

K I T E  
THE DRACHEN FOUNDATION  
J O U R N A L



*Sand Dragon as Viewed From a Kite*

*When you're at the beach and the wind dies, what to do? Build a sand sculpture, that's what. German kite enthusiasts Kisa and Anke Sauer, along with quite a few of their kite friends, carried this prescription to the extreme at the 1999 kite festival at Berck-sur-Mer, France, when they constructed this monster sand dragon. The building team called itself Groupe Babylon, as witness to the large number of languages collectively spoken. The dramatic aerial image of the dragon was appropriately made from a kite by Andrea Casalboni, of Ravenna, Italy. Scale can be judged by noting the human shadows at bottom left.*

## Our Contributors



After 40 years of designing, making, flying, and writing about kites, **Ed Grauel**, of Rochester, New York, has died at age 95. A regular contributor of both meticulous research papers and lucid letters to the editor to this journal, Grauel bows out in this issue with yet more science (Page 31). His obituary is on Page 36. Grauel was a national treasure of American kiting and he will be deeply missed as the gentleman and scholar he so clearly was.

**Tal Streeter**, of Verbank, New York, has written two of the best books on kites ever published in English, *The Art of the Japanese Kite* and *A Kite Journey through India*. A professor of art at the State University of New York, at Purchase, he is the designer and maker of large scale sculptures and kites and for decades has been collecting kites, with a heavy concentration on Asia. His reminiscence on first meeting preeminent kite inventor Domina Jalbert is on Page 41.



What does the first automobile ever built have to do with traction kiting? Designer **Peter Lynn**, of Ashburton, New Zealand, explains on Page 26. The undoubted king of kite festivals around the world, Lynn has for years now also set the pace in developing kite-related “extreme” sports, focusing now on kite boarding.

## The Journal Staff

Editor and major contributor to the Drachen Journal, well traveled **Ben Ruhe** regularly contributes articles to special interest publications on subjects as diverse as boomerangs, tribal art and flint-knapping.



**Scott Skinner**, president of the Drachen Foundation, is a former pilot instructor at the U.S. Air Force Academy. He has been a kite enthusiast for two decades—designing, making, flying, collecting, and teaching about kites.

**Ali Fujino** is the administrator of Drachen. A museum specialist since age 19 when she began work at the Smithsonian Institution, she has long been fascinated with anything that can become airborne.



### **The Drachen Foundation:** Kite Archives, Science and Culture

The Drachen Foundation is devoted to the increase and diffusion of knowledge about kites worldwide. A 501(c)(3) private nonprofit corporation, Drachen views kites from the standpoint of art, culture, science and history. It uses an integrated program of exhibitions, education, research, collections management, and publications to promote learning about kites. The archive it maintains is freely open to the public for research.

**STUDY CENTER LOCATION**  
1905 Queen Anne Avenue North / 200  
Seattle, Washington 98109-2500 U.S.A.

**OFFICE HOURS**  
Monday–Friday 9 a.m.–5 p.m.

**RESEARCH LIBRARY**  
By appointment only: (206) 282-4349

‘What Is Important Is to Have Joy’

# 9-Nation Nordic Kite Federation Forms

*By Ben Ruhe*

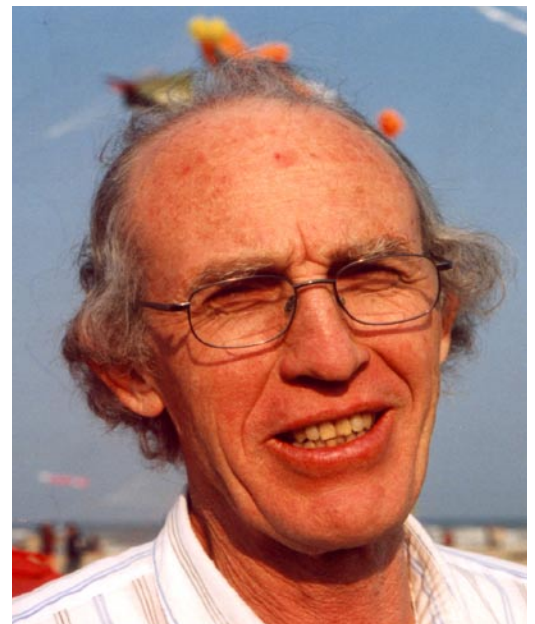
Architect, city planner, computer programmer Marten Bondestam has an unusual vision. He wants to establish a really active Nordic kite federation. What makes his concept surprising is its scope---the association numbers nine nations.

Nine? Yes, that’s the number. All are independent or semi-independent, all have their own flags. In addition to the obvious Denmark, Sweden, Norway and Finland, included are the Faroe Islands, Aland (a big island between Finland and Sweden), Iceland, Greenland, and Sameland (the former Lappland).

Kites are routinely now flown in all of the countries except possibly Greenland, but Bondestam, of Boback, Finland, has no problem envisioning the expansion of the sport to that really far north island of Inuit and polar bears. He’s a self-confessed visionary.

Bondestam says Nordic kitefliers have a unique kite culture. “There is more emphasis on play,” he says. “We’re a little mad, all of us. We have a joyful attitude toward kiting. Kiting is not so important; what is important is to have joy. It’s an attitude. It’s common to us all.”

Interviewed at the international kite festival at Cervia, Italy, last spring, Bondestam says the concept of a Nordic kite federation began in the 1980s and evolved to the point a Nordic kite council was formed. An expanded federation followed three years ago and has already had several common events and projects. He’s the president, needless to say. “I’m retired, I have the time,” he explains.



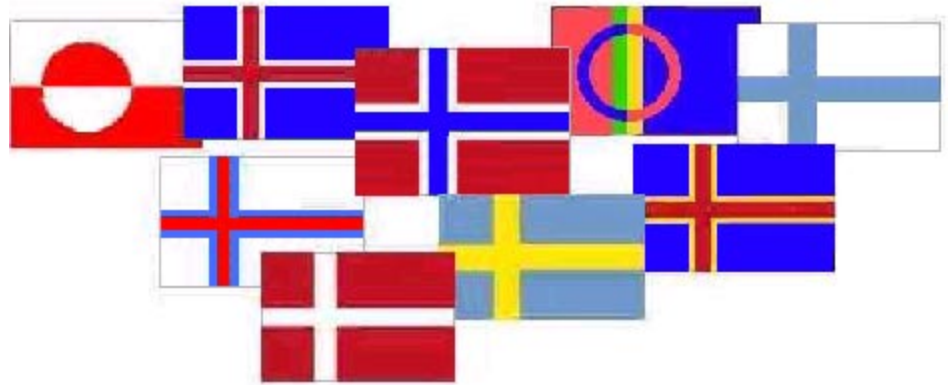
*Marten Bondestam*

Sveinung Dybvig, of Sola, Norway, is now documenting Norwegian kite traditions and his research will underpin federation studies. Bondestam can be expected to have a role here, because he has on his own published two excellent books on kites. Nordic kites, by the way, follow the European tradition. No forms uniquely and originally Nordic have ever surfaced.

The lanky, energetic Bondestam, who at age 67 still runs up stairs, is very much an activist. He recently organized an exhibition of 150 kites from Nordic countries in the light court of a chic six-story department store in Helsinki. Included were creations by Swede Johan Halin of Gotland, who makes his kites from the flight feathers of wild swans washed up on the beach, and a Dane, the well-known Jorgen Moller Hansen.

Bondestam spent 19 hours straight installing the exhibition, then went home to work three hours more writing a catalogue just in time for the preview at the Stockmann store. “Stockmann is a big store with quality goods and cheap, less common goods,” says Bondestam. “It is located in central Helsinki and 50,000 people shop there every day.” Why a kite exhibit? Bondestam explains: “I did a good impression years ago. The director of the store remembered a show of kites I did in 1983 when she was a little girl.”

The showing was sponsored not only by the store but by a Nordic cultural consortium, and it was timed to showcase a big annual Helsinki kite festival. Without kites to send, Greenland dispatched an Inuit dance troupe



*Flags of the nine Nordic countries.*

instead, students studying in Copenhagen.

Bondestam explains he comes from a “very culturally confused,” to use his words, family and that this was bound to produce someone unusual, as he clearly is. His one grandfather was a noted Lutheran priest and abolitionist, he says, while his other one was a rum runner. His father was a medical doctor who worked 16 hours a day on a set salary. Bondestam’s own wife is a member of the Greek Orthodox Church, daughter of a well known writer. All three of his own children are Orthodox. There’s even a linguistic quirk. Although a Finn, Bondestam is from the Swedish-speaking minority in the south of his country. He of course speaks Finnish as well, not to mention a few other languages, including Swahili---consequence of a job in Tanzania. As to his religion, he says: “Me? I’m a free-thinking Christian. I think animals have a soul.” Broad smile.

His daughter-in-law Kati, a doctoral candidate in biology while raising two small children, says of him: “It’s nice because you never know what happens next. He thinks in such a different way. He’s unique. I love him because he’s got a nice difference. He’s brilliant and he’s flaky.”

Son Kristoffer (“Toffa”), a kite enthusiast himself, comments: “He thinks it’s good to be disorganized. At 15, he made a kite without sticks. He studied kites, then he made his own alterations. He always has an answer that makes sense. He won’t compromise. He does things his own way. He’s really an inventor. He doesn’t worry about craftsmanship. The idea is the point. He isn’t worried how the kite looks on the ground, he wants it to look good flying.”

Bondestam has been wrestling with kites for years, once attempting without much success to set a single kite high altitude record. Problems with measuring altitude and achieving flight safety proved too daunting. He turned then to making the world’s largest kite and produced a 640-square-meter black plastic, two-bag, tubular monster. “As big as a house,” he says. On the fifth attempt, he was finally able to get it flying---two feet off the ground. “I had to use a lorry to transport it and rent a parking space to store it,” he says. Finally tiring of the whole effort, he cut up the monster to make small kites for children and for mulching strawberry plants.

Bondestam says his bent for stretching minds evidenced itself in school when he drew up a city plan for the entire earth. He says as an architect and city planner, “I was famous with the politicians for having crazy ideas.” Needless to say he holds a number of patents and has even been an official of the Helsinki inventors association.

“Kiting is good because you can see results,” he says. “You can experiment, see how they work. From a wholeness, I pick out similar details, and this leads to solutions. I’ve developed my mind. It’s a matter of learning themes.” As an example, he points to a rain-spattered window nearby and notes that he, without thought, picked out just those raindrops which were the exact same size, ignoring the other, smaller ones. A pattern leading to something, maybe. If so, what?

## *New Kite Book From Finland*

In his self-published book *Better Kites*, Marten Bondestam explains the entire world of kiting in the most charming way. Starting with simple kites and the family's role in the sport, he covers the whole field---kites for beginners, for youth groups, for light winds, giant kites, fantasies, mighty machines, stunters, dancing kites, poetic kites, miniatures, art kites, sky circus marionettes, easily made but huge kites. More than 90 of them all told. History, inventions, high-altitude flying, night shows, mental therapy, ecology, clear explanations of flight principles, festivals, aerial theater-----not much is missed.

There are hundreds of high quality photographs and drawings, and the pages of the little 128-page volume seem to turn by themselves.

The writing is intelligent, brief, amusing. Although in English, the book includes short sections in Finnish, partly to show to the world, probably, what a beautiful language this tongue must be. The *Better Kites* of the title, as an example, is *Parempia leijoja* in Finnish. Rolls off the tongue!

Photos, drawings, text, layout, constructions, and translation were all done by Bondestam himself, clearly a latter day Renaissance man.

Issued in 2000 in Helsinki, *Better Kites* is available from the author at [mabon@dlc.fi](mailto:mabon@dlc.fi). The author's home web page is [www.dlc.fi/~mabon](http://www.dlc.fi/~mabon).

For the flavor of the volume, here are two short essays from it:

### *A Free Form of Yoga*

*Let the kite fly in the sky. Keep the line in your hand. Relax. Look at the kite.*

*"The vastness of the world."*

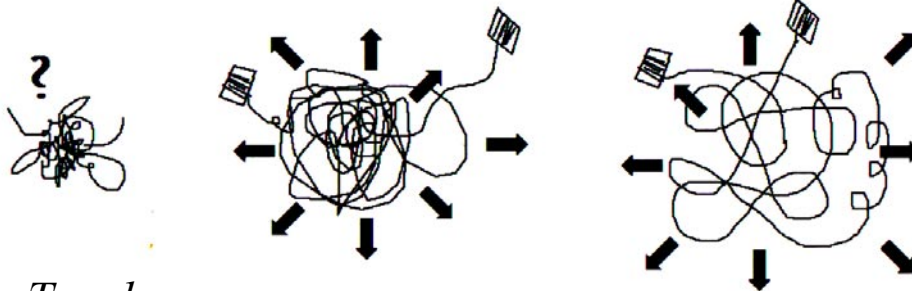
*See and feel the tremendous vast sky. Feel being up there.*

*"The miniature world."*

*After relaxing for a while you start observing all small life around you. The ant carrying its burden. The butterfly sitting on the flower. Small beings living their small lives.*

*"Your inner world."*

*Concentrate on each part of your body one part at a time. You become conscious of your body. Use a soaring, living kite, not one standing stiff on a stiff line.*



### *How to Open Tangles*

When a line gets tangled it consists of loops. Keep the ends parted. Pull with your fingers so that all the loops get bigger at the same time. When loops are parted the tangle opens by itself. To avoid losing valuable flying time do it at home.

# Cervia on the Adriatic

## Festival That's Become a Pilgrimage

*"It's not the largest kite festival around the world. And it's not rigidly organized. But it's by far the most fun. There's plenty of time----time to meet with everyone else. There's a hint of the holiday about it. All the rest of the festivals have a tinge of work. Not this one. The spirit's Italian really, isn't it?"*

----Peter Lynn

\* \* \* \* \*

Cervia is a classy beach town on the Adriatic two hours south of Venice. Jammed in summer with vacationing Italians and other Europeans, it is tranquil and underpopulated in the spring, with a gentle breeze blowing in from offshore. Perfect for kiteflying, in short.

Last spring's *Festival Internazionale dell' Aquilone* was the 22<sup>nd</sup> annual, making it one of the longest running events of its kind. It was eight days of flying on a broad, soft sand beach. Rokkaku battles, night flies with lights, live concerts, workshops for children, a major photographic exhibition, an auction, traction boarding out in the sea, fine dining with an emphasis on pasta, seafood and local wine, and lots of impromptu fun, games and singing were the bill of fare. Upwards of 100 fliers and their families from Europe, along with a sprinkling of guests from around the world, participated. Spectators in their thousands came, day after day. It was the big show in town.

The festival these days is the fruit of a father-daughter collaboration.

Once owner of an art gallery in Paris and an artist of international stature, Claudio Capelli has long combined fine arts with his love of kites. He has been running the Cervia festival for two decades now. When he wearied of the task some years ago, his daughter Caterina stepped in to get him reinterested. She adds new energy and vision. Along with her father's administrative and diplomatic skills and knowledge of French, she contributes two new ones-----fluency in English and an ease with the computer, both vital in this day and age. The two of them make a wonderful team.

When he was young, Claudio recalls his grandfather flying an Eddy kite. He himself became deeply interested when he saw the new stunters being flown in Central Park in New York City in the late 1970s. He took up kiting at that point and soon was involved in cutting edge experiments with kites, as well as painting them exquisitely. His engagement with the Cervia festival began about this time.



*Claudio and Caterina Capelli*

Caterina recalls vividly the exact moment kites seriously captured her own attention. Her father tied a rope around



### ***Kites Over Cervia***

*Photographer Marten Bondestam comments: "There is something very joyful, some strong happiness in this picture. It is like children's toys gone wild. Some of these kites are huge, like elephants."*

her waist and hoisted her into the air with a kite. She was just 3 years old. She recalls pitching in with festival work at an early age, handing out sandwiches to kites. Now 25, Caterina, when not attending to kite festival business, is working for an advanced degree in philosophy.

This year's festival showcased single line art kites and they were lofted into the sky in their hundreds. There was the usual wide range, from kites big as elephants from Peter Lynn of New Zealand to beautifully painted Rokkakus by Mikio Toki of Japan, from elaborate trains by Iqbal Husain of Switzerland to delicate, imaginative creations by the Sauer sisters of Germany, Kisa and Anke, from a menacing black Delta in the shape of a boomerang by Carlos Martini of Brazil to images of ghostly men by Robert Trepanier of Canada. Then there was the full range of Codys, Sleds, Genkis, Parafoils, Deltas, Tetrahedrals, softies, hybrids, crossbreeds and everything else one could think of by the English, French, Belgians, Dutch, and Scandinavians, and of course the home country Italians.

