

Kites

quarterly journal of the worldwide kite community

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WINTER-SPRING 1987



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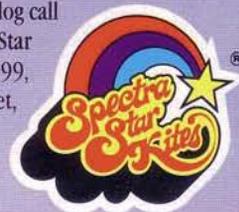
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Proud champion kite fighting teams of Thailand pose in formal style. Standing, left to right, with *chula* kite are Boontam Himskul, Vinai Poomaitong and Siriwat Poomaitong. In front, left to right, with *pakpao* kite, are Kitipong Chanwimol and Suvit Chanwimol. See story on page 60.) Photograph courtesy the Thai Kite Heritage Group.

Kitelines

ISSN 0192-3439

succeeding *Kite Tales*

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Kite Lines is the comprehensive international journal of kiting and the only magazine of its kind in America. It is published by Aeolus Press, Inc., of Baltimore, MD, with editorial offices at 7106 Campfield Road, Baltimore, MD 21207-4699, telephone: (301) 484-6287.

Kite Lines is endorsed by the International Kitefliers Association and is on file in the libraries of the National Air and Space Museum Smithsonian; the National Oceanic and Atmospheric Sciences Administration; the University of Notre Dame Sports and Games Research Collection; and the Library of Congress.

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Kite associations and clubs are located around the U.S. and the world. *Kite Lines* works for and with all of them and maintains an updated file on them. Write for information about your nearest group.

Subscriptions to *Kite Lines*: In the U.S.A. and possessions, \$11.00 for one year (4 issues), \$21.00 for two years (8 issues); all other countries, \$15.00 for one year, \$28.00 for two years (includes air-lifted service). Foreign drafts must be in U.S. dollars payable through a U.S. bank or the post office. Single copies of current or back issues are available for \$3.00 each from America's finest kite stores or the journal offices.

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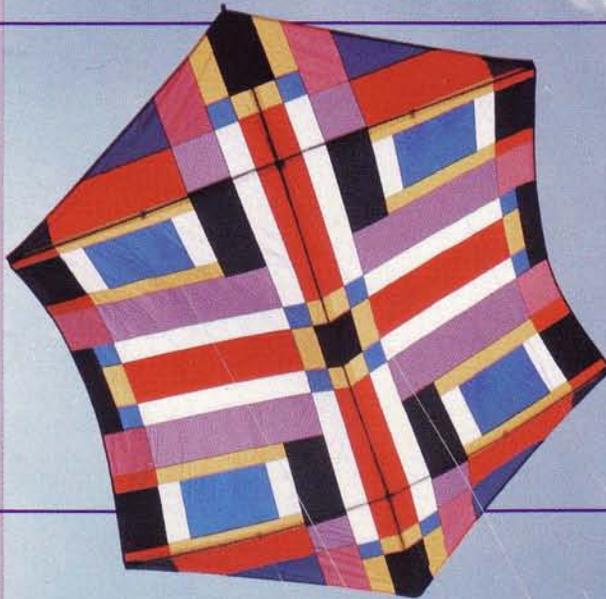
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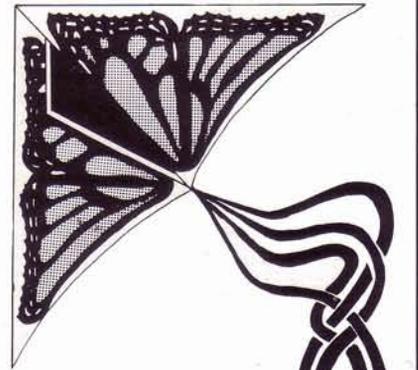
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WHOLESALE/RETAIL



Letter from the Publisher

In this age of "computerization" and "demographics" (heartless words), many magazines, perhaps understandably, tend to forget that their subscribers are real people. At *Kite Lines* we are still small enough (or naive enough) to believe that every name is a friend. We like to think the feeling is reciprocal, that our publication improves your quality of life—helps you, entertains you, shares with you—like a friend.

We are reminded of this every day by the mail, telephone calls and visits, too—sometimes from faraway lands.

In December 1985, Norbert and Michèle Velthuisen arrived in Texas from The Netherlands for an extended trip through the United States and to Japan. The pair began with two recumbent bicycles (specially made by Nop), one bicycle trailer and four kites (plus some necessities).

The first leg of their journey took them to California where they left the trailer, excess baggage and three kites. Heading back east, they carried only one kite: a Pelybox (Peter Lynn box kite), which they used to take aerial photo-

graphs over the Grand Canyon.

From New York, the pair pedaled south to Maryland and the Sunfest in Ocean City in September, 1986. We invited them to stop in Baltimore, where we shared dinner, bottles of Grolsch beer and lots of kite talk.

The next morning they were off to Washington, DC and west again, ending in

San Francisco in January 1987. They will be in Japan by the time this is printed.

Since their visit, we've had two delightful letters ("Oh, look, it's news from Nop and Michèle!") We look forward to hearing more about their trip. Then, no doubt, we'll drink a toast to them with a cold bottle of Grolsch!

Valerie



Nop and Michele exit the Kite Lines driveway on their recumbent bikes carrying tent, tools and kite.

Valerie Govig

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Letters

Nomenclature and Terminology

We would like to clarify some terminology currently misused in the kite community: the use of the word "graphlex" to describe filament wound fiberglass/epoxy tubing manufactured by Glasforms, Inc.

At one time, there was an arrow shaft of specific composition called "Graphlex XT," but it is no longer produced. However, we continue to manufacture the tubing currently used in many of the world's most popular kites. Using the term "graphlex" to generically describe this tubing is a misnomer and implies the use of graphite as part of the fiber reinforcement. While some of our products employ carbon (graphite) fibers, most do not, due to its significantly higher cost.

The correct term is filament wound epoxy tubing. It is produced with the same technology and machinery, but varies in composition, number of plies, length, etc.

We hope this information helps you and your readers.

Jeffrey J. Lane
Glasforms, Inc.
San Jose, California

Eddy, Woglom and Beard (Part I)

Your *Annotated Kite Bibliography* lists a book by Dan Beard (*The American Boys Handy Book*, 1882) reprinted by Charles E. Tuttle Co., with two chapters on kites.

It is unfortunate that the revised edition of 1890 was not chosen to be reprinted. It has everything on kites contained in the 1882 edition plus a very interesting addition on page 384 in the form of a letter from Rochester, New York, describing a tailless two-stick bowed kite, obviously a Malay, but called a "Holland kite."

Now Holland had colonized Malay for several hundred years and it is probable that the design of this kite was brought home to the Netherlands and carried to America as their own by Hollanders who came to New York state.

It is obvious that neither Mr. Eddy nor Mr. Woglom was a reader of Dan Beard's book of 1890.

H. A. Spafford
St. Petersburg, Florida

Ed.: Indeed, the Tuttle reprint is of the first edition, dated 1882, with 391 pages. A reprint of the second edition, dated 1890, with 441 pages, is available from: David R. Godine Publishers, 306 Dartmouth Street, Boston, MA 02116. The 5½ x 7½ inch

paperback is \$9.95, plus postage.

The kite referred to in the letter on page 384 of the second edition is called the "tailless Holland kite" by the letter writer, but it is what we most often think of as a "diamond" kite. The dimensions are: height 4 feet, width 3 feet, with the two spars intersecting 1 foot from the top. The cross-stick is bowed "with strings attached to each end and tied at the back."

We are unable to prove/disprove Mr. Spafford's theory that this kite came to America from Malaysia via Holland. We know for a fact that Eddy did read Beard; we are not so sure about Woglom.

Eddy, Woglom and Beard (Part II)

The modern concept is that the Malay kite is the Eddy, but I submit that the Holland kite, as described in Dan Beard's book, also had its origin in Malaysia.

The significant item is that the horizontal stick is bowed, which creates dihedral and results in tailless flight. This effect can be obtained with sticks of unequal length and great variations in the point of intersection.

I believe the Dutch colonists lifted the idea from Malaysia and took it home to Holland. I feel that any two-stick kite having the horizontal stick bowed should be called a Malay to honor the people who discovered the dihedral principle. Eddy and Woglom merely refined the idea.

I hope that *Kite Lines* will publish the details concerning the Holland kite so that the kite world can be informed of its background. I feel sure that many kite people will agree with my conclusions.

H. A. Spafford
St. Petersburg, Florida

Dorothy Likes Eddy

Many thanks to Dan Leigh for his "Porous Portable Parakite" (Spring 1986).

I've been experimenting with Eddys, and his observation that they are "manifestly magical . . . archetypally mysterious" is as true as it is poetic. In my neck of the woods, a properly made Eddy will fly when no other kite will—under "no wind" conditions.

My method of construction is: two 4-foot dowels (1/4-inch) crossed 1/6 down from the nose and a cover of 3/4-ounce ripstop. The cover is not string-bound, but should be quite taut. By careful adjustment of the mooring point, a wide range of winds can be flown. Also, the degree of bowing must be varied.

Leigh's observations on the virtues of classic designs are well taken, and the Eddy/Woglom/Malay configuration is one to conjure with. My advice to kite builders: work slowly, work precisely, enjoy every stitch. The kite will reward you.

John L. Dorrothy
Bloomfield, New Jersey

Publisher to Publisher

I had the opportunity to review a recent issue of *Kite Lines* and was indeed impressed with the growth of the magazine.

It hardly seems possible that ten years have gone by. From a very humble beginning, you have reason to celebrate—as does the rest of the kite community, for you truly have been instrumental in its growth.

My best wishes for continued success. Keep 'em flying.

Maurice Gherman, Publisher
Hobby Merchandiser
Englishtown, New Jersey

Enraged in England

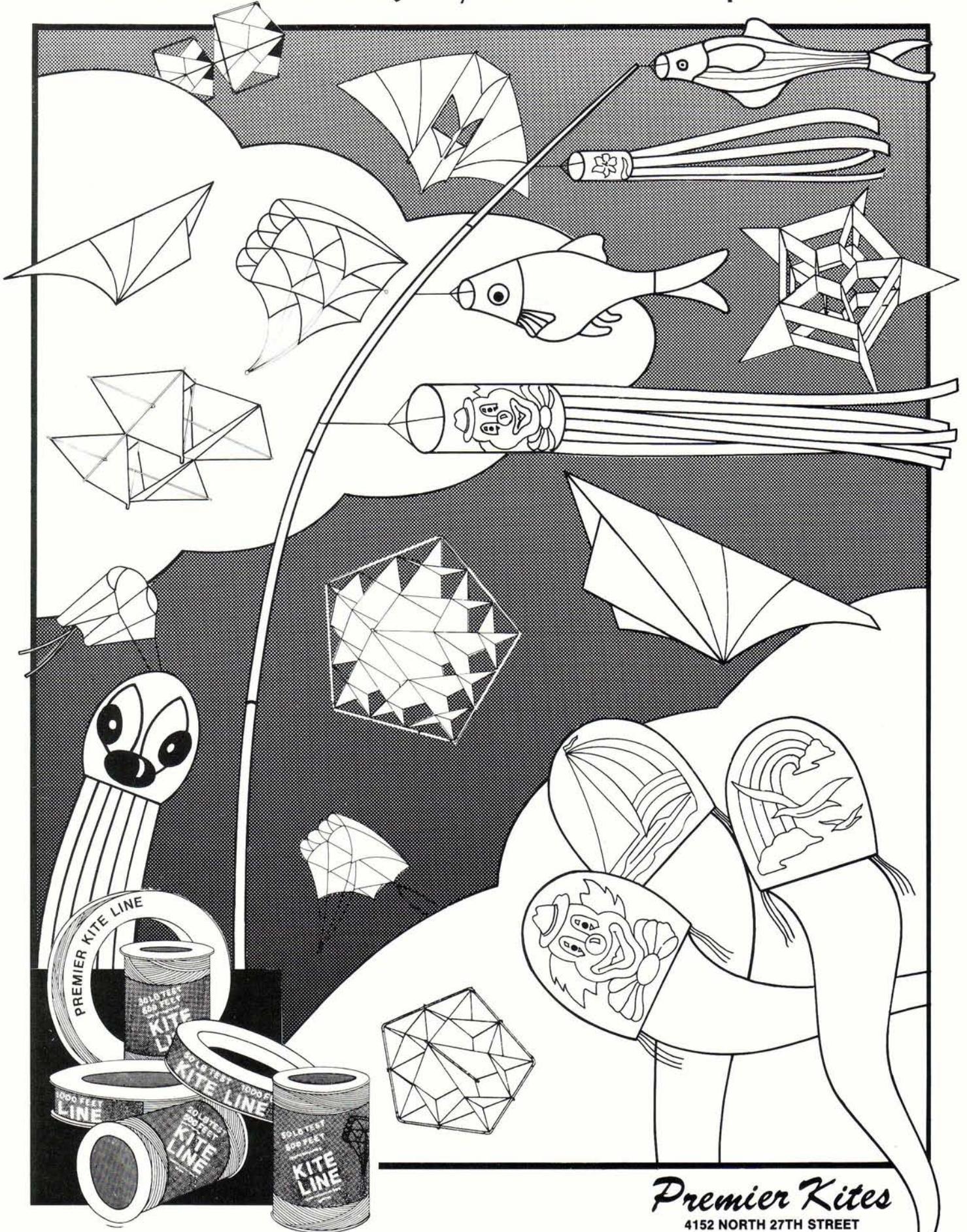
In reply to your "editorial" letter about the Jane Ambrose project (One Sky, One World) in the Summer 1986 issue: your patronizing drivel about the "purity" of kiteflying got my blood boiling.

It is all very well for you to sit in the safety of fortress America and pontificate about kiteflying being free of politics. In Europe we are in the front line of a war which has been waged on behalf of U.S. capitalism for forty years. We don't want your damn missiles here, and it is especially hard to stomach your wishy-washy liberal nonsense about "protest being unfashionable and inappropriate" when YOU are the cause of the strife in Europe.

Anyone with any sensitivity about what is happening on this planet has to "demonstrate" and protest in any way possible against a future under the shadow of YOUR disgusting invention—the atom bomb. Remember, if there is a nuclear war, it ain't you in the USA who is going to bear the brunt of it. It is us in Europe. YOU were the ones who dropped the bomb on Hiroshima and Nagasaki. YOU are the ones who perpetrate the myth of the "evils of communism" and push the world to the edge of Armageddon. What is evil is the blind hedonistic view that says kiteflying is reserved for the safe, liberal, affluent middle-class Americans.

I assume your reference to "the late 60s" means that, like myself, you are a product of the idealism that came out of

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Letters

... Continued

student protests and you once had some political awareness. Time and creeping affluence have obviously turned you (along with most old hippies) from YIPPY to YUPPY. Judging by the advertisements for ludicrously expensive kites in your glossy magazine, your main appeal is to the hedonistic, coke-sniffing, yuppy go-getters in California.

If you were true to your ideals of "purity" and "unity" and the beauty of structures that colour the sky, then you would refuse to carry ads like the one for the High Fly Kite Company and its travesty of the Shirone Rokkaku with the stars and stripes on it. You also carry a most offensive ad for Jane Ambrose's company Sky Scrapers. It shows a woman in provocative pose—with no relevance at all to flying kites. What has a large-breasted woman got to do with kites? I can only conclude that, like most Americans, you are content to take the money and run. Fair enough, but don't give us this rubbish about "purity" and "politics-free."

Nothing in the world is free from politics. Kites are a medium available to all for projecting messages to large numbers of people. In many countries (communist or capitalist) they are one of the few possible avenues of protest left.

I have built a large number of kites for protests. I have plans to build more kites with strong political messages, including FLY KITES NOT ROCKETS. If that offends your liberal sensibilities then, in the most derogatory sense, GO FLY A KITE!

Phil Manchester

Colchester, United Kingdom

P.S. I shall not be buying your reactionary publication in the future.

You are invited to write letters for this column and reply to them through our forwarding service. Any letter to Kite Lines may be considered for publication, so please state "not for publication" if you want no doubt to be left about it. Write to: Kite Lines, 7106 Campfield Road, Baltimore, MD 21207-4699, USA.

CORRECTION

In the Summer 1986 issue we reported that Benn Blinn, before his death, gave \$10,000 to the Central Ohio Kitefliers Association. This was not correct. He gave the money to the American Kitefliers Association. Initially, he intended it be used only in Ohio, but later changed his mind, allowing the gift to be used anywhere. We thank Betty Makey for this and other information regarding Benn Blinn.



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APPARATUS & PROCEDURES

A small three-wheeled cart rolls on a track of two parallel horizontal lengths of monofilament line. It is pulled back and forth by a stationary motor located at the mid-point of the track. The motor turns a drum about 2-inches in diameter to produce a speed of 4 miles-per-hour (within 1%). The drum winds up one end of a thin steel cable and simultaneously unwinds the drum, to a pulley, runs from the drum, to another pulley and back to the drum.

The cart carries a vertical mast on which is pivoted a vertical piece of reinforced foam plastic. A 3"x5" card or other recording medium is held to the plastic sheet with spring clips. A simple planar spring is pivoted perpendicular to—and lies very close to—the plastic sheet. The spring, which looks like the letter W with a bend in each outer leg, is located so that the new segment is parallel and define a line through the spring's center of gravity. The stretch of such a spring is represented very well by a quadratic function of the applied force. This is also true of a helical spring. A planar spring is heavier than the equivalent helical spring but allows the tow line to lie much closer to the recording medium. Springs of several different force ranges are interchangeable to suit the kites being towed.

The far end of the spring carries a loop or pivot to which the tow line is attached and a pen which is lightly sprung against the recording medium. The pen is made from fine hypodermic tubing with a soft plastic reservoir. The ink is McCormick's food coloring, which dries out too readily for records of hours and days, but works fine for this application. Following each flight, the center of gravity of the ink spot on the recording medium is eyeballed. Angle and extension are measured. Lift and drag are computed, allowing for the weight of the kite and half the weight of the spring.

Above is my basis for thinking this project is worth doing.
—Bill Bigge

AWARDS

Highest ratio of lift/drag . . . \$50
Highest product of above . . . \$50
Highest cash awards will be made for the most efficient kites of particular classes, such as:

- Eddy/Malay—Delta
- Box—Winged Box
- Facet—Tetrahedral—Wedge
- Airplane—Sled—Fighter
- Rotor/Kinetic—Assymmetric
- Bird—Insect—Other Figure
- Soft (frameless)
- Inflatable (framed)
- Centipede/Train
- Flat/Geometric
- Edo—Rokkaku

or any combination of the above, or others not listed. There will also be awards for kite features such as:

- Craftsmanship—Ingenuity
- Surface Design—Color
- Simplicity—Complexity
- Unexpectedness—Wit
- Manners—Message
- Durability—Historicity
- Inexpensiveness/Expensiveness (leather or both)
- Aerodynamics—Accessories
- Use of Paper—Plastic—Fabric
- Smallest—Lightest—Heaviest

or any combination of the above, plus Spectator's Choice. All cash awards will be in U.S. dollars or converted to the currency of the recipient's country. Some awards may be made in the form of Lawrence Hargrave Australian \$20 notes. In addition, each entrant will receive a Certificate of Participation.

JUDGING

The efficiency prizes will be awarded on the basis of measurements made by a panel of judges under the direction of Chief Judge William R. Bigge. Decisions of the judges shall be final.

RULES & REGULATIONS

1. The maximum projected area of the kite shall not exceed 250 square inches (1,613 square centimeters). Multiple horizontal surfaces will be totaled (as in box kites, biplane kites, etc.), but multiple horizontal surfaces of inflatable kites (such as parafoils) will not be combined, but will count as one surface. Vertical surfaces such as keels, rudders, fins, etc. are not included. Actually, we hope most kites will not need to be weighed.
2. The kites will be mechanically towed at a nominal walking speed of 4 miles-per-hour (1.8 meters-



Bill Bigge, shown with most kites flown from one line in a snow-storm (also most kites destroyed after flying from one line), says: Let yourself go and build something TOO LIGHT to fly outdoors — why not?

PURPOSE

The purpose of the International Indoor Kite Efficiency Challenge is to stimulate the design and construction of moderate-size kites of high efficiency, specifically in terms of lift/drag and lift/weight. We hope to demonstrate that kites of moderate size can fly efficiently at walking speed, but since it is difficult to measure such efficiency in the varying winds outdoors, we are inspired to conduct the Challenge indoors.

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 I will bring my kite to the Challenge.
 I will send my kite to the Challenge.

Date _____

How to Make Small (REALLY Small) Kites that Fly (REALLY Fly)

By Charles A. Sotich



Illustration: Jo Moore

Small kites hold a fascination not only for a certain segment of kitefliers but for the general public. Many people—including kitefliers—have never seen small kites fly as well indoors as medium-size kites fly outdoors. For most people, a kite gliding near the ceiling without “real wind” is a startling sight, and brings out questions such as, “Where can I buy one?”

Well, kites of this type are not commercially available, so the best way to get one is to make one. Special kites like these require unusual materials and construction techniques, but the finished product is well worth the extra effort.

How Small is Small?

The term “small” is relative, of course, but for the sake of this article we shall classify a kite of less than 12 inches (30cm) as small. A kite 12 inches to 10 feet (3m) we will call medium and one over 10 feet is large. Materials and construction methods suitable for one size kite almost never work if the plans are reduced or enlarged by a significant amount.

However, just about any kite plan in the medium size range can be made to fly in small and large versions. For example, if a medium size kite is capable of flying without a tail, then small-scale translations, if properly built, can be made to fly without tails too. I have made miniature versions of the delta, Eddy, Nagasaki hata, rokkaku and even the wedge kite that fly without tails.

The kites on which this article is based are all about three inches, but some have been made to fly successfully as small as 1³/₈-inch on a 25-foot line outdoors (though a five-inch tail was necessary). The techniques in this article are ones I use and recommend, but there must be other ones—possibly better ones—known or discoverable.

Weight

For a kite to fly it must generate lift. The amount of lift must be great enough to support the weight of the kite and its flying line. At some minimum wind speed, the

kite will just barely rise above the horizontal. If we add just a bit more weight to the kite, it will come down or require more wind to stay up. For a kite to fly in as low a wind as possible, its weight must be minimized. This means the spars, sail and flying line must be kept as light as possible, yet consistent with other factors—such as being able to see and handle the small parts without damage.

Sail Loading

One of the important elements involved in getting a small kite to fly well is to achieve a low enough sail loading for it. Sail loading is the term which relates how much the kite weighs to the amount of projected area that must lift it. If you know how much a kite weighs, you divide that by the area which is providing lift.

The term “projected area” refers to the amount of area you would measure if you projected the kite in silhouette form down its line in flight. Side panels that exist in the plane of the flying line, such as the keel of a delta, provide no vertical lift and are not included as lifting surface.

Most kitefliers are only familiar with kites in the medium size range of one to 10 feet. Typical kites at the top end of this range will have a sail loading of about two ounces per square foot. Kites at the middle of this range will usually have a sail loading of about one ounce per square foot. At the bottom end of medium size you might go to a quarter-ounce per square foot. These sail loadings represent average values; a good flying tailless kite might have a sail loading of half of these.

But when you get to small kites, such as a three-inch Eddy that can fly without a tail, you can look for a sail loading of a mere 0.01 ounce per square foot. A kite with this low a sail loading is able to stay aloft in “winds” of less than one mile per hour.

Materials

The availability of suitable materials has always been important in the development of kites. Because paper and silk evolved in China and bamboo grows there, it is not surprising that kites were made from these materials over 2,000

years ago. Even today, these materials are used in many oriental countries to make beautiful kites of good flying performance.

In recent years, plastics and other “high-tech” materials have been developed which permit us to make stronger and lighter kites. And for successful small kites, the materials should be very light indeed, well under what would be considered suitable for kites that fly outdoors, even in low winds. You need to find materials for three parts of your kite: spars, sail and flying line.

Spars

While bamboo and wood are adequate for medium size kites, and fiberglass and filament wound epoxy tubing work well in large and high-wind kites, these materials fall short when it comes to small kites. You need spars that are extremely small, light and strong. You can cut down on weight by getting the cross-section small enough, but it is very difficult to split wood or bamboo into long, straight and uniformly thin strips.

A material recently developed for the aerospace industry is boron filament. Boron is a chemical element closely related to carbon. It can be obtained in a wirelike form of 0.004-inch diameter (about twice the thickness of an average human hair). It is the strongest known material for its weight. A one-foot length of 0.004-inch boron weighs less than 0.00021 ounce. To put it another way, it takes about 4,800 feet of it to weigh one ounce. This stuff is light and strong enough for our needs.

Another material used by some kitemakers is thin nylon monofilament (paintbrush bristles, for example), which is much more flexible for spars than boron. For some types of small kites, boron is actually too rigid.

Sail

The skin you choose for your small kite can be critical to its success. Unless you have a delicate beam balance to weigh the sail material, it is difficult to check it. Even micrometers are too coarse for measuring the very thin films. The following table gives a comparison of some weights and thicknesses for a number of materials.

Material	Thickness (in.)	Weight (oz. per sq. ft.)
Tyvek® Type 10	.004	.139
plastic trash bag	.001	.080
tissue paper	.0014	.059
.5-mil Mylar®	.0005	.059
frozen food bag	.0004	.040
condenser paper	.0002	.014
.06-mil Mylar	.00006	.007

There are other films and materials worthy of experimentation for sails, but it is unlikely that they would be an improvement on the 0.06-mil Mylar, which is light and flexible primarily because it is very thin.

However, Mylar has two negative characteristics. Since it is so thin, it has far less strength than most films and will tear easily once a rip has started. Also, as films become thinner they collect static electric charges more easily. Very thin Mylar sticks to itself because of the static charge and can cause some unique handling problems that you don't have with paper or thicker plastic. To keep the Mylar flat while you work on it, you will have to use some building techniques that are radically different from normal.

Line

Standard string is easy to handle and use, but it has far too much weight for a small kite to lift. Monofilament fishing line can be obtained in one-pound test strength, but its diameter is just under 0.004 inches and it is a little on the heavy side. It is just slightly lighter than “invisible” sewing thread, which is commonly available in sewing stores.

Silk thread, as it normally comes on a spool, is also a bit heavy, but it is possible to take a piece of it and untwist the silk into smaller fiber bundles. With the help of good eyes, adequate lighting, a contrasting background and much patience, you can further untwist each of these smaller bundles to give perhaps six to 10 much smaller fibers. This is more like it. And since small kites fly on lines just two or three feet long, you don't really need to do a lot of separating. Several short lengths of silk can be joined together to make a longer flying line.

Some kite lines are made up of

CHARLIE SOTICH has been a kiter since 1973. In 1984 his tiny delta took top honors in the International Exposition of Small Kites.

bundles of very thin polyester fibers with no twist that can be pulled out of a bundle singly. The one trouble with this type of line is that it is so fine, perhaps 0.0002 inch in diameter, that it is often difficult to see. (Not only is it hard for you, the kite builder and flier, to see, but spectators usually won't realize that a line is there and will walk right into it.)

Adhesives

If you are using Mylar film as recommended for your small kite's sail, you will have trouble getting most adhesives to stick to it. Contact or rubber cement will work with most plastics, but they are generally too thick for our use and will need to be thinned down. We do this to avoid adding unnecessary weight and to make application easier. Five to 10 parts thinner to one part glue works well on spars and thin film sails. For some kinds of work with boron you may want to use cyanoacrylate glue. It is available under brand names such as "Hot Stuff," "Super Glue" or "Krazy Glue."

Tools

You will need only very few and basic tools. Some good tweezers are required to hold the boron. A double-edged razor blade of the old carbon steel type (that snaps when it breaks instead of bending like the stainless steel type) is best for cutting Mylar.

Two desirable things that make it easier to build small kites are good lighting and a magnifying glass.

Construction Techniques

You will need to develop some skills far different from those used in making normal-size kites. This is because the physical characteristics of the materials are unusual and the pieces are so small.

The steps outlined below can be followed in making a variety of small two-dimensional kites. Read the instructions through a few times before you begin the actual construction.

1. Draw your full-size plan for the kite outline and spar locations on plain white paper with a sharp pencil. Have in readiness a pattern to trace for decorating the kite.

2. Into a piece of thin stiff cardboard, cut an opening that will give about a quarter-inch clearance all around the kite plan.

3. For the sail, cut a piece of film slightly larger than the opening in the cardboard.

4. Put several small drops of rubber cement (full strength) around the edge of the opening in the cardboard.

5. Place the film over the opening and touch it lightly to the cement drops.

6. Remove the wrinkles from the film by lifting the appropriate

edges one at a time and tacking them down again, applying light tension to the film.

7. Trace the outline of the kite from the plan to the sail with permanent ink marker.

8. Position the kite sail outline over the decoration pattern and then color the sail film.

9. Turn the cardboard over and again center the sail over the kite plan. You will put the spars on the opposite side because rubber cement can dissolve marker inks.

10. Cut the spars to length, being as accurate as possible. (See drawing for detail.)

11. Glue the spars to the sail by applying very thin rubber or contact cement to the spars and then placing the spars, using tweezers, in position on the sail.

12. Cut the sail by using a very sharp razor blade guided by a ruler to cut the film along the outline. Be careful because a dull razor blade will snag the film and develop a tear.

13. Add a dihedral angle to the two cross spar pieces of boron where they join in a hinge at the center by propping up one edge of the sail and applying a small drop of cyanoacrylate glue to hold it. Do not apply the glue directly from the container, but use the tip of a straight pin to pick up a small drop and use that. Repeat several times if necessary. Humidity (breathing on it) helps it cure.

14. Tie a simple knot near the end of the flying line.

15. Prior to attaching the line to the kite, stick a piece of frosted tape (about $\frac{1}{16} \times \frac{3}{16}$ inches) across the line next to the knot on the long side of the line.

16. With a pair of tweezers, place the tape (with the line) at the bridle point on the face of the kite. Use minimum pressure on the tape.

17. Test fly the kite on about two feet of line by moving your arm back and forth. Move the bridle point down if the kite oscillates from side to side. Move the bridle point up if the kite dives to one side.

18. Repeat step 17 until the kite flies properly, then tack down the tape securely to the line on the sail.

19. Measure off about three to six feet of flying line, then wind it on a reel.

20. Put the kite in a suitable safe box for storage (with the reel).

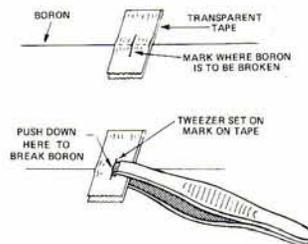
Boron and Safety Precautions

Boron fiber is very strong and very brittle. It cannot be cut the way wood, plastic or other common materials are cut. It has to be broken the way you would break a thin, brittle glass rod. Because of these characteristics, boron must be handled with great care. It could

be compared to a thin needle that can easily penetrate human skin. When you break a piece of boron to a desired length, instead of ending up with two pieces you will usually have three. The third piece is a very small length about $\frac{1}{64}$ - to $\frac{1}{8}$ -inch long that comes from in between the two main pieces. This small third piece must be captured so it will not cause trouble by entering your body.

A Procedure for Breaking Boron

A piece of transparent tape should be placed on the boron in the region where it is to be broken. The tape should enclose the boron so that when it is "snapped" all three pieces will be held in the tape. You can mark the spot where the boron is to be broken with a permanent ink marker. Grip the tape at the mark with a good pair of tweezers. Push down on the tape (and boron) at the tweezer tip until the boron breaks. The pieces can then be pulled out of the tape. It takes some effort to get the boron out of the tape. Be patient, keep pulling and be careful to pull along the axis of the boron.



Reels

Each small kite should have its own flying line and reel. It is too much trouble to reconnect the line each time you want to fly a different kite. The extra attaching knotwork also adds extra weight. The reel doesn't have to be very large because so little line will be stored on it.

A suggestion for a very simple reel is this: Make it from a piece of $\frac{1}{8}$ -inch-thick expanded polystyrene (from one of those foam trays that hold meat and fruit in the stores). A 3" x 1" reel is a good size to start with, but it should be able to fit into the container that stores your small kite. A skewer of bamboo about $\frac{1}{16}$ -inch in diameter and about three inches long placed in the center of the foam will give you something to hold when reeling line. A hole for the bamboo can be made in the foam using a long sewing needle. After it is in place, the bamboo can be glued to the foam with white glue.

Storage Containers

Because small kites are so light and fragile, they should be stored in suitable protective containers when they are not being flown. Start looking early for your container, which can be cardboard, wood, metal or plastic as long as

it is big enough to hold the kite and reel and is relatively airtight. Clear plastic boxes are nice because you can see exactly what is inside them. More than one kite can be stored in a box. It is advisable that some means be used to hold the reel in place to prevent it from damaging the kite.

