at an AKA Convention. He had been "invited back to Hawaii to do a workshop" at La Pietra Hawaii School for girls, on the slope of Diamond Head overlooking Kapi'olani Park. Two or three days into the workshop, he took his class to the park to fly their creations. When George arrived, he was surprised to find the park already full of kites. It was the AKA. Magically, he says, "I was just there in the park, and got to meet everybody."

Deep into his kiting journey, George got a call from Valerie Govig at Kite Lines. She told him, "We heard about your kites and saw some pictures and we would really like to do an article about you." He and his partner, Clare, collaborated and wrote a piece. When the article came out, George says he "started getting these inquiries from all over the world about kites." He sent out his catalog and began making kites "pretty solely for kite-crazy people, and that is how a lot of this began." Helping his business, growing his network, increasing his friend-base, the article also opened a door for him to write other pieces and include his own illustrations. "By writing for Kite Lines magazine, it was the thing in me that wanted everybody to pull out the artist in themselves." George sees kitemaking as accessible and is "a form of folk art" most people can do even if they do not consider themselves artists. He researched international kitemaking traditions and wrote about his travels; through his writing and reporting, he featured exemplars that showed "what a kite could be, to push the limits of what could go on a kite and their shapes." He loves to show that "everyone is sort of an artist."

George traveled and attended international kite festivals even before he learned about domestic kiting events. His first was in 1989 to Ahmedabad, India, where he was awed by kiters who skillfully fought using kites. George Emmons from Into the Wind in Boulder was invited but could not attend and asked George to take his place. When he said yes the next thing he knew he was traveling with Bill Lockhart. "Bill was a character and he was just an amazing guy to travel with because he had that Texas friendliness that just took him
anywhere." George also remembers meeting Japan Kite Association fliers and "got a close-up look at their kites." This taught him about bridling and widened his network of international kite friends.
"The trip was amazing and we were treated so well." Explorer Sir Edmund Hillary was there and handed out trophies at a ceremony. The trip encouraged him to return to India and to also travel to kite events in other countries. With every trip, George wrote of his travels for Kite Lines. "Primarily what I was trying to do with the articles was open people up to cultures" by explaining foreign histories, pointing out interesting customs, and using kites to open people's eyes to an interconnectedness and rich world history.

Kiting and travel to international festivals helped him connect to a network of kindred spirits that could not be dearer to him. "The friendships I've made through all the years, you know, just traveling with the Monty Python kite circus, all the people I've met has just been an amazing experience. Meeting so many people and having so much fun-we shouldn't be able to have that much fun together. What did I do to deserve this?"

Reflecting back to a 9th grade assignment, George was tasked to write an essay on what he wanted to be when he grew up. Kites did not enter into it but he remembers writing, "I want to be an artist, I want to travel the world and see other countries." Through kites, he has accomplished deep-seated dreams and appreciates that
kiting helped him achieve these goals. "I'm glad I didn't have to do portraits going around the world, being a street artist."
Now anchored in Boulder, he and Melanie Walker, his artist life partner of 25 years, create kites, teach art, and live and breathe the maker's life. The couple lives in an installation-like residence that "only an artist would live in," and run Gallery O from their ever-changing artful home that was recently repainted in a gradation of dark to light gray-andwhite checkerboard pattern mimicking a chess board. Since George has a longstanding interest in miniatures, he curates shows with tiny works of art and writes the gallery's blog-telling the history of miniature arts, including a look at mini kites.

To see more of George Peters' art, go to: https://www.airworks-studio.com/



From top: George and Melanie's checkerboard home, 2021; "Super Sled," Honolulu, 1980; Kite and banner display, Cervia, Italy, 2010.


## Mikio Toki \& Edo kites keep hope afloat <br> Loop 22 AUGUST 2019



## Mikio Toki

Our pursuit of beautiful and thoughtful objects takes us far beyond the gallery. From kite-maker
Mikio Toki, we learn that art taken to the skies can be a powerful way of giving thanks.
Mikio Toki is one of Japan's few professional kite makers. He is a regular guest at kite festivals around the world and has over 42 years of kite making experience. Inspired by ukiyo-e, Edo kites are rectangular bamboo kites with coverings made of washi paper, painted in bold, vibrant colours. Often depicting kabuki actors, legendary heroes and kanji characters, Edo kites have been popular since they were first created in the 1700s.