Off by himself at the edge of the beach, Ray Bethell, of Vancouver, stripped to the waist, deeply tanned, and looking like a Charles Atlas at age 76, endlessly flew his trio of two-line stunters in perfect formation----one with the right hand, one with the left, and one from his waist. A former postman who learned great patience delivering mail in the Australian Outback, Bethell says he clocks 75,000 miles a year attending festivals and putting on his mesmerizing all-day show.

With Michael Alvarez of Perth leading the way, Australian motifs were big at the festival this year. Several fliers brought along big Aboriginal didgeredoo drone pipes to entertain themselves and fellow fliers and a number of participants broke out boomerangs to toss and catch when the wind dropped and kites came down.

As usual, some of the most charming stories were no more than a blip on the screen.

One of those boomerangs thrown to entertain the crowd when it was too calm for kites sliced through a 48-foot hot-air balloon being lofted by Carlos Martini of Sao Paulo and mortally wounded it. The balloon sank to

## Cervia Festival

the sand. What few spectators realized was that they had just seen a world record. In the entire history of mankind, the Brazilian balloon was the largest object ever felled by a boomerang.

Only a few were privy to the announcement by Jeanette Bondestam, of Helsinki, that she had turned 6 years old that day and for the first time counted all the way to 100. Although Finnish, she announced this in Swedish. It was duly translated by her mother.

A Swede, Andreas Aagren, of Vesteras, reported that his Viking ship kite escaped when a gust snapped the line and that it sailed off out of sight. Staff at a hotel far from the beach spotted the errant kite on their roof, naturally called Claudio Capelli, and the prize object was duly returned to owner.

Photographer Stephane Clerisse from France fascinated colleagues with his complex diphthonic singing, as done in Tuva, a region between China and Russia. Diphthonic singing involves placing the tongue behind the top front teeth and humming to create a two-tone drone sound that is quite strange to the ear, even eerie. Using circular breathing, Clerisse was able to keep the drone going more or less indefinitely.

Of such stuff are kite festivals made.

The question is put to Claudio and Caterina why they do the festival at all, with all the work it entails obtaining sponsors, setting up tents and fencing, organizing a sound system, arranging transportation, contracting with merchants to sell food and drink, organizing housing and feeding for the kites, publicizing the event, coordinating with the town, setting up special events such as a major show of kite photographs this year, and so on and so on?

Claudio answers for both: “We make people truly happy. And that makes us happy. People come here and they feel free as the breeze. They love to come. They come year after year. It’s a way of introducing people from various cultures of the world to each other. And because all of the guest fliers live together in a big hostel, this makes things more friendly. For many people, it’s a festival, yes, but more than that, it’s now a pilgrimage.”

And, oh yes. Cervia is pronounced “Chair--vee--ah.”

And do you really have to guess who the proprietor of the first restaurant on the beach next to the flying area is named after? The restaurant is called Benito’s.

----Ben Ruhe



*Mikio Toki*  
*.....front and back*



# Faces at a Festival

*Big kite festivals draw a wide range of fliers, from professionals to skilled amateur enthusiasts---hobbyists, craftsmen, aerodynamicists, artists, poets, teachers, outdoors people. Following are biographical sketches of six of the kites, selected rather randomly although all proved to be interesting subjects, who attended last spring's international festival at Cervia, Italy.*

## Iqbal Husain

A Pakistani living in the Ticino, Switzerland where he works as a web content manager for a bank, Husain is passionate about kitemaking, flying, and collecting. His piquant humor is reflected in the kites he makes, mainly trains. One centipede has a crocodile as its head and a string of handbags as the train, another a white chicken trailed by dozens of frying pans, each with a fried egg.

A pig's head followed by salami slices and a cow's head by hamburgers are further examples of this very personal viewpoint.

The drollery penetrates Husain's daily life. When he fills in an immigration landing card when traveling, for example, under "occupation" he claims "18<sup>th</sup> century Indian gymnastics." "That never fails to produce raised eyebrows," he says.

Although he played with kites as a boy in Karachi, he didn't become interested in them "as a means of personal expression" until he attended a kite festival in Japan in 1984 where he was teaching after receiving a degree from the London School of Economics. There he fell under the sway of kite personages Nishi, Ohashi and Mr. Doi, the last giving him a train of box kites. "It was a train to the heaven of kites," recalls Husain.

Nishi taught Iqbal kitemaking, particularly how to make kites for low-wind flying. Iqbal was fascinated by working and forming bamboo, by the beautiful *washi* paper used in Japan. "I feel happy doing manual work," he explains. The mound of kites he totes in his van attests to that.



*Iqbal Husain and kites*

Soon he was doing his own variations on traditional designs. The bug bit so deeply he started collecting kites and kite memorabilia as well. He now has a collection of 19<sup>th</sup> century Japanese woodblock prints, all showing kites, “that rivals Scott Skinner’s collection,” he says. “Also, I like to give exhibits of my kites and hold workshops. They open people’s eyes.” Schools and his local tourist office have his number, in more ways than one.

“But kiting is always a hobby,” says Husain. “My family comes first.”

Husain is now wondering what to do with his collection, which numbers 300 choice kites, 30 Japanese prints, European engravings, books, stamps, posters, and so on. He is talking of setting up a joint foundation in retirement with other kitefliers.

“I’m definitely continuing with kites as a hobby,” he says. “The kids I teach give me motivation. They keep me young. They have no preconceptions, just joy and energy.”

## Raoul Fosset

How does a retiree with a yen to attend kite festivals all over Europe and much further afield finance such travel? Raoul Fosset, of Tervuren, Belgium, came up with a good answer. He makes and sells speciality kites.

Fosset came to kites via photography. Having suffered as a boy under the Nazi occupation of his country during World War II, Raoul moved to America after the war at the invitation of an uncle and shortly found himself drafted into the U.S. Air Force. Learning photography in the service, he set up in that business in Arizona but was eventually lured back to Belgium by homesickness. He married there and has stayed on ever since. In 1983, wanting to do aerial photography, Fosset discovered kites beat airplanes, helicopters, and balloons for the sort of work he wanted to do and he soon became an expert with kites. Industrial photography from the air became his forte.



*Raoul Fosset*  
trips,” he says.

Fosset was a founding member of the kite aerial photography movement worldwide in the ‘80s and has lectured widely on the subject. Meanwhile, there were all those kite festivals to attend and friends to meet. He began building kites to sell, got a good reputation, and his business flourished. “I stopped counting after I made 1,000 kites,” he says.

Fosset builds stunters of his own design, GenPkis, Deltas, Rokkakus, and so on. He is good enough with the two-liners to give demonstrations with them. A student of Americans Jose Sainz and Spencer Chun, Fosset often uses appliqué designs to adorn his creations.

Selling kites has permitted Fosset to travel all over Europe, to the U.S. and to Asia. “And I don’t have to cash the family budget to make the

Fosset explains how the kite festival business operates. A festival organizer sends invitations to attend to selected organizations and individuals. A person accepted can expect to receive room and board at the festival, and, if a star performer, perhaps mileage. For this, he is expected to fly a lot of showy kites, maybe fly demonstrations for the crowd, perhaps do some pleasant odd jobs like translating or appearing on TV. Fosset himself is multilingual.

As an example of the contacts a flier makes at festivals, Fosset tells of meeting a Ukrainian couple at Dieppe who he taught about kites. This led to an invitation to come visit in Kherson, near the Crimea, where he helped Sergei and Elena Tarasenko set up a local kite organization. Sergei, an engineer, picked up stunter flying in five minutes, Fosset says, and now has taken up aerial photography. What's next in Kherson? Why, a Ukrainian kite festival, of course, with Fosset as adviser.

## Kisa and Anke Sauer



*Kisa Sauer (above) and sister Anke (at right), who is flying a stunt kite of her own design.*



In a sport pretty much dominated by men, sisters Kirsten (Kisa) and Anke Sauer from near Dusseldorf give kiting a refreshing look. Theirs is an imaginative, artistic, delicate approach---might it be called a feminine viewpoint? Whatever it is, it's original and a breath of fresh air on kite festival beaches.

Anke, a computer graphics professional, spells it out in no uncertain terms: "Our kites are more detailed and delicate. They're finer." Anke's kites tend to be asymmetrical and some of them suggest strung-together atoms or molecules. They are nicely painted in colors that tend toward the acid.

A theatrical set builder by profession, Kisa on the other hand makes kites with an organic look or the look of outer space-----seashells, listening ears, moons.

The sisters design and build independently of each other, although they confer on technical matters.

They, along with Kisa's partner, photographer Tomas Jeckel, and other friends, tend to put their mark on beaches they visit. At immense labor, they sometimes construct enormous sand sculptures of people and animals. Three years ago they created a 160-foot dragon at Berck-sur-Mer. "It got a lot of publicity as the largest sand sculpture of the year in France," says Kisa. Or their wont may be a shamanistic assemblage of random, salvaged objects

arranged in an orderly way, and overseen by flags. Mongolian prayer *omoos* come to mind. Complicated photography projects absorb some of the group's creative energies, including flying and filming kites under water.

The sisters say they learned about kites from a grandfather when they were little girls. "We lived near the Rhine. It was flat and green and there was a lot of space," says Kisa. "My grandfather was so happy. He had given us something wonderful. We kept on and eventually took up stunt kites made of cotton, then we discovered ripstop around 1988. We met a lot of fliers and made friends."

Both view kiting poetically. Anke: "Flying makes a special exhibition hall in the air." Kisa: "One of my recurring themes is planets. I can never fly in space, so I bring my own planets with me, my own universe." Kisa and her kites get around. She flew one of her clamshell kites over the great temple in Angkor, Cambodia. She also flew on the Royal Kite Field in Bangkok.

Feeling "people with fantastic kites are bound to be fantastic people themselves," says Kisa, she and Anke and friends set up an "absolutely unofficial" *Drachensyndicat* (kite syndicate) a few years ago, and have chosen a select few members, living from Vienna to Montreal, from Colombia to Lithuania, and in several countries in Asia as well. "We members try to get together at big festivals like Fano, Dieppe, Berck-sur-Mer, Madison, Wisconsin. And of course Cervia," says Kisa. One syndicate tradition: "Whoever makes the t-shirts gets to recommend members."

As a computer whiz, Anke has a leg up on cyber kiting. She can steer a kite image she creates through a three-dimensional world on her computer. This is beautiful and exciting play, she says.

Because she builds theater sets for a living, sister Kisa is accustomed to using a wide variety of materials-----paper, tissue, wood, plastic. She works with wire a lot. "Whatever you want, I can build it," she sums up. "Ideas for kite projects, they jump at me, say 'here I am.'"

## Malcolm Goodman



*Malcolm Goodman*

A retired electronics engineer in Billingham, England, Goodman saw kites being flown in San Francisco 30 years ago and became an instant convert. On his return home, he starting making his own kites. He hooked up with the late Dave Checkley, of Seattle, to visit China (Weifang, Tianjin, Shanghai, Beijing, the Great Wall) and Japan (Hamamatsu). He wended his way to Singapore where he fell under the sway of Shakhb Gunn. "I fell in love with the beautiful kites, the people, and culture of the Far East and became a collector of Oriental kites right away," he says. "Now I have so many kites I had to build an extension on my house to put them. It's my own kite museum."

Why kites? Goodman explains: "I'm a practical person. I saw that kites represent culture as a whole----they combine making, learning, art."

Charming, well spoken, well organized, Goodman helped out at the Washington Festival of the Air in the northeast of England, where he lives, and soon was running it. He brought major Japanese personages-----Nishibayashi, Eiji Ohashi and Seiko Nakamura-----to the festival his first year in command and they helped make it a smash hit. It continues as one of the great global kite festivals.

Although the event involves a lot of work, Goodman says there is a great satisfaction to running a successful festival and in giving pleasure to a large number of people. There is another bonus. Goodman is offered hospitality

elsewhere around the world in return for the welcome he tenders at Sunderland. He and wife Jeanette have been to festivals all over, including Thailand, Malaysia, Laos, Vietnam, and Cambodia. Not to mention Iceland and Europe. They were married in Hawaii while attending a kite event, the American Kitefliers Association convention in 1989. Needless to say, choice kites have flowed into his collection from these visits. Valued examples are Chinese centipedes and Japanese warrior kites. The size range is from 4 millimeters to 4 meters. There are of course books in his trove----100 of them, plus porcelains, pins, and other memorabilia. For a look at his kites, bring up Goodman's fine website: [www.kiteman.co.uk](http://www.kiteman.co.uk).

Goodman gives frequent kite workshops and mounts exhibitions from his trove to spread the word about kites. Now on his mind is eventual disposition of the collection. "The kites are getting to be a bit of a burden," he says. His vision is a small farm with fields for flying and outbuildings for a museum and workshops. That's in the future. "The near future, I hope," says Goodman.

## Danny Franck

Born and raised on a *kibbutz* in Israel, Franck is one of those free-booting fliers of the new, "extreme" traction kite world, a daredevil aboard buggies and sail boards who delights the crowd with skill and daring in a sport strictly for the young, strong, and foolhardy. Franck comes by the necessary skills easily, he's a hush-hush soldier in the Israeli army, ready to fly a plane, drop by parachute, whatever.

Visiting France, original home of his father, Franck discovered kites and decided because they were light and could be packed down they'd be perfect to go with his mountain climbing hobby. Scale a peak, fly a kite in celebration, make a photograph. Perfect! Franck did ascend Mount Blanc, tallest mountain in Europe, and he did fly a kite from the summit. Then he kept traveling and exploring and meanwhile studied kites. When he got to Australia in his wanderings, he saw his first kite buggy, said "What's that?," got the answer, and was soon rocketing along the beach.

Realizing he needed sophisticated equipment and not having the funds to buy, Franck took up sewing and soon crafted his own traction sail. Attending the World Cup at Long Beach, Washington, in 1997, Franck was assigned to drive Peter Lynn and learned he too could join the upcoming seven-mile buggy race. "I raced, fell behind, got really dirty, finished way behind. But I was really, really pleased. Especially when Peter offered me a job at his works in Ashburton, New Zealand, to help design, test, and fly kites. I had learned machinery on the farm where I grew up, learned physics and math in the military."

After an apprenticeship with Lynn, Franck found himself demonstrating in Sardinia for the big Dutch kite firm Vlieger Op and got himself hired by the company. Since then he has spent summers kiting, the off season in Israel. "I was the first person to do kite boarding in Israel," says Danny, with great triumph. "Definitely!" The sport has grown quite popular in that Mediterranean country. "Boarding is now much bigger than wind surfing," he says



*Danny Franck*

"Boarding can be hair-raisingly dangerous," Franck says, "but it's the sport for me. Boarders are getting up to six seconds of air time in jumps now," he says. "It's exciting to do, fun to watch."



## *At the Beach*

*“Infant” (top left) by Claudio Capelli, geisha train by John Mitchell, undoing a nasty knot.*

*On Page 15, candy drop for children overseen by Michael Alvarez, Ray Bethell with Drachen Foil, bowling ball as anchor, sand man oversees the scene.*





## Boomerang Kills Balloon

To keep the crowd entertained at the Cervia Kite Festival when the wind was down, several Europeans threw boomerangs and a Brazilian lofted a 48-foot paper balloon. A misguided 'rang sliced into Carlos Martini's balloon admidships and exited out the other side. Down onto the sand sank the mortally wounded balloon----all 15,000 cubic feet of it. The boomerang was held aloft in triumph. A kangaroo appeared out of nowhere to gloat. It was a world record. In all of history, the balloon was the largest object ever knocked out of the air by a boomerang.



*Guido von Hove  
....he threw the 'rang.*







*A kite by painter-kitemaker Claudio Capelli floats amid the trees of rural Tuscany.*



*Philippe Cottenceau's delicate, spiritual kite flutters above a Tuscan church. The symbolism is obvious.*

## *Kite Photo Project Debuts at Cervia*

# *'The World Hanging by a Thread'*

*Because he has photographed many disasters and sees the world imperiled by pollution, hatred and war, Hans Silvester has embarked on a major kite book project to convey the other side of the equation---hope, beauty, friendship, peace. Creator of more than 25 photographic volumes, including the best-selling Chats du Soleil (Cats of the Sun), which has sold a half-million copies worldwide, Silvester enrolled artist-kitemakers Philippe Cottenceau, Claudio Capelli, and Robert Trepanier to fly for him where kites could be shown as symbols of purity. The project took them to rural Tuscany and two of the resulting images are shown on these pages.*

*Capelli sees the project "as a way of introducing various cultures to each other, of organizing people through the medium of play. I don't believe problems can be solved with arms." He makes an irrefutable point about kites worldwide. "There's wind everywhere."*

*"As a child in post-war Germany," says Silvester, "kites were important to me. It was the only thing we little boys had to play with. This marked me. I've been interested in kites ever since. To photograph kites, you have to deal with nature. You have to know about wind, about temperature, about light." Now resident in the Gordes area of southern France, Silvester met neighbor Cottenceau on a television program. Cottenceau introduced him to the two other master kitemakers, Capelli of Cervia, Italy, and Trepanier, of Montreal. The collaboration followed.*



*Hans Silvester*

*It is projected that work will continue for some years, with the group bolstered by Swede Curt Asker, also now a resident of the Gordes area. For the future, the collaborative expects to shoot beside the Leaning Tower of Pisa---symbolism perfectly obvious---and the famous Carrara marble quarries, with their dramatic, pure rock planes. A trip to Asia is also planned.*

*A major exhibition in a large beach tent of the first fruits of this interesting collaboration was held last spring at the kite festival in Cervia. To make the point he is seeking to make, Silvester titled the showing La Terra Legata ad un Filo (The World Hanging by a Thread).*

# Just How Old Is This Kite Cave Painting?

For several years now there has been talk in international kite circles of a primitive cave painting in Indonesia showing kite flying. The cave is on Muna Island, off the island of Sulawesi (formerly the Moluccas).