Flying

If you have made a good small kite (with a low sail loading and the surfaces not badly distorted), you should be able to fly it with just a little practice.

A two-foot length of line is sufficient to start flying. Hold the reel in your hand and your hand off to the side of your body so the kite will be moving in a clear air stream. These kites can require less than one mile-per-hour air speed, so begin walking forward slowly and watch to see if the kite rises. Move faster until the kite rises over your hand. Slightly faster or slower movement will make the kite rise or fall and give you a feel for how much wind speed is necessary to keep the kite flying.

With more practice, you can fly a small kite while you are standing still or sitting down just by moving your arm back and forth. To turn the kite, you have to speed up your arm at midstroke and drop your hand, causing the kite to overfly your hand. Give the kite some slack and do a quick 180-degree turn so the kite is ready to start moving back in the opposite direction. It may be easier if you mount the reel and line on a three- or four-foot dowel. Then you can fly your kite just by moving your wrist.



The contents of Charlie's 3-inch kite book: 1. Use the lightest materials available. 2. Use no more material than is necessary. 3. Keep them LIGHT!

Suppliers List

Mylar and boron: Ray Harlan, 15 Happy Hollow Rd., Wayland, MA 01778, 617/358-4013 (evenings); or Model Research Laboratories, Curt Stevens, 25108 Marguerite Pkwy., B-160, Mission Viejo, CA 92692, 714/240-8404 (after 7 p.m.)
Mylar: Micro-X Products, Inc., Gerald Skrjanc, P.O. Box 1063, Lorain, OH 44055, 216/282-8354 (evenings)

Carbon steel razor blades and boron: Jim Jones, 36631 Ledge-stone, Mt. Clemens, MI 48043, 313/791-0651 (evenings)

Nylon monofilament (paintbrush bristles) information and samples: Kite Lines, 7106 Campfield Rd., Baltimore, MD 21207, 301/484-6287. ◇

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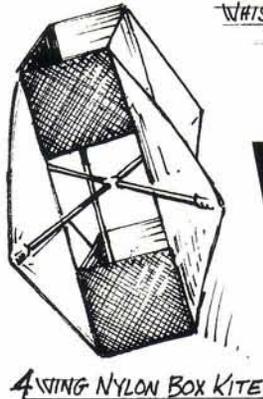
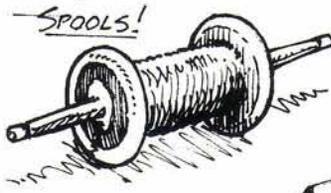
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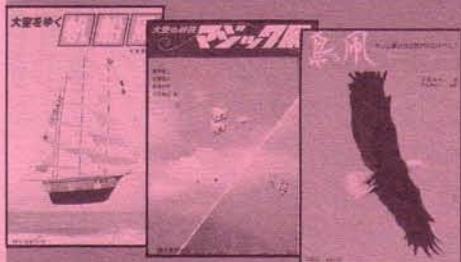
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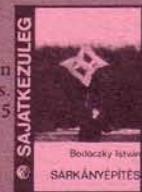
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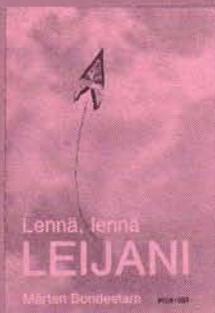
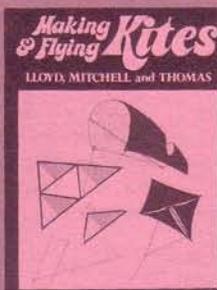
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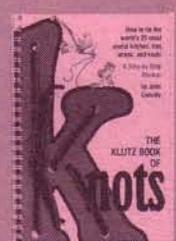


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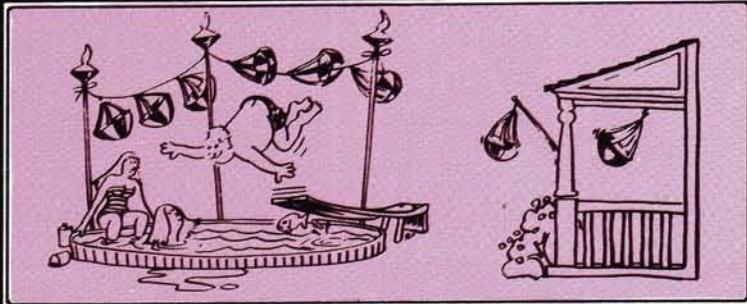
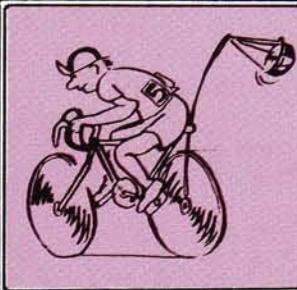
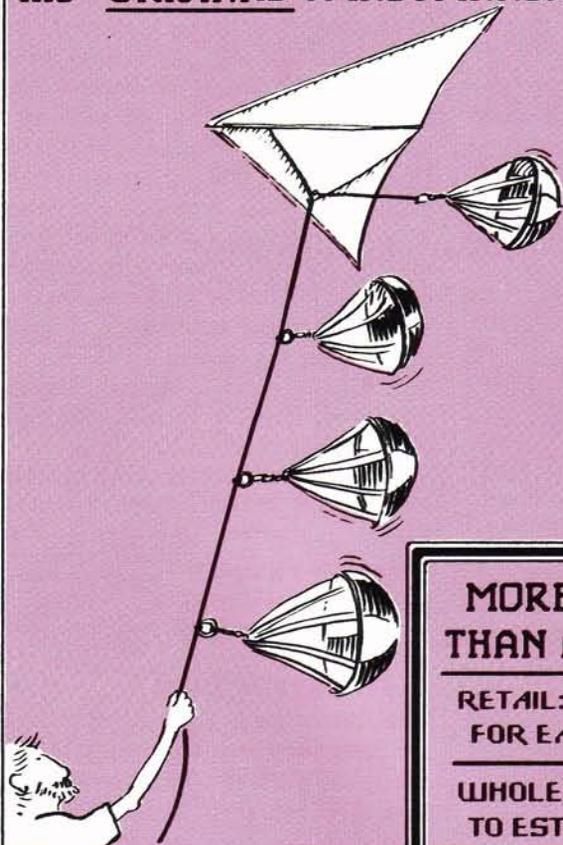


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What's New: Kites, Books, Sundries

Kites

By Mel Govig and A. Pete Ianuzzi

BELL MEETS WALDOF

Like all of Professor Waldof's previous creations, his Tetrahedral is an impressive demonstration of ingenuity. First, he has adopted internal bracing rather than external, which makes the kite lighter. Also, the way the Waldof is tensioned with a "floating" cord is, to my knowledge, unique.

I have always admired the Professor's ability to marry materials and designs to economize on the former while enhancing the latter. In this case, some of his ingenuity seems to be a misplaced devotion to unusual solutions. Yet it all comes together in the final product as a lightweight, flyable tetra. If you have tried to make your own tetrahedral or fooled with one of those plastic models popular 10 years ago, you will appreciate the sophistication of this new version.

The set we tested had part of the assembly completed, but inserting the spars and connecting the cells are left to the flier's skills and the instructions. (The Professor would do well to reduce the wordiness and add illustrations to future instructions.) It took two of us nearly 20 minutes to assemble a four-cell tetra. (A

10-cell model is also available.)

The next assembly will take less time because part of the structure does not have to be undone for breakdown. The kite stows flat in a neat triangular bag.

In strong winds, you can expect the tetra to fly at 45-50 degrees. Don't expect it to stunt around the sky—such behavior is not in its nature. Be pleased, as we were, that this is a tetra you can pull into the air and keep up by gentle tugging in winds below five miles per hour.

Thanks to the forgiving flexible frame of the Professor Waldof Tetrahedral, the kite actually *bounces* when dropped lightly on the ground. We first noticed this behavior at launch, when the kite went up, came down for a take-off hop and then bounced back up again—much to our surprise and pleasure. It's not a kite that will collapse on you. Rewarding it is, but we warn you: the Professor's latest is not a kite for timid souls of the pop-it-out-of-the-package-and-fly-it school.

—M.G./A.P.I.

OMEGA EDO

I have made and flown quite a number of large Edo kites—and so has Pete Ianuzzi. We are used to them. So when we opened

the package containing the Omega Edo, we expected to find a large number of long bridle lines and we half expected to find them tangled. We did, and were not disappointed. We also expected to adjust the bridles once we were on the field. We did not, and were not disappointed.

The innovative design of the kite coordinates the spar sleeves with the stitching of the geometric patterns that are the trademark of this collection. Also, the choice of 3/16" diameter fiberglass rods and the distribution of the bridles is a very workable combination of weight, strength and flexibility.

The bow lines have little aluminum line tensioners and they work well. The Edo's reputation for complexity has met a master at making the design easy to transport, assemble and fly.

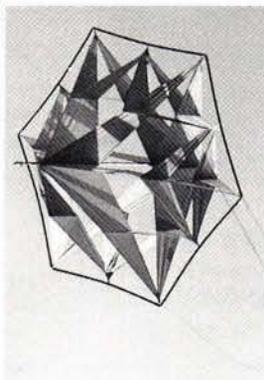
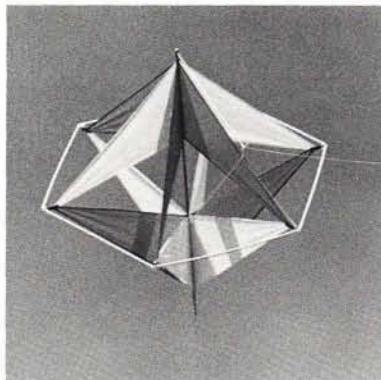
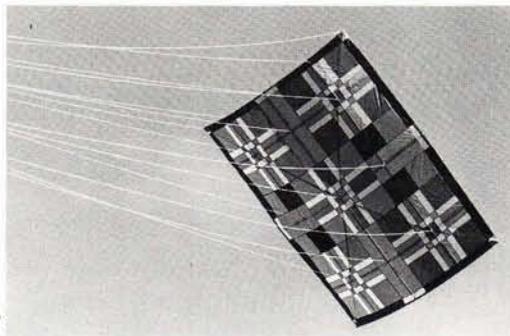
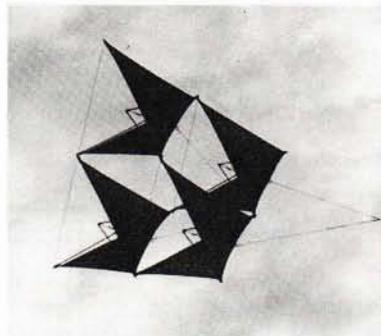
The kite carries a "big" presence in the sky, but its pull is very light—like a delta's. Tails are supplied, but we had light air and flew without them. The long bridles provide some stabilizing drag. If you fly tailless and the winds drop, pull in the line *fast*—or the kite will drift, even to the extreme of curling up on itself dramatically.

There may be some question as to whether Reza Ragheb (who makes the Omega kites) is as much the artist in his patterns as George Peters. (It was George who used to supply Reza with kites of this striking style. When George stopped offering his kites to retailers, Reza decided to produce similar kites to satisfy the demand, though it is a small one and each kite is made to order.) However, there is no question about Reza's craftsmanship: it is excellent.

Pete Ianuzzi thinks that this particular Edo looks a bit too "busy." I find the Persian rug effect appropriate to the maker and to Japan's Edo genre of "paintings in the sky"—a different look but an identical outlook. —M.G./A.P.I.

REFLEX REFLECTIONS

Since the article in *Kite Lines* eight years ago introduced us to Stephen Robinson's Facet kite (Winter 1979-80 issue), kites have experimented with ingenious assemblies, surprising sail shapes, clever connectors and myriad visual effects. Of all the



From top left, clockwise: the Professor Waldof Tetrahedral from a rear view shows its internal structure; the Omega Edo drags its long bridles in the wind; the Super Reflex and the Reflex by Controvento present one view each of the many faces they possess.

Valerie Govig

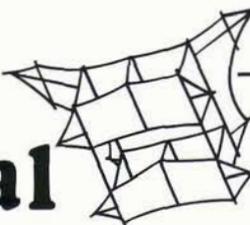
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June 13 and 14 The International Kite Festival with participants from the United States, Japan, France, England, Germany, Belgium, Italy, Denmark and Ireland. Highlights include super kites up to 4500 square feet, cultural kites from Japan, Cody manlifting kites, camera systems, kite trains, stunt kites, mini kites, etc.

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What's New

...Continued

Facet variations on the market, the Reflex and Super Reflex from Controvento in Italy are among the best made, most attractive in the air and easiest to assemble and fly. Unlike other Facets, they have very taut leading edges and do not deform at higher wind speeds. The open center of the design helps achieve improved performance while producing interesting geometry in flight. Maurizio Angeletti has given us the least Facet-like Facet of all—in always pleasing colors.

The Super Reflex differs from the

Reflex as the Facet differs from the Corner kite—more cell divisions and wings. The Reflex has 12 wings within its hexagonal exoskeleton. The Super Reflex contains an additional 24 winglets.

There is little difference in the performance of the two kites—except for one unusual trait. The Reflex takes to the air with a roar like an oriental hummer; the Super Reflex—for what reason I don't know—is quiet as an owl.

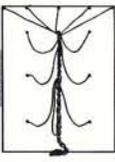
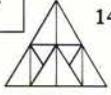
Although these kites do not tumble, they can be made to go from side to side. They glide to earth in a see-saw pattern, rather than end-over-end.

Assembly of the Reflexes is simple,

accomplished by inserting the six spars around the periphery, one at a time. A clever vertical tensioning system helps you adjust the sail to differences in air moisture.

Maurizio complains (but is grateful) that he is still able to handle all production of his kites himself. He complains that the orders are not yet enough to allow him to hire out the sewing and assembly; he is grateful that he does not have to become an employer with the monetary and psychological costs entailed. For the kite collector, now is the time to get a Reflex or Super Reflex, when the personal touch is sure to be there. —M.G.

DATA CHART

Name of Kite	Shape	Retail Price	Dimensions (inches)	Weight (ounces)	Major Components	Portability	Assembly Time	Durability	Wind Range	Ease of Launch	Skill Level
Omega Edo		400.00	78 x 62	39.0	ripstop nylon, fiberglass rods	G	3 minutes	E	5-20	G	I-S
Professor Waldof Tetrahedral		148.00	46 x 56 x 46	20.0	ripstop nylon, fiberglass rods, fiberglass tubes	G	30 minutes	E	6-25	G	I-S
Controvento Reflex		48.00	32 x 36 x 39	5.5	ripstop nylon, ramin dowels	E	1 minute	E	5-25	E	N-I-S
Controvento Super Reflex		136.00	46 x 53 x 57	14.5	ripstop nylon, ramin dowels, fiberglass tubes	E	1 minute	E	5-25	E	N-I-S

NOTE: Retail price (in US dollars) is "advertised" or "suggested." Wind range (in mph) covers minimum and maximum speeds deemed suitable by our evaluators. Skill Levels are: N-Novice, I-Intermediate, S-Skilled. Other ratings are: P-Poor, F-Fair, G-Good, VG-Very Good, E-Excellent. Dimensions (in inches) are in the following order: height x width x depth. Measurements and drawings were made with the kite upright on the floor facing the viewer.

Books

By Leonard M. Conover and Valerie Govig

LOOK — BUT DON'T READ

Kite Flight: Complete easy-to-follow instructions for making 40 different kites, by Jack Botermans and Alice Weve (New York: Henry Holt, 1986), softcover, 119 pages, \$9.95.

Originally published in The Netherlands under the title *Vliegers maken* (De Meern: Plenary Publications International, 1986), softcover, 119 pages, price unknown.

Published simultaneously in West Germany as *Drachenmodelle zum selberbauen* (Munche: Heinrich Hugendubel Verlag, 1986), softcover, 119 pages, DM18.50.

Books—like so many things—are built of details, the little things that must be pulled together to make a coherent whole. A few flaws will pass, but many flaws will bring the house down.

Kite Flight's flaws start with the title. The book is not complete, is not easy to follow and does not even contain 40 kites (24 is the true number). The book's faults are so many and obvious that they should produce immediate distrust by kites. I worry only for those who might be se-

duced by the book's veneer of professionalism and discover its problems too late, say in the middle of several yards of expensive ripstop nylon partly cut up.

The errors in *Kite Flight* are a particular shame because the quintet that created the book put a lot of talent into it: Jack Botermans laid out the book—attractively, Alice Weve made the kites—neatly, David van Dijk took the photographs—competently, and Toon van der Struijk did the drawings—skillfully. Only the text, by Rob van den Dobbelssteen is disappointing.

But the text must fulfill the expectations raised by the other parts. Pictures alone will not lead you from one step to the next in making a kite.

One of this book's worst annoyances is the literal conversion of metric to U.S. measures. A kite that is said to be "1.1 x 0.8 yards tall" or built of "dowls" (sic) "0.3 inch diameter" needs another translator. Personally, I would rather have the plain metric original.

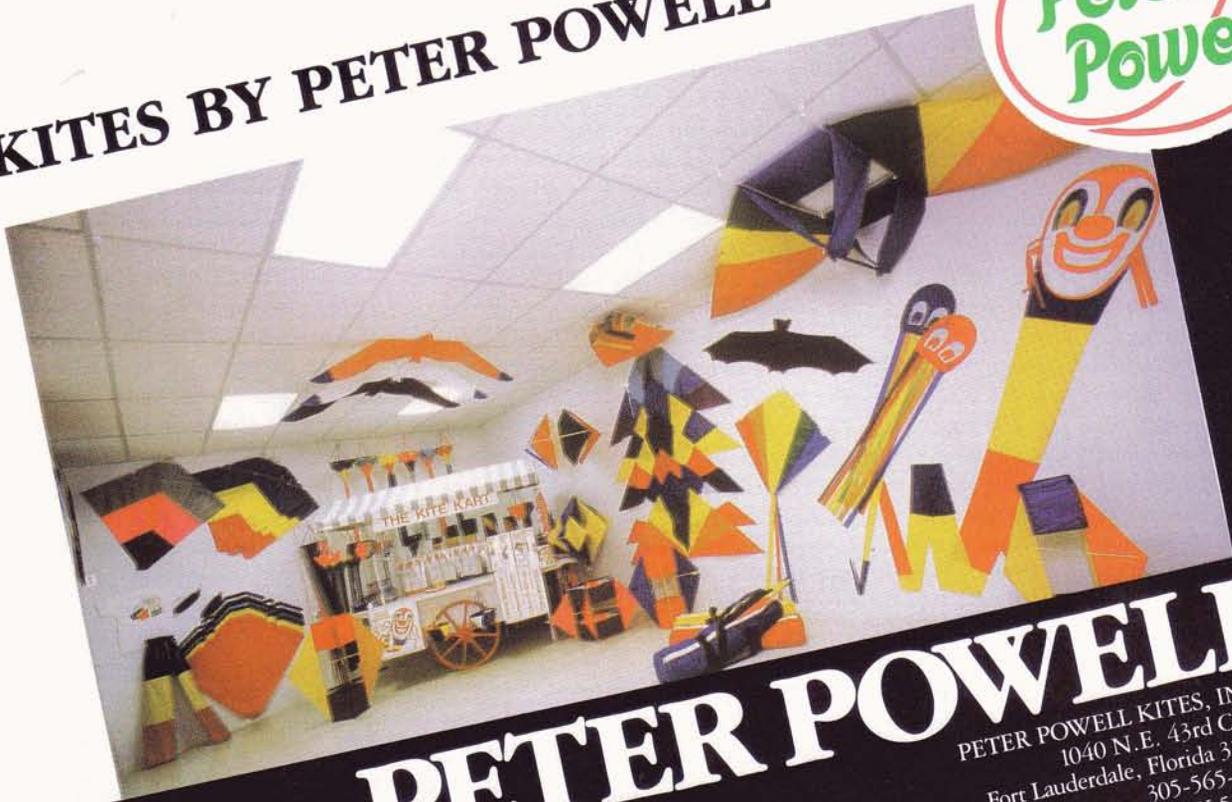
However, indication of sizes, in any measure, is rare in this book. Particular

sins are the absence of cross section for spars and the omission of any dimensions or angles from the drawings. Too much is asked of even an expert kitemaker.

The wording of the instructions often is vague, inconsistent, incomplete—in short, confusing. As for research, it pains me to read that "The Facet appeared out of nowhere from one day to the next. No one knows who invented it. . ." when this kite was clearly documented in *Kite Lines* (Winter 1979-80) as the design of Stephen Robinson of England.

Some of the blunders are funny: "paper folded into a harmonica shape" (accordion?), and the Dutch flag colors on the Nagasaki hata—orange, white and blue! Other statements are baffling. I have yet to figure out how the tape suggested for hemming a Cody kite "should be stitched on when the fabric is stretched on the frame." But I can't laugh away the text for the "Classic Kite" (Eddy or diamond) when it never shows how the kite is bowed or explains that either bowing or a tail is critical to its flight. And the bridle

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What's New

...Continued

is that abominable one, attached to the extreme fore and aft tips of the kite.

Untidy organization puts the use of a soldering iron and staple gun with the "Classic Kite" and parafoil, respectively, rather than in the tool section in front; one should not have to find these tools accidentally under the instructions for particular kites.

Speaking of tools, there are many shown in an attractive photograph—but the accompanying list doesn't match the items shown. Likewise the pages devoted to flying line show a row of different types and weight-tests, but the captions for them are completely out of order.

These examples of the many mistakes may make it seem that the translation is the main fault. It must have been awarded to the lowest bidder; many adult Dutch speak good English, including Alice Weve, who apparently had nothing to do with the writing. She probably was a source of information, but it sounds as if her words were dumped out of tape recordings made on the beach at the Scheveningen kite festival. We can't just blame the translator; the small bibliography reflects the lack of research.

Some kite books have suggested that kites have "endless possibilities." True as this is, I've come to suspect that when a writer resorts to saying it, he or she is admitting to having run out of ideas. This book talks about "endless possibilities" several times. If that doesn't wear you thin, the patronizing tone will do it, as in "You can see yourself how easy this Tetra kite is to fly. . ." or "As any technically minded person will know, a rigid cross connection is the opposite of a flexible cross connection."

Inadequate research, imprecise writing and poor translating are bad enough, but the patronizing tone of *Kite Flight* puts the finishing touch of rot on it and makes this book torture to read.

Perhaps five people should not work on one book. Because without a controlling manager, a dictator of details, the final product belongs to no one and rewards no one. —V.G.

CHARMERS FOR CHILDREN

Kite Flier by Dennis Haseley, illustrated by David Wiesner (New York: Four Winds Press, Macmillan, 1986), hardcover, unpaginated (31 pages), \$13.95.

For those of us (myself included) who collect such things or appreciate beautiful books, here is a new and charming children's kite story book. *Kite Flier* tells of

a father who makes kites for his son until the son grows up and leaves home. It is a parable about attachments and letting go, poetically written, but the illustrations are the most appealing part of the book.

The skillfully drafted pictures are rich in detail and lush in color. The different kites on each page are imaginative designs that mostly look as if they would not fly, but they are certainly inspirational. How we wish they could fly!

Here are a few more which we think are worth adding to a collection of better children's kite story books (in chronological order): *The Dragon Kite* by Nancy Luenn, illustrated by Michael Hague, 1982; *The Emperor and the Kite* by Jane Yolen, illustrated by Ed Young, 1967; *Lee Lan Flies the Dragon Kite* by Ralph Hermanns, 1962; *Anatole Over Paris* by Eve Titus, illustrated by Paul Galdone, 1961; *Curious George Flies A Kite* by Margaret Rey, illustrated by H. A. Rey, 1958; and an old treasure, *The Kite Book* by B. Cory Kilvert, 1909. —V.G.

ANGELETTI ENCORE

Costruire Aquiloni by Maurizio Angeletti (Milan, Italy: Gammalibri, 1986), 212 pages (13 pages in color), softcover, in Italian; 20,000 Lire (about \$14.50).

When Maurizio Angeletti told us about his first kite book, *I Colori del Vento* (see *Kite Lines*, Spring 1985), he apologized for its high price—80,000 lire (\$42.00 in June 1984). The publisher had produced a large, glossy, colorful hardcover, but the book sold poorly and soon fell into out-of-print limbo.

Suddenly, two years later, the book is back—sort of—as a paperback, revised, condensed, re-titled and priced at 20,000 lire (\$14.00 in June 1986).

In their efforts to economize, the editors at Gammalibri have stripped the original work to the bare bones. They have deleted or rearranged portions of the book to fit the budget of some mythological Italian kiteflier. Whereas the original contained 78 color photographs, the current edition has only 13. The excellent three-page bibliography is gone (replaced by advertisements for other Gammalibri books). Many of the original illustrations have been cropped or reduced to fit the smaller format of the new edition. Sadly, this low-budget copy lacks the glow of *I Colori del Vento*. Happily, it does not lack the guts of the original.

Costruire Aquiloni contains plans for about three dozen kites: the usual ones (sled, diamond, barn door, delta) plus a few with Angeletti's personal stamp (like his *doppia stella* and *fiocco di neve*).

Maurizio Angeletti not only loves kites,

he knows them, and is obsessed with their proper bridling and detailing. If you have flown or admired any of Maurizio's kites, you will want to have a copy of his book—even in the bargain edition, even if you don't read Italian. —L.M.C.

TAKO KICHI HEAVEN

Tako (Kites) by Tsutomu Hiroi (Tokyo: Mainichi Shimbunsha, 1973), in Japanese, hardcover (boxed), 182 pages, ¥ 6,500.

Nibon-no Tako (Kites of Japan) by Kazuo Niisaka (Tokyo: Kadokawa Shoten, 1978), in Japanese, hardcover (boxed), 315 pages plus insert, ¥ 24,000.

Edo Dako E Shi (Pictorial History of the Edo Kite) by Tadao Saito (Tokyo: Grafiksha, 1980), in Japanese, hardcover (boxed), 216 pages, ¥ 18,000.

Edo Dako (Edo Kites) by Masaaki Modegi (Tokyo: Seibundo Shinkosha, 1986), in Japanese and English, hardcover, 78 pages, ¥ 3,800.

The treasure of classic Japanese kites is matched only by the wealth of Japanese kite books available today. It is entirely appropriate that a culture which produced the Edo, the o'dako and the rokkaku should also give us some of the most exquisite works of kite literature available anywhere, anytime.

In the past 20 years, over 100 kite books have been published in Japan. Within that large library are perhaps a dozen which stand out as extraordinary works—large, lavish, colorful, beautiful books.

Recently we have "read" four such books (handicapped considerably by our lack of fluency in Japanese), which we have selected on the basis of their apparent ambitiousness and value. These are not books to be taken lightly, by virtue of their contents, size or price. For sheer bulk, exceptional design and copious use of color, these volumes have few equals in kite literature. It is especially difficult to compare these works with some of the recent offerings we have seen from other countries.

The first of the four books—*Tako (Kites)* by Tsutomu Hiroi—is one of those "complete" kite books, chronicling the known history of kites from 300 B.C. in China to 1973 (the time of publication). There are maps, tables, charts and lists to accompany the hundreds of photographs of kites, grouped according to type or country of origin. Over half of the book is devoted to kites of Japan; the selection of western kites is narrow. There are plans for two dozen traditional and modern kites, including several of Hiroi's own multicellular designs. *Tako* embodies Hiroi's belief that kites are sculpture in the sky. Elegantly designed and produced,

Regular Handles

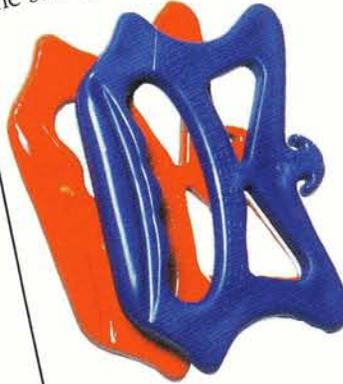
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What's New

...Continued

the book has been out of print for some time.

Kazuo Niisaka's massive *Nihon-no Tako* (*Kites of Japan*) is the largest kite book ever published, to our knowledge. It measures a little over 10 x 14 inches and contains 253 pages in full color plus an additional 62 pages in black-and-white. Included with the book is a large (20" x 29") sheet of special paper, painted with the familiar scowling face of a Japanese warrior, and instructions for making your own classic Tsugaru kite. The book alone weighs nearly five pounds.

Edo Dako E Shi (*Pictorial History of the Edo Kite*) by Tadao Saito is a visual delight—over 300 beautiful color photographs of kites from the Edo (Tokyo)

area of Japan. There are also dozens of black-and-white photographs plus 50 pages of text (in Japanese) explaining the kites.

In addition to the well-known rectangular Edo kite, there are also bird and figure kites, cartoon character kites, historic and patriotic kites (from World War II), and some novel kites used for advertising.

Edo Dako (*Edo Kites*) by Masaaki Modegi is one of the newest Japanese kite books, published in 1986, but it holds its own among its august companions. It is distinct in size and price, falling between the extremes of the popular-market books and the spare-no-expense volumes. It also stands alone in that its focus is strictly on classic Edo kites (made by master kite-maker Teizou Hashimoto). The book was lovingly compiled to honor the author's father, Shingo Modegi, founder of the

Japan Kite Association and the Japan Kite Museum.

The book is attractively designed to show five types of Edo kites, in full color, on delicately patterned pages. Finally, and most thoughtfully, Modegi has included an English translation for most of the text. Not perfect English, but quite good.

There are no "plans" per se in this book, but there is an explanation of the history, types, construction, materials and designs of the Edo kite.

Together, these four books constitute a banquet—a feast—for (Japanese) kite (book) lovers. Yet, they are merely samples from the total of Japanese kite books—the available, the unavailable and, perhaps, the yet unwritten.

Our conclusion: if you have the money and the inclination—and if you can find them—buy them. —L.M.C.

The *Kite Lines* computer contains a bibliography of more than 700 kite and kite-related books. Nearly 20% of them—over 100 titles—are about Japanese kites. Listed below are a baker's dozen of our favorites (in chronological order of publication). The prices listed are the original selling prices at the time of first publication.

TITLE	AUTHOR	PUBLISHER	SIZE	PAGES	PRICE	YEAR
(1) <i>Tako: Japanese Kite Book</i>	Tatsuo Miyawaki	Bikensha	14 x 10	16+	\$3.95	1962
(2) <i>High Fliers: Colorful Kites from Japan</i>	Tadao Saito	Japan Publications	7.5 x 10.5	63	\$4.50	1969
(3) <i>Tako Sora-no Zokei (Kites: Sky Art)</i>	Tsutomu Hiroi	Bijutsu Shuppansha	7 x 10	136	¥ 1,800	1972
(4) <i>Tako (Kites)</i>	Tsutomu Hiroi	Mainichi Shimbunsha	11 x 13	182	¥ 6,500	1973
(5) <i>The Art of the Japanese Kite</i>	Tal Streeter	Weatherhill	8 x 10	181	\$ 17.50	1974
(6-A) <i>Tori Dako (Bird Kites)</i>	Shuhei Goto	Seibundo Shinkosha	7.5 x 10.5	74	¥ 1,200	1975
(7) <i>Nihon-no Tako (Kites of Japan)</i>	Kazuo Niisaka	Kadokawa Shoten	10 x 14	315	¥ 24,000	1978
(8) <i>Edo Dako E Shi (Pictorial History of Edo Kites)</i>	Tadao Saito	Grafiksha	9 x 12	216	¥ 18,000	1980
(6-B) <i>...Habatake Tori Dako (...Flapping Bird Kites)</i>	Shuhei Goto	Seibundo Shinkosha	7.5 x 10.5	22+	¥ 1,200	1980
(9) <i>Yoku Agarū Sosaku Tsure Tako (Kite Trains)</i>	Eiji Ohashi	Rippa Shobu	8.5 x 11	56+	¥ 1,200	1981
(10) <i>Tako Bijutsu Gaido (Fine Arts Guide to Kites)</i>	(several)	Bijutsu Shuppansha	6 x 8	220	¥ 1,400	1982
(11) <i>Tako Tsukuri (Kite Making)</i>	Tadao Saito	Hoikusha	4 x 6	160	¥ 500	1983
(12) <i>Edo Dako (Edo Kites)</i>	Masaaki Modegi	Seibundo Shinkosha	7 x 10	78	¥ 3,800	1986

COMMENTS

- (1) A delightful book published 26 years ago to introduce the English-speaking world to Japanese kites. The book was sold with one complete kite plus three sheets of rice paper and enough split bamboo, string and tails to make three additional kites. Long ago out-of-print and now extremely hard-to-find, especially with the added kite and materials intact.
- (2) Another wonderful English introduction to Japanese kites and that special attitude of Japanese kitefliers. A compact, but surprisingly thorough treatment by one of Japan's most prolific kite book authors.
- (3) Published as *Kites: Sculpting the Sky* in 1978 by Pantheon Books (Random House). The English edition is slightly larger, brighter and contains four pages of color photographs not found in the original Japanese edition. Now out-of-print and hard-to-find.
- (4) We borrowed this book from our friend, Pete Ianuzzi, who purchased it in 1980 for 850 yen! It is not for sale.
- (5) The original hardcover edition (priced at \$17.50 in 1974) is no longer available. The softcover edition sells for \$14.95 today.
- (6-A) Contains unbelievably realistic, three-dimensional renditions of bird kites. The book comes with a full-size pattern for a seagull kite.
- (7) The largest, most lavish (and expensive) kite book we have ever held in our hands. Still available, but not for long.
- (8) Boxed and beautiful and still available (we think), but in a very limited quantity.
- (6-B) A 22-page booklet plus half-a-dozen full-size bird kite patterns. Made to accompany the original book.
- (9) Everything you ever wanted to know about kite trains, plus the incredible expandable box kite. Includes some full-size plans.
- (10) Originally published as the Winter 1982 issue of the quarterly magazine, *Bessatsu Bijutsu Techo (Fine Arts Magazine)*. Reprinted as a soft cover book, minus the advertisements but with a new cover. Includes chapters written by major Japanese kite authorities, such as Tsutomu Hiroi, Eiji Ohashi, Shuhei Goto, etc. An intensive, colorful collection of Japanese kites and techniques. Good value.
- (11) A chock-full, pocket-sized bargain. Sort of the Japanese equivalent of Brummitt's Golden Guide to Kites.
- (12) This is the first of what we hope will be a series of kite books by Masaaki Modegi. Expensive for its size because of the leaping value of the yen.