Mikio Toki
How did you learn to make kites?
I made Edo kites myself when I was young and had the opportunity to meet master kite flyers. The Edo kites enchanted me, so I studied with a master.

80 What is the greatest challenge in making a kite?
Making new styles while also upholding tradition.
28 Can you describe an event where a kite is flown as an expression of thanks? In Japan, we have a custom of flying kites for the Boy's Day celebration on May 5th (Translator's note: Boy's Day is the traditional name of what is now called Children's Day). Kites are made to give thanks for the birth of a couple's eldest son and pray he grows up into a healthy and successful adult. [ 8 . We assume this is changing now to celebrate the birth of all children.]
$8_{8}$ What is the Japanese name for kite-maker?
A kite-maker is called a takoshi. In Tokyo, a person who makes Edo kites is called an Edo takoshi.
$\%$ Do you sell your kites? Are some purchased as artworks to be hung on a wall rather than flown?
I do sell my kites. When I was young, there weren't tall buildings even in a metropolis like Tokyo, so there were vacant land and fields where kites could be flown by both children and adults on holidays like New Year's. But now, since there are so many skyscrapers, there is little open space, and the numbers of takoshi in Tokyo are dwindling. A generation of children who did not grow up flying kites have now become adults, so, unfortunately, the number of people who use them as
decoration is greater than those who fly them. But the kites I make can certainly be used for flying. For clients who wish to fly their kites, I test fly the completed kite and give them a fine thread that anyone can use for flying. I want people to enjoy flying their kites as much as possible.

## \% What do you think is the value of a kite?

Since kites became popular in Japan during the Edo period after passing through China and the Korean Peninsula, they have been flown throughout Japan at New Year's and events such as Boy's Day on May 5th. Kites are an important item in Japanese culture. I continue my work making kites with the goal of passing on this culture on to the next generation.


Mikio Toki

The exhibition, Edo in the Sky: Traditional Kites of Japan, features over 30 handmade kites by master craftsman. The exhibition will run at The Japan Foundation, Sydney from July 10 to October 122019.


Kite Master: Mikio Toki at the Japanese Kite Festival Dragons soared over Stapleton on Sunday, October 2, during the third annual Japanese Kite Flying Festival, a collaboration between the City of Denver and the Japan America Society of Colorado. Edo Kite Master Mikio Toki led the way as the kites began to fly in Central Park.

All photos by Ken Hamblin III.



## SANJO ROKKAKU

Masami Takakuwa


This is a typical plan of traditional Sanjo Rokkaku.
There are many sizes in Rokkaku according to a number of standard Washi sheet which is used for the kite.


In the table, Type denotes number of standard Washi pater sheet.

Unit:cm

| Type | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 30 | 23 | 6 | 7 |
| 2 | 47 | 36 | 8 | 9 |
| 3 | 55 | 44 | 9 | 11 |
| 4 | 64 | 52 | 12 | 14 |
| 5 | 76 | 62 | 14 | 16 |
| 7 | 93 | 76 | 17 | 20 |
| 8 | 102 | 85 | 19 | 23 |
| 10 | 115 | 93 | 22 | 25 |
| 13 | 137 | 113 | 26 | 31 |
| 16 | 157 | 130 | 32 | 35 |
| 20 | 176 | 144 | 32 | 35 |
| 25 | 191 | 157 | 37 | 41 |
| 30 | 216 | 173 | 40 | 44 |
| 40 | 258 | 197 | 47 | 52 |
| 50 | 285 | 212 | 52 | 56 |
| 70 | 327 | 254 | 58 | 65 |
| 80 | 364 | 285 | 67 | 77 |
| 100 | 424 | 321 | 77 | 85 |
| 120 | 455 | 342 | 79 | 89 |
| 150 | 535 | 412 | 88 | 100 |
| 200 | 667 | 515 | 121 | 133 |

## History of Kites in Korea



February 22, marks the first full moon of the Lunar New Year. Koreans celebrate the occasion with a variety of rituals and events. One of the age-old activities on this day is kiteflying.