If it could be dated and was found to be ancient, the image might prove how old kites were in that part of the Melanesian world. It has long been believed by historians Clive Hart of England and Tal Streeter of the U.S. that the Chinese claim to the invention of the kite is invalid, that the kite is likely to be much, much older than previously thought and the Chinese argue.

The case for using a cave painting to date ephemeral primitive objects made of easily destroyed materials is made by the boomerang. Remains of returning boomerangs found preserved in a peat bog southwest of Adelaide in Australia date to 10,000 years before present; a missile stick (non-return boomerang) has been found in Europe and dated to 23,000 before present. Yet multiple cave paintings off the coast of Irian Jaya, survivors of Ice Age flooding and not all that far from Sulawesi, show return boomerangs and missile sticks that have now been dated to 30,000 years before present.

The kite cave painting it now turns out was viewed by Frenchman Philippe Cottenceau, accompanied by photographer Hans Silvester, in 1999. This followed Cottenceau's reconnaissance two years before in southeastern Sulawesi during which he explored the many old paintings in caves. Some show water buffalo fighting, a sport still practiced in that area today. Cottenceau was there studying the leaf kites made and flown in various parts of Melanesia, Micronesia, and Polynesia. It is thought by scholars such as Hart and Streeter that these leaf kites--some quite big and having a natural dihedral so they need only some stiffening, bridling, and flying line to be perfectly flyable---are in fact the first kites known to man. They are still used for kite fishing in Oceania, being perfect for luring the shy, tasty needlefish, or gar, since they present the bait far away from the boat.

On their visit in '99, Cottenceau and Silvester were guided to a small, almost inaccessible cave perched at the very top of a 250-yard cliff face on Muna Island. Climbing up, Cottenceau reports, was scary, getting down was terrifying. "I didn't think I'd survive the climb down, I was scared to death," says Cottenceau. "The climb is so dangerous it really requires mountain gear such as an axe and a belay rope."

Cottenceau says the kite mural was a fairly rough outline drawing in ocher of what appeared to be a human figure flying a lozenge-shaped kite with tail. The more he thought of it later, the more he was convinced it was a kite that was depicted. But Cottenceau began to have doubts as to the age of the image. He said it was discovered just after his first visit to Muna two years before and that the style of the painting differed radically from that of the other cave images, indicating either a significantly earlier or, perhaps, quite modern provenance. Because Cottenceau had expressed so much interest in kites on his first visit, he wondered if this had not led to the painting being rendered specifically on his behalf.

Silvester made photographs of the image in connection with a long term kite book he is working on. As a professional, however, he is loath to afford advance viewing of his work. Fair enough.

With Indonesia dominated by Islam, further forays to Muna are for the time being obviously not in order for Westerners. So there the matter of the mystery kite image rests for the foreseeable future.

## String Valuable and Zealously Guarded

# Flying Fighters With the Children of Havana

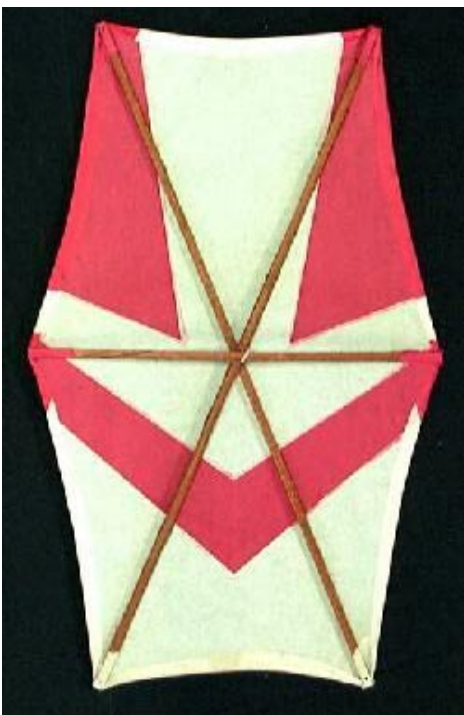
Will Tefft, 44, of Santa Barbara, California, travels the world as a representative of a map company. He organizes mapping crews and purchases maps for resale.

As a convert to kites years ago and fighters in particular, he always carries some small Indian fighters with him. He has happily flown at such disparate locales as Tiananmen Square in Beijing, where hundreds of people had kites up when he was there, and in Uzbekistan, where children only---no adults----flew odd circular kites.

On a trip to Cuba a while back, he saw some boys aged 9 to 12 flying six-sided, almost rectangular *Papelote* fighters in the old section of Havana. “After some palaver,” he reports, “they led me through what turned out to be the worst slum in the city. I was told later I could easily have been killed for the clothes on my back. Ah well! Anything for kites.

“After ascending into a rookery placed precariously on top of an old crumbling building, I was introduced to Alexander Han y Brito, a 20-year-old kite maker. He was stunned to see me and my entourage. We exchanged pleasantries and he brought out three of his best kites to sell. Considering the lack of good material to work with, they were extremely well made. The kites were small, 8 by 12 1/2 inches, made of paper and wood, and colorfully decorated. After meeting his wife and children, I invited him out to fly. Unfortunately, he didn’t have any flying line to use! He couldn’t afford it. String is apparently very scarce and hard to come by. My Spanish being poor and his English non-existent, we parted after I bought the kites from him for \$10. Cuba is a wonderful but poor country.

“Several days later I met up with some more kids flying in a local park. I noticed the boys jealously guarded their string. The line I saw being used was thick cotton, like the kind newspapers are tied up with. The boys let me fly and take photos. They instructed me in the art of adjusting the tail and bridle. Adjustments were very subtle. Any small change noticeably altered flight characteristics. These kites take a lot of practice.



*A Cuban kite and a boy flying one of them*

“The *Papelotes* are flown with tails 10 to 15 feet long, with cloth bows attached at one-foot intervals. The tails have razor blades attached to them and thus the kites become fighters. As they whip around in the air, the kites are a bit dangerous. Strikingly similar to the Haitian tradition described by Martin Bartholome in our last issue.

“From what I could learn, flying is done year round, except during the rainy season in late summer and early fall. I couldn’t learn anything about the history of the *Papelotes*.”

Tefft concludes: “I have several other hobbies, but kite flying and my map job around the globe go together particularly well.”

---

Thanks to Gina Hsiung for her excellent cyber fighter kite web site  
<http://www.csun.edu/~hfoao033/fighters.html>.

---

## *Warning to High Fliers*

*Although it is all too easy to do, kite fliers are cautioned against looking at the sun for any length of time. Pilots use special sunglasses and aircraft have protective windscreens, so be advised.*

*Australians have a mantra about exposure to sun, a real problem in a basically desert country where one might not even see a cloud in days. Slip, slop, slap is the word from Oz. Slip on a shirt, slop on a hat, and slap on the sunscreen lotion---rated 15 or higher. Sunglasses are advised as well.*

*When a storm brews, pay attention. Lightning is attracted to the lone object out in a field. Lightning does strike twice---the Empire State Building in New York City is hit an average of 20 times a year. It is also freaky. A cottage in Linconshire, England, was struck by a bolt which passed down the flue, excited the fireplace to the kitchen, blasted the larder, fusing cake tins together and roasting an uncooked ham. The cake tins are now on display in the Lincoln Museum.*

---

Kites and wind are impatient; we must seize the moment when they come together.  
Yao Zhende

Give them a kite and men will be boys.  
Tom Gorman, Los Angeles Times

Kiteflying washes away the dust of everyday life.  
Anon.

What’s great about kites is that the wind is free. All you need is a field.  
Pam Markie

## Definition

Kite---a light frame covered with paper or cloth and flown in a breeze at the end of a long string until it disappears into the heavens and time stands still.

Anon.

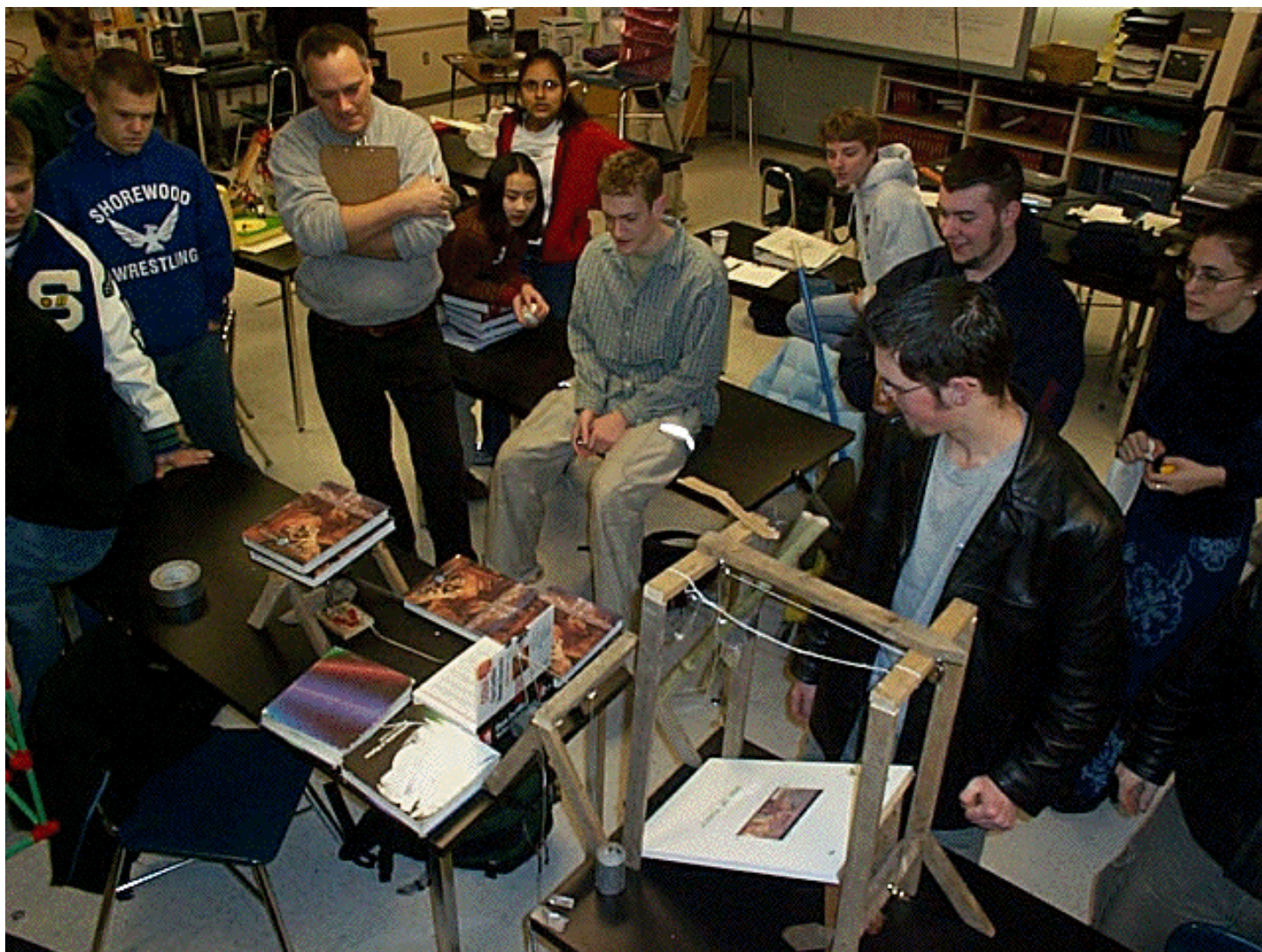
‘Tough Little Birds But No Polar Bears’

## Kite Photography at the South Pole

When Eric Muhs, a physics and geometry teacher at the Seattle Academy of Arts and Sciences, goes to the South Pole next December, he'll do cosmic ray research dealing ultimately with the question: What is the fate of the universe? He'll be there on behalf of the National Science Foundation's ongoing Teachers Experiencing Antarctica program.

But in typical fashion for a teacher who in the past has had his students build rockets, electronic musical instruments, a one-person electric racing car, hovercraft, an FM radio station, *trebuchets* (Medieval gravity-powered siege engines), boomerangs, telescopes, clocks, an Internet weather station, and assorted Rube Goldberg machines, Muhs wants to involve his current classes in his forthcoming research on the White Continent. So he came to the Drachen Foundation and proposed a collaboration.

What he and Drachen cooked up was a kite aerial photography project, he to supply the students as builders of kites and photo rigs, the foundation to supply the expertise and modest funding. It seems a perfect science engineering project----easy to do, inexpensive, refreshing because everyone likes to look at images from a new perspective.



*Muhs (with clipboard) and students study the physics of kites.*

Very straightforwardly, Muhs adds that one of his ongoing desires is to publicize science, to draw people, both pupils and parents, into the field. He sees the Drachen collaboration as forwarding this goal.

Toward it, Muhs will not only make photographs, videos, and Quicktime movies with the highly portable, collapsible, reliable rigs his students concoct for him, he'll file them daily on the T.E.A. (tea.rice.edu) and Drachen ([www.drachen.org](http://www.drachen.org)) Web sites, along with text describing his work. He says there will be plenty to photograph at the Pole, including lots of scientific installations. "But no polar bears," he says. "There are, though, the occasional tough little birds to be seen."

Drachen Administrator Ali Fujino, who put together the project with Muhs, has recruited Jim Day, of Seattle, an enthusiast of kite aerial photography, to assist the teenagers. Problems facing Muhs when he attempts the photography are extreme cold (up to minus-15 degrees Fahrenheit even though it will be summer in Antarctica) and wind so extreme it can blow a person off his feet. As a practical example of the problem the cold poses, plastics will be unusable as a construction material, since cold makes plastic very brittle. Students, in Muhs' words, "will have to test string, rayon and adhesives for suitability, to *ruggedize* the kite rig---that's a new word I just made up." The students will keep a classroom log of the experiments and will develop a resource library. They will also be expected to master the science of kite flying and photography---aerodynamics, force vectors, waves and vibrations. Fujino proposes string harmonics as a potentially interesting area of study: Can wind strength be measured by the sound the kite line makes?

Muhs hopes to do a live video from a kite-mounted wireless aerial video camera during his five weeks at the Pole. When the trip is over, he expects to make either a movie or multimedia CD. Drachen in turn will use materials from the trip in its projected national high school kite aerial photography instruction program.

Kite flying will be very much a sideline for Muhs. His primary project at Amundsen-Scott base will be the study of extremely tiny cosmic rays called muons and neutrinos. The ongoing Project Icecube is building the world's largest high energy particle detector in a cubic kilometer of the deep, clear ice under the Pole station. As very high energy (read high speed) particles pass through the ice, they leave extremely faint, ghostly trails of light. In an analogy, Muhs pictures an auto driver coming from a 50 mph zone into a 35 mph one. "Briefly the particle's going too fast," he says. "It gives off light as a way to slow down."

Studying this light will permit reconstruction of the paths of the cosmic rays, ultimately leading to basic questions about the physical properties of the universe itself. Heady stuff.

Married to a professor of Spanish literature at Seattle University and father of two sons, Muhs, age 42, is a private pilot, scuba diver, professional musician and composer, amateur astronomer, computer whiz, expert home remodeler and gardener. "Fixer of anything," he confidently concludes his resume. He has put out a variety of publications, including a multimedia textbook on telescopes and something he calls *Seeing Relativity: Supercomputer Animations With Light Slowed to Walking Speed*. He has even published a book in Spanish, in which he is fluent, of the poetry and prose of his wife Gabriella Gutierrez, complete with graphics, music, and video.

Ali Fujino of Drachen thinks Muhs is one of the best instructors she has ever seen. "He not only teaches book learning, he does lots of hands-on, real life teaching which will mean life-long learning for his students. He's a mentor. His students will remember him all their lives."