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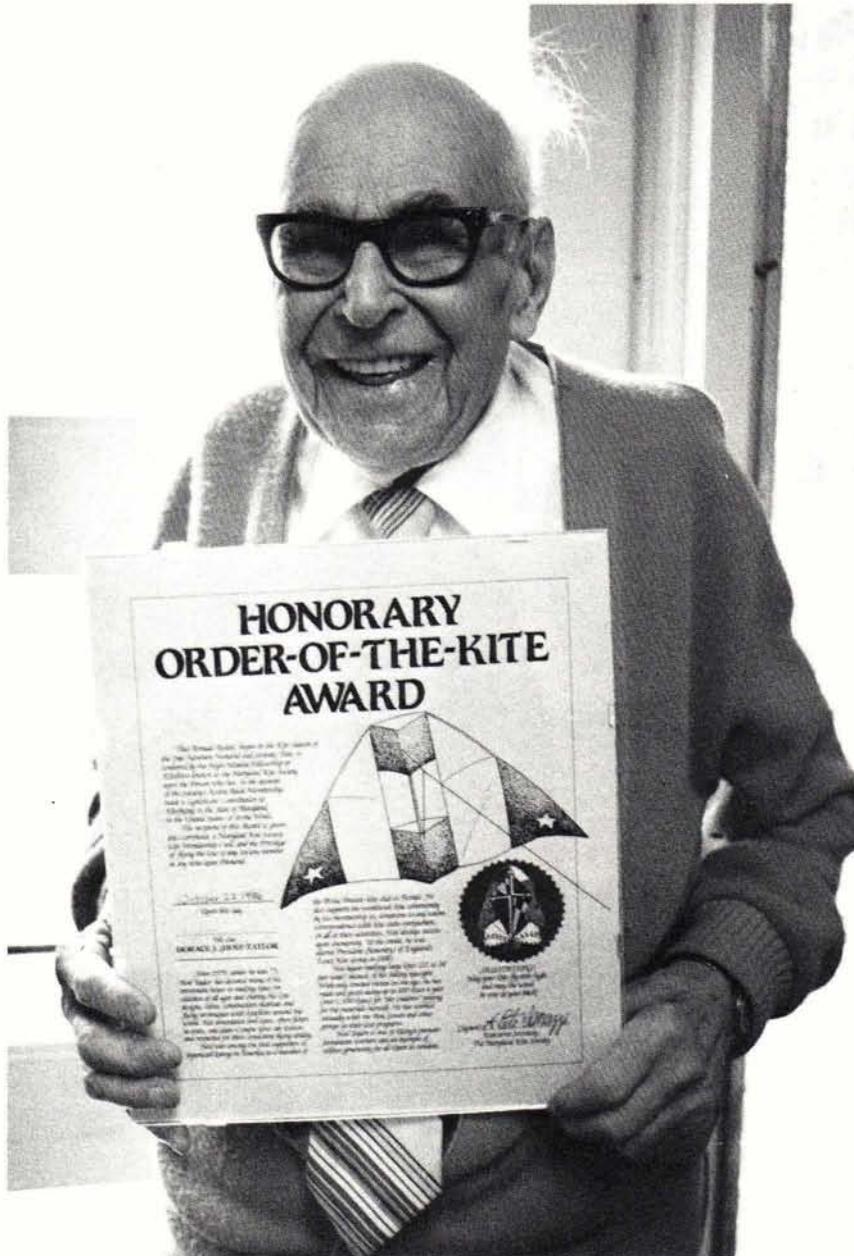
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An Award for Hod Taylor



Hod Taylor shows his pleasure in accepting the Honorary Order-of-the-Kite Award.

Past Recipients of the Honorary Order-of-the-Kite Award

1972 Paul and Irene Garber	1977 Harry C. Sauls
1974 . . . Francis and Gertrude Rogallo	1981 Wyatt Brummitt
1975 Domina C. Jalbert	1983 Ansel Toney
1976 Robert M. Ingraham	1984 Will Yolen

Did you know that the Maryland Kite Society has been performing a valuable and rather grand service to kiting by presenting the Honorary Order-of-the-Kite Award? Unless you are an active local member of the Society, you might not know, so let me explain.

Since it began the Award in 1972, the Society has set rather peculiar standards for the preparation and presentation of this honor.

First, nominees are voted upon at our annual meeting in January. There is never a lack of nominations, nor any great argument or difficult voting on the choice; always, one person seems to stand out as the "right" kiter to be named, whose lifetime achievement seems most due for recognition at the time.

After the decision is made, a citation is written. As the Society's founder, I do this. I research the recipient's contributions to kiting and incorporate an appreciation of them into the citation.

Next, a certificate is commissioned. Each award is designed separately and illustrated by hand in a manner appropriate to the honoree. The certificate is then framed in clear acrylic with a removable backing to allow the presenter to add the date of the salute on the day it is given.

The final step in the process is usually the most difficult: a member of the Society must arrange to present the award in person to the honoree. The logistics and advance planning required to do this sometimes have delayed the actual giving of the Award by as much as a year. Also, normally the presentation is done as a surprise and with some bit of fanfare and photograph-taking.

Afterwards, the occasion is reported in "The Windy Notice," the newsletter of the Maryland Kite Society.

The list of recipients of the Honorary Order-of-the-Kite Award over the years represents some of the most respected names in our sport (*see box*). The latest of the honorees, Hod Taylor, was presented with his Award on October 22, 1986, when my husband Mel and I de-toured to Austin, Minnesota on our return from a personal trip to Oregon.

Hod now lives at the Sacred Heart Hospice in Austin, an attractive, spacious and busy home for people of many years (Hod turned 90 on November 29, 1986). We were delighted to find him in fit condition and high spirits after the hardships of losing his wife in 1984 and breaking his hip in 1986. He was out of the wheelchair and getting around very independently with a walker. Also he had just recently had a cataract operation and a corneal implant that had improved signifi-

cantly the vision in his one seeing eye.

Hod greeted us with a booming voice and sparkling smile. We had invited several local enthusiasts to join us for the occasion, including Jim Ogland, who just recently had begun the process of forming the Minnesota Kite Society. Hod took us to his room, conveniently located next to an outside entrance, so he can go outdoors easily for testing and flying his kites. The room was full of cabinets he had just finished building before we arrived. The new closets and chests of drawers hold all his belongings in a systematic, orderly fashion so that Hod's poor eyesight is less a hindrance to his daily functioning. Neatly accommodated, too, are all his kite paraphernalia, including *Kite Lines* and club newsletters, separately boxed and boldly labeled next to his desk.

Hod was talkative and we enjoyed it, especially listening to the story of his introduction to kiting by Walter (Scotty) Scott in Florida. The two men were bicycling together after breakfast in 1969 when kites came up in the conversation. Hod owned that he had never made a kite—never even had one in his hand! He was only 72 at the time. ("I had lived in the woods in Minnesota," he explained.) That afternoon, Scotty brought over a kite—and Hod got interested—*very* interested.

Hod made his first kite from kraft paper and tape and flew it for Scotty: "We became friends right there." Soon Hod was rounding up all the books about kites he could find at bookstores and libraries. He started out making "every kite I could get a picture of, then I went to my own experimental kites." Besides kites, Hod made equipment for flying them. He showed us a clinometer and told us about his reels for using the heavy line he needs for the big kites he prefers (just so he can see them).

Hod didn't speak about the thousands of kites he has made for youngsters over these years—a kindness that in spite of his self-effacing ways has become well known.

The moment seemed right for it, so Mel pulled the certificate out of the bag and said, "Hod, we have a little something to give you today." I read the words from the certificate aloud, knowing Hod would have trouble reading them.

At the end, I mentioned that many other members of the Maryland Kite Society had wanted to come to see Hod, but were unable to do so at the time, especially Doris Fithian and Leonard Conover, who had nominated him.

Hod obviously was delighted with the Award, and said, "Give my regards to everybody in the Society, everybody in kiting. It means so much to me, even

Text of the Honorary Order-of-the-Kite Award

[Opening common to all the certificates]

This Annual Award, begun in the Kite Season of the Year Nineteen Hundred and Seventy-Two, is conferred by the High-Minded Fellowship of Kitefliers known as the Maryland Kite Society upon the Person who has, in the opinion of the Society's Active Adult Membership, made a Significant Contribution to Kiteflying in the State of Maryland, in the United States, or in the World.

The recipient of this Award is given this Certificate, a Maryland Kite Society Life Membership Card, and the Privilege of flying the kite of any Society member at any time upon Demand.

[Citation for Hod Taylor]

Upon this day, October 22, 1986,
We cite: HORACE J. (HOD) TAYLOR

Since 1969, when he was 72, Hod Taylor has devoted many of his retirement hours to making kites for children of all ages and sharing his kite designs, ideas, construction methods and flying techniques with kitefliers around the world. His innovative bird kites, often flown in train, and delta-Conyne kites are known for their consistent flying ability.

Hod was among the first supporters of organized kiting in America as a member of the Briny Breezes kite club in Florida. He also supports the worldwide kite community by his membership in, donations to and warm correspondence with kite clubs everywhere. In all of these activities, Hod always insists upon anonymity. To his credit, he was elected President (honorary) of England's Essex Kite Group in 1980.

Hod began making large kites (12 to 34 feet wide) because of his failing eyesight. With only limited vision in one eye, he has made and given away up to 100 kites a year (over 1,300 kites) for "the children," paying for the materials himself. He has worked annually with the Boy Scouts and other groups in their kite programs.

Hod Taylor is one of kiting's premier foundation workers and an example of selfless generosity for all kites to emulate.

[Closing common to all the certificates]

SALUTATIONS!

May your kite fly ever high
and may the wind be ever at your back!

(Signed) A. Pete Ianuzzi
Executive Secretary
Maryland Kite Society



Top, Kelley Johnson flies his self-made Taylor box-delta with coaching from Hod himself. Bottom, the group gathers: back, Ralph Larson, Kelley and Joela Johnson; front, Jim Ogland, Hod Taylor, Valerie and Mel Govig.



though I don't deserve it. I will treasure this for the rest of my life. . . Give me a handkerchief, in the second drawer. . ."

It was an appropriate time to have some of Hod's Manischewitz wine. We toasted good health to all. Hod added, "and keep the kites in the air."

After lunch, we had a good time flying and talking and snapping pictures in the large open field behind the home. More than once Hod remarked that he was eager to get back to making kites, now that his room was fit for it.

We left Hod and our friends with reluctance, but with a sense of anticipation for the Minnesota Kite Society, which has auspicious starting strength in the person of Hod Taylor.

—Text and Photographs by Valerie Govig

Tips & Techniques

1 Can Your Line Can Can? Plus, A Linear Amplifier

Larry Hoffman writes from Tokyo, Japan: In the Spring 1986 issue of *Kite Lines* you had an interesting article about the sounds produced by a vibrating kite line ("The Singing Line," by Jacques Durieu). I have recently discovered something you might find of interest.

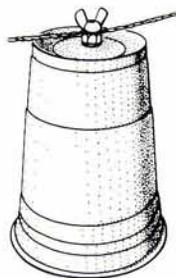
After emptying a can of vegetable soup—I can guarantee other soup cans will work as well—I punched a hole in the top and cut out the bottom. Then I shaped a small hook out of piano wire and secured it to the top of the can with a machine screw and nut.



After lofting your kite, you snare the hook to the line and, by holding the open end of the can to your ear, you can clearly hear the sounds the string makes."

Felix Cartagena of Newark, Delaware, demonstrated his linear ("line-ear") amplifier at the winter weekend kite retreat of the Maryland Kite Society.

Start with a large thin plastic—not foam—cup and a small nylon machine screw, washer, hex nut and wing nut. Burn a small hole in the bottom of the cup with a hot knife. From the inside, pass the screw through the hole and fasten securely with the hex nut and washer, leaving enough threads exposed for the wing nut. Clamp the flying line tightly between the hex nut and the wing nut. Listen.



2 Kubo's Car Kite Carrier (But Will It Hold A Pizza?)

Mel Govig relates: One of my joys on a recent business stopover in Tokyo was meeting Hiroaki Kubo of the Japan Kite Association who served as my host, transport and guide on a kite outing. Although Mr. Kubo spoke little or no English and I spoke even less Japanese, we had a wonderful time flying kites for one glorious weekend. This tip is from Kubo-san:

Most cars on the road today have small

clothing hooks in the back seat roof area. Mr. Kubo uses these hooks and the sun visors of his small Honda as anchor points for an efficient, dry, overhead interior stowing place for lightweight flat kites.

To create your own Kubo rack, you will need some heavy twine (selected for ease of handling, not strength) and two short elastic cords with hooks at each end (called "shock" or "bungee" cords).

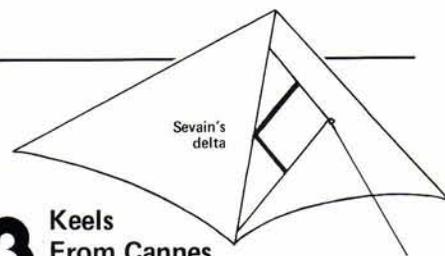
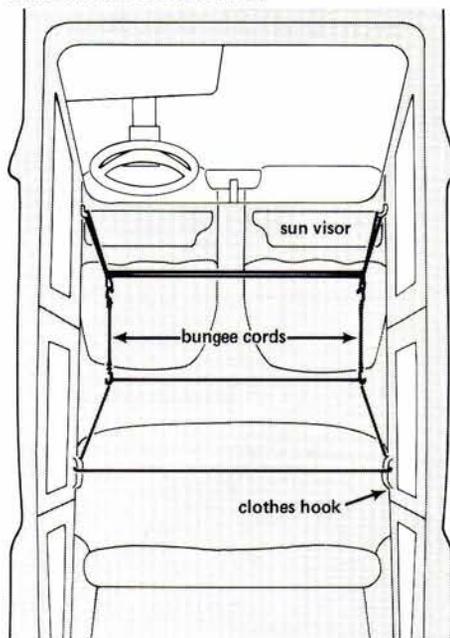
Start by making a loop of twine long enough to reach between the two clothes hooks, but slack enough so that it will hang down 6-12 inches when suspended from the hooks. Make a similar loop of twine for the front of the car and attach it to the sun visor brackets at the corners of the roof.

Into the front loop of twine you tie two small loops about 6-12 inches directly below each visor bracket. These small loops will set the distance from the windshield that you hook the elastic cords. Otherwise, the elastic will slip to the center of the loop and your rack will become two triangles meeting in the center.

Now you hook the bungee cords to the twine, first into the loops in the front, then over the rear twine. You should now have a four-cord rack across the roof of your car's interior with several inches of space between the rack and the roof.

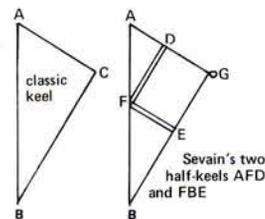
Insert your kites (or other lightweight flat objects) above the cords.

While this system is no substitute for an empty van or station wagon, we think that you will find it a definite asset in a minicar full of kitefliers.



3 Keels From Cannes (Two are Better Than One)

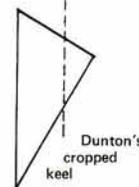
André Sevain sends a suggestion from Cannes, France: I find the classic delta kite keel frustrating because it limits the possibilities of towing points. To avoid this inconvenience, I make two half-keels on my deltas, like this: on the left is a classic one-piece delta keel. On the right are my two half-keels with a two-legged bridle attached to the two points of the keels.



The ring at G (the towing point) can be adjusted up or down, according to the wind range. The two half-keels are stiffened along edges FD and FE by thin strips of bamboo, enclosed within hems.

I have made many deltas using this technique. They fly very well.

Kite Lines would like to add that Alex Dunton of Richmond, Virginia, has a similar—but different—solution to the same problem voiced by Monsieur Sevain: not enough towing points on a classic delta's keel. Alex neatly removes the tip of the keel, reinforces and stiffens the leading edge with a thin stick enclosed in a hem, and attaches a two-legged bridle.

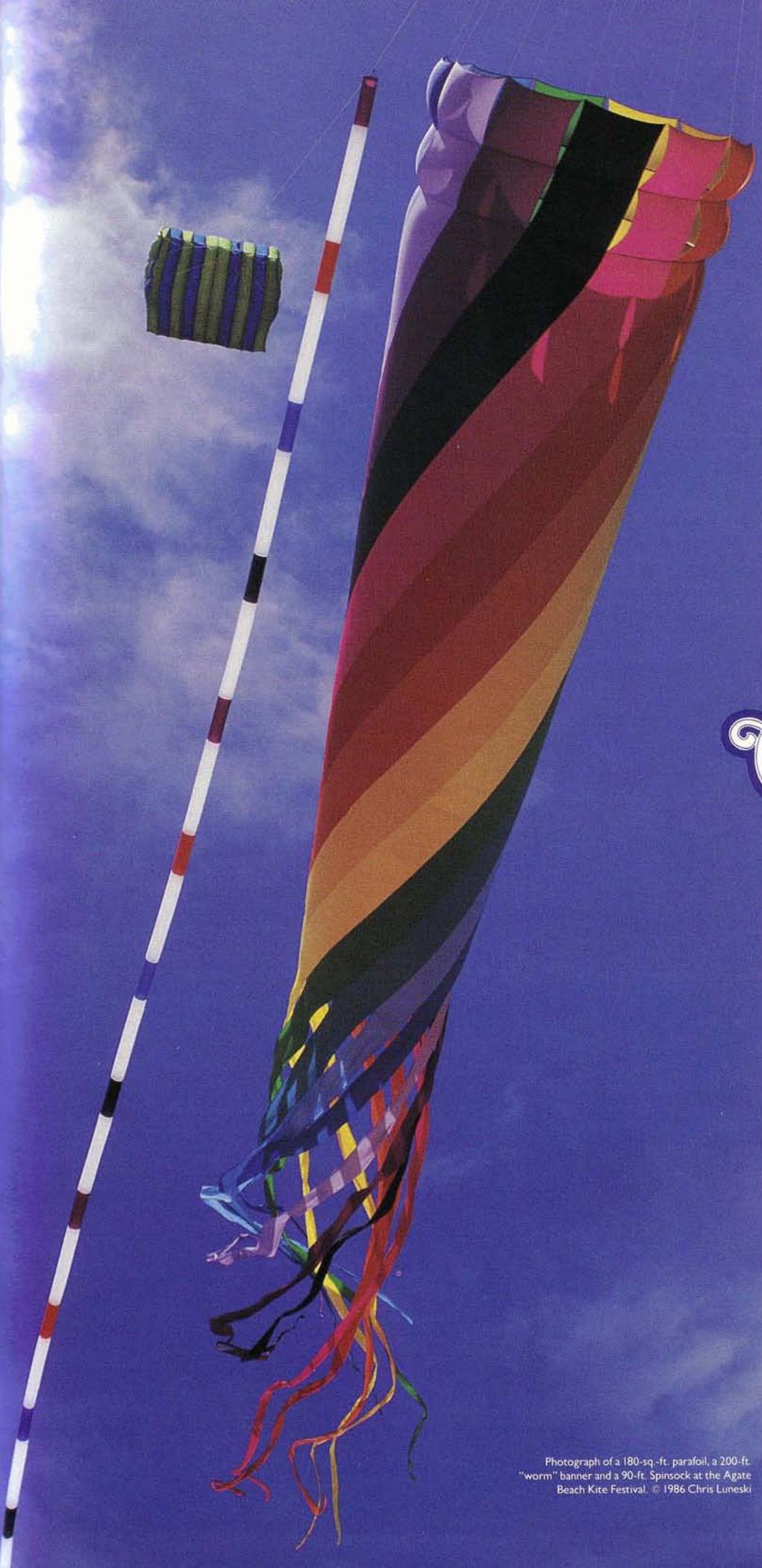


Alex has made many deltas using this technique. They fly very well. ♦

Tips & Techniques is a forum for you to share your favorite tip, hint, trick or technique for making or flying kites.

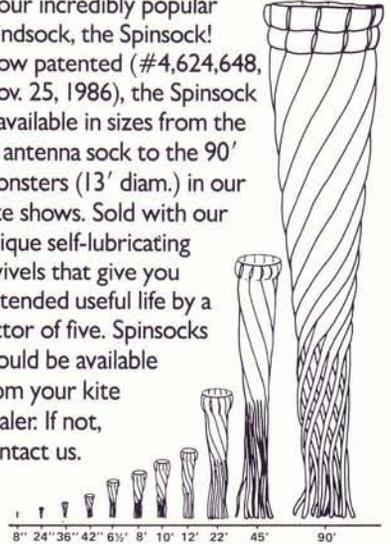
Each published item earns your choice of (1) any book(s) from the *Kite Lines* Bookstore to a value of \$15 or (2) a subscription or extension for 4 issues of *Kite Lines*. And of course, you will also receive recognition for your idea from the worldwide kite community—as a bonus.

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Photograph of a 180-sq.-ft. parafoil, a 200-ft. “worm” banner and a 90-ft. Spinsock at the Agate Beach Kite Festival. © 1986 Chris Luneski

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ST4	Stratoscoop 4	106" x 88"	1050 lb
STV	V Scoop	53" x 45"	175 lb
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In the Wind

A MISCELLANY OF KITE NEWS AND RUMORS

It was an impressive show—the One Sky, One World international kitefly for peace held on October 12, 1986—over 10,000 kites, more than 40,000 spectators, in at least 90 locations in 15 countries. Jane Parker-Ambrose, chief instigator and paper handler, has sent out thanks, certificates of participation, press releases, tallies and a financial report. Expenses exceeded income by \$10,900 and Jane needs donations to the cause. Suggestions are invited for the second annual event, to occur on October 11, 1987, again “in the spirit of world friendship” and “in recognition of our responsibility, above all, to protect the planet on which we love to live (and fly kites).” Interested kites should write to Jane, c/o Sky Scrapers Kites, P.O. Box 11149, Denver, CO 80211.

Rick and Eileen Kinnaird are the proud parents of Katherine Marie, born October 28, 1986. Katy is expected to be part of the next generation of kitefliers. She has already flown her first kite, at the age of 38 minutes, establishing her as the youngest person ever to have flown a kite. The model was a clear Mylar Eddy made by Bill Bigge. It could not be photographed, but “we have witnesses to prove it,” says Eileen.

When a police helicopter torpedoed Rome physics professor Carlo Sallustro's kite, he leaped up and down and made a gesture that indicates to southern Italians the infidelity of their wives. The two pilots landed in the park, ran up to Sallustro and demanded his identification. A patrol car took Sallustro to the station—followed by more than 100 people from the park who supported him.—Quoted from the San Fernando (California) *Daily News*, February 12, 1987.

Lincoln City, Oregon, through its Chamber of Commerce, in September 1986 announced that it is laying claim to the title “Kite Capital of the World.” The city's location midway between the North Pole and the equator is said to assure reliable winds for kiteflying. “The 45th parallel is where all the wind is created,” according to Kip Ward, local politico—

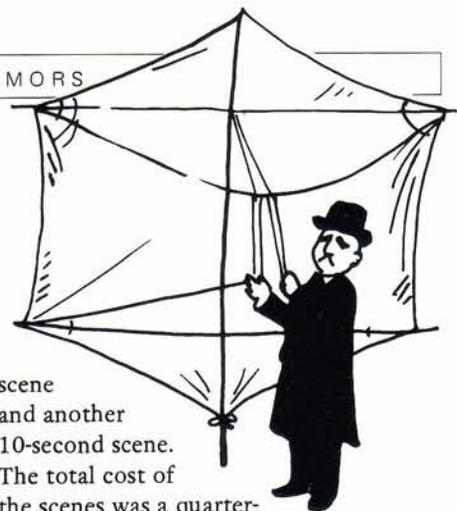
and no slouch at producing wind himself. The city is issuing a challenge to other prospective “capitals” and has asked *Kite Lines* for assistance. We made up a list of seven quantitative factors and two qualitative factors to be considered in selecting a “capital.” Weighting of the factors and weighing of the candidates should be done by an impartial but knowledgeable committee.

We think as many as 50 cities could reasonably be considered for the title, and we know of two others besides Lincoln City that have actually made a claim as “Kite Capital of the World.” We hope city fathers during this year will claim and counterclaim with wild abandon, so the committee will have some real work to do later. We suggest that the announcement of the “winner” be made on February 25, 1988, Will Yolen's birthday. Yolen, the late founder of the International Kitefliers Association, was noted for the combined whimsy and bombast of his press releases.

Kites in the flicks: • “Peggy Sue Got Married,” a recent box office hit, shows Peggy Sue returning to her high school days where a teen scientist friend makes kites. Two scenes include them, one a Cody-like fantasy in white, the other a yellow nylon Conyne. Both are very incidental to the plot, but at least they are more interesting than your standard Charlie Brown. Happens that they were made for the film by our friend Leland Toy.

• “A Walk on the Moon,” due to be released sometime this spring, is a true kite movie, one in which kites are a main story theme. A set of five handsome Codys was made for the film by Nick Morse and Alice Weve, then sent to Mexico, accompanied by Bill Tyrrell and Pete Ianuzzi, for the shooting. The story line revolves around a lad in the Peace Corps in Latin America who decides to impress a girl by building a kite lifting system. The original aluminum struts had to be covered with bamboo and the white nylon painted and dirtied to look like scrap material.

Kites NOT in the flicks: • “Radio Days,” the latest Woody Allen movie, was to have shown Marconi's first radio signal being received by kite. An authentic Baden-Powell kite was rush-built by Mel Govig and used in one two-second



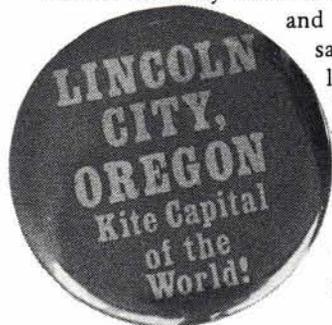
scene and another 10-second scene. The total cost of the scenes was a quarter-million dollars (of which the kite cost less than 1%), but both ended up on the cutting room floor. Not one scene shows the kite or even mentions Marconi.

Another triumph for the Mama-sans! At the AKA convention in Newport, Rhode Island, October 1986, the women's rokkaku kite team made a clean, definitive kill of the men's team, the Rainbow Warriors, by cutting their line. Skye Morrison of Canada and other key haulers showed particular finesse. The women seemed stronger than ever, even though they had just lost their coach, Fran Gramkowski, who defected to the men's team.

The battle was well described by Corey Jensen, one of the louder members of the Rainbow Warriors, at the microphone. In an unexpected lapse into fairness and objectivity, he pronounced the Mama-sans the victors. Later in the convention, your editor publicly praised Jensen as a “nice guy,” besmirching his hard-earned reputation as kiting's leading bum. Jensen demanded a retraction. Let it be known: Corey Jensen is not a nice guy. He is a wonderful guy.

Four new Mama-sans were added to the team in 1986: Lois DeBolt, Martha Keyser, Jan Wheeler and, as an Honorary Mama-san, Hazel Ingraham.

Pete Ianuzzi has announced his intention to make a serious assault on the duration record for kiteflying. The current record stands at 180 hours 17 minutes, set by the Edmonds Community College kite team in August 1982. Pete is going for a 10-day period, starting on September 17, 1987, at Ocean City, Maryland, to be completed on September 26, in conjunction with the Sunfest kite festival. Pete is recruiting his team now. Hardy, experienced kitefliers only need apply. Write to A. Pete Ianuzzi at 1908 Old Frederick Road, Catonsville, MD 21228. ◇



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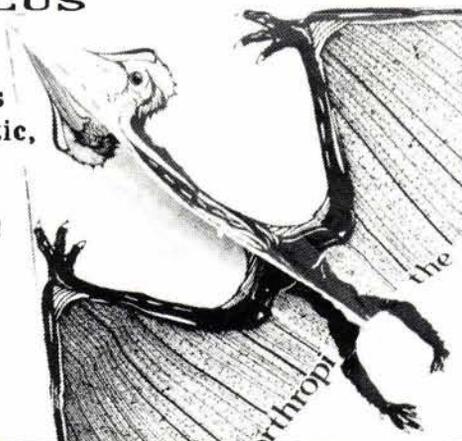
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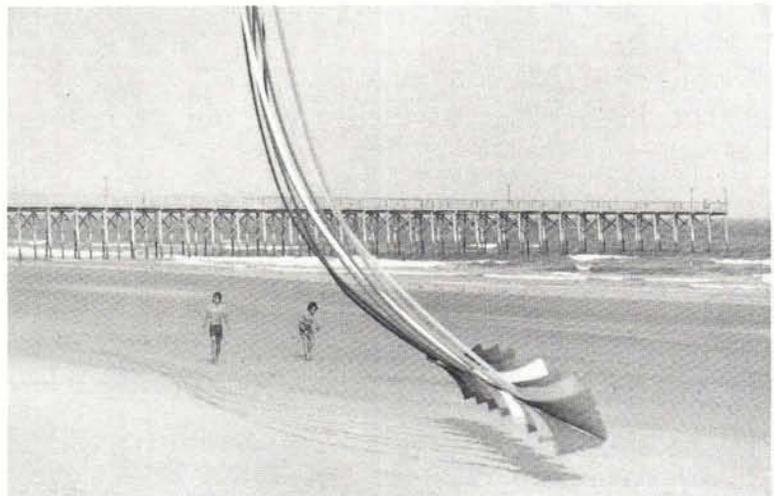
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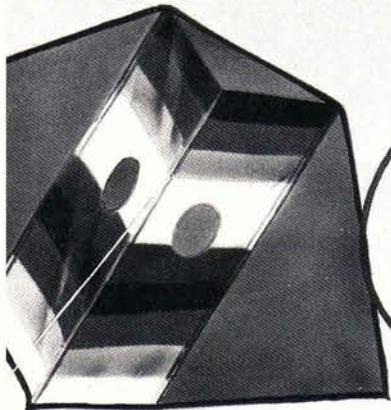
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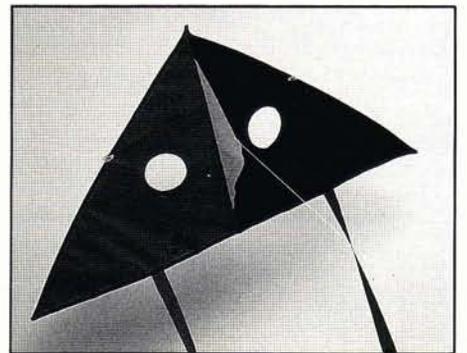
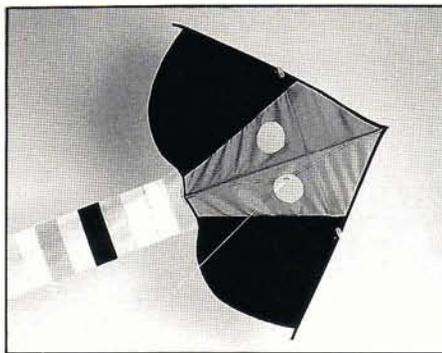
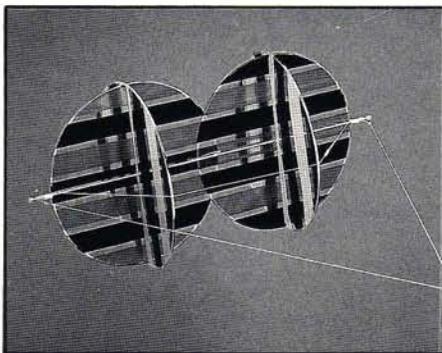
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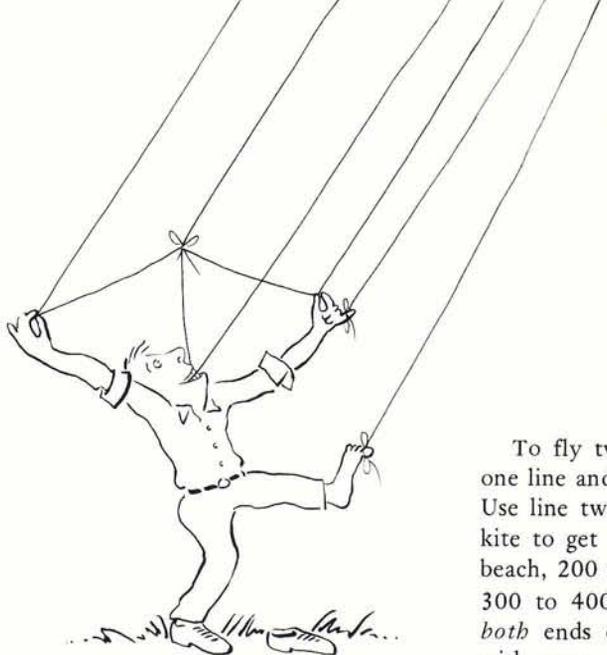
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How Many Kites Can A Person Fly at Once?