## Traditional Korean Kites

While people in other countries usually enjoy this activity in spring and fall, Koreans often fly kites during winter, especially on Lunar New Year's Day and on the lunar year's first full moon. Some people cut the strings to let their kites fly away to drive away bad luck and bring good luck instead.
In Korean history, kite flying is traced back to 637 A.D., during the first year of the reign of Queen Chindok of Silla, when General Kim YuSin used a kite to calm the agitated populace. He launced a kite in the night sky over Kyongju. The kite had a large cotton ball attached that was burning, causing the supertitious people to think it was a falling star soaring up in the sky, and that their misfortunes would soon come to a close.

Another general in Korean history, General Ch'oe Yong, of the 14th-century Koryo period utilized kites for shooting fire arms. Admiral Yi Sun-sin used kites in the 16th century as a fast way to inform the naval troops of his strategic instructions, flying kites having different pictures signaling tactics to use, while fighting the Japanese invaders.


Ttraditional Korean Kites
The most popular Korean kite, a "shield" kite, called pangp'aeyon, looks simple, but is the toughest of all kites in Korea. This rectangular kite is made from five bamboo sticks and covered with traditional Korean mulberry paper. It is always in the strict proportion of 2 by 3. It has a circular hole in the center, with a diameter half the width of the kite, and functions as an efficient air control device


Four of the five bamboo sticks are placed: one top to bottom (centered), one side to side (centered), and two from corner to corner; all crossing each other at the center of the kite to form a rectangular frame. The ffith stick is placed along the top of the kite and connects to the ends of the three sticks there. These sticks are tied with string at four points: the two at the top corners, the center, and midway between the center and the bottom of the vertical stick. From these four points the strings are gathered to make a bridle. This kite can move freely up and down, to the left and to the right within a scope of 45 degrees in both directions. The ideal wind velocity is 5 meters per second. The kite is large and fast, and is flown tailless when used in combat flying. a coloured silk line on a traditional Korean multi-spoked reel, is reinforced with a mixture of sticky rice glue, gelatin, glass powder, or even varnish and adhesive.

POSTED ON AUGUST 1, 2006 BY DRACHEN FOUNDATION



The historical record of kites in Korea dates back to the seventh-century Silla Dynasty, when General Gim Yu-Sin is said to have used a fireball-carrying kite to simulate a star. The general's troops, whose confidence had been shaken by the bad omen of a falling star, saw what they thought was the star shooting back to heaven. They rallied and defeated the enemy. Among sources that recount this legend is The Survey of Korean Kites by Ch'oe Sang-Su, president of the Korean Folklore Society, published in 1958 as the first in a "Korean Folklore Studies Series."
The Chinese-Japanese Library of HarvardYenching Institute at Harvard University holds an original copy of the publication; the DF Archive holds a photocopy. The archive is also adding, at the suggestion of kite historian Bob White, an edition (reissued by Dover in 1991) of Stewart Culin's Korean Games with Notes on the Corresponding Games of China and Japan, first published in 1895.


But what Korean kites does the archive hold? Because of an unexpected and delightful gift
in 2000, The Drachen Foundation may hold the oldest specimens of Korean kites extant. DF Board president, Scott Skinner, describes how the fifteen kites, all more than a hundred years old, made their way to Drachen. "The kites were originally bought by or given to Georges Lefevre, French consul to the Orient in the 1890s. They passed within his family to his great-grandchildren, one of whom was Docteur François Fourrière, formerly president of a French kite club. Fourrière was unsure of what to do with these fragile artifacts, and was encouraged by members of Zoone Collectif to gift them to the Foundation. Ramlel Tien and Christophe Cheret helped make the exchange complete at the Art Kite Festival in Detmold, Germany."


Not content with this historic trove, which is still in remarkable condition, with bamboo spars largely intact and paper sails strong and flexible, The Drachen Foundation has also been pursuing contemporary examples of traditional Korean kites. Doing so has not been easy. Executive Director Ali Fujino says, "It's very difficult to get accurate information or access, given the language barriers. We don't speak Korean, and few Korean kite makers speak English." But recently, through the good offices of DF friend Orly Ongkingco of the Philippines, the archive secured ten traditional bangpae yeon, painted in bright colors. Ongkingco knew that Drachen had been searching for accurate replicas of traditional designs. When he was in Korea for a festival, he commissioned the set from a Mr. Shin. The construction is of high quality and the colors conform to those of traditional signal kites.