---

*Want to know more about teacher Eric Muhs? His imaginative Website is at <http://www.invisiblemoose.net>.*

---

## *Novel Rotary Wing Kite Used by U-Boats*

Of the many kites and kite-hybrids used during World War II, one of the more novel was the rotary wing kite---the *Bachstelze*, or Sandpiper---used by the German submarine service. A free-turning three-blade rotor mounted on a vertical pylon attached to a simple framework, the kite was used as an observation post.

The observer's seat was unprotected. The 24-foot kite was carried aft on a tubular boom and consisted of a rudder and horizontal stabilizing surface. The observer had controls for operating the rudder and for tilting the rotor head.

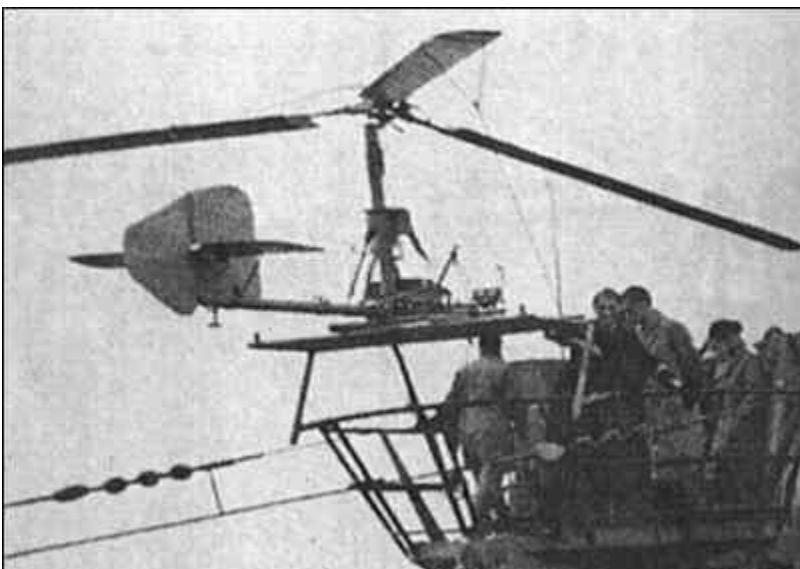
The kite was connected to the U-boat by cable and winch and maintained height when towed by a surfaced submarine. The observer communicated with the vessel by telephone.

Operating on the principle of the autogyro, the Focke Achelis 330, manufactured by Wezer Flugzeugwerke in Delmenhorst, near Bremen, afforded the submarine a much greater range of vision. It could hold an altitude of up to 700 feet at 25 miles per hour and gave the observer, using powerful binoculars, a vision range of 25 miles. In a normal return to the submarine, a winch wound in the FA330's cable until the vehicle was back on board. The kite was then rapidly dismantled and stored in a compartment on the submarine.

In an emergency, the pilot could jettison the rotor hub and blades. When the rotor assembly separated, it automatically opened a parachute attached to both the machine and the pilot. The pilot then released his safety belt and the aircraft dropped into the sea, leaving the pilot to descend alone by parachute.

Only a few of the FA330s were used in combat, and only in the South Atlantic and Indian Ocean where aircraft patrols were uncommon early in the war. When growing Allied air power provoked repeated crash dives of U-boats, the poor autogyro pilots were sometimes left foundering in the sea to die because it cost too much time and was too dangerous to recover them. The scheme was then abandoned.

About 200 of the rotary wing kites were constructed, and only a few survived the war. One of these was located on a captured U-boat by the British and subsequently tested by the Allies in 1945. A combined Allied intelligence unit which studied the kite commented that "great ingenuity in design is evident."



*A rotary wing kite ready for launching aboard a German U-boat.*

# Blue Hill Archive Being Saved

A valuable collection of late 19<sup>th</sup> and early 20<sup>th</sup> century manuscript and printed materials gathered by Abbott Lawrence Rotch is to be preserved and catalogued by the Blue Hill Observatory Science Center. The material offers much insight into the state of aeronautics---and in particular kites---during the years immediately before and after the invention of the airplane.

The Rotch collection is held by the Harvard University Scientific Instrument Collection in Cambridge, Massachusetts. Blue Hill, located at Milton, outside Boston, was associated with Harvard from the observatory's beginnings in the mid-1880s until 1959.



*An historic late 19th century photograph of Blue Hill Observatory, with weather kites and winch on view.*

Rotch, a Boston brahmin, was the founder, chief financial supporter, and director of Blue Hill until his death in 1912. His collection, which includes everything from news clippings to handwritten manuscripts, illuminates the history of flight during a critical period. Similar collections gathered by Alexander Graham Bell, Samuel Langley, Octave Chanute, and the Wright brothers are held by the Library of Congress, National Air and Space Museum, University of Chicago, and elsewhere.

The collection is unique, however, since it offers insight into the thinking of A.L. Rotch, a pioneer in his own right and leader of the Boston Aeronautical Society. It contains items of national importance, including correspondence from Rotch's friend Octave Chanute, the focal point of an important circle of flying machine experimenters, and a friend and supporter of the Wright brothers. Correspondence from the Wrights and from the Anglo-Australian Lawrence Hargrave, inventor of the box kite, is included in the file.

The material constitutes some 20 boxes of material, some of which, being on highly acidic pieces of paper, will not survive into the next generation unless conserved. Cataloging and copying will be done in conjunction with the conservation work. The collection will then be housed to archival standards.

Additional Blue Hill material has been located on the David Wheatland property, in the Boston area, where it was stored after Wheatland rescued Blue Hill material headed for the dump after Harvard severed its connection with the observatory. This material, which includes an original Blue Hill weather kite, will be returned to the observatory and conserved as needed. A radio buff, Wheatland had professional connections with the Blue Hill over many years.

Funds for the conservation are being given by the David Wheatland Trust, augmented by a grant from the Drachen Foundation. Copies of the entire file will be added to the Drachen archive and made freely available to the public; this includes World Wide Web access.

The conservation effort is spearheaded by surgeon William Minsinger, of Randolph Center, Vermont, who has been at the forefront in establishing the Blue Hill Observatory Science Center.



# Drachen Organizes Its French Language Archive

In order to widen the audience for its collection of French language kite material, some of it rare and unusual, the Drachen Foundation hired Rebekah Pape of Seattle Pacific University to survey and organize the holding. Over the course of several months last year, she indexed books, journals, magazines, photographs, and drawings.

To appraise non-French speaking researchers as to what is available, she translated title pages and tables of content for most of the written matter. This material now can be examined by appointment and copying or translation of selected items may be made at cost, with Miss Pape being available to render this latter service if desired.

Of the books in the holding, Arthur Batut's 1890 study on kite aerial photography is outstanding. Batut was the first person to make such photographs. Among other authors represented are Leailly, Houard, de Graffigny, Bescancon, Pichard, Poujoula, Romain, Saconney, Thiebault, Vines, Weber, and Schweisguth. Le Cornu is the knowledgeable author of several titles. Topics covered ranged from kite designs to man-lifters, rescue kites to games, wind toys to kites used in meteorology.

Issues of the scholarly review *Le Cerf-Volant* (The Kite) dated from 1912 to 1914 are an exceptional holding, covering as they do major issues of the kite world, often as it related to the still young aviation industry. This review, begun in 1909, was apparently the world's first kite magazine. It may be remembered that no country surpassed France in its enthusiasm for aerial discoveries, starting with a collective national passion for ballooning in the 1800s. Topics in *Le Cerf-Volant* ranged from traction kiting to the use of anemometers, competitions to winches, construction techniques to kite fighting. Other practical uses of kites surveyed included life-saving, signaling, and the use of kites to raise antennas for wireless telegraphy. Essays on pioneers in the field such as Graham Bell, Hargrave, Madiot, Cody, Donzella, the Icks brothers, and Saconney were a continuing feature.

The Drachen archive of French language material was obtained via gift, purchase, and trade. As opportunity presents itself, the foundation will continue adding to the holding.

## Kite Oddities

In an experiment, C.W. Post, the breakfast food millionaire, once tried to produce rainfall on his Texas ranch by using 20 kites to hoist 150 sticks of dynamite into the air, where they were simultaneously detonated. The arid blue sky remained blue. No rain fell.

In a volume called *Art That Flies*, kite historian Tal Streeter points out that Samuel F. Cody, the American cowboy who invented and flew the first manned and powered airplane in England, worked up to that high point by designing man-lifting observation kites at the turn of the 19<sup>th</sup> century. As he was working toward manned flight, he managed to get himself appointed chief kite instructor at an important British military establishment at Farnborough, making him, as the author comments, "the first (person) to command a country's military air force."

India weighs in with its own kite oddity. It is reported that the famously beautiful Taj Mahal, in Agra, has a number of old gashes to its edges where lethal ground-glass fighter kite lines swiped the stone façade.

# Telling It Like It Is

*Editor's note: The author of the following essays is a noted kite designer and international exhibition flier. He lives in Ashburton, New Zealand.*

## 1st Motorcar Is Linked to Kite Sailing

By Peter Lynn

A couple of vintage car enthusiasts arrived with a very interesting challenge one weekend. They had secured the rights to make an official replica of the first motorcar, Carl Benz's single cylinder three-wheeler of 1886---from 15 pounds of plans duly received from Mercedes-Benz. It took 14 months to build. Unfortunately, it wouldn't run.

That fits the profile of a perfect Sunday problem: that is, has moving bits, makes noises, involves being dirty, is challenging enough to be interesting, and is definitely solvable. Just a sudden thought, that I'm too old to have, but no, girls don't qualify---they fail the final criterion.

The Benz engine has a slide-type inlet valve but a conventional exhaust---sort of half-way between steam engine and internal combustion engine technology. It should produce 1 horsepower at 250 revolutions per minute on full throttle from its one liter open crank, single cylinder engine. Forget fuel injection, this engine doesn't even have a carburetor. The air intake passes through a sort of half size fuel tank, picking up some fuel vapor as it does.

At the start of the day there were only three of us but by mid-afternoon rather a crowd had gathered, offering many "helpful" suggestions. For hours, occasional chuffs were all we could get, but by 4 p.m. it settled down to regular running and one of the proud builders popped off down the track at 7 miles an hour, albeit with some push assist through the larger potholes. Directional control is so rudimentary that in the end of each run it was easier to jump off and lift the front wheel around, rather than to try steering.



*Peter Lynn*

In just 118 years, this motor tricycle has morphed into 200 horsepower/90mph/climate controlled/automatic everything/autobahn cruisers that cost proportionately less of an average person's discretionary spending income than the barely driveable original. Doesn't seem possible, but it has happened.

I wish that kite sailing would parallel this.

A few days later we sailed our latest four-meter kite sailing catamaran for the first time.

Because I'd sworn at it extensively during the final stages of construction (it was behaving very annoyingly), I thought it would bite me back as soon as we were on the water. It didn't, or at least it hasn't yet; maybe it's waiting for an opportunity with more potential for violence. Maybe I better apologize now.

At last, an almost perfect boat, with all the best ideas we've discovered in 15 years of kite sailing development: four-rudder steering, swinging seat, pull from leeward, displacement/planing hulls. It also has a few new



*A kite sailing catamaran has its controls tested at the Lynn establishment in Ashburton, New Zealand.*

convenience features like an excellent hook-in system, no gaps between the hulls and rudders so that lines never get caught there, and an electric outboard for when you get caught miles offshore in a dying breeze.

It's usable by any yachting standards: easy to sail, very good wind range, high top speed (an earlier version had done over 35 mph), excellent upwind, surf stable, 8 foot draft, 88 pounds, car roofable.

Since 1987, I've dreamt a lot about making kite sailing happen, have built many silly things and some half-sensible ones---the buggy boats and later monohulls were far from disasters.

Can kite sailing ever catch on? This new boat works well enough for sure. It's generations ahead of our earlier commercial offerings in every way. But will people want to do it in sufficient numbers? Bored or retired kite surfers maybe? Can it develop into a competition sailing class? Even just as toys, mega yacht owners would be a start.

Not that we are planning for production just yet, but a problem is that as the design has become more sophisticated, it has become more expensive to make: \$4,000 is probably an achievable retail, but not less after allowing for transport, taxes, and margins.

Dreaming on!

# Tricks of the World Traveler

Traveling. There are lots of tricks.

One of the requirements of going to international kite festivals from New Zealand is that the baggage allowance of 140 pounds (64 kilos) is for kites alone---that is, no superfluous things like anchors or little tents to store gear, beer, and hide in. And definitely no room for clothes and personal things, which have to all fit in a carry-on bag along with a few heavy but non-metallic things like 200 yards of flying line.

If there's just too much for the permitted 18 pound (typically) carry-on, I pack the overflow in a prominently labeled duty-free bag, because gate staff are blind with respect to these, probably on account of instructions from airport management not to cause problems for airport rent paying shops. The clothes allowance is still minimal for more than a week away though, so I have to get involved in an activity that eludes me at home, that is, washing clothes. It's easy, just puddle each day's dirty kit under foot while showering, squeeze, then lay out on the hotel bedroom carpet. This soaks up the excess water fast---much quicker than for hanging, and because air conditioning includes dehumidifying, within 12 hours your clothes will be wearably dry. And the damp spots on the floor will be mainly gone in an extra day or two, so you don't get hauled over the carpet by hotel management.

To relieve the tedium of endless hours sitting in airports and on planes, most frequent fliers play the game of how to get upgrades without paying. Of course there are the standard ploys like booking early and requesting a bulkhead seat in the hope that some mother traveling with a baby will, at the last minute, require your seat because it has a bassinet bracket, because by then hopefully all the spare cattle class seats will be taken and you will gain a promotion.

Or like somehow getting through to the gate without a seat assignment and then not presenting yourself at the podium for ditto, until the last possible second, no matter how many times your name has been called, by which time there should be only business class seats left, or if you're very lucky, first class---or maybe no seats at all. Oh well, pain for gain.

David Gomberg has one I've never thought of. He knows the fine print perhaps better than some of the check-in staff and when some neophyte erroneously calls him out on a technicality, usually to do with weight or number of bags, he says, "Fine, I'll agree to that, but only on condition that if you're wrong in this ruling you've just made, I get a free upgrade, OK?"

And here's a new one, though it's not perfect yet and maybe needs a bit of working on. At Kites on Ice, in Madison, Wisconsin, 12 hours out on the frozen lake with wet feet (and sore shins) from stepping in an anchor hole or three, and no way to get warm when the wind chill factor must have hit treble figures negative, left me with the first cold I've had in five years. And doing it again the next day, but not for as long, didn't help, nor probably did extended participation in various after match functions.

The sensible kitefliers (by far the majority) limited their time in the cold by enthusiastically conducting a kitemaking workshop in the warm, dry convention center three miles away. The outside crew quickly labeled them, derisively but enviously, "the workshop weenies."

After this event, on presenting myself at United check-in at Chicago, the nice lady took such pity on my suffering she gave me a free first class upgrade to Malaysia (for the Pasir Gudang festival). On board and with me fully reclined, another nice lady came along and offered smoked salmon, caviar and Chateaufort du Pape (or maybe it was Haut Brion, or maybe my fevered imagination was inventing things by this stage).

The wine tasted terribly, I couldn't even finish one glass. And even the thought of myriad unborn baby sturgeons, which normally would have fired me with carnivorous enthusiasm, made me feel sick. See, I told you this one needs working on yet.

Kites on Ice was an excellent festival though. I heard the workshops were the best there have ever been.

## Little Miss Duct Tape

My admiration for the female of our species is increasing every day. At the Thailand International Kite Festival with the Mega Ray, Clyde Cook and I were being our usual obnoxious selves about attending the opening and closing ceremonies, and about getting up for breakfast at 7:30 (so as to be ready to leave for the field at 9:30 so that we can sit there and wait for the wind to arrive at 11:30 and the public at 1:30), and things like that. Well, we met our match this time. A young lady from the Thai Tourism Authority soon had us sorted. Always smiles, hardly ever tears (visibly anyway), but unswervingly persistent. Eventually we just did whatever she asked; it was much easier. Clyde even appeared for breakfast on the last two mornings, first and second time for probably 10 years. We called her Little Miss Duct Tape: fixed every problem and never let go.

Also in Thailand, we discovered perhaps the greatest innovation in single line kite flying that has come our way in the last 30 years---the Thai army. Friendly, keen, natural kitefliers. After a few minutes of teach-by-example, we could fairly much leave them to it: launching, wind shifts, packing, the lot. When kites tangled, they would often have them sorted and relaunched before we could get there. They came fully equipped with mobile anchors (jeeps and five-ton trucks) and, I suspect, would also be quite useful in any territorial dispute. The ultimate kite team.

I'll settle for reincarnation as a kite, provided that I'm cared for and protected by the Thai army, that is. Hmm, I wonder if they have women soldiers.