By Lewis Cretsinger
Illustrated by George Peters



The question in the headline is akin to "How many angels can dance on the head of a pin?" It is more secular and finite than the famous old conundrum, but both questions boggle the mind. Kitefliers in contortions form a vision at least as bizarre as angels on pointe.

The Rev. Lewis Cretsinger, perhaps inspired by the angels, tried a series of ways to fly multiple kites and has flown up to six at once. Here are his suggestions:

To fly two kites from one hand, use one line and fly at both ends of the line. Use line twice as long as needed for one kite to get up to a good wind. (On the beach, 200 feet will do; other places need 300 to 400 feet.) Put a snap swivel on both ends of the line. Mark the middle with a pen. Attach one kite and fly it all the way out on all the line. Snap on the second kite and feed it line (simultaneously bringing in the first kite) until it is in good wind. If you keep the mark five or six feet out from your hand, the kites can't hit each other.

To maneuver the kites somewhat, take the line in both hands and spread your hands far apart.

To fly three kites at once, put a ring or a third snap swivel on the line in its middle.

To fly four or more kites at once, different techniques are possible. You can connect more kites at the center of the U formation. Or fly one set of two kites and have friends hand you second and third sets of two kites each.

You will find that swivels are no longer helpful at this level. Just use line. You will be grabbing lines all the time, fiddling with them. Slack any line of a kite that's having problems. If two lines cross, pull on the top line. It's difficult if a kite drops, but the tangles are not as bad as you'd expect. You might use your teeth sometimes, or your feet. Be sure to wear gloves! It's fun! It's beautiful! ◇

Questions? Write to Lewis Cretsinger, 2 Evans Street, Warminster, PA 18974.

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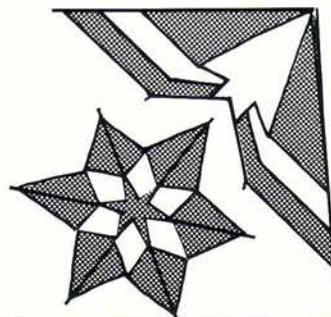
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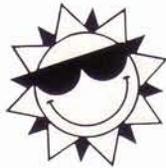
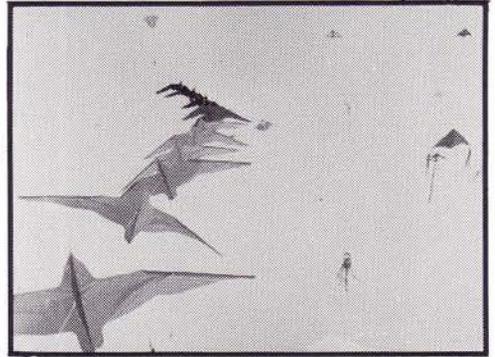
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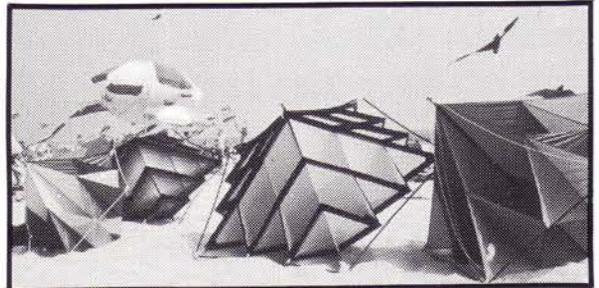
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HATTER CREEK, IDAHO—The kite danced against the sky, dipping and soaring with the March wind.

"Can I hold it?" asked Greta, my 5-year-old daughter.

"Oh, okay. Here, grab the string. Have you got it?"

"Yes. . .No."

"What? No! Don't let go. . .oh no. . ."

As the kite went into a dive, I sprinted across the hay field, trying to grab the string that skittered over the ground just out of reach. After about 100 yards, the chase ended.

I looked back. Greta, who has been trying her best these days to be big, was biting a quivering lower lip.

I looked at the kite, soaring toward the eastern horizon, headed for Lester Pool's house or beyond.

"Can you get it, Dad?" Greta sobbed, still trying to be big.

"Yes," I declared. After all, I thought, as the kite skipped farther and farther away, this isn't the first time the March wind has betrayed a little kid.

Back in the late 1950s, the kids around Hillcrest Drive in Fridley, Minnesota (that's a northern suburb of Minneapolis), attended the equivalent of an aerospace short course each spring in the fields behind Billy Schilling's house. Contrary to the popular saying, March never came in like a lamb. It seemed to roar for 31 days straight in Minnesota.

And that was good for us kids. We'd take our kites, usually the 10-cent store-bought kind, a couple of peanut butter and jelly sandwiches and a quart of Kool-Aid to the launch site, strip out a couple hundred yards of string, lay back in the grass and watch the dog fights overhead.

One time, Billy Schilling's kite got tangled with Kevin Knudsen's kite and

before long, Billy and Kevin were tangling. It was one of the better fights that spring.

The only kite fights I ever had were with oak trees. There are a lot of oak trees in Minnesota; and in March they stand as naked snares against the horizon. An oak tree can reach out and grab a kite, like Charlotte tending her web, and there's no second chance. You just have to cut the string and let the tree have its prey.

In the summer, of course, when boys

best idea since we zipped Gary Hanson into the jungle hammock.

"Let's make a kite," Kevin said.

"A big one," I agreed.

"Yeah," said Billy.

So we made a kite about seven feet high and six feet wide. Kevin wanted to write dirty words on it, but Billy said we wouldn't be able to fly it anywhere that his mother couldn't see.

On launch day, about March 15, we tied the big kite to a ball of string, hooked a tail of rags to its aft and sent Billy running toward Columbia Heights, another Minneapolis suburb. The kite climbed like it wanted to be store-bought. A better design even the Tonka people couldn't have made.

And then, as always happens, just when Billy, Kevin and I were ready to eat our peanut butter and jelly sandwiches, the string broke. For the rest of that spring, we rode on the school bus and looked at our kite snagged in the oak tree behind Scott Jordal's house.

Almost 30 years later, I was determined to protect Greta from such sadness. Luckily, Lester Pool was looking out his window about the time Greta's kite settled into a bush near the mailbox down by the creek. We hopped in the car and found the kite. I climbed the bush, just like it was a giant oak, reached out and brought a smile back to my daughter's face.

The kite was ready to fly again. And since March came in like a lion this year, I keep telling Greta the best fun is yet to come. . .when the lion roars. "But this time, don't let go of the string." ◇

David Johnson is the "roving regional reporter" for the Lewiston Morning Tribune, Lewiston, ID and Clarkston, WA. (Story is from the issue of March 10, 1986.) He lives in Hatter Creek, which if you don't find it on a map is near Princeton, which if you don't find it on a map is near Potlach, which if you don't find it on a map is near Moscow—Idaho, that is.

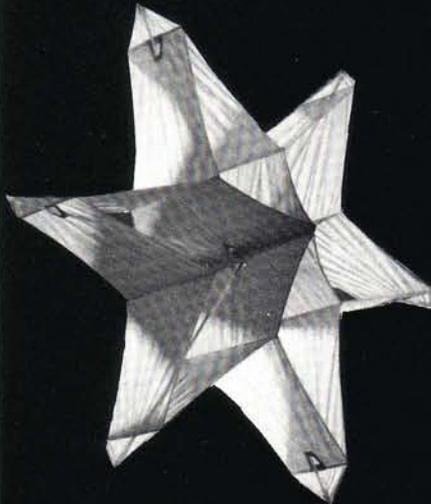


think about baseball and fishing, the trees grow leaves that fill in around the captured kites and nobody thinks much about it. Come winter, however, when the oaks stand naked again, it's common to see at least one kite skeleton shivering in every tree; the oaks took no prisoners and never buried the dead.

I think it was in March of 1957 when Billy, Kevin and I found some strips of wall molding in the garage and got the

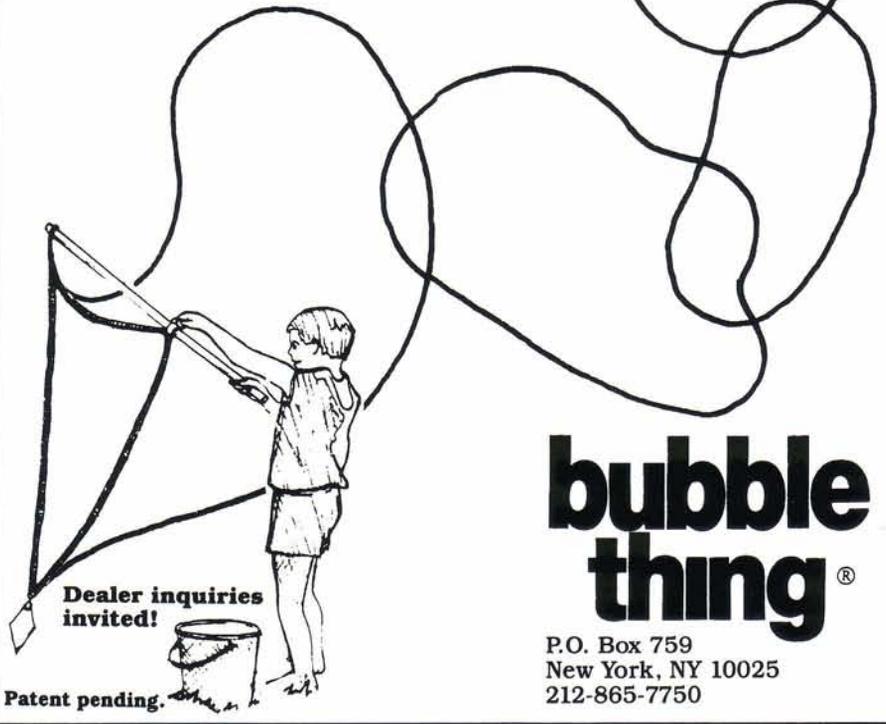


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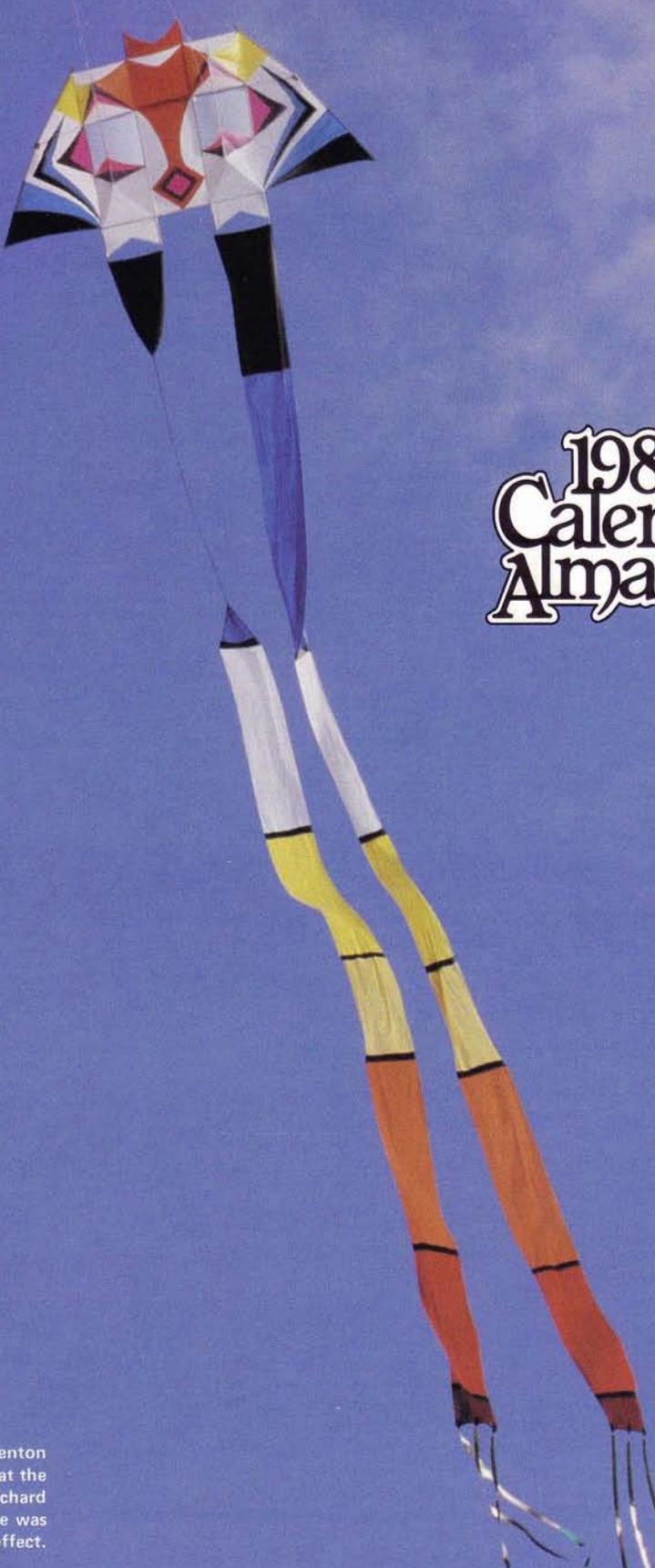
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1987 Kite Calendar & Almanac

A big, bold delta-Conyne rises over Brenton Point in Newport, Rhode Island, USA, at the AKA convention 1986. Made by Richard Hayde of St. Louis, Missouri, the kite was given tails only for their spectacular effect.





All Calendar Photographs
by Valerie Govig at the
American Kitefliers Association festival,
Newport, Rhode Island, October 4-5, 1986

An arresting Edo-style kite in a quilt-like pattern of nylon draws admirers. Its maker, Scott R. Skinner of Monument, Colorado, in pink Skye Morrison jacket, talks with Bill Lockhart of Lubbock, Texas, in red jumpsuit.

The Kite Festival Longevity Honor Roll

Hamamatsu Kite Festival, Japan
Early May
Approximately 412 years old

Shirone Giant Kite Festival, Japan
Early June
Approximately 310 years old

Hoshubana Giant Kite Festival, Japan
Early May
Approximately 258 years old

Sagamihara Giant Kite Festival, Japan
Early May
Approximately 158 years old

Zama Giant Kite Festival, Japan
Early May
Approximately 90 years old

Royal Thai Kite Festival, Bangkok, Thailand
March
Approximately 82 years old

Jacksonville Kite Tournament, Florida, USA
Saturday in mid-March
62 years old

Kiwanis Kite Tournament, Sac City, Iowa, USA
Sunday in late April
62 years old

Zilker Kite Contest, Austin, Texas, USA
Second Sunday in March
60 years old

Carmel Kite Festival, California, USA
First Saturday in May
56 years old

Ocean Beach Kite Festival, California, USA
Early Saturday in March
40 years old

National Kite Flying Contest, Seoul, Korea
February
34 years old

San Antonio Kite Fair, Texas, USA
March
26 years old

Copenhagen Kite Festival, Denmark
First Saturday in May
23 years old

Maryland Kite Festival, Maryland, USA
Saturday in late April
21 years old

Oahu Kite Flying Festival, Hawaii, USA
March
21 years old

Smithsonian Kite Festival, Washington, DC, USA
Last Saturday in March
21 years old

*A kite festival's age is set on the basis of
number of years since first occurrence minus
any cancellations or interruptions.*

AS BIG AS IT IS, the 1987 Kite Calendar as published here is by no means exhaustive. Many events were beyond our reach at the time we prepared the Calendar. Others are sure to occur on short notice during the year. And then there are those informal flies that many kite clubs hold regularly (monthly, for example) that are simply too numerous to fit within the scope of this Calendar.

Even though we verified as many kite events as possible, we received no response to many of our inquiries. So if *you* are in charge of a kite event (festival, contest, fly, competition, meeting, convention—call it what you will), *please* tell us about it.

Yes, we expect to publish the Kite Calendar annually. Now that we have hundreds of kite events on computer, we can update the data easily and we can respond at any time to requests for special information. We will continue to provide not only a *magazine* for you, but also *service* to you as a kiteflier and friend.

Will you enjoy the kite events in this Calendar? We give no guarantees. Long-established kite festivals are apt to be larger and better organized. On the other hand, new events may have freshness and enthusiasm to make up for the lack of experience. There is—thank goodness—no standardized format for a kite festival.

If you are new to the subject, we suggest you start by reading the 12-page article, "New American Tradition: Kite Festivals! and How to Build One of Your Own," in the Spring-Summer 1978 *Kite Lines*. If you can't lay your hands on a copy, the article is available from us in reprint for \$3, postpaid. If you need additional help, please ask.

You see, it was a kite festival, back in 1961, that started me off on a lifetime flight that hasn't ended yet. I hope the events listed in this Calendar bring some of that kite festival euphoria to you.

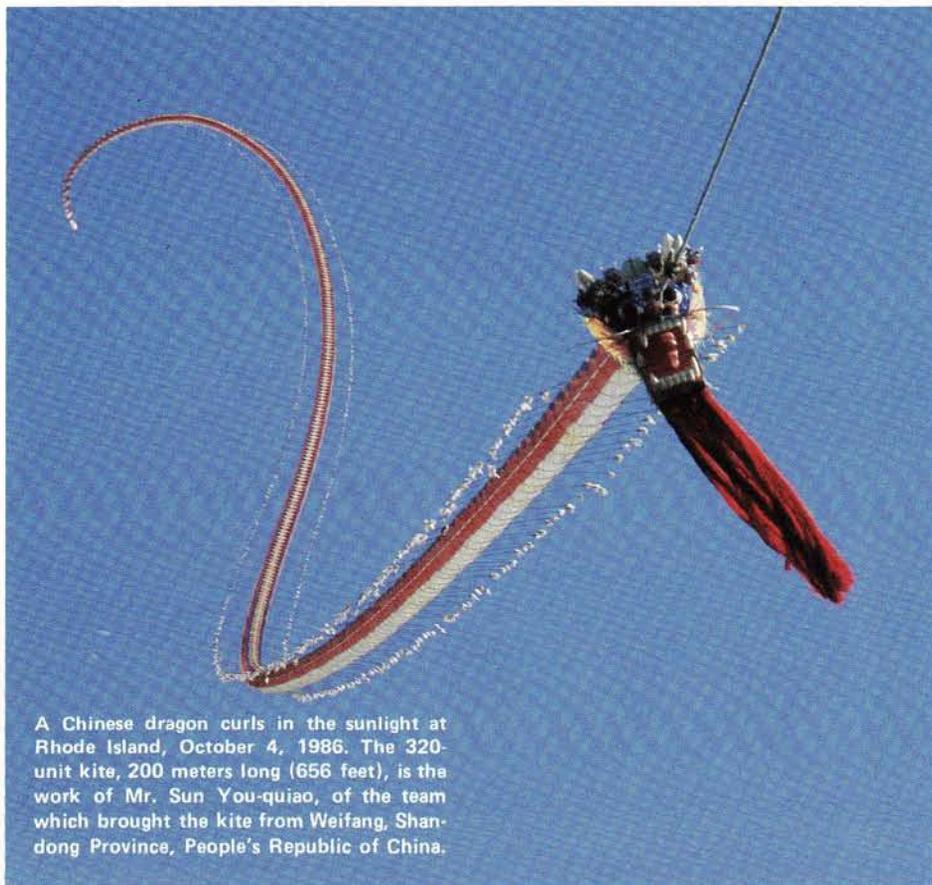
—Valerie Govig

NOTES: FUTURE FLIES

Spring 1988: Australian Bicentennial World Kiting Festival, Launceston, Tasmania, Australia. Contact: Ross A. Walters, COMPLAN, PO Box 391, Launceston, Tasmania 7250.

July 1988: Celebration of the 100th Anniversary of the Invention of Kite Aerial Photography, Labruguiere, France. Contact: Michel Dusariez, Kite Aerial Photography Worldwide Association, 14 avenue Capitaine Piret, 1150 Bruxelles, Belgium.

1992: World Wide Kite Games / Holland, to coincide with the Olympic Games. Contact: Edo van Tetterode, PO Box 466, 2040-AL Zandvoort, The Netherlands. ◇



A Chinese dragon curls in the sunlight at Rhode Island, October 4, 1986. The 320-unit kite, 200 meters long (656 feet), is the work of Mr. Sun You-quiao, of the team which brought the kite from Weifang, Shandong Province, People's Republic of China.

JANUARY

S	M	T	W	T	F	S
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Jan. 1: Protest the Bowls Kitefly, 14th annual, Golden Gardens Park, Seattle, WA, USA. Contact: Washington Kitefliers Association, 200 Second Ave. North, Seattle, WA 98109.

Jan. 17-18: Singapore Kite Festival, 7th annual. Contact: Singapore Tourist Promotion Board, 131 Tudor Court, Tanglin Road, Singapore 1024.

Jan. 25: Poruria City Kite Day, 5th annual, Winea Drive, Poruria, New Zealand. Contact: Bob Maysom, Secretary, New Zealand Kitefliers Association, 9 Kenef Rd., Paremata, Wellington, New Zealand.

Jan. 25: Lower Hutt Early Days Festival, 4th annual, Hutt River Bank, Avalon, New Zealand. Contact: Bob Maysom, Secretary, New Zealand Kitefliers Association, 9 Kenef Rd., Paremata, Wellington, New Zealand.

Jan. 30-Feb. 1: Kite Retreat Weekend, Great Oak Landing, Chesterwood, MD, USA. Fee \$100. Includes meals plus \$10 for materials. Non-competitive workshop weekend. Contact: Tim Thompson, Maryland Kite Society, 239 N. Lakewood Ave., Baltimore, MD 21224, tel: 301-776-4509.

Jan. 31: St. Paul Winter Carnival, Harriet Island, St. Paul, MN, USA. Contact: Jim Oglund, Minnesota Kite Society, PO Box 776, Wayzata, MN 55391, tel: 612-929-7876.

FEBRUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

Feb. 6-8: NZKA National Convention, 3rd annual, Hawkes Bay, Napier, New Zealand. Contact: James White, PO Box 665, Napier, New Zealand.

Feb. 6-8: NZKA Annual Festival, 3rd annual, Colenso College, Napier, New Zealand. Contact: Bob Maysom, Secretary, New Zealand Kitefliers Association, 9 Kenef Rd., Paremata, Wellington, New Zealand.

Feb. 8: National Kite Flying Contest, 34th annual, Yongin Farm Land, Korea. Contact: Roe Yoo-sang or Roe Song-do, 182 Youngdong, Seodaeum-nu, Seoul.

Feb. 8: Radio Hauraki Auckland Festival, 14th annual, Auckland Domain, Auckland, New Zealand. Contact: Radio Hauraki, Private Bag, Auckland, New Zealand.

Feb. 8: Napier Festival of the Winds, 3rd annual, Andersons Park, Napier, New Zealand. Contact: James White, PO Box 665, Napier, New Zealand.

Feb. 13-15: Festival International de Chiringas de Lajas, 13th annual, Lajas Valley, Pinar del Rio, Cuba. Fee: \$1 per kite. Awards: trophies and medals. Contact: Israel Rodriguez, HC 02, Box 17362, Lajas, PR 00667.

Feb. 14: Valentine's Day, USA.

Feb. 14-15: Presidents' Day Kite Fly, 2nd annual, on the beach, Highway 1, Seaside, CA, USA. Contact: Corey Jensen or Steve Kihm, Windborne Kites, 585 Cannery Row, Monterey, CA 93940, tel: 408-373-7422.

Feb. 16: Presidents' Day, USA.

Feb. 16-18: Thailand International Kite Festival, Pattaya Beach Resort, Pattaya, Thailand. Traditional competition between the male chula and female pakpao kites for Royal trophies and team awards. Contact: Ron Spaulding, The Hugel Co., 8th Floor Mahatru Plaza, 888/88 Ploenchit Road, Bangkok 10500, tel: 253-6842.

Mar. 2: Clean Monday, Greece. Traditional day for kiteflying (southern islands of Ios).

Mar. 6-8: Kite Retreat Weekend, 4th annual, Fort Warden State Park, Port Townsend, WA, USA. Fee \$65 for room, meals and materials. Contact: Jack Van Gilder, Washington Kitefliers Association, 1925 Walnut Ave. SW, Seattle, WA 98116, tel: 206-938-0550.

Mar. 7: Kite Festival and Parade, 40th annual, Ocean Beach Elementary School, San Diego, CA, USA. Contact: Mike Morrow, Ocean Beach Recreation Council, 4726 Santa Monica Blvd., San Diego, CA 92107.

Mar. 8: Zilker Kite Contest, 60th annual, Zilker Park, Austin, TX, USA. Contact: Parks and Recreation Dept., PO Box 1088, Austin, TX 78767, tel: 512-442-5947.

Mar. 8: Festival of the Kite, 13th annual, south of the pier, Redondo Beach, CA, USA. Contact: Lisa Joy, Sunshine Kite Co., 233-B Fisherman's Wharf, Redondo Beach, CA 90277, tel: 213-372-0308.

Mar. 8: Kite Crazy, 12th annual, Royal Park, Melbourne, Australia. Contact: Helen Bushell, Australian Kite Association, 10 Elm Grove, East Keew, Victoria 3102, tel: 859-1673.

Mar. 8: Kite Flying Contest, 7th annual, Glenwood Hotel, Route 611, Delaware Water Gap, PA, USA. Contact: Walter Bishop, Delaware Water Gap Chamber of Commerce, PO Box 144, Delaware Water Gap, PA 18327, tel: 717-476-0444.

Mar. 13-15: Oahu Kite Festival, 21st annual, Queen Kapiolani Park, Waikiki, Oahu, HI, USA. Fee \$3 to enter competition. Contact: Douglas Mizuno, Dept. of Parks and Recreation, 650 S. King St., Honolulu, HI 96813, tel: 808-841-9100.

Mar. 14: Jacksonville Kite Tournament, 62nd annual, Hammock Playgroup, Jacksonville, FL, USA. Contact: Jacksonville Dept. of Recreation, 851 N. Market St., Jacksonville, FL 32202, tel: 904-630-3577.

Mar. 15: Gunston Hall Kite Festival, Gunston Hall, Lorton, VA, USA. Fee \$3 for adults. Contact: Mary L. Allen, Special Events, Gunston Hall Plantation, Lorton, VA 22079, tel: 703-592-9220.

Mar. 21: San Antonio Kite Fly, 26th annual, Brackenridge Park, San Antonio, TX, USA. Contact: Phyllis Alvarez, Dept. of Parks and Recreation, 950 E. Hildebrand, San Antonio, TX 78212, tel: 512-821-3115.

Mar. 21: Stone Mountain Endurance Contest, 18th annual, Stone Mountain Park, Stone Mountain, GA, USA. Fee \$4 parking. Contact: Charlie Henderson, Peach State Kite Club, 3044, PO Box 811, Decatur, GA 30033, tel: 404-292-0649.

Mar. 22: Spring Kite Festival, 14th annual, on the beach, north of the pier, Santa Monica, CA, USA. Contact: Gloria Lugo, Let's Fly A Kite, Fisherman's Village, 13755 Fiji Way, Marina del Rey, CA 90292, tel: 213-822-2561.

Mar. 22: Kite Performance Contest, 5th annual, Speigleville Park, Waco, TX, USA. Competition for stunt kites, controlled and formation flying. Contact: Donna Bates, Parks and Recreation, PO Box 1370, Waco, TX 76702, tel: 817-752-1860.

Mar. 28: Smithsonian Kite Festival, 21st annual, Washington National Mall grounds, Washington, DC, USA. Trophies and ribbons in many categories. Contact: Joan Cole, Smithsonian Residents Associates Program, 1100 Jefferson Drive SW, Washington, DC 20560, tel: 202-357-3030.

Mar. 48: All City Kite Show, 3rd annual, Franklin Park, Spokane, WA, USA. Contact: Don Roise, Parks and Recreation Dept., 4th Floor, City Hall, Spokane, WA 99201, tel: 509-456-2620.

Mar. 28-29: Southwest Louisiana Kite Contest, 2nd annual. Practice on the 28th, competition on the 29th. Contact: Gene Dolan, 2401 Fifth Ave., Lake Charles, LA 70601, tel: 1188-478-1468.

Mar. 25: Lower Hutt Early Days Festival, 4th annual, Hutt River Bank, Avalon, New Zealand. Contact: Bob Maysom, Secretary, New Zealand Kitefliers Association, 9 Kenef Rd., Paremata, Wellington, New Zealand.

Mar. 30-Feb. 1: Kite Retreat Weekend, Great Oak Landing, Chesterwood, MD, USA. Fee \$100. Includes meals plus \$10 for materials. Non-competitive workshop weekend. Contact: Tim Thompson, Maryland Kite Society, 239 N. Lakewood Ave., Baltimore, MD 21224, tel: 301-776-4509.

Jan. 31: St. Paul Winter Carnival, Harriet Island, St. Paul, MN, USA. Contact: Jim Oglund, Minnesota Kite Society, PO Box 776, Wayzata, MN 55391, tel: 612-929-7876.

APRIL

S	M	T	W	T	F	S
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Apr. 1-10: Weifang International Kite Festival, 5th annual, Weifang City, Shandong Province, China. Contact: Sheng Lin, Arts and Crafts Institute, 42 Shenglin Street, Weifang City, Shandong Province, People's Republic of China.

Apr. 4: Kite Day, 2nd annual, Faust Court Park, St. Louis, MO, USA. Contact: Gloria Rogers, Parks Dept., tel: 314-889-2086.

Apr. 4-5: International Convention of Kite Aerial Photographers, Esplanade Parmentier, Berck Plage, France. Contact: Michel Dusartre, Kite Aerial Photography Worldwide Association, 14 avenue Capitaine Piret, 1150 Bruxelles, Belgium.

Apr. 5: Ben Franklin Kite Contest, 12th annual, Takoma Recreation Center, Takoma Park, MD, USA. Contact: Belle Ziegler, Parks and Recreation Dept., 7500 Maple Ave., Takoma Park, MD 20912, tel: 301-270-4048.

Apr. 5: Carlisle Kite Festival, 3rd annual, Dickinson College, Harrisburg Pike, Carlisle, PA, USA. Includes rikkaku challenge and kitemaking of the field (materials supplied). Contact: Kevin Shannon, 809 Factory St., Carlisle, PA 17013, tel: 717-243-7913.

Apr. 5: April Fool's Kite Fly, Core Creek Park, Langhorne, PA, USA. Contact: Roger Cheung, The Meadow House, 520 N. Pennsylvania Ave., Morrisville, PA 19067, tel: 215-736-8253.