Korean kites have been much on Drachen's mind this year. It commissioned from kite artist and designer Greg Kono a Korean-style fighter to use in classroom projects for intermediate and middle-school students reading Linda Sue Park's The Kite Fighters, a story set in fifteenthcentury Korea during a New Year kite competition.


Drachen asked for a design not too remote from the traditional bangpae yeon but also suitable to the construction skills of young students. Drachen has tested the design in two school settings and plans to release a kit by the end of 2006. Kono adapted the same design when tapped by representatives of the Han Woo-Ri Festival, an event aimed at the KoreanAmerican population of the Puget Sound region in Washington State, to construct twenty bangpae yeon to adorn the display tent.


Kono's design also helped Drachen respond to a request from an unusual source-MTV. One of its participants in "Next" (a reality speed dating contest) was to be a Marine who spoke Korean. Show organizers had decided that an idiosyncratic and surefire way for him to "get the girl" was to fly a Korean fighter kite. Fujino asked how long the contestant could spend learning to fly the kite. "Oh, at least an hour," said the producer. Fujino convinced him that these tricky high-fliers deserve more respect, that rather than flop as a flier, our Marine should decorate a kite with his prospective date, then soulfully inscribe something romantic on its tail. Two Kono Korean fighters were duly dispatched to Santa Monica.
Save
This entry was posted in 2006, Drachen, Issue 49 (Jul/Aug), Kite Columns, KL Archive and tagged art, drachen, korean.
Issue 49: Letters to the Editor
Issue 49: Dave's World: Lincoln City Summer Festival





Bow


## The Korean Fighter

We saw this little Korean fighter fly at the 1996 Dieppe Festival. Given his qualities in flight, we immediately acquired a copy of this superb little device to provide you with the plans on the Web. It's easy to do, it lends itself well to decoration, and it has quite extraordinary combat skills, with surprisingly smooth flight for such a device.

```
Materials :
4 bamboo slats (width 2 mm, thickness 1 mm
2 slats of 52cm (diagonal)
1 slat of 42cm (central spar)
2 slats of 29.5cm (leading edge and central yard)
A sheet of sturdy paper, minimum dimensions: \(43.5 \mathrm{~cm} \times 29.5 \mathrm{~cm}\)
```

Start by cutting a $43.5 \mathrm{~cm} \times 29.5 \mathrm{~cm}$ sheet, and decorate it (you have the traditional decoration on the diagram). Then cut in the center of this sheet a circle 14 cm in diameter.
The sail is ready.
Glue the bamboo slats on the outside of the CV, as shown in the diagram; at the front of the kite, fold a 1.5 cm strip over the 29.5 cm slat which serves as the leading edge. The total length of the device is therefore 42 cm .
Add bending wire to the leading edge. Tense, it will bend the device.
Bridle:
It is a 4-point bridle. The dimensions and attachment points of the clamping are shown in the diagram.
Make several! (it is preferable for the fights ...)



Many kites are associated with nationalities and that includes Korean bang-pae yeon, or shield kite. While the bang-pae yeon is today considered in the west "the Korean fighter kite," or just "the Korean," that is only part of its story.

First, it is a kite with a long history, with much of it being based on wartime uses. The traditional designs were military commands. (Choe). Stories vary, but the kite easily predates the SCA (600-1603 CE) period. The earliest description of kites in Korea dates from the Three Kingdoms era (4-645 CE). One version has kites used in subduing Mongolian stock farmers in the Mog-ho rebellion during the Goryo Dynasty (918-1380 CE). The kites either lifted fire bombs into a fort, or provided the means for an air assault into the fort with troops. A third dates from the time of the 28th ruler of the Silla Dynasty, roughly 647-654 CE. In the third story, a falling star is believed to be a bad omen before a battle between a ruler's army and rebels. A kite is flown lifting a lantern to place the fallen star back in the heavens. With that, the omen is reversed and the battle won.


The proximity of the Korean peninsula to China may account much for in terms of the shape and construction of the kite and materials used. Similarly, religion - Buddhism specifically - appears to have had a hand in the introduction of kites to the peninsula. Buddhist monks are known to have traveled and spread their beliefs from China to the Korean peninsula during the sixth and seventh centuries CE. They are also known to have spread knowledge of kites to Japan.