---

### *Tapping High Altitude Wind*

## *'Ladder' of Kites Viewed as Energy Source*

A former Dutch astronaut with the euphonious name of Wubbo J. Ockels has come up with an unusual, even unlikely, wind energy invention. Best described as a looped kite "ladder" in the sky, Dr. Ockels' inspiration is to use the stiff breezes at high altitudes as an energy source.

His series of kites, or alternatively tethered wings, connected in train to a cable forming a huge loop would serve to produce electricity on the ground by having the kite line pass through a generator. Such a device would be both cost effective and environmentally correct. That's the theory.

Ockels, 55, who made two trips into space as an astronaut, is now an aerospace professor at the Delft University of Technology and head of the European Space Agency's educational outreach office. He says he conceived his invention, patented in the U.S. under the name Laddermill, because of high altitude kite flying he did as a boy, when he had to enlist his parents to help him reel in the powerful kites he made and flew. His experiences as a pilot of light aircraft and of gliders reinforced his notions on the potential of wind power.

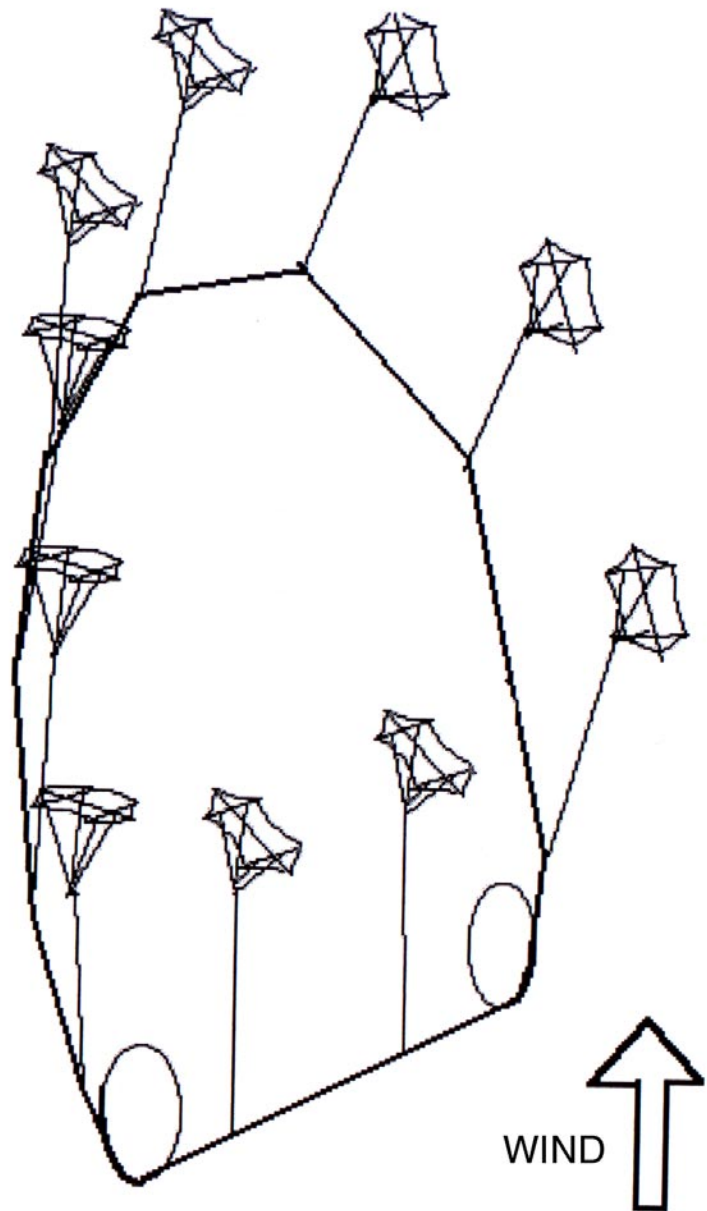
## Kite 'Ladder'

Ockels conceives of his kite loops flying to altitudes of 29,000 feet, with sensors on each kite permitting individual flight to be adjusted to changing weather conditions. The kite would do this by radioing data to a computer on the ground, which would then relay flying orders back to the kite. As they revolved back to the ground, the slowly moving kites would be detached and transferred to the upward-heading line in a manner similar to the method used with ski cable cars.

Flying would be done in a zone where aircraft were banned, similar to the large area along the U.S.-Mexican border where high-flying balloons with radar are used to interdict drug traffic. Working closely with weather forecasters, operators of the system would bring down the kites when needed.

Ockels envisions 100s of his installations, each requiring some four hundred 10-by-27-foot kites, as capable of generating enough electricity to supply the needs of a city the size of Seattle, and this at a cost comparable to polluting fossil fuels.

Grandiose, complicated, and costly as the project sounds, and is, Ockels envisions a simple prototype to begin with. Required would be two capstans, six kites, and some cable. The rig would be flown to an altitude of 1,000 feet. Sensors would be attached to the kites to regulate their angle of attack to the wind, and thus their pulling power, both going upwards and downwards. The rig would be launched by balloon, which would detach and return to earth. If this project, costing maybe \$25,000, worked well, the matter could be taken further. Expensive technical studies would begin.



*How the kite "ladder" might look*

David Lang, of Seattle, a former NASA expert and now aerospace consultant, is Ockels' point man in the U.S. Lang's expertise was objects tethered in space. Now he is enlarging his view to include objects tethered to the earth.

Lang submits four interesting questions for skeptics of the Ockels concept: Do you doubt the wind velocity figures provided each day on the Web by the National Oceanic and Atmospheric Administration? Do you doubt there is enough power available in high altitude winds to supply all the energy needs of the U.S.? Do you doubt the ability of the industry to make apparatus capable of capturing the power available from this wind safely and as economically as fossil fuels? Would you have doubts about devoting a very small portion of the air space in the U.S. to flying this apparatus?

Lang concludes: If the answer to any of the above queries is "yes," would you be willing to try and support that position in detail, and debate it?

Rising to the challenge, Scott Skinner, president of the Drachen Foundation, who has studied technical material on the subject, queries operations at the top of the kite loop. "How will angle of attack be changed? What will be the cost if every wing can sense angle of attack and have the computer machinery to change it automatically? Must the downward flying (and upward ones as well) wings be changing their angles of attack constantly, due to changes in wind at various altitudes? What effect will this have on their tethers and their internal controls?"

"Maybe because as a kiteflier I have learned that what can go wrong will go wrong," Skinner continues, "I wonder about what happens if the line breaks. It appears the assumption made is that the kites will still fly in an upright and stable position. What if they, for example, turn 180 degrees to the wind and fly downwind and actually accelerate in speed to the ground? What if one, two, or three flip over on the way down---now they are increasing speed downward with every meter? Aren't they?"

Ali Fujino, administrator of the Drachen Foundation, thinks the correct way to view the project is as a "dream or vision that may lead to innovative inventions. Both Dr. Ockels and Dave Lang are highly credible scientists, and their idea should be studied carefully. The point is, really, kites remain viable in modern technology, as this project shows."

Lang responds: "This is the kind of dialogue Dr. Ockels and I welcome." Ockels can be contacted at [wubbo.ockels@worldonline.nl](mailto:wubbo.ockels@worldonline.nl) and Lang at [ddl@lang@cypressmail.net](mailto:ddl@lang@cypressmail.net). Have at it!

---

## Patents, Trademarks and Copyrights

By Ed Grauel

If you want to protect your new idea for a kite or a kite accessory, should you apply for a patent, trademark, copyright, none of these, or all of them?

A patent protects the basic idea embodied in the new creation, a trademark protects the name of the product, and a copyright protects the words and style used in presenting the idea.

A patent is issued when a proposed idea is new, novel, and not obvious to someone familiar with kiting. It is good for 20 years and is not renewable. About 65 per cent of patent applications are approved and the inventor may assign the patent, sell it, or grant rights on a royalty basis. Cost to obtain a patent is \$3,000 to \$5,000, including searching and filing fees. After the issuance of a patent, a yearly maintenance fee is charged to keep the patent current. The fee varies with the subject and use of the patent, but for most kite patents would total \$2,875 for the life of the patent. Just another way to increase revenue for the Patent Office.

There is still another way of protecting a specific shape, design, or coloration of a product, as opposed to function. This is done by means of a "design patent." These patents are rather quick and easy to obtain and are renewable after the original 14-year life. Few design patents are filed, however, because they are easy to get around by changing one or more of the design elements. The cost varies from \$185 to \$370.

A trademark can be obtained on a word or words, names, symbols, services, or devices which are used to describe or identify a product or idea, providing the same word or words aren't already registered for a product or idea in the same or similar field. For example, "zephyr" is a word trademarked for several different types of products, but if it isn't registered as a kite name, it can be trademarked for this particular use. A trademark is good for as long

as it is continued in use, but it must be re-registered at the U.S. Patent and Trademark Office every 10 years. Fee \$175.

A copyright covers any literary or artistic work, including photography, designs, drawings, and sculptural works. But only the words or the form in which an idea is expressed is protected, not the use of the idea itself. Anyone is perfectly free to express the same idea in any way he wishes to, as long as it isn't in the exact form or wording as the original copyrighted material. Copyrights cannot be taken on trademarks, forms, mottos, slogans, systems, methods, titles, lists, or formulas. They are issued by the Library of Congress and are good for the author's life, plus 50 years. Cost for each copyright is \$10.

Under some circumstances, the courts will recognize common law copyrights which have not been formally registered at the Library of Congress. In these cases, the author has to prove the material has been published and circulated under his name, and that any re-copying or infringement, in whole or in part, has been protested in writing.

So, if you want complete protection and the costs involved are of secondary consideration, or, better yet, are subsidized, you can patent your idea, trademark the name you select, and copyright the advertising you use to sell the product.

---

## Traction Kites Show the Way at South Pole

Two intrepid Belgian explorers conclusively proved the worth of kites while transiting the White Continent, Antarctica. Their 99-day trek is documented in a fine new book titled *In the Teeth of the Wind: South to the Pole* published in England by Bluntisham Books ([bluntisham.books@btinternet.com](mailto:bluntisham.books@btinternet.com)). At \$45 postpaid, the hardback is good value not only because of the crackling text but also its superior photographs, 54 of them.

Adventurers first and foremost and scientists a distant second, mainly it would seem to justify some of their funding, Alain Hubert and Dixie Dansercoer, veteran Himalayan climbers, wind surfers, hang glider pilots, and polar trekkers, spent 400 hours training themselves in the use of modified Francis Rogallo No. 5 NASA Parawings, in three sizes to cope with various wind speeds, before starting their 1997-98 trudge, mainly on skis, from Dronning Maud Land south to the American base at McMurdo Sound, stopping en route at the Amundsen-Scott Base at the South Pole, another U.S. facility. As Hubert points out, the Pole symbolizes absolutism because it straddles all the meridians while at the same time it undermines space because all directions read north. It's a place for perceiving the great relativity of human existence, he concludes.

En route, the pair had the usual setbacks, from annoying to grave. "Untangling sails and undoing knots was the recurring theme of the crossing," notes Hubert. There were dangers such as crevasses, high altitude ills, poisonings, broken bones, psychological traumas, but the two managed the route carrying all their own supplies on sledges without any outside assistance, eating a specially designed, untasty diet high on fat. They also took ice core samples and collected ice crystals as part of their work. Admirably, they carried all of their waste with them.

Bogged down on the last lap of their journey by horrible weather and facing a forced march for home (with trip insurance at this point costing them \$49,500 a week), the two abruptly were blessed with good winds and clear





*A traction kite permitted this sledge-toting Belgian trekker to hurtle 168 miles in one day.*

skies and with the help of their really huge 69-foot (21 meter) kites managed to hurtle 168 miles (271 kilometers) in one day of all-out effort, easily breaking the 24-hour speed record for the Antarctic. Past expeditions have made as little progress as one mile---or less---in that same period of time.

Altogether, the pair covered 2,432 miles (3,924km), of which 2,060 miles (3,340km) were traversed using power kites for traction. At one point, they whizzed by the spot where Robert Falcon Scott and companions set up their last camp in 1912 before starving to death, just 7 1/2 miles short of a life-saving food cache. “We’ll hold on to the end, but we’re becoming progressively weaker; death can’t be far away,” wrote Scott in his usual elegant prose.

Hubert, main author of *In the Teeth of the Wind*, speculates on his own motives: Pure madness? Whim? Prolonged adolescence? Life journey? Spiritual quest? In the end despite the difficulties, he talks of exaltation, as he trod where no human had ever set foot. And that’s clearly what the trip was all about.

In an appendix, Hubert analyzes kiting in the Antarctic. He and partner altered the basic Rogallo design of 1957 so their four-line, bat-wing kites would fly as low as possible. They also built them just as light as they could and designed them for good control even when the wind was really howling, as it sometimes was. Having sets of kites in various sizes, they had equipment that permitted them to do kite skiing with sledges in tow in winds as light as 10 miles per hour all the way up to 36 mph---gale force. Traction kites of advanced design “constitute a new aspect to transport over ice, a new perspective for scientific and sporting expeditions onto the white spaces of our planet,” writes Hubert.

# *An 18<sup>th</sup> Century Poem*

*Author of the famous hymn “Amazing Grace,” John Newton, a Church of England cleric in the last half of the 18<sup>th</sup> century, described himself in his own epitaph as “a servant of slaves.” Arising from a dream the night before, he wrote a kite poem on Aug. 4, 1770 and the creation was eventually printed, with illustrations, in a little booklet in 1820. It can be found today among the Thornton Papers of Cambridge University at the British Library---shelfmark Ch.820/42(4.). The poem was discovered for the British Midland Kite Fliers journal by Marylyn Rouse.*

## *The Kite, or the Fall of Pride*

*My waking dreams are best concealed,  
Much folly, little good they yield.  
But now and then I gain when sleeping  
A friendly hint that’s worth the keeping.*

*Lately I dreamt of one who cried  
“Beware of self, beware of pride;  
When you are prone to build a Babel  
Recall to mind this little fable.”*

*Once upon a time a paper kite  
Was mounted to a wondrous height,  
Where, giddy with its elevation,  
It thus expressed self-admiration:*

*”See how yon crowds of gazing people  
Admire my flight above the steeple;  
How they would wonder if they knew  
All that a kite like me can do?  
Were I but free, I’d take a flight,  
And pierce the clouds beyond their sight.*

*“But, ah! like a poor pris’ner bound,  
My string confines me near the ground:  
I’d brave the eagle’s tow’ring wing,  
Might I but fly without a string.”*

*It tugged and pulled, while thus it spoke  
To break the string; at last it broke.  
Deprived at once of all its stay,  
In vain it tried to soar away;  
Unable its own weight to bear,  
It fluttered downward through the air;*

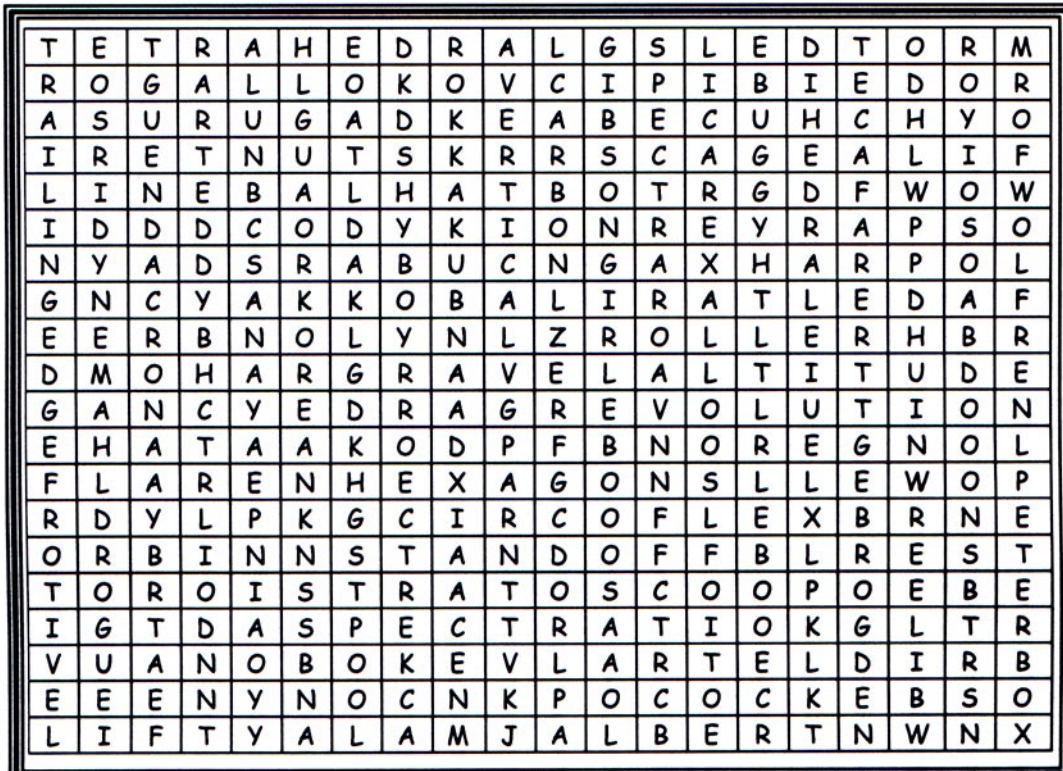
*Unable its own course to guide,  
The winds soon plunged it in the tide.  
Ah! foolish kite; thou hadst no wing;  
How couldst thou fly without a string?*

*My heart replied, “O Lord, I see  
How much this kite resembles me!  
Forgetful that by thee I stand,  
Impatient of thy ruling hand;*

*“How oft I’ve wished to break the lines  
Thy wisdom for my lot assigns?  
How oft indulged a vain desire  
For something more or something higher.  
And but for grace or love divine,  
A fall thus dreadful had been mine.”*

# Word Search Puzzle

Find as many kite or kite-related words as you can in the grid. Words can be spelt across, backward, up, down, and diagonally. Write them down, then turn to Page 53 for the answer list. The range is from three-letter words such as fly and Edo to 12-letter combinations, such as trailing edge. High marks if you top 35 words. Highest marks if you achieve 45. And let us hear how you did. Happy searching!