Apr. 5: Kite Fly, 9th annual, Carl Smith Park, Tulsa, OK, USA. Contact: John Couch, Parks & Recreation Dept., 200 Civic Center, Tulsa, OK 74103, tel: 918-492-7851.

Apr. 11: Maryland Kite Festival, 21st annual, Sandy Point State Park, Annapolis, MD, USA. Contact: Pete Lanzetta, Maryland Kite Society, 1908 Old Frederick Road, Catonsville, MD 21228, tel: 301-744-4754.

Apr. 11: Broadmeadow Kite Day, 11th annual, Broadmeadow School athletic field, Middletown, DE, USA. Contact: Broadmeadow School, 500 S. Broad St., Middletown, DE 19709, tel: 302-378-9879.

Apr. 11: Kite Flying Festival, Griffiths Friday State Park, Copalis Beach, WA, USA. Contact: Gene Woodwick, Chamber of Commerce, PO Box 562, Copalis Beach, WA 98535, tel: 206-289-4552.

Apr. 11-13: Thailand International Kite Festival, Pattaya Beach Resort, Pattaya, Thailand. Traditional competition between the male chula and female pakpao kites for Royal trophies and team awards. Contact: Ron Spaulding, The Hugel Co., 8th Floor Mahatru Plaza, 888/88 Ploenchit Road, Bangkok 10500, tel: 253-6842.

Apr. 17: Good Friday, Bermuda. Traditional kiteflying day.

Apr. 17: Great Delaware Kite Festival, 18th annual, Cape Henlopen State Park, Lewes, DE, USA. Contact: Barbara Jerrell, The Kite Shop, 49 Rehoboth Ave., Rehoboth Beach, DE 19971, tel: 302-227-1616.

Apr. 18: Hit the Beach Kite Fly, 7th annual, on the beach at the end of Rehoboth Avenue, Rehoboth Beach, DE, USA. Complimentary breakfast. Contact: Barbara Jerrell, The Kite Shop, 49 Rehoboth Avenue, Rehoboth Beach, DE 19971, tel: 302-227-1616.

Apr. 18: Go Fly A Kite!, 3rd annual, Ann Morrison Park, Boise, ID, USA. Contact: Tom Gervaise, Boise Park System, PO Box 500, Boise, ID 83701, tel: 208-384-4240.

Apr. 19: Easter.

Apr. 19-20: Blackheath Easter Festival, 7th annual, on Blackheath Common, London, England. Competition includes British Rikkaku Challenge. Contact: Tony Cartwright, Blackheath Kite Association, 78 Dongola Rd., Tottenham, London N17 6EE, tel: 01-808-1280.

Apr. 25: Fort Worth Kite Fly, 2nd annual, Kollie Hill Park, Fort Worth, TX, USA. Contact: Lois Card, Fort Worth Kitefliers Association, 2320 Yeager St., Fort Worth, TX 76112, tel: 817-451-6171.

Apr. 25: Bloomsburg University Kite Festival, upper campus, Bloomsburg University, Bloomsburg, PA, USA. Contact: Joe Vaughan, Grandmaster Kites, PO Box 276, Millville, PA 18631, tel: 717-759-3167.

Apr. 25: Gunpowder Kite Festival, Gunpowder Falls State Park, Ebenezer Road, Chase, MD, USA. Contact: George Fosh, USA. Fee \$3 to enter competition. Contact: Douglas Mizuno, Dept. of Parks and Recreation, 650 S. King St., Honolulu, HI 96813, tel: 808-841-9100.

Apr. 26: Kite Fly and Frisbee Flieg, 8th annual, Lubbock, TX, USA. Fee \$1. Contact: Gary King, Buffalo Beano Company, 801 University, Fort Worth, TX 79401, tel: 806-762-8553.

Apr. 26: Kite Flying Derby, 5th annual, Concord Park, Knoxville, TN, USA. Contact: Ola Cole, Recreation Dept., 400 Main Ave., Knoxville, TN 37902, tel: 615-521-2346.

Apr. 26: Kite Day, 4th annual, Prairie View Park, Kalamazoo, MI, USA. Fee \$2 per vehicle. Contact: John D. Cosby, Parks and Recreation, 2900 Lake St., Kalamazoo, MI 49001, tel: 616-383-8778.

Apr. 26: Kite Carnival, 3rd annual, Elgin B. Robertson Park, Dallas, TX, USA. Fee \$1. Contact: Barbara Schriever, Samuell Recreation Center, 6200 E. Grand Ave., Dallas, TX 75223, tel: 214-823-8790.

MAY

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May 1: Festa Degli Aquiloni, 6th annual, Villa Pamphili, Roma, Italy. Awards include trip for 2 to Paris, France. Contact: Oliviero Olivieri, Associazione Italiana Aquilonisti, via Dandolo 19/a, I-00153 Roma, Italy.

May 1-4: Coloriamo I Cieli, 7th annual, Castiglione del Lago, Perugia, Italy. Contact: Oliviero Olivieri, Associazione Italiana Aquilonisti, via Dandolo 19/a, I-00153 Roma, Italy.

May 2: Bucks County Kite Day, 9th annual, Core Creek Park, Langhorne, PA, USA. Fee \$2 per vehicle (no charge for kitefliers). Contact: Marc Miller, Dept. of Parks and Recreation, 901 E. Bridgetown Pike, Langhorne, PA 19047, tel: 215-737-0571.

May 2: Carmel Kite Festival, 56th annual, on the beach, Carmel, CA, USA. Contact: Recreation Dept., PO Box CC, Carmel, CA 93921, tel: 408-626-1255.

May 2: Kite Carnival & Balloon Derby, 8th annual, Bethany Center, Horseheads, NY, USA. Kites and hot air balloons. Contact: Linda Miller at tel: 607-739-8711.

May 2: Sky Circus, 4th annual, Grant Park, Chicago, IL, USA. Contact: Charlie Sotich, Chicagoland Sky Liners, 3851 W. 62nd Place, Chicago, IL 60629, tel: 312-735-1353.

Apr. 4: Kite Day, 2nd annual, Faust Court Park, St. Louis, MO, USA. Contact: Gloria Rogers, Parks Dept., tel: 314-889-2086.

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Apr. 26: Kite Day Kite Festival, Salmon Creek Beach, Bodega Bay, CA, USA. Contact: Charlie Henderson, Peach State Kite Club, 3044, PO Box 811, Decatur, GA 30033, tel: 404-292-0649.

May 10: Mother's Day, USA.

May 10: Kite Day, 13th annual, William Hawryluk Park, Edmonton, Alberta, Canada. Contact: Virginia Newell, Kites & Other Delights, 314 West Mall, Edmonton, Alberta T5T 4J2, tel: 403-481-7299.

May 10: Ligoniere Kite Festival, Ligoniere, PA, USA. Contact: Lynn Labbee, Ligoniere Kite Club, Pine Drive, New Florence, PA 15944, tel: 412-238-7078.

May 10: Brighton Kite Festival, 8th annual, North Sheppote Valley, Brighton, England. Contact: Gregor Locke, Brighton Kite Flyers, 53 Row Lock, Shoreham-by-Sea, West Sussex BN4 6RB.

May 10: Ash Lawn Kite Day, 8th annual, at Ash Lawn, the Home of James Monroe, Charlottesville, VA, USA. Contact: Linda Goodwin, Route 6, Box 36, Charlottesville, VA 22901, tel: 804-293-9539.

May 10-11: Spring Kite Festival, 4th annual, D River Wildlife, Lincoln City, OR, USA. Contact: Catch the Wind, 266 S.E. Hwy. 101, Lincoln City, OR 97367, tel: 800-227-7878.

May 16: Kids & Kites, Families & Flights, 3rd annual, Pioneer Airport, Oshkosh, WI, USA. Contact: Chuck Larsen, EAA Aviation Foundation, Wittman Airfield, Oshkosh, WI 54903, tel: 414-426-4800.

May 16: Mendocino's One and Only Kite Festival, 10th annual, Headlands, overlooking the ocean, Mendocino, CA, USA. Contact: Bob Rosenfeld, The Sky's No Limit, PO Box 407, Mendocino, CA 95460, tel: 707-937-4633.

May 17: Pacific Rim Kite Festival, 12th annual, Vanier Park, Vancouver, British Columbia, Canada. Contact: Dave Tuttle, British Columbia Kitefliers Association, PO Box 35653 Station E, Vancouver, BC V6M 4G9, tel: 604-261-5425.

May 17: Delaware County Kite Fly, 7th annual, Rose Tree Park, Media, PA, USA. Contact: Terry Smith, Department of Parks and Recreation, 1671 N. Providence Rd., Media, PA 19063, tel: 215-365-4564.

May 17: WRSI Kitefly, 3rd annual, Veteran's Field, Greenfield, MA, USA. Contact: Zoltan or Dorothea Stroh, World On A String, 12 Bridge St., Northampton, MA 01060, tel: 413-586-6141.

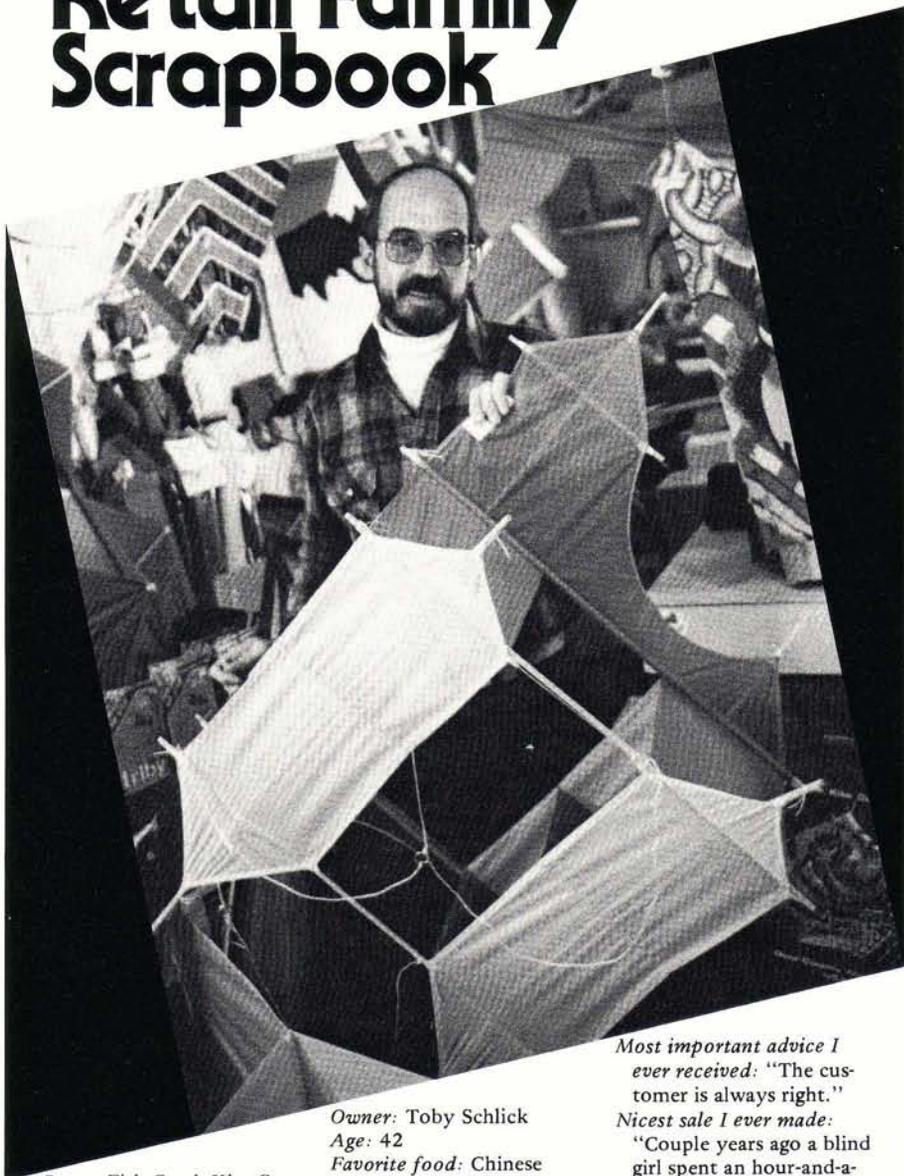
May 17: Cliff Bokman Memorial Kite Fly, Fort McHenry National Historic Park, Baltimore, MD, USA. Contact: Bill Rutiser, Maryland Kite Society, 8412 Towncrest Court, Gaithersburg MD 20877, tel: 301-330-0658.

May 18: Touch the Sky, 3rd annual, Ottawa, Ontario, Canada. Contact: Miriam Fry, CBC Radio, PO Box 3290 Station C, Ottawa, Ontario K1Y 1E4.

May 23: Memorial Day Kite Festival, Salmon Creek beach, Bodega Bay, CA, USA. Contact: Harbor Kites, PO Box 811, Bodega Bay, CA 94923, tel: 707-875-3777.

May 23-24: Rockaway Beach Kite Festival, at the wayside, Rockaway Beach, OR, USA. Contact: The Kite Shop, PO Box 517, Rockaway, OR 97136, tel: 503-355-8088.

Our Retail Family Scrapbook

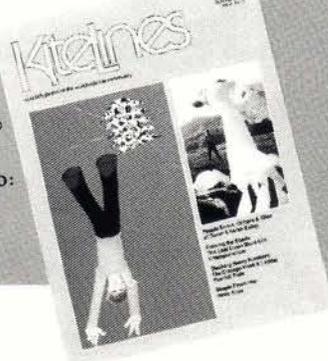


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Kite Lines:** 10

Owner: Toby Schlick
Age: 42
Favorite food: Chinese
Last book read: *Yeager: An
Autobiography* by Chuck
Yeager and Leo Janos
Last kite book read: "Re-
read Clive Hart's *Kites:
An Historical Survey*"
Favorite flying spot: "I'm
spoiled—by a 30-acre golf
range next to the shop."
Latest promotional effort:
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afford."

**Most important advice I
ever received:** "The cus-
tomer is always right."
Nicest sale I ever made:
"Couple years ago a blind
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all the kite shapes and
appliques. After she flew
the kite, she came back
to tell me about it."
**Best fringe benefit of the
business:** "I get to try all
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through your support of

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for Peace.

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kites were flown above 40,000
spectators around the world.

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| New York, NY | Bonn |
| Honolulu, HA | Kiel |
| Colorado Springs, CO | St. Peter Reich |
| Ordway, CO | Parmund |
| Denver, CO | Oberhausen |
| Aspen, CO | Holland |
| Boulder, CO | Amsterdam |
| Telluride, CO | Halder |
| Garnett, KS | Alsbay |
| Anderson, IN | Den Haag |
| Burdess, IN | Horen |
| Sharpville, IN | Italy |
| Lincoln City, OR | Cervia |
| Phoenix, AZ | Ferrara |
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| Milwaukee, WI | Denmark |
| Madison, WI | Arhus |
| Morro Bay, CA | Nykobing |
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| San Francisco, CA | Madrid |
| Monterey, CA | Canada |
| Santa Monica, CA (2) | St. Thomas, Ontario |
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| Framingham, MA | England |
| North Hampden, MA | Blackhearth |
| Hyannisport, MA | Hartfordshire |
| Orleans, MA | Shrewsbury, |
| Provincetown, MA | Schropshire |
| Middlebury, VT | St. Alban's, |
| Newport, RI | Noman'sland |
| Grand Rapids, OH | Norwich |
| Cleveland, OH | Brighton |
| Bellevue, WA | Bristol |
| Seattle, WA | Walsall, West |
| Hector, MN | Midland |
| Phoenix, AZ | Ireland |
| Baltimore, MD | Dublin |
| Perth-Amboy, NJ | New Zealand |
| Fort Worth, TX | Paremata, Wellington |
| Boca Grande, FL | Japan |
| Jacksonville, FL | Tokyo |
| Key West, FL | China |
| Boise, ID | Weifang, Shangdong |
| France | Yantai, Shangdong |
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Kites fly from a hill in Marienfelde's Freizeit Park, only 300 meters from the Berlin wall.



BERLIN



KITES ABOVE

THE WALL



Text and Photographs by
JACQUES FISSIER



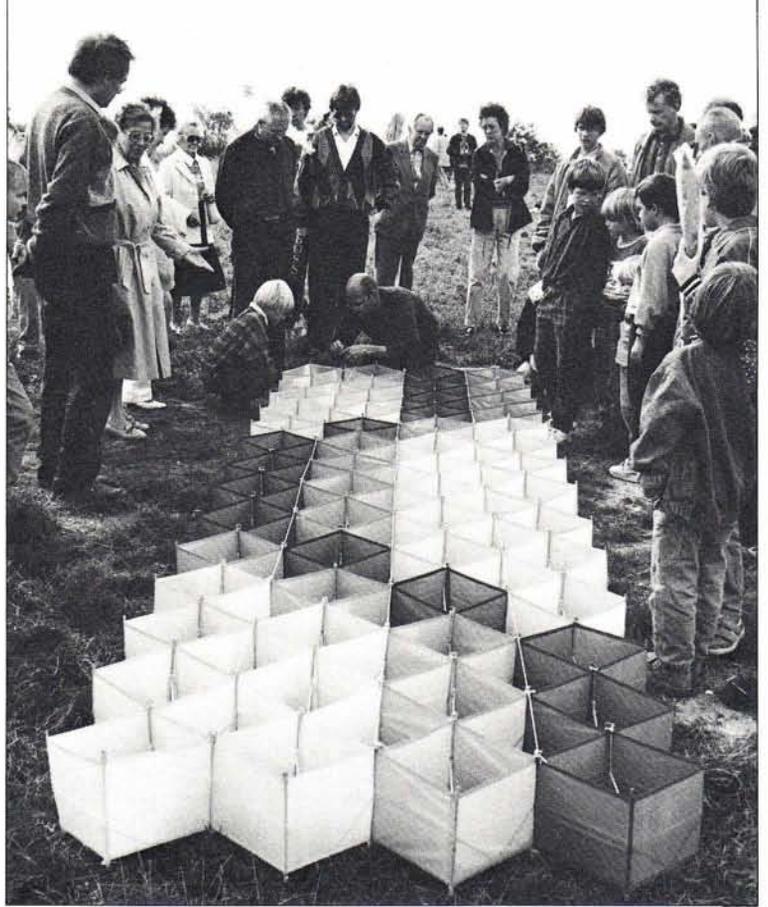
Never before have kites demonstrated their philosophical value with such impact! At the end of September, 1986, thanks to Michael Steltzer, Andrea Bosche and Chris Sandy, with participation from the Kite Club of Germany, the Berlin Kite Club, and the aid of the Kopenicker Bank, the Third International [German] Kite Festival was held in Berlin. At the same time, the First German National Stunt Kite Championships took place. The occasion confirmed the importance of the kite in this great city of a divided country.

By way of a preamble, perhaps it is appropriate to make a short historical recollection, which may help show the importance of the kite in Berlin.

At the end of the European part of the Second World War, in April 1945, Soviet troops reached the capital of the Third Reich. Following the capitulation of Germany and the Potsdam Conference, the city of Berlin was divided into four sectors under the occupation of the victorious powers: the United States, Great Britain, France and the Soviet Union. In 1948, there was a two-month



From above clockwise:
 a Brunhild-like figure on a rokkaku kite
 by Alfons of Berlin; an expansible box kite
 (Ohashi style) by Jørgen Møller-Hansen of
 Denmark; Till Krapp with one of his kites;
 in the background, radomes at
 Tempelhof Airport.



blockade; in 1953, a popular uprising in East Berlin; in 1958, an unreasonable Soviet ultimatum and the withdrawal of western forces from Berlin. Construction on the wall began August 13, 1961.

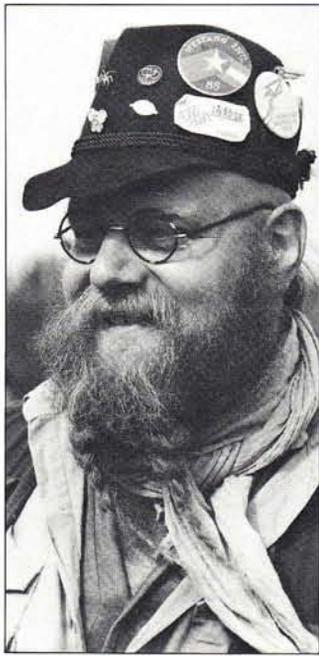
Meanwhile, despite this "wall of shame," Germans by the thousands have crossed from east to west. Despite the surveillance of the *vopos*, not a month passes that a fugitive does not attempt the terrible crossing of the mine fields. Imagine, then, kites in Berlin! Kites high in the sky, above the wall—imagine their impact on the spirit!

For this festival, Michael Steltzer had reserved a hill in Marienfelde's Freizet Park, near Tempelhof Airport, and only 300 meters from the wall! Whether the location was simple chance or deliberate choice, how could one not rejoice to see

hundreds of kites in the Berlin sky, kites whose freedom was limited (by the length of their line), much like the limited freedom of the citizens of East Berlin?

Among the members present from the Kite Club of Germany, Till Krapp, from Melsungen, clearly saw two kites flying in the east, on the other side of the wall. "We have some friends from the other side," he said, "and they knew that we would be in West Berlin for this festival. They are with us in spirit. One day perhaps they will be able to fly their kites with us!" Till is the chief technician of the German club. An engineer of precision machinery, he measures his kites down to the millimeter.

As a way of getting out and breathing clean air, Hans-Peter Böhme, a toxicologist in Berlin, flies his "Gebauchte Variante"



From left: a "flexible airplane" kite by Gerhard Böttcher; the well-traveled and double-bearded Klaus Siering of Berlin; a ghost kite by Till Krapp; children reaching for candy being dropped from kites by the Drachen Club Deutschland.



(flare variation), a large serpent with a 50-meter tail. He flies it as a protest against all the smoke in the sky.

Let us not forget Klaus Siering, with his beard in two pigtails. This native East German came to the west several years ago and for him the Berlin Kite Festival is very important. "Ingenious!" he says of the kites, "but I don't like plastic kites bought in a supermarket. I would like to make a Chinese centipede, a real kite!"

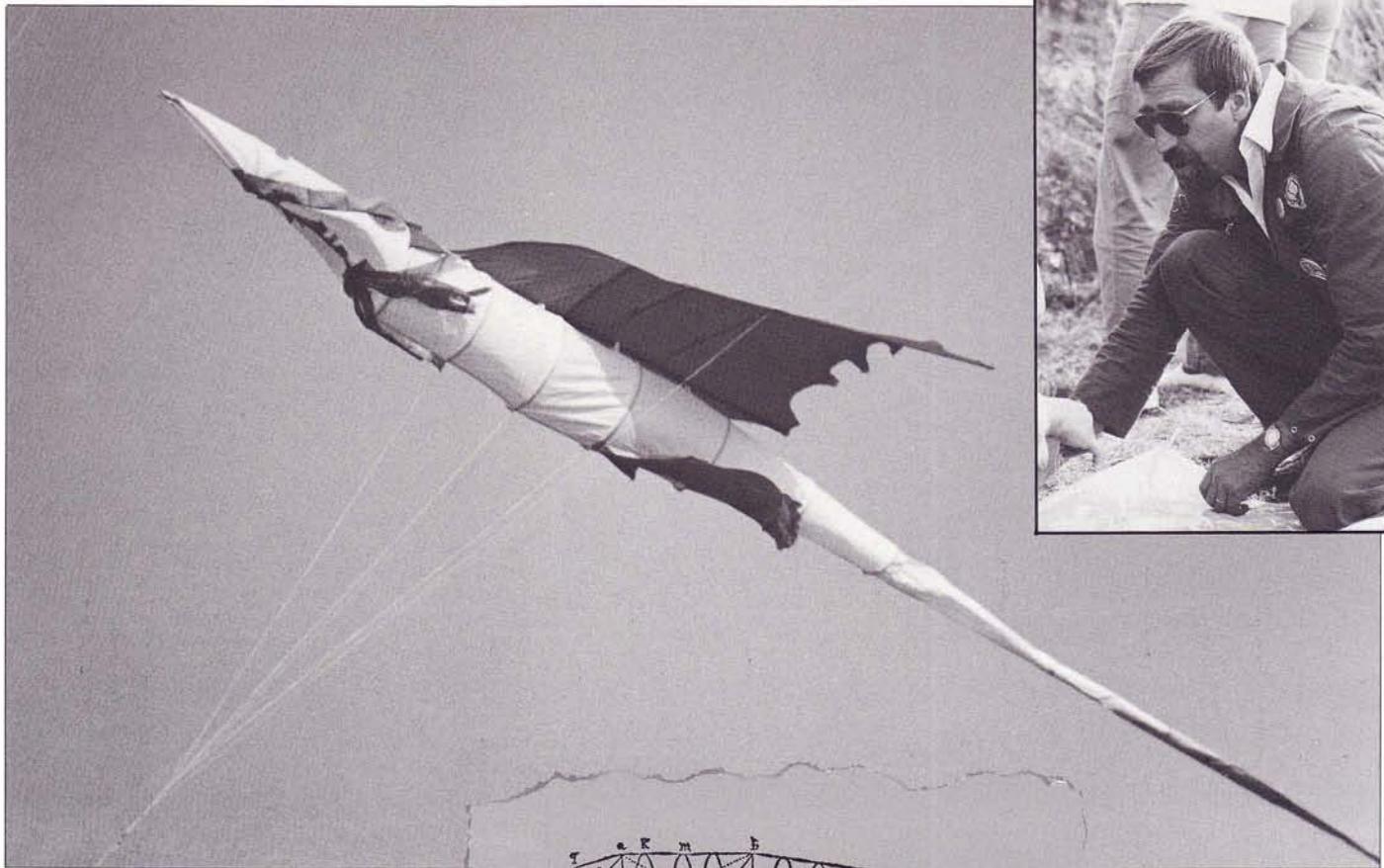
Let us also mention the artistic geometries of Wolfgang Schimmelpfennig of Hamburg, Peter Malinski of Bremen and Alfons, a phenomenon of Berlin who is known by only one name.

And then there was Gerhard Böttcher of Berlin, a young man of 68 years, who has been making "flexible airplanes" for half a century.

An estimated 10,000 people attended this festival, hundreds helped with it, scores participated actively—entire families—an encouraging sign for the organizers.

In the center of all these people, deeply engrossed in "kites above the wall," is Hans Snoek from Bremen. Numerous Berliners and kitefliers have their attention drawn to an "unidentified flying object." Is it some sort of monstrous machine from another planet? Or perhaps a prehistoric bird? A long white body, red moustache, blue wings—a flying fish? No, it is a kite made by Hans Snoek.

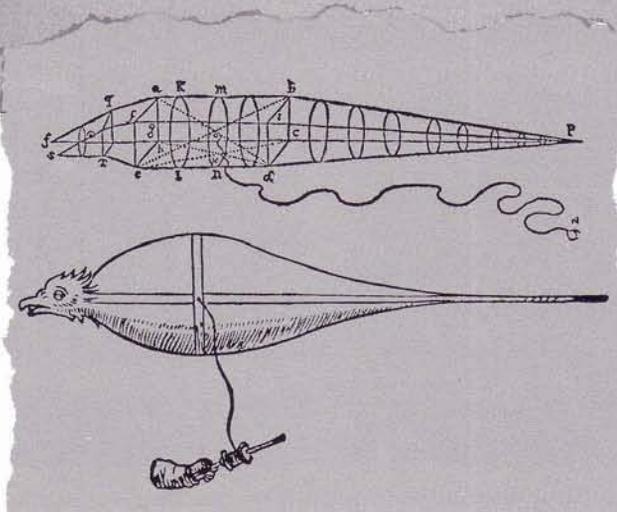
With his red jumpsuit (the uniform of the Kite Club of Germany), Hans has the appearance of a jet pilot. However, behind his smile and precise gestures seems to lie a great nostalgia for the past. In fact, this unique kiteflier discovered the plans



in a very old book by Daniel Schwenter: *Deliciae Physico-Mathematicae*, a treatise which dates from 1636!

On pages 472 and 474 appear some very revealing drawings of Schwenter's obsession: a "flying" apparatus with a carcass whose similarity to an airplane is provocative, to say the least. Yet not a sign of wings. His imagination has allowed Hans to recreate an important piece of civilization's cultural history. Thanks to his energy and his love for kites, Hans is taking his part in the worldwide kite renaissance.

As for Berlin, above the wall was another part of the renaissance in which kites have played a considerable part, this time in the joining of two great separated families. ◇



Top, the kite of Hans Snoek, recreated from an ancient text by Daniel Schwenter; inset right, Hans assembling his kite; inset left, two plates from the Schwenter work; below left, striking graphics on a flare kite by Wolfgang Schimmelpfennig; below, stunt kites, a high point of the festival, pulling fliers off the ground and across the grass, pulling too the attention of spectators.



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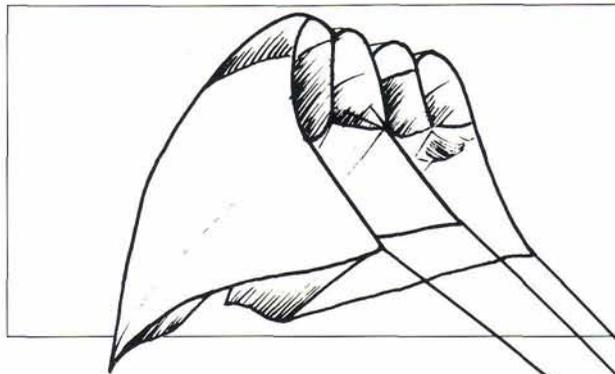

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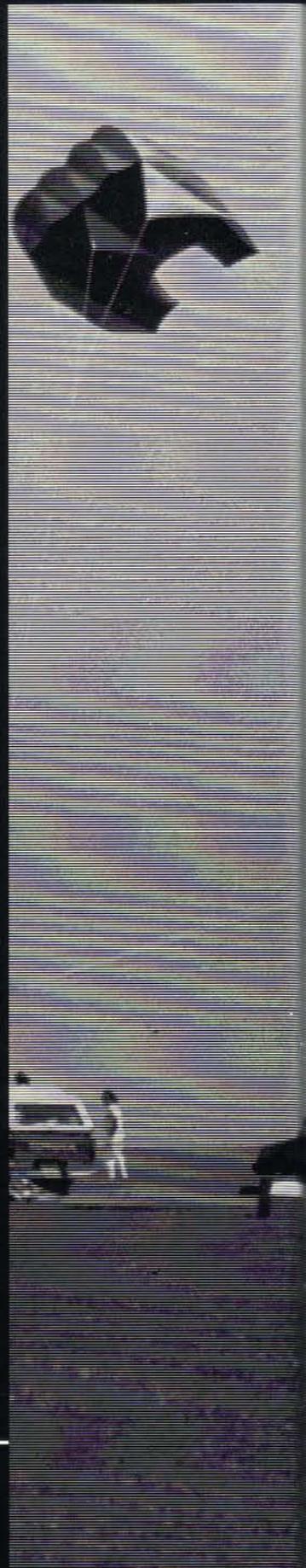
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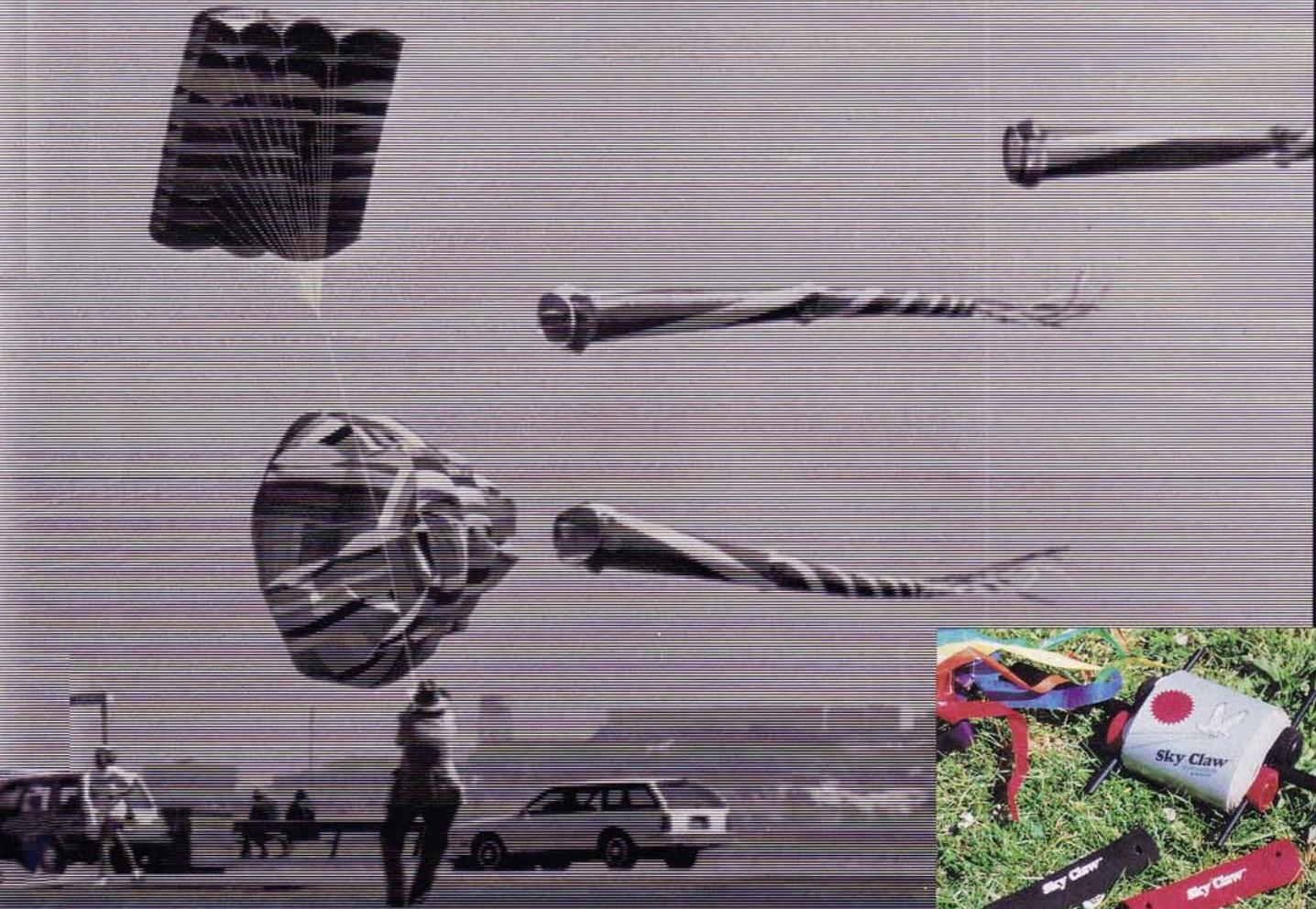
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THAI KITES: ANCIENT TRADITION, PERENNIAL EXCITEMENT

Text and Drawings by Ron Spaulding

Finished Drawings by Sakorn Vongvavjit

Research and Assistance by Siddhijai Solasachinda and John Hoskin

Photographs by Luca Invernizzi Tettoni

When the southwest monsoon is beginning to stir the leaves of Thailand's flame trees, many elderly grandparents, not to mention their grandchildren, lift their eyes to the sky, anticipating the excitement of the kiteflying season.