The bang-pae yeon is unlike most kites. Its vertical orientation for a rectangle kite is common enough in Asia with examples seen in China, and Japan. But the kite has a center hole, or vent. That isn't seen anywhere else on any other kites. The vent has one purpose: it adds some stability, approximating what a short tail would accomplish and results in a kite that is maneuverable and speedy. The size of vent is important, too. The larger the hole, the slower the kite will fly. A smaller vent results in a quicker, more maneuverable kite (and more difficult to fly, too!).
"The Korean fighter is unique because of its rectangular shape and central vent (bang-gumong). A traditional Korean kite's size and
dimen-sions may vary. They are made from paper and bamboo by either the individual flyers or artisans. The common medium size is about $430 \mathrm{~mm} \times 560 \mathrm{~mm}$ ( 17 " $\times 22$ "); small is about $280 \mathrm{~mm} \times 380 \mathrm{~mm}$ (11" $\times 15$ "); large is about $120 \mathrm{~mm} \times 1520 \mathrm{~mm}$ ( 44 " $\times 60$ "). The size of the kite will depend on the area and wind strength. In strong areas, like near the sea, kites tend to be large with thick spars and a two-ply paper sail." (Choe) The kite is classified by design and color. There are more than 70 kinds of Korean kites. "They are basically rectangular and made of white paper decorated with different colors and designs."

Many of the traditional designs are from signals used in war. Others have specialty uses. The Aeg-mag-i-yon or Song-aeg-yon is a kite flown to ward off evil. It is flown at the end of the first 15 days of the new lunar year. The kite flyer will let out all his string, and then untie it from the kite reel (called a ol-li, za-sae, or gamga). No one will pick up such a kite for fear of picking up the former owner's misfortunes. The Aeg-mag-i-yon kite can be made as simply as writing "bad luck go away, good luck stay" on the kite. Since white is a color of mourning there, the only time a plain white kite would be seen was if the flyer was in mourning.
"Frame and Sail: The frame is made of five bamboo sticks of various diameters but symmetrical stiffness. The vertical is the stiffest and, like the diagonals, is slightly tapered toward the trailing end; whereas the middle spar, which has no bowing line, is made very thin because it must bend back easily.
"The sail is made of Korean handmade paper, called sunji or sun hanji, remarkably light, stiff and strong; it is simply folded on the sides, without any reinforcing line, at least on regularsize kites.
"A good kite needs a slightly convex face. First the leading edge spar is glued on the sail, and then the diagonals, the spine and the middle spars are attached lightly. The shaping is done by steaming the center of the sail to give some slack around the hole. Then the diagonals are glued firmly, tensioning the paper as it dries and slightly bowing it back.
"Bridling and Bowing: The central bridle, attached to the middle of the hole, is always slack but comes under tension when the kite is in the air. Silk cutting thread is used for the four bridling lines of competition kites." (Fabre)

Traditionally, the ol-li is loaded with several thousand feet of silk line, often four colors in bands. The line is called sang-baeg-sa (Korean silk), or dang-baeg-sa (Chinese silk). The line is coated with a mixture of ground porcelain or glass, and adhesive made from egg, glue or rice starch. The ol-li is made of wood with a handle through the axis. Though they can be flat (which is used mostly by children), they are often made with four to eight spokes. The reel is made of maple, oak, ironwood or pine (the latter being the children's reel). The Koreans consider the kite and reel a system, and one without the other is an incomplete set.

## Bibliography

"Survey of Korean Kites" Choe Sang-su 1958 "Fighter Kites and beyond" Wayne Hoskins 2000 Skytec Arts, Clermont, FL
"The Fighter Kites of Korea" The Drachen Foundation
"The super fast fighter kites of Korea" Pierre Fabre, Kitelines Fall 1994 Vol 11, (1), 31-35