## Happy Moments in Finland

A calm evening, not even a car anywhere, clouds sailing high up in the sky. Sun shining on the melting stretches of ice. There is just me and my kite gliding from one cloudy pillow to the next.

The soil is warm. The sun shines kindly on me. I am just lazily lying on the ground. And up in the blue there is the happy little kite.

The day of the deep, deep diving into the dark blue sky. There are several kites on the line. We lie in a rowing boat some kilometer from the shore on a calm sea. We have a feeling of being on the bottom of a great pyramid lying in the mud. Up there one kilometer is the top kite. It is barely visible.

We are a group flying unusually giant kites. We laugh and shout. Our eyes are happy. The fantastic monsters really fly. We run in half a meter of water. It is raining on the ice.

Marten Bondestam, Boback, Finland

## Scholar Devoted 40 Years to Kites

# American National Treasure Dies

At age 95, with his remarkable mental and physical faculties largely intact, Ed Grauel of Rochester has died of a heart condition. A national treasure of American kiting, Grauel spent 40 years in retirement researching, designing, building, flying, collecting, exhibiting, lecturing, and writing about kites.

Most notably, he was the foremost authority on U.S. kite patents, an important role since kites not only led to the invention of the airplane a century ago but in more recent times produced the hang glider and steerable parachute. Enormous kites may well be used for economical freight-hauling in outer space in this century.

Born in 1906, Grauel came to kites after being educated at the University of Pennsylvania's famous Wharton School and a subsequent 32-year distinguished career as an administrator at Eastman Kodak. Retiring at the early age of 55, he decided to focus on kites as a full-time hobby because he liked to be active and liked the outdoors. "I thought to myself, kites are ideal," he recalled. "If the weather is good I can go outside and fly them. If the weather is bad, I can stay inside and do research, design, and building."

In his thorough, intelligent way, Grauel soon decided to design his own kites rather than buy them and his investigations led him directly to U.S. patents, which he studied extensively. When word got out about his unique research in this arcane field, a demand arose for the information he had compiled and he eventually issued a volume on every U.S. kite patent ever granted, updated annually. Manufacturers, lawyers, inventors, historians, and kitefliers provided a steady market for the book, which eventually monetarily repaid Grauel's thousands of hours of effort in compiling it.

With like minded friends, Grauel formed the Long Meadow Kite Association in Rochester and on good weather days as many as 25 members turned out on their kite field to fly and discuss their sport.

His father having been an inventor, it was natural for Grauel to obtain his own patents. His two great successes were the Bullet kite, a trapezoidal venting of the Allison Sled for greater stability, and the Zephyr, a Delta with balloon keel. "The Zephyr most pleases me," Grauel once commented. "When the wind ebbs, most kites plane forward out of control; the Zephyr on the other hand gently settles vertically to the ground."

Among many others, Grauel also invented the Triform, a kite with three wings of equal size which could be flown so any wing served as the keel, and the Airflow, a Diamond kite with no keel and no bowing, but with nonporous ripstop at the front and back of the wing and a strip of porous cotton in the middle. The kite generated lift through the combination of the porous and nonporous wing areas. "This would have been a generic, or unique, kite design," said Grauel, "except that it didn't work in other kites. And I couldn't figure out why. My Diamond seemed to be an aberration."

Grauel wrote many kite research papers on such subjects as wind-range, line tension, the effects of attachments on flyability, angles of elevation at various windspeeds, the effects of asymmetry and the center of gravity on performance, and so on. Starting with the January 1998 issue of the Drachen Journal, these papers were published for the first time, to Grauel's immense gratification.

Among other projects, Grauel studied the early history of kiting in North America, the names for kite in various cultures around the world, and aerial photography using kites. On commission from the Drachen Foundation, he reported on all of the kite patents ever issued in England, France, and Germany.

## *'A Person Who Loved Kites'*

*By Scott Skinner*

*The first thing that occurs to me is, I wish I could have known him better. The distance between our homes in Colorado and upstate New York made visiting difficult.*

*Like many others, I developed a very special admiration for Ed. Looking back now at his mountain of patent work, I wonder if the subject wasn't bigger than he originally expected. However, he was never one to let the magnitude of a problem slow him down. Maybe what we'll miss most is all this research he conducted, not only on patents but on kites and kiteflying in general. He approached the work in the proper spirit. He was not one to take the rule of thumb as gospel. He found out for himself. His work verified a lot of things. Rather than prove matters right or wrong, much of his work reviewed the dialogue. It confirmed our knowledge. It was valuable because it got us talking.*



*Skinner and Grauel*

*The gift of Ed's archive and other material to the Drachen Foundation by his family shows a trust in Drachen which makes the foundation flattered and pleased. Drachen pledges to keep Ed's work alive.*

*To sum up, Ed Grauel was an active flier, an experimenter, a researcher. He did all of this with a personal drive and energy and intelligence we can all admire. He was a person who loved kites.*

This valuable material is freely available to the public, through the good offices of the foundation.

Grauel was predeceased in 1996 by his wife of many years, Rue, a painter. Wintering for many years in the California desert, they had traveled across country 49 times. In retirement, they visited more than 70 countries.

Upon Grauel's death on May 3 of this year, his only child, Betty Hall, of Thousand Palms, California, donated Grauel's archive to Drachen. Included was his Canon word processor and the disks on which he stored his research, plus his correspondence and other kite material. Other Grauel gear including his sewing machine and issues of the historic Kite Tales magazine went to Long Meadow Kite Association pals. Although Grauel had given away most of his kite collection over the years, what remained was kept as keepsakes by the family---daughter, three grandchildren, and seven great grandchildren. His famous Impala 1966 "kitemobile," with its trunk loaded to the brim with kites and kite paraphernalia, has been saved by his daughter and may be restored.

Grauel was once asked how he wanted to be remembered? "Apart from my work with patents, I want to be known as the guy who tried to get research into kiting. My research has been significant. It has worked for me, it has worked for a lot of other people."

# Reza Ragheb Dies; Pioneer in Kiting

Reza Ragheb, of Aurora, Colorado, died last April after a brief illness. He was 67.

Ragheb won worldwide renown for his beautiful kites and was the mentor of many Southwestern kitefliers, including Scott Skinner, president of the Drachen Foundation, who lived near him.

Born in Tehran, Ragheb moved to the U.S. as a teenager, but returned to Iran in 1969 to establish a construction machinery business. When the Islamic Revolution occurred 10 years later, he and his family left Iran for good, first to London, then to the U.S.

“He didn’t have a job, no business,” recalls his widow Helen. “That’s when he took up kiteflying, and he loved it! When we came to Denver, he saw how outdoorsey everybody here was, saw the marvelous weather, and decided to open a kite store.” Ragheb’s Hi-Fli kites in Aurora, well advertised in kite magazines, became a magnet that drew kite fans from around the world. He made everything from small, delicate kites to huge, elaborate ones costing thousands of dollars. Everything he turned out was elegantly made and marked by his unusual, memorable color sense.

Helen Ragheb has closed the store now. “The store was him. Everybody came to see him. He was the personality. He was quite a unique guy.”

The Raghebs originally came to Denver because one of their two sons was a student at the university there. “But,” says Mrs. Ragheb, “it ended up the best place we could have chosen. We loved it here.”

A former U.S. serviceman, Ragheb’s ashes have been interred in the Arlington National Cemetery in Arlington, Virginia.

“He was Moslem, I am Jewish,” said his wife. “We lived together side by side comfortably with that for 47 years.”

## *Remembering Reza*

*By Scott Skinner*

*Walking into his store in early 1983 really did change my life. Reza gave me a giant push and completely hooked me on serious kiting. He also became a good friend. We were opposites in a way, he a dyed-in-the-wool New Yorker, an avid Yankee fan, me a born-and-raised Westerner. But I found him a genuine caring person once I got to know him.*

*He was a consummate retailer, stunningly good at selling kites. In the ‘80s he saw a market for higher priced ones and filled it himself, making show kites no one else was making. He made a small store his livelihood and it worked. He didn’t expand like some others did, he never lost his focus.*

*I have one of the biggest, choicest collections of his kites, at least 30. At one point, he gave me first pick.*

*His kites were notable for their beauty and reflected his Iranian background in their refined sense of color. The kites were bold and bright, with colors no one else used---purples and browns, colorful neutrals, if you will.*



*Reza Ragheb  
...he created a magnetic kite store*

*He encouraged me to build kites myself and to tackle projects I wouldn't have otherwise tried. In fact, I hadn't made a single kite on my own until I met him. He inspired by example. Kitemaking wasn't brain surgery, he showed me.*

*Reza was a very good personal friend who I particularly prized for his sense of humor, his playfulness. As a kitemaker and kiteflier, he really did show me that anything was possible in the world of kiting.*

---

## Foundation Gets Harold Writer Collection

As part of its role in increasing and diffusing knowledge about kites worldwide, the Drachen Foundation maintains a study collection of kites, kite artifacts, and publications related to the sport. A recent and welcome addition to that collection came from the family of Seattle kitemaker Harold Writer, who died last year, aged 88.

Writer's children Linda and Richard gave the kites and other objects to Jim Day and Kathy Goodwind, long-time Seattle kite enthusiasts, and the pair in turn turned over the collection to Drachen on permanent loan. As well as kites, the gift included reels, spools, and a range of kite magazines and newsletters, including 44 issues of the important Kite Lines, now no longer published. The largest single holding of newsletters is from the Washington State Kitefliers Association.

## Harold Writer

Scott Skinner, president of Drachen, says the Writer kites have particular historical significance “because they span Depression times of the early 1930s to the modern, high tech period. Harold’s first kites as a boy were made with sticks and paper, as a youth he planed hardwood down to make spars and used cotton fabric for sails, and in his maturity he switched to ripstop nylon, fiberglass spars, and Kevlar line---space age materials.

“The kites he made---first Eddys, then mostly box kites and Codys, which are box kites with wings---were well made and they were beautiful fliers. I saw him flying several times at the international festival at Long Beach, Washington, and was always impressed by his calm, reserved demeanor, his kite craftsmanship, and the excellent aerodynamics of his kites.

“The Drachen Foundation thanks Harold’s family as well as Jim Day and Kathy Goodwind. As with the rest of the growing Drachen collection, this gift will be made readily available to the public for inspection, upon appointment. As well, it will available for inspection in the future on the foundation’s Web site.”

Goodwind, who runs a Seattle kite shop, recalls first meeting Writer two decades ago. “He was clad in khaki garb, as usual, and was flying a kite at the top of Seattle’s Kite Hill. It was so high in the sky you had to trace the line down to this figure standing on the side of the hill. My feeling now is he made the most exquisite kites flying out of the Northwest from the 1950s on. I have one of his butcher paper and wood Hargrave box kites still hanging in my shop. It is signed, numbered and dated 1962 by Harold. It was a gift from him after I bought one of his miniature kite mobiles for \$25 at the American Kitefliers Association convention auction in Seattle in 1980. He thought I paid such an outrageously high sum for the mobile that I have should have one of his ‘real’ kites as a gift, and he gave me the box kite. So began my more than two decades relationship with one of the true kite artists of the Northwest.”



*Harold Writer*

Born in Florida, Writer had come to Washington State with his parents when he was a child. When their house burned, they were forced to camp out in a tent. “So began Harold’s love of the outdoors,” says Goodwind. Writer eventually moved to Seattle, married his childhood sweetheart Irene, and earned his living doing expert floor finishing.

Goodwind recalls Writer as honorable, modest, generous, and the possessor of a good sense of humor. In addition to kites, he had many other hobbies, including blacksmithing, welding, camping, exploring, birding, and cooking. He once ran a public broadcasting show called “Harold and His Kites.” Goodwind notes a telling aspect of Writer’s character: he didn’t sell his kites, but rather gave them away.

Ali Fujino, administrator of the Drachen Foundation, tells about seeking out Writer in his small, unheated workshop behind his house in Seattle. She found a perfectly organized shop with tools all neatly in place. His most trusty instrument for kite making, he told her, was a Pfaff 130 sewing machine which he said he had rebuilt from parts he found all over Seattle. He said his total cost was \$4.

Writer was an immaculate record-keeper. “Harold documented the construction of every kite he made with notes and drawings,” says Fujino. “Design elements, material used and the cost of it, method of fabrication, and the amount of time taken to make each kite were all recorded.”

Writer told her: “Making a kite puts me in my own space where I sew the world away. Flying the kite, later, brings me back again.”



# Domina Jalbert: Brother of the Wind

*Editor's note: Following are excerpts from writer and kite expert Tal Streeter's book-in-progress titled Domina Jalbert, Brother of the Wind. "There is not, nor has there been ever before, a thing so intimately related to the wind itself than the Parafoil kite," says the author. Here he describes his first, memorable encounter with Jalbert.*

## 'Nothing More Than Cloth and Wind'

By Tal Streeter

By the late 1950s, Domina Jalbert had involved himself in just about everything possessing the possibility of getting up off the ground into the sky. His professional life was devoted to flight: balloons, kites, airplanes, parachutes, and kite-balloons (an early invention, the Kytoon, was developed first as a barrage balloon flown to impede raids by wartime aircraft and was later employed for a variety of purposes). For all of his industry and creative powers, it was not until a crucial point in 1957, piloting his Beechcraft on a return trip from an exhibition given by a team of sky diver parachutists he sponsored, that Jalbert's inventive powers reached their full fruition. The parachute team was an offshoot of his passion for aviation. Kites were his first and a lifelong love, sewn for him as a child out of old bedsheets by his mother. Balloons and parachutes followed. The flash of inspiration which came to him at the controls of his Beechcraft was an amalgamation of kite and parachute incorporating crucial elements from winged aircraft and his own Kytoon.

One must be forgiven for not being readily able to discern where the parachute leaves off and kite begins: in general appearance quite similar, in roles they are subtly different. Fifty-one years old at the time, self-taught, an aeronautical genius, Jalbert was struck with an image of something more basic than either 'chute or kite. His vision was of a *wing*: a soft wing, completely non-rigid in and of itself, but made rigid when its cells were inflated by the rush of air. As he tells the story, immediately upon landing his plane he got out, picked up a stick, unscrewed the airplane's wing gas tank cap, and stuck the stick in, measuring the depth of the wing's chord. His first soft, cellular experiments were based on the Beechcraft wing's proportions.

Jalbert called it the Parafoil.

His idea involved joining the airfoil form of an airplane wing, the shaped definition of a sewn gored fabric parachute, the ram-air inflation of a tapered windsock, and the keel-like bridling system of a barrage balloon. Given the variety and depth of Jalbert's expertise in these areas, both theoretical and practical, all of them at work in the Parafoil, it is doubtful that anyone would have had a similarly rich background to have enabled him to come up with such a revolutionary concept. A piece of each part of his life had found its way into the Parafoil. Archetypically giving proof to the truism of life being more astonishing than fiction---that this idea came forth in the cockpit of a plane, its inventor at the plane's controls---the Parafoil must reign as the only kite in history to have seen its first light of day, born flying in its natural habitat, aloft in the blue sky.

Jalbert applied for a patent, his invention described as a "wedge-shaped multi-cell glide canopy parachute," on Jan. 1, 1963. Patent No. 3,131,894 was granted by the U.S. Patent Office on May 5, 1964. It was followed by a second application for a "multi-cell airfoil wing," filed on Oct. 1, 1964. Patent 3,285,546 was granted on Nov. 15, 1966.