For Thais, kiteflying is not just a casual attempt to see how high a craft can soar into the sky. It is an ancient sport that stretches back to the very birth of the nation. It involves everyone from kings to commoners. It is dignified by a time-honored heritage of skills in kitemaking and flying that include long-established rules and regulations for competition. It is Thailand's national pastime. And it is the most sophisticated form of competitive kiteflying in the world.

Kiteflying as a sport has been popular in Thailand since the reign of King Ramkamaeng of the Sukhothai period, some 700 years ago. There is also evidence that King Rama II (1809-1824) enjoyed kite fighting more or less in its present-day form. The King used to match his

pentagonal male kite, called a *chula*, against a courtier's female kite, called a *pakpao*, on the Pramain Grounds beside the royal palace, the same area from which kites are flown today.

The big annual competition between the *chulas* and *pakpaos* is what traditional Thai kiteflying is all about. In the past, contests spanned a two-month period during which games were held every afternoon during March and April, when the warm southern trade winds are at their best.

Today few people can afford to take that much time off work to go kiteflying. Accordingly, the annual contest for the coveted King's Cup has been shortened, and now runs usually for the month of March. Dates and duration can vary, however, and the precise schedule is set each year by the organizers.

Although their scheduling has been abbreviated from past practice, the competitions remain true to tradition in every other respect. The venue is Sanam Luang, the oval-shaped public area adjacent to



Opposite page, an early 1900s mural decorates a wall of the Thai Buddhist temple, Rachapradit, Bangkok. Such temples were the country's source of learning at the time. Murals served as textbooks, illustrated with scenes of daily life to make the scriptures more understandable. Left, a *chula* kite team uses a pulley to haul its kite, with its captured *pakpao*, into the safety of its own territory. Above, Vinai Poomaitong sends a *chula* kite downfield into combat.



Kiteflying and making are close to the hearts of the Thai people, whether they are champions or beginners. These young men are making not only chula and pakpao battle kites, but also other traditional designs, such as the well-known long-tailed cobra.

Lower right, a team's "stable" of 8-10 chula kites waits in readiness for selection according to the particular wind condition.

Bangkok's Grand Palace, which King Mongkut first opened to kitefliers in 1855. And as before, contests are held every afternoon at 4:00 o'clock.

The character of the contest is unlike other forms of kite fighting because the combatants are the "male" chula kites and the "female" pakpao kites.

The chula is a sturdy 260cm kite with a bamboo frame that has been seasoned for months. Shaped like a five-pointed star, the big kite has three sets of bamboo barbs attached to its line for snagging a female. It takes a team of at least 20 people to launch, maneuver and retrieve a chula.

The pakpao, or female, is deceptively fragile, diamond-shaped and only 90cm from stem to stern. Its defenses are a marvelous maneuverability and a 1200cm loop of string hanging beneath its flying line, plus a 630cm tail with which it attempts to ensnare and strangle its opponent. The flirty little pakpao, with an expert at the end of its line, can dart in on its cumbersome male enemy with deadly accuracy.

To constitute a competition, there must be at least two pakpao teams for every chula team. Each game is held between two to three chula teams and five to ten pakpao teams. One afternoon's game lasts 45 minutes. Should there be more than three chula teams, a second set of 45 minutes is played. The teams draw lots to decide who plays in which set.

The field of contest is divided into two sections by a rope hoisted at a little above head height. The chula fliers position themselves at the far end of the upwind area, while the pakpao teams are stationed just beyond the dividing rope in the downwind section.

A male kite venturing into pakpao territory is any female's game, and vice versa. Sometimes the male is the aggressor, choosing from the pool of flirting wallflowers the pakpao he thinks he can bring home, like choosing an unknown partner at a dance, and often with as calamitous a result. At other times, a pakpao may find herself in a position for a role reversal,



and will swoop down and lasso an unsuspecting male.

No male kite dies without a struggle, nor does any female, but the wails of anguish are greatest at the chula end of the field when one of its members is threatened. Thus, for the spectator, the best position for viewing a competition is as close to a chula team as safety and the officials will permit.

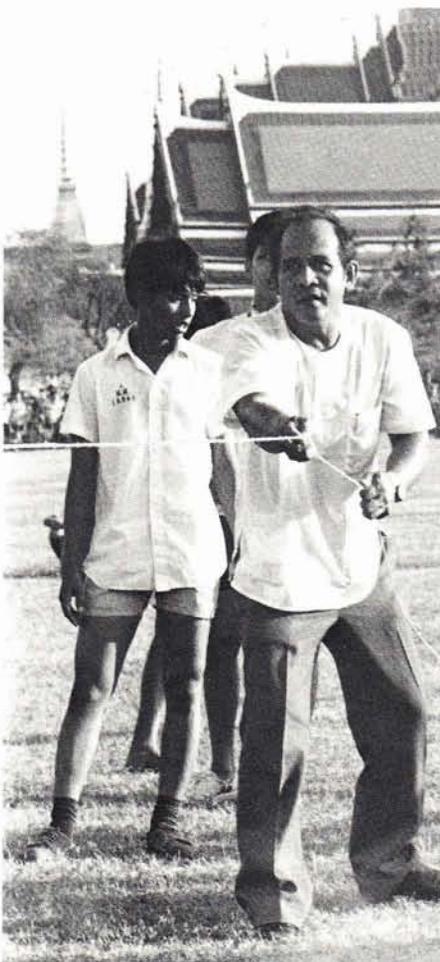
Overseeing the competition are a referee and a number of field observers whose task is to keep track of who has captured whom. In the event of a dispute, they have the final say.

Every team has a collection of 10-12 kites, although each team may fly only one kite at a time. Before the start of the contest, each pakpao team puts up one kite. Once the females are fluttering provocatively above their territory, the referee signals the start and each chula team puts up a kite.

The object of the exercise is now for each chula team to capture and bring down inside its territory as many pakpaos as it can—and vice versa for the pakpaos—within the allotted 45 minutes. On the average, it takes about two minutes for a chula to go out, capture and bring back a



Top left, a traditional orchestra accompanies a competition, following every movement of the kites. Spectators can close their eyes and follow the action. If a chula abducts a pakpao, the orchestra sadly laments her fate. If she captures him, the orchestra happily teases the male. Lower left, Boontam Himskul, the undisputed chula champion of 15 years, lures a pakpao into low-altitude combat 250 meters downfield. No other chula flier would attempt such a feat.



are complex, and there are more than 50 rules which have to be followed. Of these, the regulations governing the actions of the chulas are more numerous, and thus the little female kites are given a slight advantage.

For example, a chula can bring home a pakpao only when its barbs have caught the pakpao's line or tail, or when the pakpao's tail is tangled with the chula's, or when the pakpao is damaged by a broken spar, torn paper, ripped tail, etc., or when the pakpao has lost its line loop.

The pakpao, on the other hand, may do whatever she can to bring down the big chula. She may entangle him with her tail, lasso him with her loop, or lay herself on the chula's surface, thereby taking the wind out of his sails and causing him to lose balance. Even when a pakpao is being pulled into chula territory, she may still by chance regain control and succeed in bringing down her abductor inside her own territory. It is all up to the skill of the teams, and especially their captains, who give encouragement to their members usually by blowing a whistle. At critical moments, the chula captain takes over the flying, with the team standing by, slack end of rope in hand, waiting for the moment when the bamboo barbs take hold. When a catch is made, a specially-designed brass pulley is snapped over the line and, to the rhythm of the captain's whistle, the chula is raced home with its captive.

At the end of the day's contest, the scores are tallied and added to the previous days' totals. And so it goes every day for the duration of the competition until the final day, when there is an hour-long runoff between the three top-scoring chula teams and the six top-scoring pakpao teams. The winners of this final—one chula and one pakpao—receive the King's Cup. In addition, trophies are awarded to the chula and pakpao teams with the highest running totals over the

pakpao. Speed is of the essence, because only three chulas can be in the air and only one of them can enter pakpao territory at any one time. When a catch has been made, resulting in the downing of two kites, replacements are immediately launched, so there is rarely a lull in the action.

Each team scores 10 points for a successful capture and downing of an opponent inside its own territory. The winners of a contest are the one chula team and the one pakpao team with the highest scores.

The regulations governing the contest

full duration of the competition.

Today's competitions are as popular as they ever were. Besides attracting thousands of noisy spectators, they draw hundreds of even louder viewers whose excitement is augmented by the fierce betting which traditionally accompanies any contest. In addition, the local press turns out to record the winners, while the King's Cup finals are broadcast on national television.

Battle of the Sexes

Every kiteflying competition in Thailand is a battle of the sexes between the male chula kite and the female pakpao kite. The former is dominant and aggressive, the latter is flighty and clever. He sets out to capture her; she, though smaller, has many tricks and can ensnare her man with cunning. The outcome of the competition, as in real life, is no foregone conclusion.

No one knows exactly why and when the kites were assigned these roles, but since every existing historical reference makes mention of the male/female characteristics, it is safe to assume that a battle of the sexes was integral to the sport from the start.

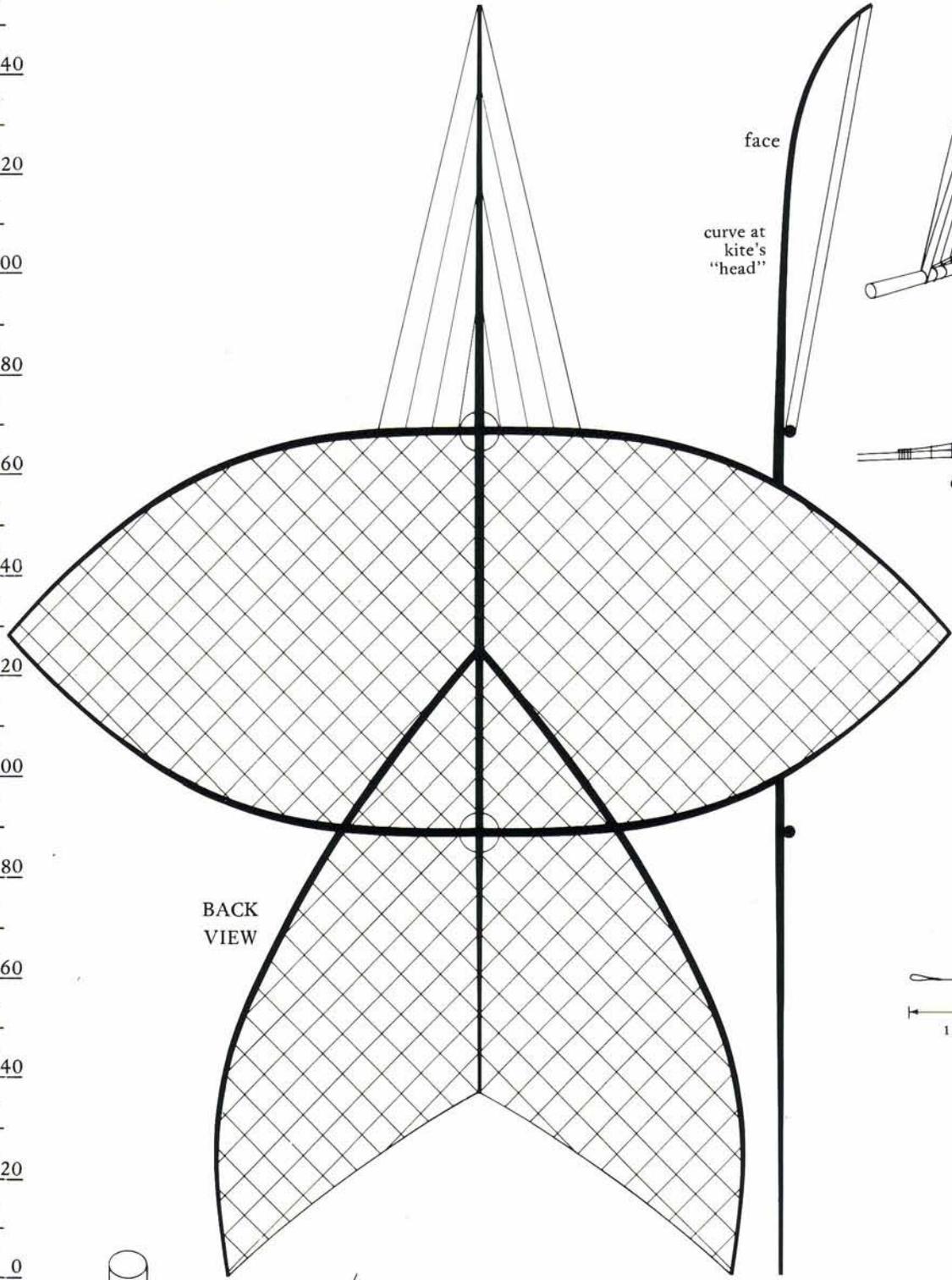
So strong have been the masculine and feminine associations that Thai poets of the past found the chula and pakpao to be handy metaphors for love songs and tales of romance.

Such comparisons are no mere flights of romantic fantasy. The physical components of the chula and pakpao have very clear parallels with distinguishing male and female characteristics.

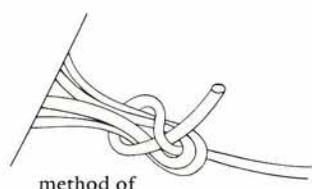
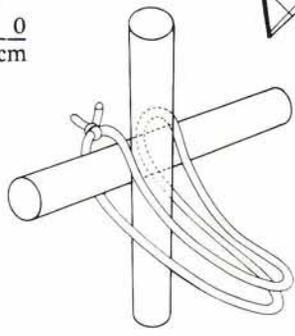
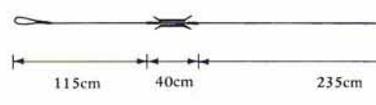
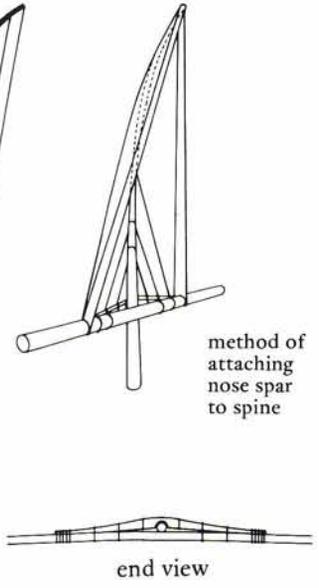
Reference to the star shape of the big chula is often made in human terms—head, chest, legs and back. The pakpao, on the other hand, is feminine in being smaller, prettier and, in most telling fashion, deceptively fragile. Then there is the symbolism of the kites' respective weapons—the barbs of the chula, the tail and loop of the pakpao—which could hardly be more explicit.

Moreover, the etiquette of the sport is

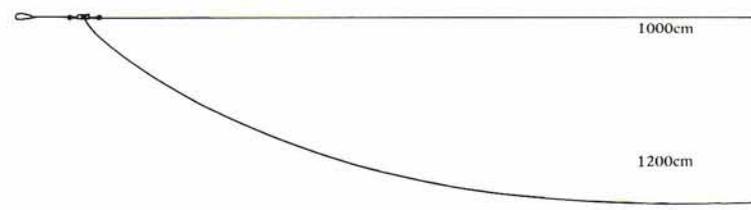
The Chula Kite



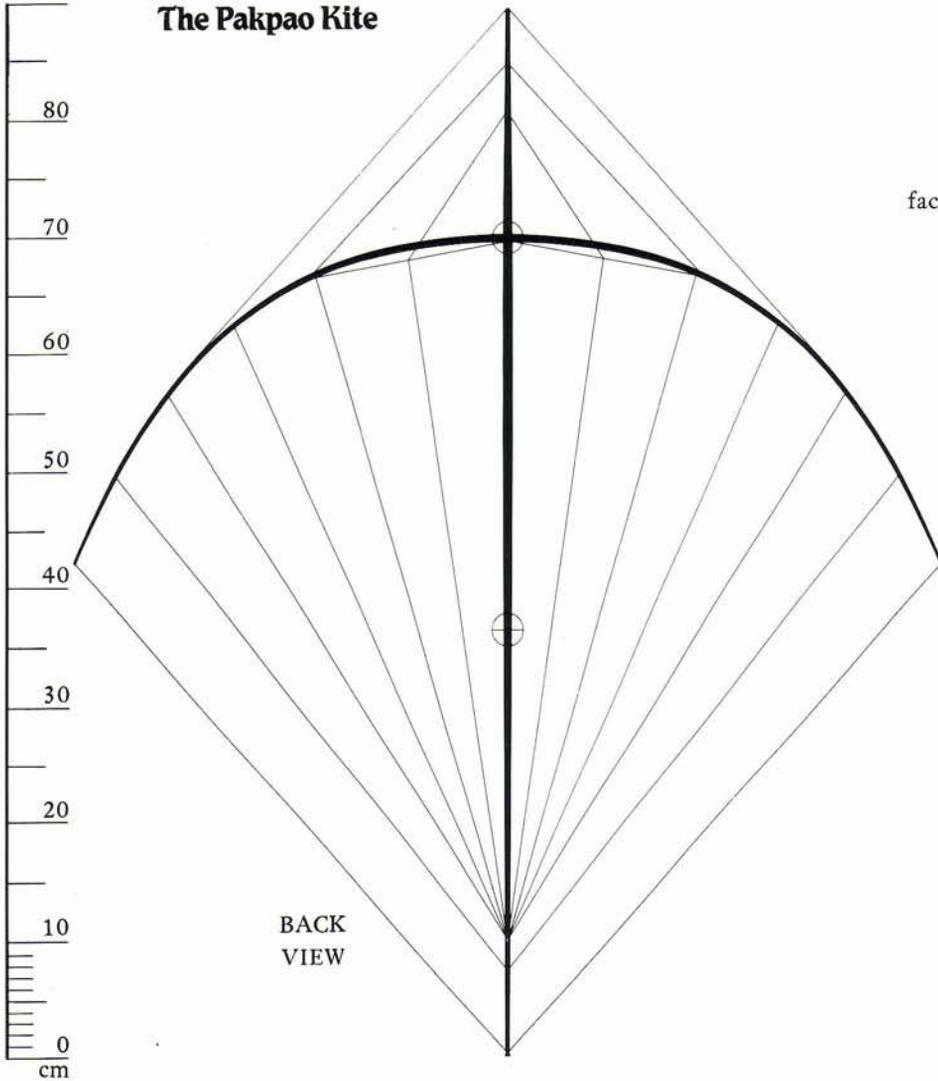
face
curve at kite's "head"



method of attaching the flying line to the chula and pakpao kites



The Pakpao Kite



The Chula Kite

The chula is a tall, sturdy kite in the shape of a five-pointed star with the following specifications:

- Height: 254cm
- Width: 193cm
- Longeron: 217cm
- Wing Spars: 215cm
- Leg Spars: 144cm
- Bridle: fore leg 7m, aft leg 7.14m

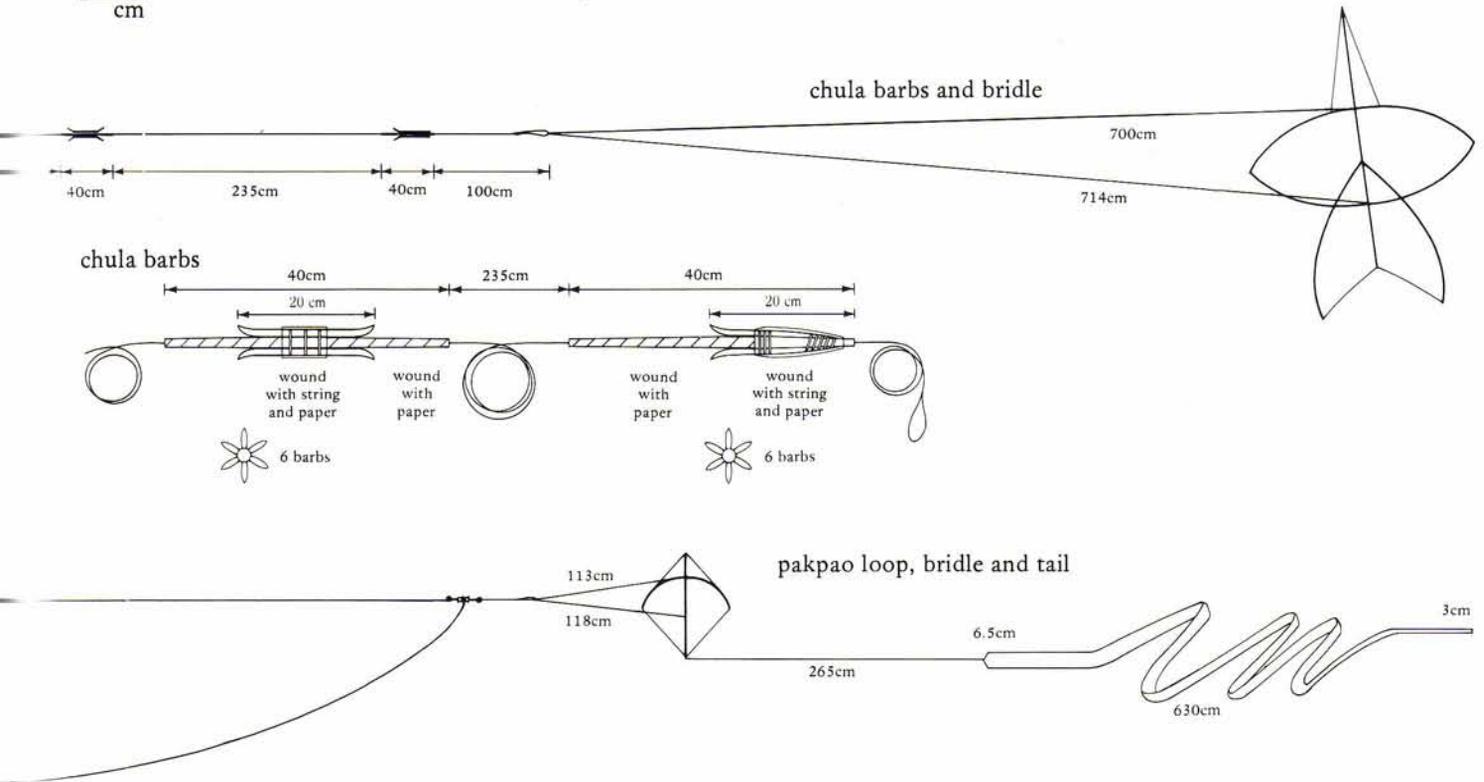
In addition to its large size and weight, the chula is equipped to conquer a pakpao by means of three to five barbs on its flying line. Each of these is made up of six 20cm pieces of bamboo, curved at the ends and tied back-to-back over the line to form a star-shaped hook. These barbs are used to ensnare a pakpao by catching her line or tail in their curves.

The Pakpao Kite

The pakpao is a small, diamond-shaped kite with the following specifications:

- Height: 88cm
- Width: 75cm
- Longeron: 88cm
- Wing Spar: 102cm
- Bridle: fore leg 113cm, aft leg 118cm

Although much smaller and lighter than the chula, the pakpao cannot only elude the male through rapid flight, she can also bring him down through one of two feminine devices. First there is the pakpao's tail, a piece of starched cotton 630cm long (seven times the length of the longeron) which tapers in width from 6.5cm to 3cm. It is attached to the kite by a piece of line three times the length of the longeron. The second trap is the pakpao's loop, a 12m length of line attached to the flying line by small bamboo tubes 10m apart.



Top right, the tools and materials used in making Thai kites are dictated by tradition.

The bamboo must be of the "sisuk" variety from Thailand's jungles. It is split, straightened, shaped and polished to a fine finish. The line is made from fibers combed from the bark of the "ban" tree in the mountains of the northeast.

Lower left, top spar and longeron are neatly joined. Lower right, a line control stool is placed over the flying line for a teammate to sit on while the kite is raced home.

male/female-inspired. The chula, for example, should avoid approaching a pakpao from below. He is the attractive aggressor and should assume a high and proud position from which he can swoop down on his captive. The pakpao, while she does not chase, can still play active roles by luring the chula into an awkward position and then darting across his path, ensnaring him with her tail or loop.

In practice, these roles are played to good effect. With skillful handling, the big and powerful chula can maneuver in any direction; the little pakpao can be timid or fast as she pleases.

The subtlety of the sport is such that neither kite is trying to destroy the other; rather, he attempts to abduct her, she tries to capture him. It is precisely this intricate game, which we all recognize, that makes the sport as exciting for the spectators as for the players.

ELEMENTS OF THE GAME

The Chula Team

The standard team to fly a chula consists of at least 20 persons as follows:

- 1 Captain (also co-flier)
- 1 Flier
- 1 Catcher (with pulley)
- 5 Assistant Catchers
- 1 Line Controller (with stool)
- 8 Pull-In Runners (or more)
- 1 String Tender (with basket)
- 1 Kite Technician (responsible for launch, knots, bridle adjustments)
- 1 Kite Repairer (on-site)

The Pakpao Team

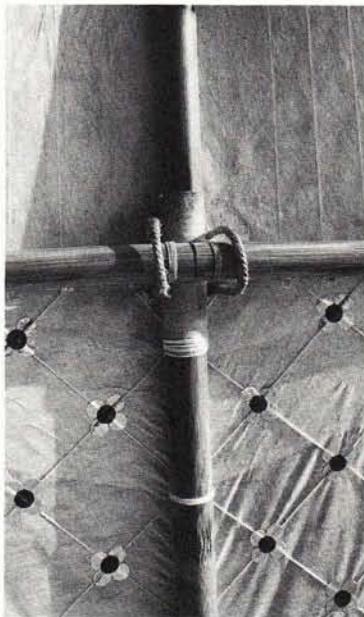
The standard team to fly a pakpao consists of only four to five persons as follows:

- 1 Flier
- 1 Catcher (with pulley)
- 2 Pull-In Runners
- 1 String Tender (with basket)

The Bamboo

The spars of a traditional Thai kite are made from split bamboo and they are prepared by hand in a slow, careful process.

Only one type of bamboo, the *sisuk*



variety, meets the demands of Thai kite-makers and has the necessary size, strength and flexibility. Even then, it must be selected with care. It is important that the plant be mature—at least 10 years old—and that it be cut only some four or five months after the end of the annual rains, around February or March. It is then split and stored away for 10 months to allow it to dry out completely.

Split bamboo, however carefully selected, is not perfectly straight, and so, once it is thoroughly dry, it must be bent to shape. This is done by heating each joint individually over a charcoal fire and

bending the bamboo into line.

In fact, the heating process serves a dual purpose as it also kills the white ant eggs that may be embedded under the bamboo skin. If this were not done, the little creatures would hatch out and reduce the pole to powder in a matter of three months.

Once dried and straightened, the bamboo is ready to be shaped as required. The work is done with wood files, and demands skill and precision. For example, the chula's wing spar is something of a challenge in that this one piece of bamboo must be filed so that it runs in thickness



Left, gold medals, a book of competition rules from 1932, a King's Cup and old photos reflect generations of kiteflying in Thailand. Lower left, a veteran flier displays a championship kite and medal. Estimated date: 1924 or 1925. Note that the kite's structure remains unchanged today.



and ends with a cord that has no stretch and is strong enough to pull an ox.

The basic material is the bark of the *ban* tree, which grows well only in the northern part of Thailand. The bark is first stripped from the trunk and soaked in water for two weeks in order to soften the fibers. After this, the pulp is pounded with a wooden mallet and combed to separate the individual strands of fiber, which are about 20cm to 25cm long.

Now considerable patience is required as the fibers are joined and twisted together into a three-ply cord. The complicated process continues, a few centimeters at a time, until the required length is produced.

To give an idea of the time involved, an experienced cord maker can produce up to six meters a day and a pakpao kite will need 300 meters of line (three sets of 100m each). The big chula, which has to do all the chasing, must have at least 900 meters (three sets of 300m each).

Once the line has been spliced to the appropriate length, it must be soaked in water and then strung out between two trees so that it will shrink and tighten. If it has been well made, it will last four or five seasons.

Accessories

In chula and pakpao competitions, two unique accessories are brought into play: a pulley and a line-control stool. The former is used for both kites, while the stool is employed only by the chula team.

The pulley is a hook-shaped piece of wood, roughly 40cm long for the chula and 35cm for the pakpao, with a pulley wheel inside the curve. When an opposing kite has been caught, it must be quickly pulled home, so immediately the pulley is snapped over the victor's line, creating a

steady angle between the kite and the runners, and enabling the haul-down to be done as quickly as possible.

The line control stool is a small, sturdy four-

legged bench with a roller alongside each leg and one more underneath the seat. It is used to assist the quick retrieval of a chula. When the captain calls for the kite to be brought in, the line controller rushes up with the stool, places it over the line and sits on the stool to keep the line steady while it is being raced in.

HISTORY OF KITES IN THAILAND

While it is clear that kiteflying has always been common in Thailand, its precise origins and antecedents are obscure. Like many other forms of popular culture, the sport has been handed down from generation to generation largely through an oral tradition. Written records and references are few, especially prior to the founding of Bangkok as the capital in 1782.

However, although there are many tantalizing unknowns in our learning, sufficient material does exist to allow an historical sketch that traces kiteflying from the first Thai kingdom centered on Sukhothai through the succeeding Ayutthaya period and into the present Ratanakosin or Bangkok era.

Sukhothai Period: c. 1238-1438

The first Thai sovereign state was founded at Sukhothai in the early 13th century when two Thai chieftains rallied their people and defeated the Khmer overlords. Although short-lived, this first capital saw the initial flowering of Thai culture in all its vital forms. Right from the start, kiteflying was a part of the social fabric.

If legend is to be believed, one of the first Sukhothai kings was a kite enthusiast and there is a story which tells how his pastime led to an amorous adventure.

He was flying his kite one day, so the fable goes, when the line broke and the craft landed on the roof of a nearby

from 5mm at either end to 13mm in the middle. Moreover, it must be perfectly straight and must flex to a perfect bow.