WIND: Gentle to Moderate
LINE: $4.5 / 6.8 \mathrm{~kg}$ (10/151b) test

## MATERIALS -

SAIL: 1-535 mm x 355 mm (21" x 14") rice paper
SPAR:
$1-520 \mathrm{~mm}\left(20-1 / 2^{\prime \prime}\right) \times 2 \mathrm{~mm}\left(1 / 16^{\prime \prime}\right) \times 5 \mathrm{~mm}$
(3/16") split bamboo (spine)
2-345 mm (13-1/2") x 2 mm (1/16") x 5 mm
(3/16") split bamboo (cross spars)
2-620 mm (24-1/2") x 2 mm (1/16") x 5 mm (3/16") split bamboo (diagonal spars) BRIDLE: 1880 mm (74") flying line FRAMING LINE: flying line TAILLESS

NOTE: As a rule-of-thumb, the diameter of the hole in a Korean Fighter is one-third the kite's width: The smaller the hole, the faster the kite.

- An easy ratio to remember for the size of a Korean kite is 3:4:5. (3 units wide, 4 units of length and 5 units for the diagonal).

Millimeters inches
1305
140 5-1/2
$260 \quad 10-1 / 4$
$350 \quad 13-3 / 4$
40516
$410 \quad 16-1 / 4$

KOREAN FIGHTER KITE
PANG PAE YON
Malcolm Dick - Tasmania
Hello everyone
It's about time I shared a plan with you, after all the great fighters and tips you have kindly let me know about.

OK here we go with a simple-to-make Pang Pae Yon designed to fly in light winds.
Were making a kite here, not a house, so keep it as light as possible. Lighter the better.
You will need:
2 mm diameter fibreglass rod
filament tape
3M Magic tape
Mylar, or high tensile plastic or rice paper or glassine paper ( about 40gpm )
Mark out on the material a rectangular shape 55 cm long 35 cm wide at the leading edge, and 40 cm wide at the trailing edge. Mark a line down the middle for the centre spine. Mark a line corner to corner for the diagonal spines. At the point where the diagonals and the centre spine cross over, scribe a circle 17 cm diameter.
At the leading edge add a fold over seam 2 cm wide.
Cut out the cover (hot cut Mylar) reinforce sides and trailing edge with magic tape. Cut out centre hole and reinforce with magic tape. Cut all the spines 2 cm longer than required and trim them accurately when you've finished the kite.
Tape the centre spine first to the cover with filament tape, leaving excess length at the leading edge. Next tape the leading edge spar across the kite at right angles to the centre spar. Tape the diagonal spines corner to corner. At the leading edge where the spines cross at the centre and corners bind them with thread firmly then put a few drops of superglue on the thread and allow it to dry. Fold the seam over the leading edge and tape it down. Use a strong thread to bow the leading edge 6 cm at the centre.
Bridie the kite with a threeleg bridle. Tie a length of thread at either end of the leading edge bowed spar. Pull it down the centre spine to the bottom of the cutout circle. Make a overhand knot in the bridle at this point making sure each bridle side is the same length and centred on the spine. Fix another thread about 65 cm long to the centre spine, 2 cm below the bottom of the circle. Make a larks head knot at the other end of the thread and slip it over the overhand knot in the centre of the top bridle. Attach a small ring on the bottom bridle line using a larks head knot so that you can slide the ring along the bridle to find the tow point. To finish the kite add a 15 cm triangular shaped "leg" at each bottom corner of the diagonal spines.
You'll make this kite in about 1 hour. Test fly it in a gentle breeze, adjusting the tow point till it fiys OK. If you want to add a horizontal spar across the hole choose a very thin strip of bamboo or a sliver from a broken carbon fibre spar from a stunt kite.

Have fun and please give me some feedback on how you fare.
Good wishes, Malcolm Dick (Tasmania)
From: STALLARDS CAMERA HOUSE [devonport@stallards.net.au](mailto:devonport@stallards.net.au)
SUbject: [FK] Korean kite
Date: Mon, 19 Jun 2000 21:42:00-0700

Malcolm Dick - Tasmania


## Wave Kite

Godfrey Gamble - Takahashi
This is one of the kite plans left by the visiting Japanese kite makers who visited Sydney in 1995.
This is an original design by Mr Takahashi and is simple to make, having no vertical spars or bridle lines. The kite is designed to fly well in light to medium winds. It is particularly suitable as a children's kite. Although a tail is not essential for flight it makes the kite more attractive for children.
Mr Takahashi would like to thank Mr Ohashi and Professor Hirori for the ideas and advice they gave in this kite's development.