The rest, as the saying goes, is history. As kite and parachute, the Parafoil soon found itself in extraordinary places and, as a tool, it solved a greater variety of unusual tasks than any other contemporary kite-parachute “wing” before or since.

There have been barely a handful of major, generic developments in the long history of kites. The Parafoil was quite possibly the last. Surely, in its ultimate simplicity, it is one of the most astonishing. There’s a famous quote by Albert Einstein that seems particularly relevant to Jalbert (who was compared to Leonardo da Vinci in the popular press). “Everything is simple,” Einstein said, then winked, so the story goes, adding, “but not *too* simple.” The Parafoil was undeniably simple---gloriously simple, being nothing more and nothing less than cloth and wind, an object which flew with a grace and at the same time, the strength and the force of nature. Simple, but not *too* simple.

The man from whose genius it had emerged, the Parafoil born whole, Mozartian, of a piece we might say, I would find to be frustratingly, often it seemed bafflingly, complex.



*Doug Hagaman of the Pacific Northwest made countless breathtaking parafoils. He was one of the first to consult with Jalbert on their secrets.*

## Baltimore, the First Meeting

I remember my first meeting with Domina Jalbert in Mel and Valerie Govig’s home. The living room was packed with a gathering of kite enthusiasts, all of whom, including myself, had come to Baltimore for the Maryland Kite Festival and World Kite Competition, sponsored by the Maryland Kite Society. I’m terrible with dates. Would it have been 1972? Jalbert was out of the noisy bustle, sitting quietly by himself on a sofa in the far corner of the room. Valerie asked if I would like to meet him and when I responded enthusiastically she led me over to introduce us. He stood up. I had a quick image in my mind of a 1930s Hollywood handsome man, youthfully tousled hair now gray, permanently windblown, a tall, slim Howard Hughes look-alike, with a Hughes-style thin pencil mustache set over a slightly off center, quizzical half-smile held in a bit from spreading across his face. We shook hands. I noticed that his hands were strong but graceful with long, thin fingers. He motioned me to sit down next to him on the sofa. With little more than a few words of formalities---he must have sized me up in an instant, knowing I would be up for novelty, out of the ordinary run of things---Jalbert leaned forward closer to my head, looking over his shoulder to see if anyone was listening in, and said in one long breath in a kind of conspiratorial whisper, “A kite in the water’s currents behaves just the same as it does in the atmosphere’s air currents. A *water* kite powering boats in the Gulf Stream from the Gulf of Mexico north up along the East Coast to the Grand Banks of Newfoundland, how about that? An airfoil bridled to rise and fall in a spiraling path. Perpetual motion?” He concluded with a wink, looking around again to see if anyone had overheard.

At that moment in our brief conversation, I was totally tongue-tied. I could not think of a single intelligent response to his abrupt, “How about that?” Kites had suddenly entered the realm of science or science fiction, I

wasn't sure which, but I was ill-prepared for either one in my kite innocence. "I'm ready," I told my wife later that night on the drive back to our home in upstate New York, "I'm ready to drop everything, go down to Florida to live for as many months as it takes, being in close proximity to Jalbert, to write a book about him." Jalbert had drawn me into his fertile mind in those few seconds and in there stirring around like a maelstrom were the primordial elements, wind, sky, and water, and there were also wonderfully mysterious things which were able by some unknown alchemy to transform themselves from rumpled scraps of cloth into power and strength, pure energy beyond belief, and pure beauty beyond belief, things which sailed above in the breezes of the sky, and below in the currents of water.

I watched Jalbert closely the next day on the flying field. His son, Paul, was with him. I marveled at one of the Parafoils Jalbert flew, not particularly big but powerful enough to bend Jalbert's strong body like a bent sapling in a high wind and requiring his concentration to hold on against the strain of the kite's pull. Paul said that a not much bigger Parafoil that he and his father had flown in a stiffer wind had not too long before dislocated the rear axle of his, Paul's, car---the flying line being tied to the axle as a backup anchor. As the son relived the story, it seemed to me both he and his father were awed by the power of the kite and at the same time quite proud of it. I also got the impression they were quite oblivious to the demise of the car. Apparently the episode had brought some heavy scorn and wrath down on both of them from Mrs. Jalbert. Paul understood her anger. His father had recently had a heart attack. The family doctor had restricted his activities and yet he had been out there risking life and limb flying like he were a teenager instead of in his 70s.

And now in Baltimore, here he was again acting as if he was 14, this time surrounded by fans who had caught his infectious enthusiasm for kites and the Parafoil. Paul had been sent along to ensure that Dom took it easy. Now he ran off down the field towards his father, yelling back over his shoulder that he couldn't tell him anything, but he could at least give him a hand should a Parafoil start to get out of control.

Robert Ingraham, founder of the American Kitefliers Association, asked me years later if I remembered Dom at that Baltimore festival. "We would have to go out looking for the guy," he recalled, shaking his head. "He would be way off somewhere fighting one of those big kites. And he was supposed to have a heart problem, you know. You couldn't tie him down when it came to flying kites."

About midday, Jalbert seemed to have disappeared. I went up to the parking lot to look for him. He was nowhere in sight, but I found Jalbert's station wagon filled up to the roof with kites. How he imagined he would be able to fly all of them was beyond comprehension. Then it occurred to me that he was ready for any eventuality: the variety of winds which would affect his kites' flights. Jalbert didn't do anything half way!

Finally, from the higher vantage point of the parking lot I spotted him way out in the back part of the field, flying by himself. I meandered out to watch him---in my capacity as one of the judges of the festival responsible for the "beauty" award. Jalbert was all smiles, enjoying his Parafoil. His long fingers wound the thick cord up in a back and forth, end over end motion that laid it down in a smooth, elongated ball on his stick winder. An elaborate kite at this festival had a reel built on the design of a stationary exercising bicycle---a beautifully executed piece of machinery made by a kite reel lover. Jalbert called my attention to his stick, telling me that it was made of a broom handle and had always served him adequately. His hands and dexterity were the highly refined machinery of this reel, I thought to myself, without making any comment. We discussed the concept of beauty. There were a great many brilliantly colored, decoratively patterned kites on the field, as well as many beautifully crafted kites. Jalbert's comment was quite succinct, "I always thought the most beautiful kite was the one that flew the best." I don't know if he was familiar with the art observation, "Form follows function," but in the case of the Parafoil I had to agree (I prevailed upon my co-judges to give him a prize in the "most beautiful" category, which I think surprised, but pleased him.). In regard to the competitions, Jalbert said, "You know there shouldn't be competitions, really. Kite flying together is more of a celebration."



*Domina Jalbert at work in his laboratory.*

Just before I left Jalbert there flying his Parafoil, my wife came walking up to us across the flying field. As she drew close, Jalbert said to her with an engaging smile, "Put your ear right here on the line." She did so, and while she listened to the music of the kite line humming, he asked with smile widening, spreading across his face, "Isn't that beautiful?" He said it with truly wonderful innocence and pure pleasure. It was readily apparent that Jalbert was very much as one with the kites he flew and loved.

## Paul Garber Recounts War Politics Tale

# Telling 1st Lady: ‘Go Fly a Kite’

Paul Garber, late curator of aeronautics at the Smithsonian’s National Air and Space Museum, was perhaps best known in the kite world as the inventor of the highly successful World War II Target kite, used to train military anti-aircraft gunners.

An inveterate story teller, Garber was happy to tell how he, then a Navy commander, was informed by the admiral in charge of the project that an additional 50,000 kites were needed. “Okay sir,” as Garber told it, “the Spalding Sporting Goods Company in Springfield, Massachusetts, has been making them and can readily add that many to its contract.”

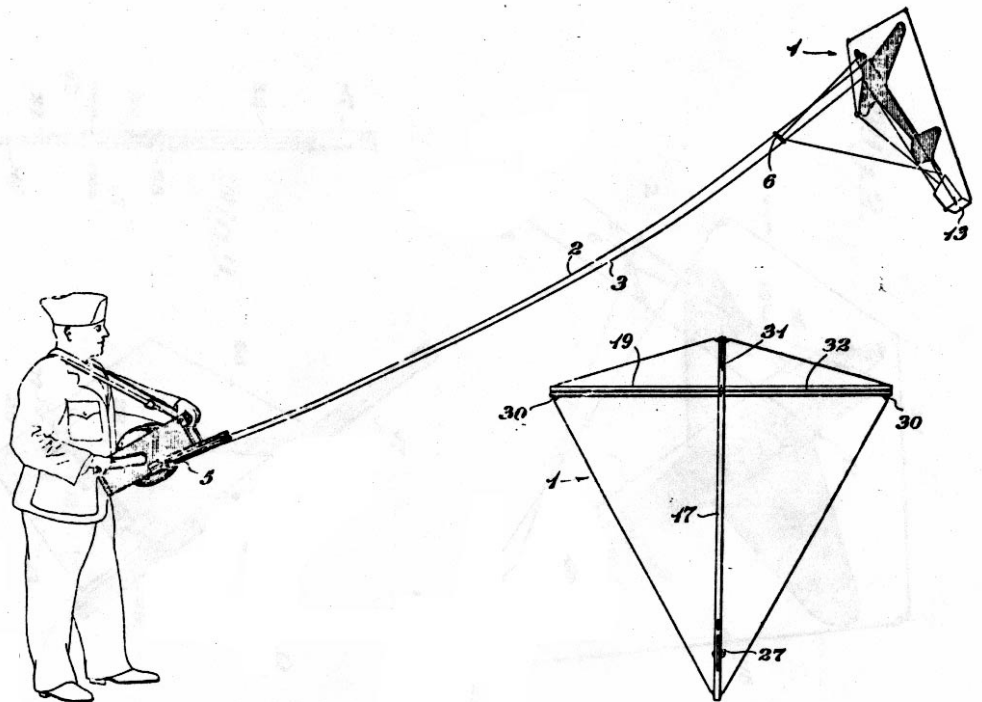
The admiral replied that although the company was doing good work, he had been ordered to give the contract for the extra kites to a little town in West Virginia named Arthurdale. It seems Eleanor Roosevelt, wife of President Franklin Roosevelt, had visited the impoverished village and decided it needed financial help. A war contract would be just the ticket.

As Garber tells it, he obtained a map and located Arthurdale on the northern border of the state. Driving there, he located a town factory that needed work, chose several craftsmen, rounded up some women who agreed to sew the kite sails, phoned Dupont to order enough rayon to fill the order, located other suppliers, and soon had kites coming off an impromptu production line he set up.

With the project rolling along nicely, a White House limousine bearing the First Lady arrived. It was Mrs. Roosevelt checking up on her do-good project.

Garber said he suggested she and her aides go to a field with him where he could demonstrate the two-line stunt kite, flown via a box reel. “With it well aloft,” he recalled, “I nosed it over into a long vertical dive, then leveled off at a right angle to the ground, forming the letter ‘L.’ That ‘L’ is for Eleanor.

“Then as I let the kite zoom vertically, I put her hands on the reel’s control bar, went close behind her, reached forward and showed her how to steer the kite into a full loop for the top circle of an ‘R’ and then on a downward slant for the ‘R’s’ leg. We shared the applause with her.”



*From Paul Garber’s Target kite patent application.*

To complete the story, Garber said that after dinner that night, Mrs. Roosevelt said she thought she had seen him before and he recalled it being true. He reminded her that when she appeared at a Washington church, she took communion. Garber told her he had been tenor soloist with the church choir and was seated beside the altar rail. “Now I remember your face,” said the First Lady; “and may we also recall your singing?”

One of her friends was a pianist and Garber launched into the song “Friend of Mine,” which begins “When you are happy, friend of mine, and all your skies are blue...” I reminded Mrs. Roosevelt that we had enjoyed beautiful skies that afternoon when we flew the kite.

“So,” noted Garber, “I may be the only person who ever told Eleanor Roosevelt to go fly a kite.”

*Retailers have been using kites to sell products for longer than one might think. A case in point is this pencil tablet for children marketed as far back as 1889. The charming image is part of the extensive collection of kite artifacts----prints, porcelains, stamps, postcards, and so forth----owned by Scott Skinner, of Monument, Colorado. Skinner is president of the Drachen Foundation.*



# *A Kiteflier Meets the Public ---And Encounters Problems*

*A member of the British Midlands Kite Fliers took up the matter of public reaction to kite flying in an Internet news group posting on the rec.kites site. "Can I have a go with that?" was the most often asked question, according to Jim Cronin.*

*He recounts a conversation with a 12-year-old:*

*Can I have a go with the kite?*

*Sorry, no.*

*Why not?*

*Because it cost a lot, it's not easy to fly, you won't learn it in five minutes, I've only had it three days and if anyone's going to break it it's going to be me.*

*So how much was it?*

*One hundred sixty pounds.*

*That's not much.*

*Okay, you give me that much cash to hold, damage it and it's a sale----okay?*

*End of conversation, reports Cronin.*

*Another exchange went:*

*Can I have a go?*

*Sorry, no.*

*Why not---my dad's got a kite?*

*Can you fly it?*

*Err...it's got handles.*

*How many lines?*

*Two handle things, you know.*

*How many lines---this one has four?*

*Don't know.*

*Then you'd better go ask him for a go on his.*

*"Don't get me wrong," says Cronin, "I'll have a go at teaching anyone and provide the gear. But they don't want that. They just want me to hand over the kite for them to wreck, and then walk away. Not a chance!"*

*"On one occasion, I put a Delta into the air and handed over the reel to a 10-year-old, keeping one hand loosely around the line. This is what I got:"*

*I want to hold it.*

*You are holding it.*

*Take your hand away.*

*You won't let go?*

*No.*

*“So like a fool, I did! Next scene has me sprinting across the park chasing the line, the kite making a beeline for kite-eating trees. I caught it. I didn’t know I could run that fast! When my heart-rate returned to normal, I asked the boy:”*

*Why did you let go?*

*It pulled!*

*Didn’t I say it would?*

*Yes.*

*Cronin reports building a fighter kite and straining to keep it up in the air.*

*“A chap of about 60 strolls up,” he says, “and this conversation ensued:”*

*You need a tail on that, to stabilize it.*

*Pardon.*

*You’ll never get that off the ground without a tail. I used to fly kites when I was a kid.*

*“There followed a fascinating discussion with me trying to explain that fighters don’t need tails, and in fact are supposed to be unstable. This ended with him wandering off, muttering: ‘Needs a tail, that does....’”*

---

## *What They Had to Say*

*On the creation of Bukit Layang-Layang (Kite Hill) in Pasir Gudang, Malaysia, earlier this year: “I could have made this area into a golf course, but only a few people would benefit and appreciate it. Making it into a kite flying field benefits more people...children, adults, boys, girls. This is not only your Kite Hill but everyone who loves kites owns this flying field.”*

*Iskandar Ismail, Sultan of Jahor*

*On appearing at kite events around the world: “I like to put up as many kites as possible, then lie down and watch them. It’s the festival effect I really like.”*

*George Peters, Boulder, Colorado*

*On using the molecular structure of the diamond: “The tetrahedral design is very intelligent, very clever. The kite flies in light or heavy winds, is put together and taken apart easily, and resists breakage. It’s a system, and I like systems.”*

*The late Peter Malinski*

*On one of his favorite aspects of kiting: “I like people who’ve applied the skills they’ve learned in their professions to their kites.”*

*The late Lee Toy*

*On designing kites as a livelihood: “There’s so much challenge and I myself want to rise above the poppy field. For this you need new, strong, dynamic ideas.”*

*Peter Lynn, Ashburton, New Zealand*



# Meditations on Sky Art

*Editor's note: As well as anyone in the English language, writer Tal Streeter is able to convey in words his deep feeling about kites. Following are his musings from the book *Art That Flies*, a companion volume to the 1991 exhibition of sky art by Curt Asker, Jackie Matisse, and Streeter at the Dayton Art Institute in Ohio.*

## Living in Japan

I flew my kites quite often on the sandy beach of Suruga Bay near my home in Shizuoka city, about half way between Tokyo and Kyoto. My wife held the first big kites I made aloft while I braced myself holding a line a hundred feet down the beach, and waited for a slight advantage in the wind. At the right moment I imagined I would run at breakneck speed to pull the kite airborne. But the moment I began running and met the full force of the wind hitting the face of my large kite it was as if I were trying to run in the sand up to my knees. The pull was enormous. It was like trying to fly a ponderous anchor at the end of a long rope.

Tiny kites offered a more relaxing kind of pleasure, quite a different picture from my exercise at Suruga Bay. Between these appearances, which attracted crowds of curious Japanese, I enjoyed the delight of a small kite less than a few inches in height. Legs stretched out full length, I sat comfortably on the soft tatami mats of my home, leaning back on my elbows, a fan blowing softly over my shoulder, its light breeze pushing against a tiny kite dipping and turning in the far corner of the room at the end of a short sewing thread flying line. A friend said, "Not so exciting," and I replied, "When it crashes it doesn't sound like the big ones, but the feeling to me is the same. When an ant dies, it is as dead as a bear, and in as much pain." A tiny kite alive in the air has a wonderful personality. I feel the tensions in my brow and face relaxing into a smile as I watch it skip around like an exploring butterfly.