It takes many hours to shape the spars according to specifications. It is work that cannot be hurried, and even a skilled worker needs a month to build one kite.

The Line

Thailand and Japan may be the only two countries left in the world where kite line is still made by hand. The craft involves a slow, painstaking and time-honored process. It starts from scratch with the raw material provided by nature

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palace belonging to a nobleman. The King decided to resolve this potentially embarrassing situation by waiting until nightfall before scaling the palace walls disguised as a commoner and retrieving his kite.

He so entered the palace, but before looking for his kite he remembered that the nobleman had a beautiful daughter. The opportunity was too good to miss, so he sought out the woman and spent the night with her. The kite was recovered the next day, though the outcome of the romance is unknown.

On somewhat firmer historical ground are surviving chronicles telling us that *ngao* kites were a feature of a ceremony known as *klang*, which was conducted by Brahmins, the priests who then—as even now—conducted royal rites. The ritual, most likely of Indian origin, involved the flying of humming kites over the city either as a form of blessing or in order to predict the weather of the coming season. In the language of the Khmer (from whom the Thai inherited Brahmin rituals and other manifestations of Indianized culture), the word *klang* means bird or kite.

The *ngao* kite was similar to the chula kite we know today, except the *ngao* was equipped with a humming bow at the nose. The chula no longer makes the growling sound it had until the 70s, when speed became more important than sound.

Another similar kite is the *dui-dui*, a steady night flier that sings a melody like one made by fingers meandering up and down the scales on a flute. The sound (*dui-dui-dui-dui-dui*) is produced by a bow fitted with a reed that freely twists and creates the tonal vibrations. Even today, up-country, it is the custom to get up early and bring the *dui-dui* down before the morning dew sets in. It appears from ancient poems that the *dui-dui* is a descendant of the *ngao* kite.

Ayutthaya Period: 1350 to 1767

The Thai kingdom of Ayutthaya was founded in 1350 and rose rapidly to power, taking Sukhothai as a vassal state in the mid-14th century and totally eclipsing it in 1438 to become the undisputed Thai capital. It flourished for 400 years until it was sacked and razed by the Burmese in 1767.

Ayutthaya inherited many of Sukhothai's cultural and religious traditions, including the *klang* ceremony, which continued to be practiced until the beginning of the Ratanakosin era. In his records of the Ayutthaya ceremonial, poet Prince Somdej Chaofa Thammatibet Chiyachet

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Suriyawongse wrote of the klang: "In December when the winds are strong . . . the ngao kites will fly all over the city and create musical sounds . . . there will be a lot of ladies sending off the kites everywhere."

Kiteflying, however, was more than a ritual; it was a craze infecting everyone from the king down. Such was its popularity that kites often became entangled with the roofs of the royal palace, not only damaging buildings but also infringing on the private preserve of the monarchy. Eventually, it got so bad that a royal edict was proclaimed forbidding the flying of kites over the palace; offenders were to have one hand cut off as punishment.

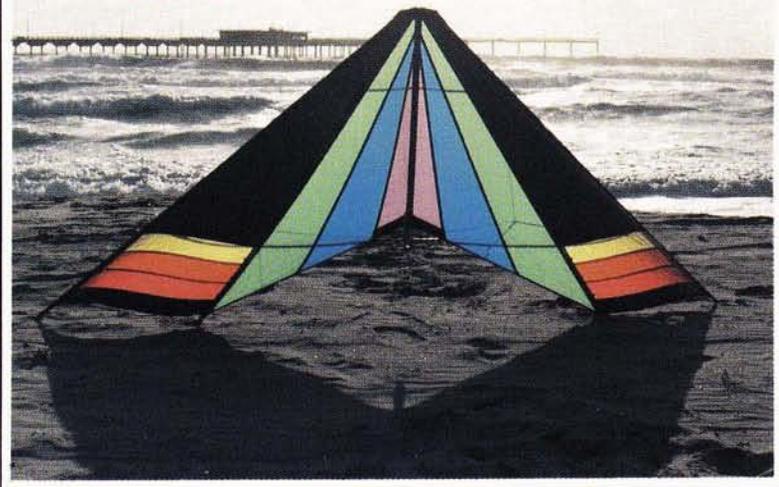
Not that Ayutthaya kings were anti-kiteflying; they, like their Sukhothai counterparts, were fond of the sport. For example, Monsieur de la Loubère, French Emissary to the Court of King Narai in the 17th century, commented on how the king's kite could be seen at night with lanterns attached to it and glowing "like a comet." At other times, instead of lanterns, a coin would be tied to the kite and if it got lost the person who recovered it could keep the money as a reward.

Another Ayutthaya king made use of the kite as a war machine. When the city of Nakhon Ratchasima revolted in the reign of Phra Phetracha (1688-1703), the rebels were defeated by kites. The king's army had been unable to storm the city by conventional methods, so pots of gunpowder with long fuses were attached to kites and flown over the walls. The resulting aerial bombardment set fire to houses, creating sufficient confusion to enable the Ayutthaya soldiers to enter the city and put down the revolt.

It was also in Ayutthaya times that the chula and pakpao kites made their first appearance, and competitions were organized as a national sport. Undated written evidence of this is found in a book titled *The Traditional Culture of Ayutthaya*. Here it is recorded that the king would put up his chula kite from the palace compound and challenge any pakpao kite that entered his territory. When one did, the king would appoint royal guards to do the running-in and so bring the kites down. Not only is this the first mention of the pakpao kite, it also includes the first record of the fierce betting which accompanies competitions, even today.

Ratanakosin Period: 1782 to Present

Despite the enormity of the defeat of Ayutthaya by the Burmese in 1767, the Thais quickly rallied and soon expelled



I don't know if there's anyone in the kite business today who is more excited than I am.

I have a new kite on the market, the Hawaiian Team Kite*, and, with no more promotion than just flying it a lot (and winning almost every stunt competition around), the demand has been simply amazing. We are having the time of our lives keeping up, building a business that will offer quality of response to our customers that is on a par with the quality of response in our kites.

It's not easy, but damn if it isn't fun!

Believe it or not, I think it is fun to fuss around our shop every day to be sure our kites are the highest quality

we can make. The rugged ripstop nylon sail and graphlex frame have to be detailed with precision, because they make the kite fly with precision.

It's fun to show people how the kite moves — how easy it is from the very start.

It's fun to fill orders on a dead run from morning to night, even if sometimes I see the UPS man more than my wife.

And its fun to keep improving our operation and — especially — flying these Hawaiians. I love 'em, I admit it, and I love 'em even more because so many other people do.

Seldom do you see a person who has never flown a stunt kite

plunk down \$110 to \$150 to buy a first piece of stunting equipment. But it has happened with our Hawaiian — not once — not twice — but hundreds of times.

You ought to be able to find your own Hawaiian in your favorite kite store. Let us know if you have trouble getting one. We're making them more available, but quality takes time.

We're working to see how fast we can make Hawaiians without losing the things that make them so great.

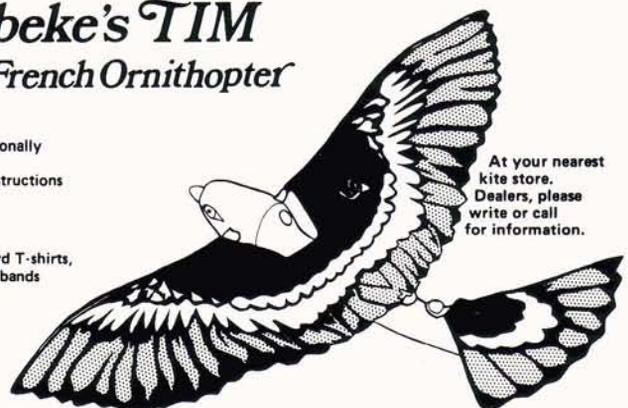
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the invaders. Their capital, however, was beyond salvaging. A temporary power base was established at Thonburi where King Taksin reigned for 15 years until, in 1782, his successor, King Rama I, moved the capital across the Chao Phya River to Bangkok. This new city was modeled on Ayutthaya and was designed to reflect both the former glory of the lost capital and its lifestyle, pastimes and traditions.

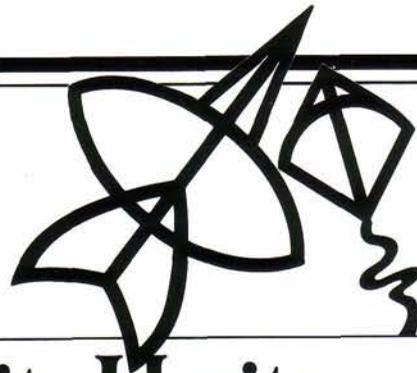
Presumably the first reign was too involved in building activities to find time for leisure pursuits, though in the reign of King Rama II (1809-1824) kiteflying was once again a royal pastime. The chronicles of this period relate how Rama II would fly his chula kite out from his palace and over the walls of the nearby residence of his brother, who held the rank of Second King, and who would send up a pakpao in competition.

From this date forward, references to kiteflying become much more common in Thai history and literature. For example, Sunthornpu, the foremost literary figure in the early Ratanakosin period, wrote a poetic account of how a little female pakpao succeeds in seducing a chula:

"Pakpao has caught her chula in the air. . . the chula tilts and limps to one side, barely able to balance. . . the pakpao follows suit, she moves closer and closer. The big chula struggles, nearly out of control. The pakpao takes aim and does not miss. Unable to move, he cannot escape. . . Finally they land and become one."

It is not known how or when the chula and pakpao kites became associated with male and female roles, but it appears to have always been the case. In her visit to Thailand, the 20th century American anthropologist Ruth Benedict described the kites as having such associations, and further noted that the male chula was always the dominant character, as was the human male in Thai society till then.

In the pictorial arts, chula and pakpao competitions have been depicted in several of the murals that adorn the interior walls of temples. (These paintings commonly use scenes from daily life as background for religious tableaux.) But perhaps the most charming example of kites in traditional painting is to be found in a mural at Wat Phra Singh in the northern city of Chiang Mai. Executed during the reign of Rama V (1868-1910), it illustrates a fantasy written in the time of Rama III. The story relates how a prince hoped to find a princess to marry by flying his kite and seeking his bride wherever it landed. The painting shows the kite having landed on the roof of a palace in a distant land, and



Thai Kite Heritage Group

TO GIVE THE THAI TRADITIONAL KITE MAKERS AND FLIERS PRIDE AND SUBSTANCE THROUGH INTERNATIONAL RECOGNITION

there at the end of the line stands a beautiful princess.

Kiteflying obviously enjoyed a great popularity by the middle of the 19th century. Rama IV, King Mongkut (1851-1868) appears to have been as troubled with kite excesses as were his predecessors in Ayutthaya. In 1855, he made a public announcement that anyone who wished to do so might fly kites at the royal parade grounds, adjacent to the palace (now called Sanam Luang and still the site for kiteflying competitions), but, he stated, kites could not be flown over the palace because they could damage the delicate golden spires.

During the next reign, that of Rama V (Mongkut's son, King Chulalongkorn), the chula and pakpao competitions were established as a national sport. In 1906 the first contest for a royal gold cup was held at the Dusit Palace. The King presided over the competition with members of the royal family in attendance, and a court orchestra provided background music to spur the competitors to greater endeavors. The King enjoyed these contests so much that they were held annually until his death in 1910.

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year of his reign, he appointed Phraya Bhirom Bhakdi to form a "Siam Sports Club" (a name that still applies, even though Siam has been called Thailand since 1939) and authorized him to hold kiteflying competitions at Sanam Luang.

The club existed quietly for five or six years before it was finally registered in 1933. It suffered an inevitable setback during World War II, when Thailand was occupied by the Japanese, but by 1952 it was back on its feet. From then on, kitefliers and the Siam Sports Club have joined forces to re-establish the annual competitions, which, with the exception of 1985 when the Sanam Luang site was needed for other purposes, have been held yearly ever since.

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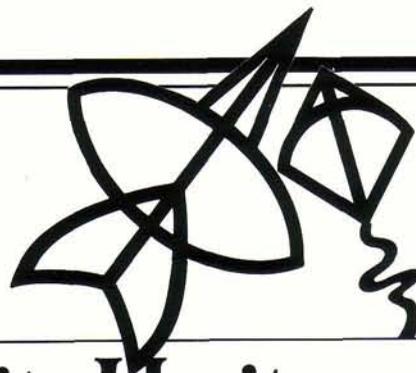
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the formation of demonstration teams which will be sponsored on overseas tours. At the same time, the Group is building up contacts with kiteflying associations and publications in other countries with a view to exchanging visits and information.

The Thai Kite Heritage Group is already giving lectures on kiteflying, to be expanded through the making of a presentation video and the setting up of a traveling exhibition.

The Group was welcomed abroad at the 4th Biennial International Kite Competition in Dieppe, France, September 13-14, 1986. Michel Dascotte wrote his impressions for "Le Nouveau Cervoliste Belge" (No. 27, Nov.-Dec. 1986):

"The Thai kitefliers had quite an elegant presentation: black trousers, white jackets, gold buttons—no comparison to our clothing. When one sees them proceeding with their kites to the flying field, they seem to be coming to a religious ceremony. Each club was then received by the Thai team and presented with a video cassette as well as a chula kite."

In order to increase knowledge and understanding about traditional Thai kiteflying, the Group is now establishing an English language data bank on the sport with the collation of existing material and the inclusion of new information.

Co-founder Ron Spaulding says:

"People are not aware that the art of traditional kiteflying is far more sophisticated in Thailand than in any other country. The high degree of craftsmanship in kitemaking has been perfected over the centuries, while the norms and rules of competition were established by the Royal Palace perhaps 200 years ago.

"The art has come down to us in a pure and unaltered form, but precisely because of the skill and dedication involved, it is becoming increasingly difficult for it to prosper, indeed even to survive.

"An awareness strengthened by international interest will, we hope, help preserve the heritage and keep the sport alive." ♦

RON SPAULDING is an art director and designer from Batavia, Ohio, who "went to Sweden for vacation, stayed 10 years, got cold, came to Thailand, always warm, plenty of sun, sand, wind, have Thai wife and two children, here now for 12 years." He started Thailand's first design studio, The Huge Company, in 1976, which in 1985 was Thailand's most award-winning independent agency. In recent years, Ron has devoted many hours helping preserve the traditions of kiteflying in Thailand.

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New Stars in the Sky.
See page 2.

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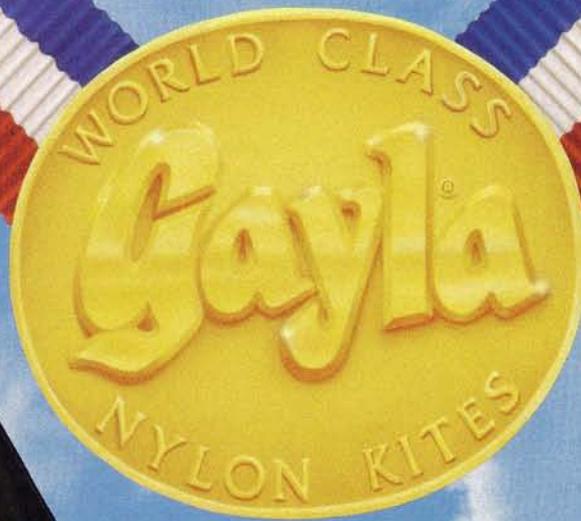
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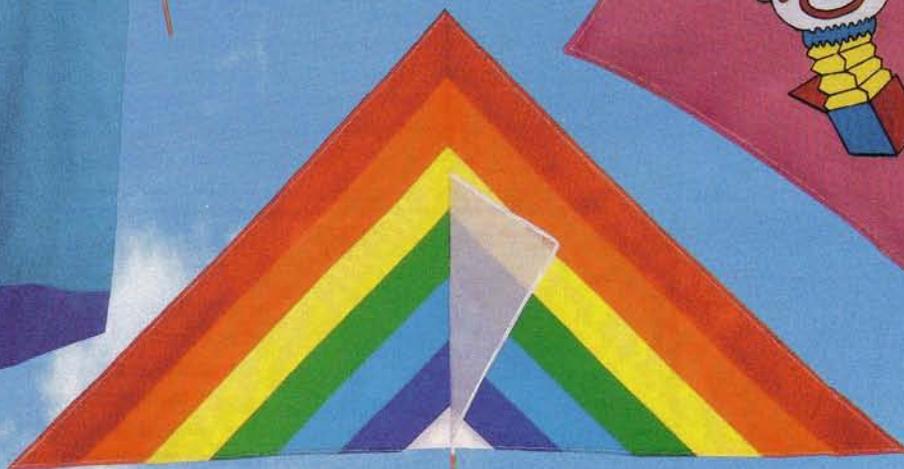
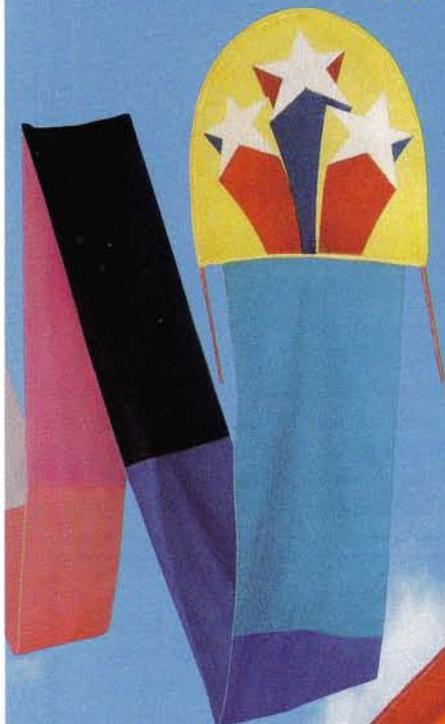
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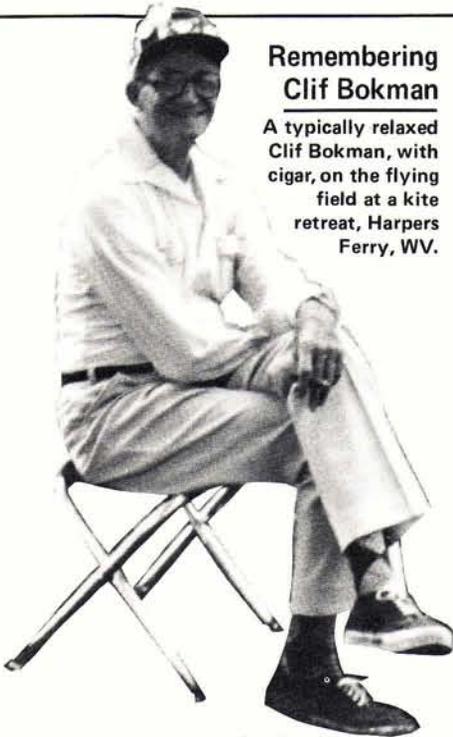
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Empty Spaces in the Sky...



Remembering Clif Bokman

A typically relaxed Clif Bokman, with cigar, on the flying field at a kite retreat, Harpers Ferry, WV.

Members of the Maryland Kite Society lost a true friend on October 18, 1986, with the death at age 80 of Clifton Albert Bokman.

When we met him in 1980, Clif was retired, but he was still involved in Boy Scout affairs—and was soon to become one of our most active members. Clif assisted at many kitemaking workshops, reveling in the ease of our methods, free of the pasting and notching he had done since boyhood. From his grandfather in 1914 he had learned to make the “Seven Sisters,” the box kite and the “barn door.”

Clif flew kites nearly every week at Fort McHenry National Monument in Baltimore, and when our kite festival privileges were cut off in 1984, Clif was a staunch defender of “our right as taxpayers to fly there.” Part of Clif’s fondness for the Fort may have come from his love of the American flag. He knew flag protocol like the back of his hand, and he did not hesitate to preach it to the rest of us. Clif attended most of our scheduled events at the Fort, where his big sombrero, covered in kite buttons, made a colorful combination with his favorite multi-striped kiting jacket. (In honor of Clif, the Maryland Kite Society plans to hold a “Clif Bokman Memorial Kite Fly” at Fort McHenry annually on the Sunday nearest May 18.)

One of his favorite kites was the seagull, made by his flying buddy Bill Kocher. Clif would fly it off the Fort’s bulwarks as a way of starting a conversation. He was a social personality and used to say that

kites make good friends—and that friendship is the most important thing in life.

Though diabetes sent him to the hospital many times in his later years, Clif would bounce back as if nothing had happened, driving his car to Society functions and his favorite kite shops in Maryland.

At an earlier MKS Retreat, Clif taught us all how to make a classic barn door kite. In his exuberant but self-effacing way, he explained all the “old” methods and how he had perfected them with

thousands of Boy Scouts. We each made a barn door kite and then joined them together to fly as a train at the end of the weekend.

Though we most associate Clif Bokman with the barn door, it was only one of many kites that he appreciated and, eventually, mastered. But for us, kites—whatever the type—were just the lucky key that gave us the privilege of friendship with Clif Bokman. And that was “the most important thing.” —V.G.

“MY GRANDFATHER’S KITE”

Clif buys 1/4"-thick lattice from a lumberyard and has it cut to produce sticks 1/4" x 3/16". Then, with a fine-bladed saw, he cuts slots in the ends of the sticks running side to side with the kite, not front to back. When you run the framing line through the slots, make an extra pass at the beginning and end. No knot is necessary.

Clif recommends sturdy steel straight pins to join the sticks. He taps them through with a small tack hammer, using an old iron turned upside down for an anvil! Note how the pin is bent and clinched into the wood.

Almost any paper can be used for covering. Cut it about

an inch outside the framing string and cut away pieces around the sticks. Instead of glue, which “puckers,” Clif uses library paste or flour and water to stick the folded hem down around the framing line.

The standard configuration calls for a 60-degree angle between the sticks at the point of intersection, but you can experiment and make your kite tall and thin or short and fat.

Clif prefers a 4-leg bridle (two 2-leg bridles)* with a sliding ring for adjustment at the towing point. For tails, attach two parallel strips of cloth, one from each trailing edge corner, or one long strip from a V-string. You can also attach

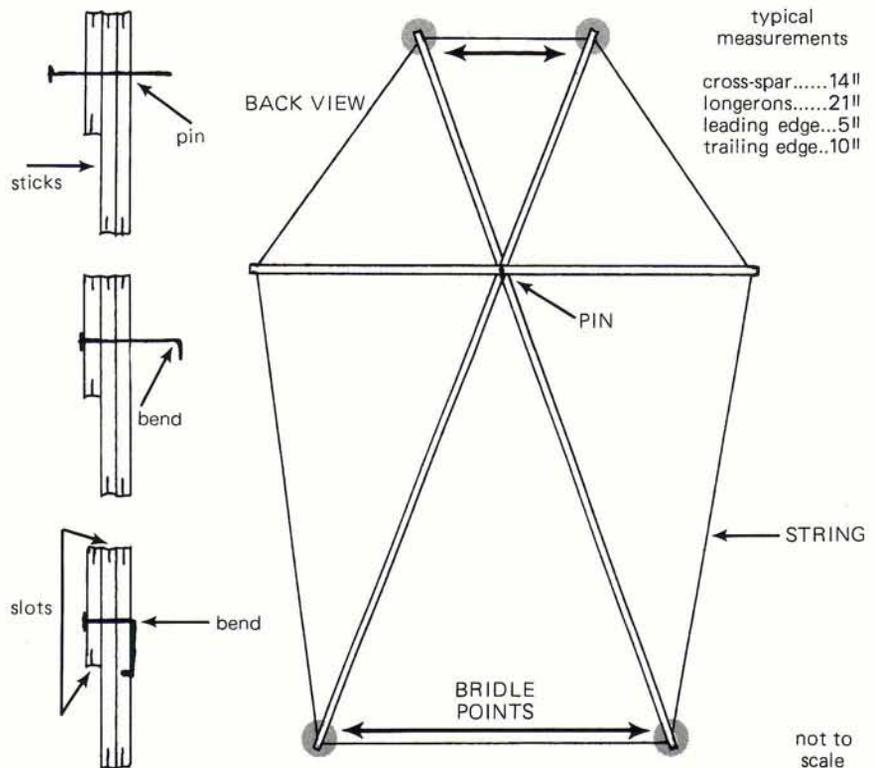
fringe all around or paste a long “skirt” along the trailing edge. Stunt-kite fans can attach their dual lines to the cross stick only, about 5" to each side of the central joint.

And you can fly this kite in train by using a single bridle point at the intersection.

Thanks to “Tight Lines,” newsletter of the Greater Delaware Valley Kite Society, in which Clif’s method first appeared. It is capsulized here with permission.

And thanks most of all to Clif Bokman.

*This is Clif’s way, but others prefer a three-point bridle, to the “ears” and central cross.



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3. Baseball line marking cord
4. Fishing line
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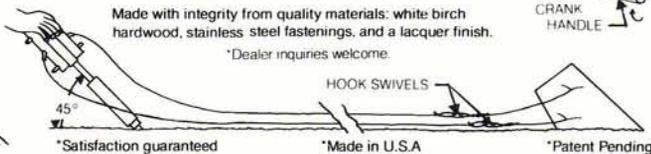
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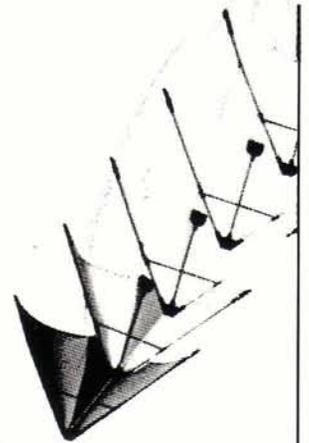
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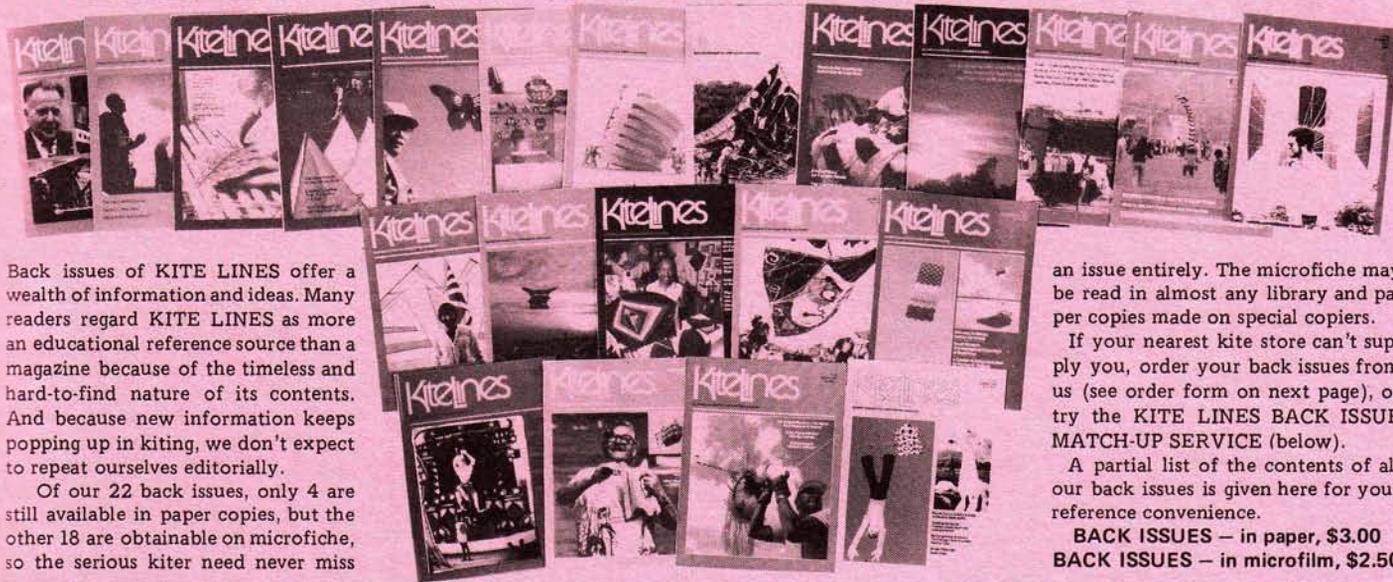
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Outrigger Kite Plans; Brummitt's Kite Categories; Exhibits in New York and Paris; Paul Garber Profile; Two Marconi Kite Plans; Festivals of Japan; Magazine's History; Tail Talk; Paper Bag Kite; Glue Gun Use.

SUMMER 1977 (Vol. 1 No. 2):

Which is the Perfect Kite? People-Lifting Kites; Trains (Van Gilder's Deltas & Van Sant's Trampoline); Proposed Standards for World Records; Stunt Kites; Greger's Dutch Kite; Mike Weletyk Profile.

FALL 1977 (Vol. 1 No. 3):

Guatemalan Kites; Ansel Toney Profile; Selecting a Tail; Seagull Delta; Kite Fishing in Oregon & Micronesia; Reels Analyzed; Seattle Exhibit; Greger's Vietnamese Kite; Sycamore, CA Fire; Aluminized Mylar.

WINTER 1977-78 (Vol. 1 No. 4):

Medieval Dragon by Hart; Stacked Delta by Thorburn; Tetrahedral Symposium; England's Jubilee Year; Shipping Kites by Ingraham; Sleds with Hundreds of Kids (Hundreds of Smiles).

SPRING-SUMMER 1978 (Vol. 2 No. 1):

Rogallo Corner Kite; Lincolin Chang's Rokkaku; J. C. Young Profile; Kite Flexifolds; Kite Festivals; Spandlove's Taxonomy of Kites Poster; Le Cerf-Volant Club de France; Figure Kiting by Braswell; Kite Safety.

SPRING 1979 (Vol. 2 No. 2):

Reels Roundup; Van Gilder's Reel design; Tokyo and Smithsonian Kite Exhibits; Streeter in Paris; Kites in the Wilderness; Nirvana in Nags Head; Braswell's Two-String Delta; Stephen Bernstein's Chinese Bird.

SUMMER 1979 (Vol. 2 No. 3):

Flow Form Kite Plans; Marshall's New Nylon Cutting Technique; AKA First Meeting and Grand National Kite Festival in Ocean City, Maryland; The Sky Is Big Enough for All of Us by Brummitt; Altitude Record.

FALL 1979 (Vol. 2 No. 4):

Sri Lanka Craftsmanship; Monumentality in Kites; Giant Kites of Japan and the Bedsheet O'Dako; Louise Crowley Profile; Kite Fishing from a Lighthouse by Trebilcock; Art Kurl's Super Conyne Plans.

WINTER 1979-80 (Vol. 3 No. 1):

Rotors Reviewed; Grauel's Shooting Arrow and Bull's Eye Target Kites; Ham's Parafolds; Allison's Death; Robinson's Facet Kite; Streeter on the Flexifoil; The Miracle of Sagami-hara; Kill Devil Hills, NC; Manassas, VA.

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Searching for the Real Will Yolen; Tetrahedral Variations by Bevan Brown; Kite Aerial Photography: Who's Done it and How; Shirone's Largest Kite; How to Bridge a Japanese Giant by Van Gilder.

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Scheveningen, Netherlands; Kites as Art by Streeter; World Records in Kiting; E.C.C.'s Largest Kite; Asymmetrical Kites; Kuroda's Convertible Cubics; Spandlove's 140 Box; Piney Mountain Hornbeam Sled.

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FIRST QUARTER 1982 (Vol. 4 No. 2):

Best of Show—Verschoor; Sky Art Conference; Fighter Kites—How to Pick & Wield Your Weapon; India's Utran; Scheveningen Album; Venice Pier, CA and Singapore Festivals; Grauel's Flapper; New Pelham Book.

WINTER-SPRING 1983 (Vol. 4 No. 3):

Detroit Convention Panorama Picture—Bailey; Blackheath, England; Coup de Vent & Maebishi Festivals; Rokkaku Challenge; Harpers Ferry Delta; Kites of Trinidad; Peter Lynn Box; Adrian Conn Profile; New Reels.

SUMMER-FALL 1983 (Vol. 4 No. 4):

The Eye of Tyrus Wong; South African Kite Fishing—Turton; Space Shuttle Cut-Out Kite—Hux; Small Kites—Bigge; Singapore '83—Gunn; Deaths of Steve Edeiken, Tan Siak Yam and David Turner.

SPRING 1984 (Vol. 5 No. 1):

Shirone's Giant Kite Battle; Alick Pearson Roller and Round Pond Fliers; Washington State Kite Retreat—Raddon; Cartoons by George Peters; Kite Nomenclature; Your Line: It Flies, Too!—Pfund; Henri Huttges Profile.