## Materials

1 sheet of washi 333 by 485 mm (As there are no real stress points on this kite cheap washi, Tyveck or other paper products are suitable)
2 pieces of 3 mm split bamboo (bamboo cane) each 61 cm in length.
2 paper streamer tails each 2 metres long (optional)
15 cms of light weight cotton flying line
Scrap washi etc for reinforcing corners
Fast drying glue

## Decorating the kite

The hole in the centre of the kite creates an interesting design challenge. Mr Takahashi's kites generally feature geometric
 patterns or coloured bands. See also painting on washi.

## Making the kite

Firstly make sure it is dry after any decorating. This kite does not have any hem allowance. Fold the paper in half. Measure along this centre fold, $1 / 3$ of the length of the kite from the top of the kite and mark this spot. This spot will be the centre of the circle and also the cross over point for the spars.
Using a circular cutter (Olfa is one brand name) make a hole using this mark as the centre of a circle that is half the width of the kite. Alternatively if a circular cutter is not available make a cardboard template $1 / 2$ the width of the cut and carefully position it over the mark. Cut out the hole using a sharp blade. If using this method be careful of fingers.
Before glueing the spars place them onto the rear of the kite and bend them into a rough approximation of their shape. Mark the bamboo where the edges will roughly cross the cut out circle. Use a fast drying glue to coat the bamboo except for the section that will be visible through the hole. Bend to shape and place in position, holding until it is dry. Repeat for the other spar. Glue reinforcing patches (approximately $2 b y 4 \mathrm{cms}$ ) over the bamboo ends at each corner. Glue optional tails onto the bottom corners of the kite.
Take the 15 cm length of lightweight line and make a knotted loop. Larks head this onto the bamboo spars at the cross over point. Attach the flying line to this loop.

## Flying the kite

Prior to flying the kite make a dihedral curve in the kite.

## Further suggestions

Mr Takahashi suggests that you can add a small windspinner to spin from the cross over point or join the kites at this point to make a train of kites. Why not try scaling this kite up or down?

## 600 kite flyers, sellers held during anti-Basant raids

## 197 sent to Adiala Jail, 200 released after court grants bail

Syed Qaiser ShiraziFebruary 13, 2022


RAWALPINDI:
The police arrested 600 kiteflyers and sellers on Thursday and Friday during an operation against the 'Basant Night' and the 'Basant Mela' in Rawalpindi and Chaklala - both cantonments of the Rawalpindi district. About 98,000 kite strings have been confiscated. Those arrested were fined Rs10,000 on the spot by Special Judicial Magistrates, while 197 accused were sent to Adiala Jail and a total of 200 bails were granted. In cases where the accused were found to be underage in their Form-B, the parents of the minors were fined instead.

The Special Judicial Magistrate warned kiteflying students that they would be sent to jail if caught flying kites again. Police in all Cantt police stations remained on the field for 72 hours during the Basant festivities. Arrests of kiteflyers continued from morning till half-past one in the night. Immediate bail was not granted to the people arrested by the police for kiteselling.

They have been sent to Adiala jail on judicial remand. Decisions were made on Saturday on
the bail applications filed by them. The hearing of these petitions filed by over 100 kite-sellers have however, been adjourned till February 14 (Monday). Meanwhile, the kite-flyers who confessed to kite-flying and tendered an unconditional apology were released with a fine of Rs 10,000. The court also ruled that the kites were indisputably in the possession of the accused, for which they were arrested The court added that kitesellers were also equal in the face of the law.
"Due to the ban currently in place, kiteselling is a crime. Therefore all the accused arrested on kite-selling charges have been sent to Adiala Jail on 14-day judicial remand," it declared. There was a large crowd gathered at the courts of the magistrates when the cases of kite-flyers were presented. Relatives, friends and parents of the accused also reached the court. The accused were brought to the court in public and private vehicles.

Many kite-flyers were also brought in with ropes due to a shortage of handcuffs. In spite of these proceedings, the Kite Flying Association (KFA) has announced another Basant Mela in Rawalpindi on February 18. KFA Central Leader Haji Iqbal said that Basant Night would be held on February 17. "Basant Night will start after sunset and will end at one o'clock at night. On Friday, February 18, the next day, we have scheduled a Basant Mela - the preparations for which have also been completed," he added. Simultaneously, the police have also started preparations for an extensive crackdown against the recently-announced Basant Mela in the city.