## Back in America

My Flying Red Line kites, which emerged from this experience, reflect the traditions and culture of the ancient kites of Japan, pure white, handmade rice paper, carefully split bamboo and cotton strings, a long wide line painted in a vivid red dye down the middle, red lines drawn on the blue canvas of the sky. Following the scale of my large steel sculpture, the kites are generally quite large, requiring a half dozen helpers to hold them down to the ground once they have taken flight----though I am equally attracted to the notion of pocket kites, a handkerchief you can pull out of your pocket, blow your nose (not too hard, please), and toss it up in the sky. And any kite, no matter how large, can end up looking like a tiny handkerchief, a dot away in the blue sky. Big kites may be a little bit machismo too, but the sky is a pretty humbling place to strut your manhood.

## A Meeting Place of Sky and Art

The sky art of airborne objects made with low or early technology obliges a tangible participation with nature. Sky art objects jerk our chins upward. They draw us out-of-doors, out of the artificial confines of the museum, subjecting us to the elements----wind, rain, snow, blinding light. It is an art which will not accept the restraints of interior walls, which comes alive only in the sky.

The old sky always new, to be enjoyed for its own content, hue, light density, temperature, a clean slate for the next sky artist or the new day. It is a temporal art, sky art, against the grain of "traditional" art which is fixed forever in time, frozen artifacts of the creative spirit. Sky art lives only in the sky minute, then, not dead, simply gone, stored, suspended life, resting, awaiting rebirth within the sky.

## *Window on Other Worlds*

# *Kiting as a Means of Expression*

*A group of imaginative kite enthusiasts in France has for some years banded together as an association known as Au fil des Vents. The group is based in Pierrefeu, Reillanne, home of the group's organizer, Philippe Cottenceau, well known for the strikingly beautiful kites he makes and flies at festivals around the world..*

*With a number of its members working as school teachers, Au fil des Vents has been able to dispatch its fliers during summer vacation to various foreign countries, such as Vietnam, China, Indonesia, and Guatemala, to investigate local traditions and conduct kite research projects. This ongoing work has produced a useful archive which the association makes available for historical, geographical, linguistic, technical, and poetic studies. The association views its work as not cultivating an old-fashioned image of the kite, but rather as leading to future kite creativity; this to be accomplished by classroom teaching and the holding of kitemaking workshops, among other methods.*

*As Cottenceau notes, kiteflying is an excellent means of expression. It leads to the acquisition of varied knowledge and skills through play. It provides an introduction to materials and tools, contributes to an understanding of our natural surroundings, and provokes discovery of distant lands and their cultures. It encourages communication without words. The multidisciplinary dimension of kiteflying and its capacity to bring people together provides a window on other worlds.*

*With one exception, the association's publications so far have been in French, the latest of them being the first, very interesting issue of Cahiers Au fil de Vents, a 40-page nicely illustrated journal dealing with kites in China. There are three major essays, penned by Cottenceau and Jean-Pierre Ollive, including a survey of the contemporary kite scene in China.*

*In a note to the Drachen Foundation answering the question, how is Au fil des Vents to be rendered in English, Cottenceau responded:*

*"Au fil des Vents isn't easy to translate. It has several meanings in French. For a start, I was inspired by the French expression au fil de l'eau, which is more common, and conveys the idea of 'going with the current' (of a stream, for example). So Au fil des Vents means the way the wind is blowing. But fil has a double meaning here, because it means not only the way a wind is blowing but also refers to the string which unwinds, allowing the kite to be carried by the wind. Au fil des Vents has a hidden meaning too, that of being entrusted to the winds and by extension to the mysterious forces which govern our lives and determine events-----in brief, trusting our destiny. Putting "wind" in the plural indicates that all winds on earth are concerned, in all countries where kites are to be found, and allows you to imagine that at the end of the string there is not just a kite, but all the winds from those countries too. These are the various meaning behind the expression which has become the name of our association."*

*All clear?*

*Cottenceau can be contacted by telephone or fax at 0492 764 827. His address is Pierrefeu, 04110 Reillanne, France.*

# Letters to the Editor

## Appreciation

Dear Drachen,

I enjoy reading the Drachen Journal. Here's a donation to help keep it going.

Paul MacCready, inventor of the Gossamer Albatross

## Comments on New Journal Policy

Cool web page. I am on your mailing list and got your announcement card today. Yes, we can save paper to make kites. I love your web page and do not need paper journal unless I see a special item, which I can then print out myself. Thank you.

Dick van den Berg ([dickvdb@fastq.com](mailto:dickvdb@fastq.com))

Issue No. 9 is well done. Having the journal in pdf form (Adobe portable document format) is a good start. Color and more room to maneuver. Next, an online magazine!

Eden Maxwell, [egarden@earthlink.net](mailto:egarden@earthlink.net)

Sure enough, the foundation sent me a color copy of issue No. 9 of the Drachen Journal and it certainly is a major contribution to the history and development of kiting.

The description of the giant kites typical of Guatemala and the color photographs are excellent, as are the articles on the World Kite Museum, kite stamps and the invention of the Sled kite. Also, Tal Streeter's comments about Rogallo, Jalbert, and Allison are very interesting.

Also, the idea of reprinting previously published articles, such as Baden-Powell on man-lifting kites, Modegi on Teizo Hashimoto, and drawings of Maori kites are all well worthwhile.

Congratulation on another fine issue, although with some regrets that the material is only now available on the Drachen web site.

Keep 'em up,  
Ed Grauel, Rochester, New York  
(Grauel's final letter to us before his death.)

Love the beautiful colors of those huge Guatemalan kites in issue No. 9.

Gina Hsiung, [gina.hsiung@csun.edu](mailto:gina.hsiung@csun.edu)

I was glad and sad at the same time: glad because the new issue is out now, sad because it won't come by mail any more. I'm afraid this is going to leave a lot of people without the Drachen Journal. Here we shared the issues, passing it to each other. But I guess this is modern times. Keep the kite spirit high!

Frank Coenraets, [frankcoenraets@vt4.net](mailto:frankcoenraets@vt4.net)

Yes, we succeeded in printing out the journal. Great history, great reading. I've got it indexed in a three-ring

binder. Keep them coming. Many thanks to all.

Margaret Greger, [mgreg@gte.net](mailto:mgreg@gte.net)

I feel journal has come of age. The articles are well written. It's a really useful part of the kite scene.

Paul Chapman, [chapman@whl.co.uk](mailto:chapman@whl.co.uk)

Have downloaded issues 7, 8, and 9 and really enjoyed reading them. I didn't realize I had been missing out on some wonderful articles. I have always wanted to go to Guatemala so your article has spurred me on to make plans to go visit.

Malcolm Goodman, [Thekiteman@ntlworld.com](mailto:Thekiteman@ntlworld.com)

## About High Altitude Flying

Dear Drachen Foundation,

I had occasion to do extensive high altitude research some years back and I found that minute by minute, hour by hour, day by day, month by month, the wind is extremely unreliable in almost every part of the world. There are layers where there is no wind. Some are 10,000-foot bands. The wind at certain altitudes can be extreme, and might kick up five times a day, although it might remain calm for two days.

If you were able to put up a train of kites to an altitude of 10,000 feet for five days out of 50, I'd be deeply impressed and highly surprised. When I did high altitude experiments, only twice was I able to get a train high up in the air and keep it there. This out of 100 attempts. It's shocking, the way the kites go up and down.

I thought about using kites to generate electricity. I thought about it a lot. But I realized those dead spots in the sky were impossible to get through.

Also, kites can't take really high winds. If the line is strong and thick enough to buck high winds, it creates too much drag to get kites high in the air.

There are not only dead areas in the sky but highly turbulent areas, areas where dead spots about windy areas. These can be killers too.

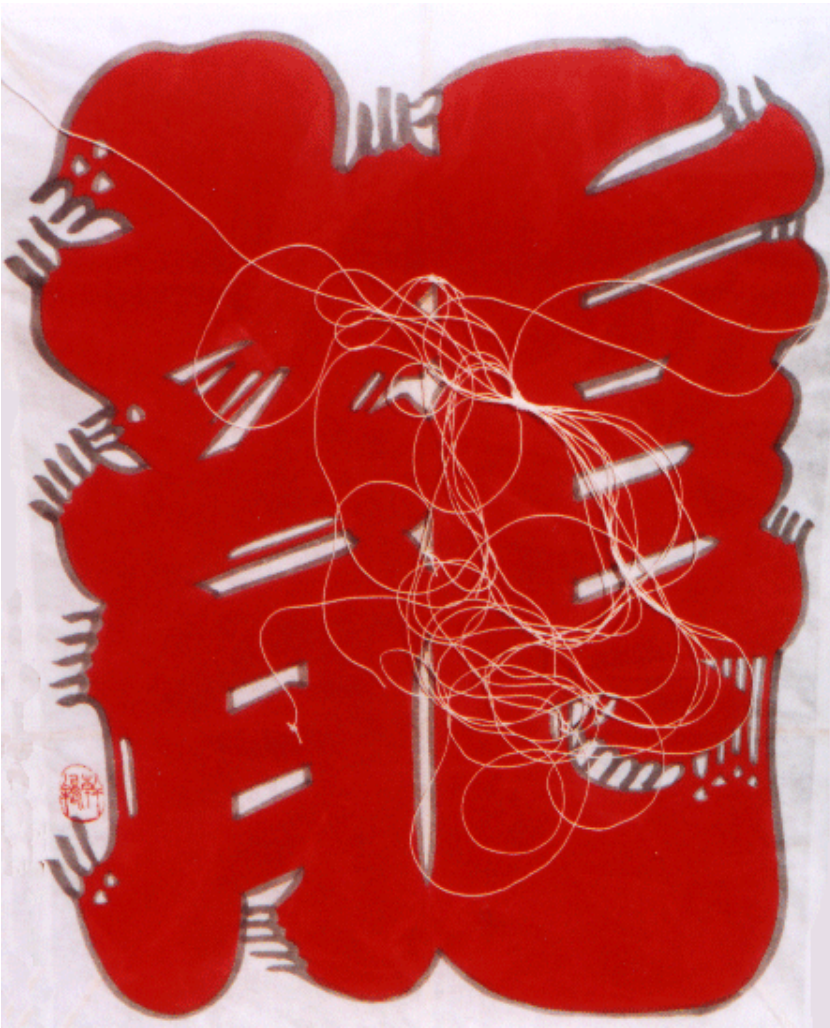
Cold places of the earth at a time where there is no sun, such as winter in Antarctica, would be better for high altitude flying. But then who can fly there?

I have a message tee-shirt that makes the point about my high altitude experiments. "To be old and wise," it says, "you must first be young and stupid."

Peter Lynn, Ashburton, New Zealand

*Two little sisters went walking one day,  
Partly for exercise, partly for play.  
They took with them kites which they wanted to fly,  
One a big centipede, one a great butterfly.  
Then up in a moment the kites floated high,  
Like dragons that seemed to be touching in the sky!*

*Traditional Chinese children's poem*



*This is the kanji character for dragon, as painted on a bold ji-dako kite by Mikio Toki, of Funabashi, Japan. The image is rendered in powdered pigment on handmade washi paper. Dragon is spelled drachen in German. Since the first kites in Europe were made in the shape of dragons, this German word is the basis for the Drachen Foundation's name.*

## Answers to Puzzle

Forthwith a partial list of answers to the word puzzle on Page 35: altitude, aspect ratio, Box, bridle, Brogden, buggy, carbon, Circoflex, Cody, Conyne, Dacron, Delta, dihedral, drag, drogue, Dynema, Edo, facet, flare, fly, Flowform, Gibson girl, Hargrave, Hata, hexagon, Icarex, Jalbert, Kevlar, knot, leading edge, Levitor, lift, line, longeron, Malay, nylon, Peter Powell, Pocock, reel, Revolution, Rogallo, Rokkaku, Roller, Sled, spar, Spectra, standoff, Stratoscoop, stunter, Suruga, tetrahedral, trailing edge, vertical, Yakko. Thanks to Harry Peart and the North East Kitefliers of County Durham, who published this puzzle originally in their newsletter The Highflier.

### *Illustration Credits*

*(Excluding Page 2)*

*Cover---Andrea Casalboni; Pages 3, 6, 8, 9, 10, 11 (left), 12, 13, 14, 15, 16, 17 (bottom), 26, 53---Ben Ruhe; Pages 4, 5, 7---Marten Bondestam; Page 11 (right)---Tomas Jeckel; Page 17 (top left and right)---Hans Silvester; Page 19---Will Tefft; Page 23---Seattle Academy of Arts and Sciences; Page 23---G-2 SHAEF; Page 24---Blue Hill Observatory; Page 27---Peter Lynn; Page 30---David Lang; Page 33---Bluntisham Books; Page 35---Harry Peart, North East Kitefliers, United Kingdom; Page 37---Ali Fujino; Page 39---Scott Skinner; Page 40---Francis Hall; Page 42---Eden Maxwell; Page 44---International News; Page 45---U.S. Patent Office; Page 46---Collection of Scott Skinner.*

# Competing Against Knights of the Manjha

*Editor's note: The author is an aeronautical engineer from Bristol, England, who early this year did a kite walkabout in India. Here he gives a perhaps fanciful account of dueling with Indian fighter kite experts. Traditional ground class cutting line (manjha) was of course used in the aerial combat.*

By Paul Chapman

After 24 hours of travel and just two hours rest at the my hotel in Bombay, my friend Mital and I are away to meet Dilip Kapadia of the Golden Kite Club. Sound, smell, and chaos---the real India. The kiteworld closes in and for the rest of the day I am in Indian kite heaven. A "professionals" cutting competition is taking place and we arrive in the middle of dusty scrubland to be greeted by seriously serious fliers. The competitions are a series of one-on-one jousts and held under the strictest possible Indian rules (after all, they inherited the British passion for bureaucracy and have embellished it since). The fliers are confined to their crease (cricket must have taken the term from the kite tanglers) and are assisted by their reel handlers. The blue, or black, tissue and bamboo kite is launched into the gentle sea breeze and rapidly disappears from sight as the *manjha* line is spooled off. After spooling 900 yards of lethal glass the kite is considered safely airborne and it is time to attach the cotton line. And when 500 yards of cotton are out the knights of the *manjha* start maneuvering to gain tactical advantage for the fight. The kites are just dots on the horizon. "Are you ready?" "Yes, er no, er yes, er no." Psyching each other is part of the battle. "Ready?" "Tangle!" The little dots maneuver around each other and the performance reminds me of Kipling's Indian story of the mongoose and the cobra. There is a strike. No cut, and the kites back off. They circle and strike again. Line is pulled fast to accelerate the escaping kite. Line flies off the spool as the attacker strikes again. At each joust the kites seem to climb higher into the sky until..."Cut, cut, cut!" Suddenly one of the dots is floating away and the flier is looking downhearted.

"This kite is for you." I am suddenly in possession of a kite, *manjha*, reel and Mital is to be my spool handler. I suddenly feel hot and sweaty as my credentials are about to be tested. What can I do against the top professionals of Bombay, these people who treat kites more seriously than cricket? The dark blue paper kite takes to the air and I try playing with it, hoping that I won't be asked to fight. No chance. They see my trick flying as part of the tuning process. "Bring it down and I will make the necessary correction." Huh, seemed okay to me. Airborne and now disappearing into the blue. At 900 yards it becomes really sluggish to control and I am fearful that just pulling will break the line. At 1,500 yards I am flying an invisible tank. "Ready?" What? I desperately try to bring the kite down in order to tangle from low altitude. "Tangle!" I have lost sight of the black dot and have no idea where the opposition is. There is a slight pressure on the line and a hearty slap on my back. "Congratulations, you have won your first tangle in Indian skies."

The second tangle goes rather better because I can see both my kite and the opposition. The line continues to pull so I am ready. This time Mital and I are a crafty pair and the advantage is with me, and against me. "Spool!" "Pull!" "Line, line, line!" By now the professionals are looking bemused and my quarry looks dejected as his kite drifts away.

Another kite takes to the air. Try as I can, my dot will not come down so I try a different tactic. "Pull, pull!" And my eagle accelerates down toward the enemy. "Line, line, line!" The line spools off rapidly as I see my kite pass below the second dot. What happens next cannot be explained, but both of our lines go slack and two little dots drift skywards. The professionals looked relieved.

And I ponder whether two wins and a draw is a kindness on their part, or a fluke on mine?