Strict orders have also been issued to the Station Head Officer (SHOs) of all police stations in the city to cordon off the Dolphin Force against kite-flyers from February 14 to February 18. Monitoring of online sales of kites and strings has also started.


Perhaps the following image and details from articles will spur some of you to action. Research, kite-making, or epic adventure, these snippets give you some perspective of the role of kites as tools easily forgotten when history is finally written. Several of my favourite historical images come from the Illustrated London News, of which this one is from November $29^{\text {th }}$, 1851. Here's an excerpt from the article that accompanies the image:
In the month of May, 1845, Sir John Franklin sailed from England,... in the hope of discovering the Northwest Passage. more than six years have elapsed since the departure of the Expedition; and when we consider the frightful rigour of an arctic climate, winter after winter, and that the untiring exertions made for their discovery have all proved fruitless, the hope that remains is but faint.

Certainly, the Franklin expedition is one of the most famous in history and is remembered still in countless books
(www.ric.edu/faculty/rpotter/franklit.html) on the subject. But this article gives some detail to the search expedition led by Captain H. T. Austin in 1848. Austin's adventures were as dangerous and exciting as any expeditions of the day and were compounded by Admiralty hearings upon his return as to the reasons for his failures. But through all of that very fascinating history, the single image from the London News is what turns my head:

It's interesting to note that in the Wikipedia entry for Austin, he is "credited with organizing successful sledging expeditions along the coasts of several Canadian Arctic islands." So, was this the first such use of kites in sledging operations? Was it the last? It's your turn to find out

This is the same shape as a fighter kite from India. I wanted to design a kite for the kids' kitemaking workshop at the 1996 Washington State International Kite Festival in Long Beach, Washington. I chose this design because it tied in with an exhibit of fighter kites at the World Kite Museum (also in Long Beach).
I've used the kite in many more workshops since. This version of the tulka shape is not a fighter but is a steady little performer.


Materials
I've fit the kite design onto an 8.5 -by- 11 bond paper. I like the bright-colored 60 \# weight that is commonly used in copiers.
The sticks are from roll-up matchstick bamboo window shades.
The tails are made from 1.25 -inch adding-machine tape-a 12-foot piece folded in half.
The kites are assembled with 1 -by-3-inch self-adhesive address labels cut in half to 1 inch by $1.5-$ inch.
For line I use 50 feet of cotton crochet string wound on a 3 -inch cardboard square.
Assembly
Fold paper in half and cut the outline of the kite. While the kite is still folded punch a quarter-inch hole for the bridle point with a hand hole-punch.
Unfold the kite, lay it facedown and attach the spine stick to the back with two stickers, one at the top, one at the bottom. Fold the stickers over and wrap around to the front of the kite.
Attach the spreader stick at each wingtip. The alignment of the stick is critical-the stick should be even with the outer edge of each wingtip. Fold the sticker over square (don't worry about matching the silhouette of the kite).
Attach the tail, a 12 -foot piece of 1.25 -inch adding-machine tape folded into two equal 6 -foot lengths. Stick the folded end to the base of the spine.
Tie the string to the spine stick through I the hole you punched earlier. Make sure to tie the bridle through the front of the kite, not the back. Happy flying.

$\qquad$
Phone number.
Email

CAR REGISTRATION (required for entry) $\qquad$
Camping nights required (please circle) Wed $1^{\text {st }}$, Thurs $2^{\text {nd }}$, Fri $3^{\text {rd }}$, Sat $4^{\text {th }}$, Sunday $5^{\text {th }}$ (All campers to be offsite by 10 am Monday $\mathbf{6}^{\text {th }}$ June)

> Would you like arena flying time? (please circle) Yes No
> Please have your public liability insurance cover available on request

Further details:
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Tel 01639881635

## KITE FLYING SAFETY



DO NOT FLY IN STORMS


DO NOT FLY NEAR ANY ANIMALS

DO NOT FLY NEAR AIRPORTS OR


Civil Aviation Authority

MIDLANDS KITE FLIERS GREAT BRITAIN