SUMMER-FALL 1984 (Vol. 5 No. 2):

Ohashi's Trains and Expandable Boxes; Singapore '84; International Exposition of Small Kites (Full Size Plans); Directory of Kite Clubs; New World Records; Caldwell's Counter-Rotating Box; More Stunt Kites.

SPRING 1985 (Vol. 5 No. 3):

The Great Kites of Bali; Mama-sans!—World's First Women's Kite Team; Tucson Museum of Art Exhibit; Original Conyne Found; Hototakes Kite; Stunter Nomenclature; Will Yolen; Wyatt Brummitt; World Records.

SUMMER-FALL 1985 (Vol. 5 No. 4):

The Italian Kite Renaissance; Cervia Bellissima; The Hösle Himmelbett; Mama-sans in Europe; Guinness Kite Records Dialogue; The Alex Dunton Light Wind Delta-Box; Splitting Bamboo; Kite and Book Reviews.

SPRING 1986 (Vol. 6 No. 1):

Scheveningen, Netherlands; Long Beach, Washington; San Diego, California; 1986 Kite Calendar Almanac-Poster; Tips & Techniques; Death of Will Yolen; Woglom Parakite; The J-17.5x21 Parafold; Singing Line; Guinness.

SUMMER 1986 (Vol. 6 No. 2):

People Socks by Oscar & Sarah Bailey; The East Coast Stunt Kite Championships; Chicago Hook & Ladder Flexifolds; One Sky, One World; The Brandes Flare; Team Combat; International Rokkaku Challenge.

KITE LINES BACK ISSUE MATCH-UP SERVICE

We've found such demand for KITE LINES that a number of our back issues are sold out. Many people are extremely interested in obtaining these sold-out issues. If any readers have any copies they are willing to part with, PLEASE let us know. Specify the issues you have. Then we can put people who want them in touch with you.

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Through a special agreement with Robert M. Ingraham, we have acquired the publisher's last stock of KITE TALES (predecessor to KITE LINES). Issues are: Vol. 9, No. 1 (First Quarter 1975) and Vol. 10, No. 3 (Nov. 1976). These are the only paper copies left, and supply is limited (order form next page). . . \$3.00 each, postpaid

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For the Record

This department is devoted to reports of record-setting achievements with kites. News will appear from time to time, as it arrives, in KITE LINES. Publication of a report is not to be construed as official recognition, by KITE LINES or any other party, of any attempt at a record. Neither are any of the methods that are described in the contributed reports necessarily recommended.

Why Is Everybody Claiming Largest Stunt Kite?

Largest Stunt Kite is not on the list of categories of kite records recommended as significant by *Kite Lines* (see Summer-Fall 1985 issue). But over the past year or so, a passel of contenders has come forth claiming the title.

The first in our files is Rick Kinnaird, September 22, 1984, Ocean City, Maryland. Rick and a crew of volunteers tried to fly "the largest stunt kite in the world," namely Rick's Big Silver Thing, the pillowy metallized Mylar® kite of 200 square feet in surface area. The idea seemed to be: take the largest kite you can find and see if you can get it to perform the minimum requirements (5 minutes of flight under control, including a loop to the left and a loop to the right)—then dub it a "stunter." Rick had no luck with the maneuvers, but his interesting effort was written up in the Summer-Fall 1984 *Kite Lines*.

In Cervia, Italy, June, 1985, the Club Cervia Volante flew a monster Peter Powell-type kite of 15 square meters (about 160 square feet), measuring 6m x 5m (about 20' x 16'). The claim was made by Francesco Innisi and Nadia Bonotti of Portiolo, Italy, that this was "the world's largest stunter," but its maneuvers were not recorded, so the kite's success was unofficial. However, the kite was surely a credible challenger, for, as Francesco said, "This kite was not built to set records, but to fly."

On July 7, 1986, *Kite Lines* received a telephone call from Debbie Wonsyld of Hood River, Oregon, saying that she, Dyane Andresen and Dolly and Red McClarren had made a 16-foot delta (approximately 64 square feet in area) and the McClarrens had flown it on July 6 over the Columbia River Gorge. We asked for more details but did not receive adequate information to support a claim.

On September 20, 1986, two contenders came to Ocean City, Maryland prepared to put their kites through the paces for the gold medal being offered by The Kite Loft to world record setters.

Mark Hergan of Baltimore launched a giant octopus-type kite made of scrap bedsheets and PVC tubing. It had barely risen from the ground before it dove over and crashed. (Mark repaired it but in a later try the kite collapsed again with a thud.)

The second would-be hero was Larry



Recent contenders for the record of Largest Stunt Kite include the following, clockwise from top left: Francesco Innisi and the 15m² kite he flew in Italy with the assistance of the Club Cervia Volante; Mark Hergan and his bedsheet octopus kite just before its crash; Larry Schultz using Hergan's control bar on his "FIRE" kite; John Waters flying his first record, a 180-square-foot soft kite, which John later surpassed with a 330-square-footer; the Schultz Frameless Inflatable Rogallo Experiment in one of its better moments.

Schultz of Annapolis, who presented an oversize model of his "FIRE" (Frameless Inflatable Rogallo Experiment) soft kite. Larry borrowed a control bar from Mark Hergan to get maximum arm extension, and went through a dozen starts of the clock—but each time the maneuvers were incomplete and most of them ended in collapse. Larry gave up. It appeared no one would earn the coveted gold medal.

That's when Jim Miller of Chicago, Illinois, saw his golden opportunity. He hurried to fetch his delta, all eight feet of

it (50 square feet of area). The kite was one Jim had made earlier in the year and had been flying for months without realizing it was the "Largest Stunter." Now the time was right: controlled conditions and lots of witnesses. And he had no trouble meeting the requirements. In fact, he exceeded them by doing numerous loops, dives, ground sweeps and figure-eights for about 17 minutes. Jim acknowledged that his "record" was an easy target for would-be claimants. Nevertheless, he intended

Continued on page 79. . .

Budget Delta Stunter

By Bruce J. Jarvie



Depending on your mood, you can fly this kite as a gentle two-string stunter or a one-string floater. The original Genesis Delta was developed by Hank Szerlag of Detroit, Michigan in 1980. He and his wife Nancy (founders of the 5/20 Kite Group) used a number of them in their kite bags for times when they wanted to fly under adverse conditions and didn't want to jeopardize their better kites. Bruce Jarvie (current president of the 5/20 Kite Group Detroit) built his first Genesis Delta in 1981 and later developed several hybrids—including Genesis II, the stunting version. Plans for both kites have appeared in the club newsletter. The kite in the photograph is Jim Miller's eight-foot ripstop model—the one he flew in Ocean City, Maryland to win the gold medal for "largest stunt kite."

Tools

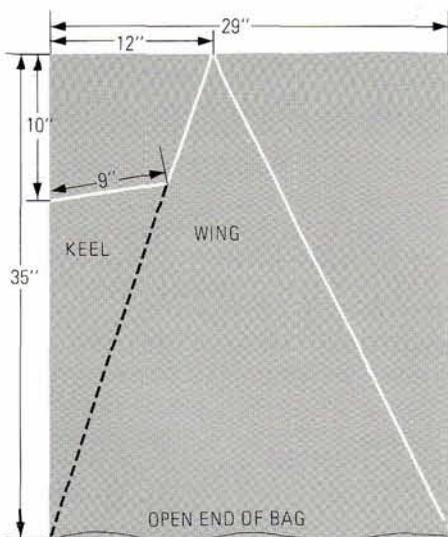
In addition to the typical kite-making tools, such as: knife, scissors, straight edge, tape, etc., you will need a punch (for making holes) and small drill.

Materials

- 1 plastic bag (at least 30" x 36")
- 2 dowels 1/4" x 30" for the wings
- 1 dowel 1/4" x 36" for the spine
- 1 dowel 5/16" x 25" for the cross-spar

First Things First

1. Make a cardboard template of one wing-with-keel.
2. With the template as your guide, cut through the plastic bag with a razor or knife to create two identical halves (wing-with-keel combinations).
3. Fold the keels back against their own wings and tape the two halves of



the kite together down the centerline (front and back).

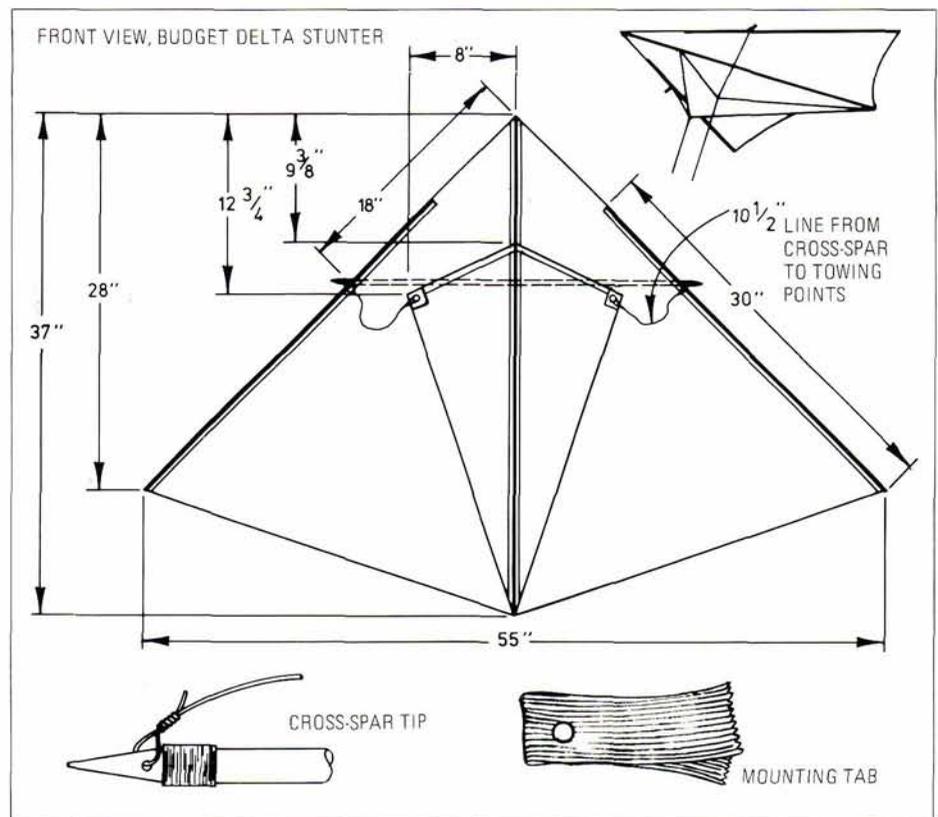
4. Tape a 1/4-inch dowel along the centerline down the back of the kite. This is the spine.
5. Tape a 1/4-inch dowel along each wing leading edge, from the bottom up.
6. Reinforce the top leading edges and towing points of the keels with tape—preferably strapping tape (with fiberglass filaments).

7. Using the same tape, make tabs for the cross-spar and attach them to the wings, over the wing dowels.
8. Punch a hole in each tab and in the towing points of the keels.
9. Taper the ends of the cross-spar (a pencil sharpener may be used) so that it can be inserted into the holes in the mounting tabs.
10. Drill a small hole through each end of the cross-spar at the points where it protrudes through the tabs.
11. Wrap the ends of the cross-spar with tape to prevent them from going all the way through the holes in the tabs.
12. Make two 10.5-inch lengths of looped line (a line with a loop at one end).
13. Attach the unlooped end of the line to each end of the cross-spar.
14. Thread these lines through the tabs as you install the cross-spar.
15. Connect each loop to its corresponding keel when you attach the flying lines (with a snap swivel, or the like).

Flying

For stunting, attach two flying lines, one at each point of the keels, hooking up with the loops of the cross-spar lines. You now have a slow-moving, light-wind, easy-to-fly stunt kite.

For floating, disconnect the two dowel lines from the keels and let them hang loose. Remove one flying line and hook both keels to the remaining flying line. The result is a lightweight, light-wind delta that you can relax with. ♦



For the Record

...Continued from page 77

to enjoy the limelight "for a minute."

The minute lasted exactly two months and 17 days.

On December 7, 1986, John Waters of Lincoln City, Oregon flew a sparless ram-air kite, 18½' wide x 10' 2" deep (180 square feet in area). Two beach strollers signed as witnesses to the flight, which lasted 10 minutes and included a dozen loops in each direction.

However, John wasn't satisfied it was the largest he could stunt. He obtained another soft kite, this one measuring 25' x 13' 4" (at least 330 square feet in area). On February 5, 1987, he flew it in Lincoln City for 15 minutes, making four loops in each direction. Light 5mph winds made it possible for John to self-launch the kite. Four tourists from Portland signed the witness sheet.

We capitulate. Six different kites in just one year making a serious effort to set a record are enough. Largest Stunter goes on the *Kite Lines* list.

Most Figure-Eights Flown in France

A claim has been submitted by Michel Trouillet of Nîmes / Montpellier, France, that on August 25, 1986, he flew a stunt kite through 1,141 figure-eights (2,282 loops) in one hour.

We are impressed not only with the number of loops in the time span, but with the direction of interest in stunting records that this feat represents. We are awaiting verification and further details as we go to press.

Kenny Flies More Hyperkites

Young Kenny Frederick of Chula Vista, California is still at it—trying to increase his own record for most stunt kites flown in train. On August 23, 1986, at the Washington State International Kite Festival, Kenny reset the number from 155 to 179, flying modified Hyperkites. He followed the rules by flying for over five minutes under control and performing loops to the left and right. There were four witnesses. However, Kenny did not bother to tell us about his feat (we learned about it from other sources), perhaps because he is going for 200 next time and may consider 179 to be a trifling interim step.

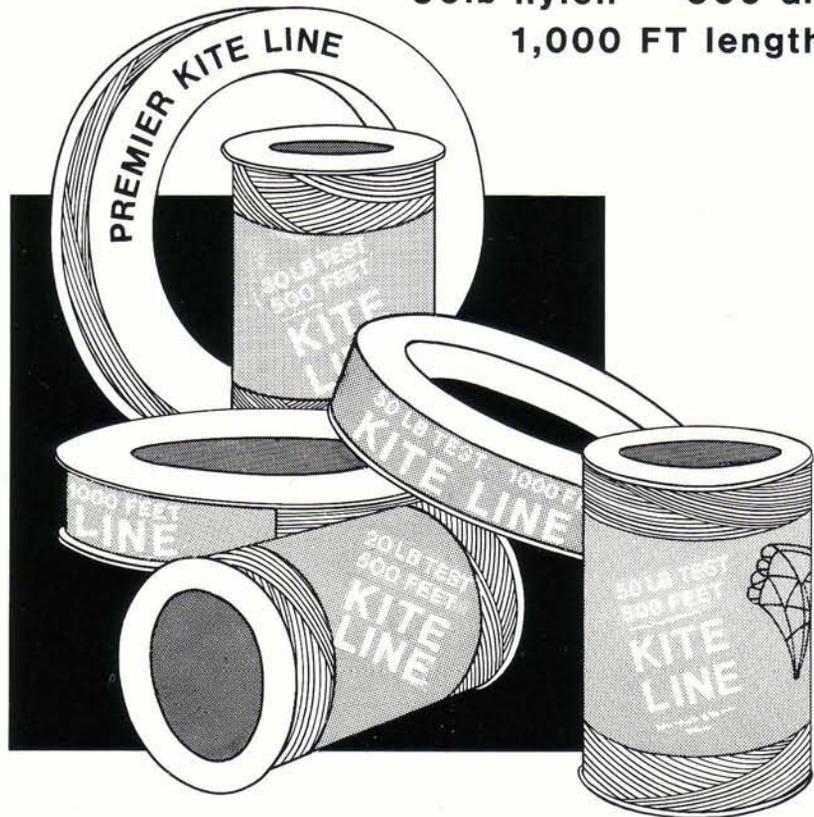
Follow-Up: The Latest Guinness

The 1987 *Guinness Book of Records* arrived at the *Kite Lines* office in October 1986. The big, colorful original edition, printed in England, contains four kite records, in between the ones for kissing and knitting.

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The categories for kiteflying are the same as last year: Largest, Greatest Number (flown on one line), Altitude and Duration. The first three of these records remain unchanged, but the Largest Kite is now said to be the same as the Longest Kite. It is true that the Thai-type cobra kite made by van den Broek and Kuil in 1984, at 2,133 feet long measures 8,288 square feet in area. But we—and other thoughtful kites—would dispute that this is a larger kite than the 5,952 square foot inflatable airfoil flown by another Dutch team in 1981.

What part of the cobra was tail and what was kite? That question has never

been resolved. Until it is, the categories Largest and Longest cannot legitimately be combined. We suspect Guinness was more interested in saving space in the book than in accommodating a new category. *Kite Lines* has suggested a full 10 categories to Guinness and received a noncommittal answer. Persons interested in a full range of categories in kite records are invited to read *Kite Lines* and to send us your opinions. We will continue to lobby Guinness on your behalf, but we need assurance through your voice—your vote, if you will—that our suggestions represent the consensus of the kiteflying community. ♦

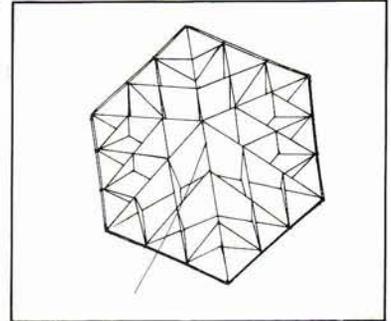
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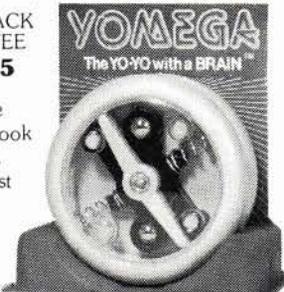
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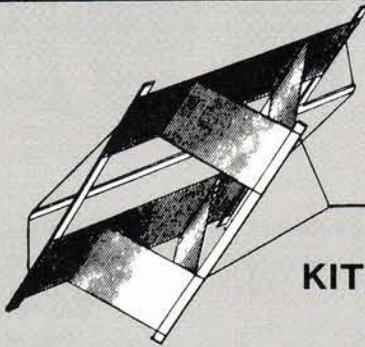
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Members of the New Zealand Kitefliers Association gather for a group photograph by James White that captures the comradeship of kite clubs everywhere.

KITE CLUB DIRECTORY— an intermittently updated reference from *KITE LINES*

Counting the Clubs

Being sticklers for accuracy may be our curse. So when we are asked the question, "How many kite clubs are there?" we just try to tell what we know. No less. And no more. We resist the temptation to sound "big," because we think that, in the long run, groundless claims would far more undermine our authority.

One thing we know about the clubs: there are more of them.

Our first directory, published in 1978, listed 29 kite clubs in existence. In 1981 we ran a listing of 52 clubs. With our next directory, in 1984, the number increased to 65. And now (count them yourself) there are 116 kite clubs, groups and associations on

our list. If our calculations are correct, it appears that in less than nine years, the number of active kite clubs has increased by 300 percent.

Does that sound good to you? We call it nice, but not phenomenal. This "increase" is at least partly a result of the diligent digging we do at Kite Lines. The information does not flow into our office like water from a tap. We have more data about clubs now because we have worked more to get it.

On the other hand, what seems a moderate growth may in fact be much larger. This is because we depend on the responsiveness of the clubs in order to determine if they are alive and well. Many could be thriving, growing and flying —

but if we don't know it, we can't list them.

We have also found that the dying of a kite organization is rarely noticed. One day a club is soaring like a delta and everyone sees it in the sky. The next day it vanishes from sight like a box kite with a broken line.

In short, new clubs spring up, old ones fade away, and the only thing that remains constant in the world of kite clubs is . . . change. Thus, publishing a list is almost an exercise in futility. But in putting the directory together we have held to a few simple standards.

Have we heard from this group within the past year? From what we have heard, is it probable that there is some degree of unity, activity and continuity? If someone

were to contact this club, would he or she likely meet with some response? If it's a new club, do we list it immediately?

There are many judgment calls. What we are publishing in this directory is anything but permanent and is barely objective.

How They Run

Kite clubs are as diverse as kitefliers. Some seem to be the creation of strong-minded individuals; others are democratically run. A few de facto clubs are no more than kite shop mailing lists, yet a retailer may provide very well for club functions. At the other end of the spectrum are the independent publications, such as *Vlieger* and *Kite Lines*, which provide communications but shun any

"club" pretense. It is well to make no assumptions when you join a club and enter into its mutual endorsement system.

What We Are Listing

Space limitations have prevented us from publishing as much detail as we would like about club activities and benefits. For example, most of the groups put out newsletters, which vary from brief announcements to journals of some girth and ambition.

Dues are listed for one adult member for one year and in the currency of the club's country. Overseas and airmail services should be added to the dues where appropriate.

We have printed the number of members for the clubs according to what they told us, which in some cases are approximations.

Our database of kite clubs contains listings old and new, large and small, active, inactive, incipient and defunct. As we write this, the total list numbers over 300! Therefore, this printed directory consists only of active clubs we have verified. In order to name more clubs and/or tell more about each one, we may have to handle the directory differently in the future. We welcome your comments and suggestions.

The Main Point

If you live near a kite club and have not been aware of it, we are happy that Kite Lines can make this your introduction. If you find fellow fliers because of this directory, we will be well rewarded for our efforts. Let us know, won't you?

Australia

AUSTRALIAN KITE ASSOCIATION
Founded: March 6, 1977
Dues: None
Members: 100
Contact: Larry W. Osborne, 24 Union Road, Surrey Hills, Melbourne, Victoria 3127

BRISBANE KITE GROUP
Founded: June 14, 1984
Dues: \$5.00 (Australian)
Members: 16

Contact: Paul Elton, 6 Colborne Street, Acacia Ridge, Queensland 4110

KITE FLIERS OF TASMANIA
Founded: September 23, 1986
Dues: \$15.00 (Australian)
Members: 8 (at founding)
Contact: Jeremy Carson, 88 Forest Road, Trevallyn, Launceston, Tasmania 7250

KITE FLYERS OF SOUTH AUSTRALIA
Founded: June 23, 1977
Dues: \$5.00 (Australian)
Members: 16
Contact: Bill Slater, 34 Bellview Road, Flagstaff Hill, South Australia 5159

Belgium

ASSOCIATION MONDIALE DE PHOTO PAR CERF-VOLANT (Kite Aerial Photography World-wide Association)
Founded: April 1985
Dues: FB 700
Members: 110
Contact: Michel Dusariez, 14 avenue Capitaine Piret, B-1150 Bruxelles
Comments: Excellent bilingual newsletter (English/French) contains wealth of information, is published quarterly.

NOUVEAU CERVOLISTE BELGE
Founded: May 31, 1982
Dues: FB 1000
Members: 150
Contact: Jacques Durieu, 45 rue de la Houssiere, 5873 Hevillers
Comments: Bimonthly newsletter (in French, with English index) is one of the best.

Brazil

ASSOCIACIO PAULISTA dos EMPINADORES de PAPAIAIOS
Contact: Roberto Armano, 140-32 rua Abilio Soares, 04005 Sao Paulo SP

Canada

ALBERTA KITE CLUB
Contact: E. N. Watrich, Post Office Box 113, Glendon, Alberta T0Z 1P0

BRITISH COLUMBIA KITE-FLIERS ASSOCIATION
Founded: March 1980
Dues: \$8.00 (Canadian)
Members: 76
Contact: David Tuttle, Post Office Box 35653, Vancouver, British Columbia V6M 4G9

China (Peoples Republic of China)

WEIFANG KITEFLIERS ASSOCIATION
Founded: October 1983
Members: 120
Contact: Sun Lirong, 42 Shengli Street, Weifang City, Shandong Province

YANTAI KITE ASSOCIATION
Contact: Ling Hong Sheng, Middle School 9, Yantai City, Shandong Province

China (Republic of China)

REPUBLIC OF CHINA KITE-FLIERS ASSOCIATION
Founded: November 30, 1980
Contact: Kin Kan Hsieh, Post Office Box 35-37, Taipei, Taiwan

Colombia

COLOMBIAN KITEFLIERS
Founded: August 1979
Contact: Fidel Jaramillo, Post Office Box 90617, Bogota

COMETEROS DE LA VILLA
Founded: July 19, 1985
Members: 30
Contact: Luis Carlos Cadavid, Apartado Aereo 11059, Medellin

Denmark

DANSK DRAGE KLUB
Founded: May 4, 1985
Dues: KR 100
Members: 40
Contact: Finn Jensen, Solvagerej 8-A Unnerud, 4500 Nykobing Sj.

EXOSFAEREN KITE CLUB
Founded: 1970
Dues: KR 110
Members: 50
Contact: Lars Koudal, Banegaardsgade 17, DK-8000 Aarhus C

KOBENHAVNS DRAGECENTER
Founded: April, 1982
Dues: KR 25
Members: 76
Contact: Herman Wolsgaard Iversen, Amagergade 10, 1423 København K

MIDTBYENS DRAGEKLUB
Founded: September 1, 1984
Members: 5
Contact: Jorgen Moller Hansen, Knudrisgade 41, DK-8000 Aarhus C

England

BEARLY MADE IT SKYDIVE SQUAD
Founded: May 31, 1981
Dues: None
Members: 100+
Contact: John Barker, 48 Laurel Lane, West Drayton, Middlesex UB7 7TY
Comments: Everything you ever wanted to know about parachuting teddy bears from kites.

BLACKHEATH KITE ASSOCIATION
Founded: February 10, 1977
Dues: £ 1.00
Members: 50
Contact: L. F. Patten, 303 Lincoln Road, Enfield, Middlesex EN1 1SY
Comments: "The only active kite-flying club in London."

BRIGHTON KITE FLYERS
Founded: 1979
Dues: £ 2.90
Contact: Gregor N. Locke, 53 New Road, Shoreham-by-Sea, West Sussex BN4 6RB

BRITISH KITE FLYING ASSOCIATION
Founded: October 12, 1975
Dues: None
Contact: Ron Moulton, Post Office Box 35, Hemel, Hempstead, Hertfordshire HP2 4SS
Comments: The BKFA is "liason" between prospective members and other kite organizations.

CORNWALL KITEFLIERS
Founded: February, 1979
Dues: None
Members: 15
Contact: John & Carolyn Rule, Tremain, Meaver, Mullion, Helston, Cornwall TR12 7DN

CROYDON KITE GROUP
Founded: June, 1980
Dues: None
Members: 10
Contact: Michael J. Fay, 156 Balcombe Road, Horley, Surrey

DEVON KITE FLIERS
Founded: 1984
Dues: None
Members: 7
Contact: L. J. Symons, East Waytown, Goodleigh Road, Snapper, Barnstaple, Devon

ESSEX KITE GROUP
Founded: October, 1976
Dues: £ 1.50
Members: 46
Contact: Kathleen Pike, 34 Mortimer Road, Rayleigh, Essex SS6 9NX

GREAT OUSE KITE FLIERS
Founded: April 1, 1979
Dues: £ 6.00
Members: 20
Contact: E. A. (Ted) Fleming, 10 Laxton Close, Eaton Ford, St. Neots, Huntingdon, Cambridgeshire PE19 3AR

KITE SOCIETY OF GREAT BRITAIN
Founded: April, 1983
Dues: £ 4.00
Members: 300
Contact: Jon & Gill Bloom, 31 Grange Road, Ilford, Essex IG1 1EU

MIDLANDS KITE FLIERS
Founded: April 1, 1979
Dues: £ 5.00
Members: 97
Contact: Bill Souten, 76 Oxhill Road, Handsworth, Birmingham B21 9RH

NORTHERN KITE GROUP
Founded: November 5, 1978
Dues: £ 5.00
Members: 30
Contact: Ron Ogden, 41 Ashfield Drive, Clayton Bridge, Manchester M10 6WJ

SHEFFIELD KITING CLUB
Founded: April, 1977
Dues: None
Members: 18
Contact: John Green, 18 Downham Road, Sheffield, South Yorkshire S56QB

SHROPSHIRE KITE GROUP
Founded: 1977
Dues: None
Members: 8
Contact: Tony Slater, 128 Meadow Farm Drive, Harleslott, Shrewsbury, Shropshire SY1 4JY

WESSEX KITE GROUP
Founded: 1981
Dues: None
Members: 40
Contact: David Webster, 16 Brackley Way, Hammonds Green, Totton, Hampshire SO4 3HN

YORK KITE FLIERS
Founded: Summer 1983
Dues: None
Members: 22
Contact: Anne Hoskins, 2 Dewsbury Terrace, York, North Yorkshire YO1 1HA

France

ASSOCIATION EPHEMERES MILLENAIRES
Founded: August, 1984
Dues: FF 50

Members: 35
Contact: Martine Chatel-Theze,
58 rue Jean Bodin, F-49000
Angers

ASSOCIATION pour le DEVELOPEMENT du CERF-VOLANT
Founded: 1986
Contact: A.D.C.V., boîte postale
140, F-76204 Dieppe

CERF-VOLANT CLAROKESSI
Founded: 1976
Contact: Chantal Barret, 57 rue
Grenata, F-75002 Paris

CERF-VOLANT CLUB DE FRANCE
Founded: April 3, 1977
Dues: FF 170
Members: 278
Contact: Jean-Claude Blatry, boîte
postale 186, F-75623 Paris

CERF-VOLANT CLUB NIMOIS
Founded: 1984 (or earlier)
Contact: Charles Gouiran, 19 rue
du Moulin Raspail, F-30000
Nimes

I.C.A.R.E. ENCORE
Founded: 1986
Contact: Icare Encore, Kerclique-
net Brillac, F-56370 Sarzeau,
Brittany

Germany (Federal Republic of Germany)

BREMER DRACHENFREUNDE
Founded: August 15, 1983
Dues: None
Members: 15
Contact: Thomas Kibelksties, 30/
31 Marterburg, Bremen 28

DRACHEN CLUB BERLIN
"AERO-FLOTT"
Founded: March 14, 1986
Dues: DM 50
Members: 30 (at founding)
Contact: Michael Steltzer, Eisen-
acherstrasse 81, 1000 Berlin 62

DRACHEN CLUB DEUTSCH-
LAND
Founded: 1984
Dues: DM 30
Members: 130
Contact: Jurgen Gutzeit, Wands-
beker Chaussee 82, 2000 Ham-
burg 76

STUTTGART FESSELDRACHEN
GESELLSCHAFT
Founded: 1985
Contact: Roland Falk, Marien-
strasse 12, 7000 Stuttgart

Hong Kong

HONG KONG KITE ASSOCIA-
TION
Founded: September 15, 1980
Dues: HK \$50.00
Members: 360
Contact: James Au, 1-A 7th Street,
Tai Wai Village, Shatin, New
Territories

Hungary

MAGYAR SARKANYERESZTO
KLUB
Founded: September 10, 1983
Dues: 100 Forint
Members: 46
Contact: Istvan Bodoczky, Kiss
Lajos U. 30, H-2092 Budakeszi

Ireland

WATERFORD KITEFLYING
GROUP
Founded: 1986
Contact: Aine O'Brien, 15 Thom-
ond Green, Losmore Lawn,
Waterford

Italy

ASSOCIAZIONE ITALIANA
AQUILONISTI
Founded: July 12, 1982
Dues: 20,000 Lire
Members: 200
Contact: Oliviero Olivieri, via Dan-
dolo 19/a, I-00153 Roma

CLUB CERVIA VOLANTE
Founded: June 5, 1984
Dues: 10,000 Lire
Members: 204
Contact: Claudio Capelli, via Pina-
rella 26, I-48015 Cervia

CLUB L'AQUILONE
Founded: 1985
Contact: Annemiek Rosati, via A.
Gramsci 24, Sesto Fiorentino,
Firenze

GRUPPO VULANDRA A.R.C.I.
Founded: April 19, 1981
Dues: 20,000 Lire
Members: 15
Contact: Guido Guidarelli, Centro
Civico, Piazza B. Buozzi, I-44038
Pontelagoscuro

Japan

BARAMON PRESERVATION
ASSOCIATION
Founded: April 29, 1966
Members: 56
Contact: Eijiro Morita, Sakae-
machi 6-3, Fukue-shi, Nagasaki
853

CREATE KITEFLIERS CLUB
Founded: 1977
Contact: Matsuo Isobe, 14-13
5-chome, Ebara, Shinagawa-ku

ECHU DAIMON KITE ASSOCI-
ATION
Founded: February 20, 1980
Dues: ¥ 1,500
Members: 35
Contact: Makoto Ohye, Toyama-
ken, Imizu-gun, Daimon-machi,
975 Gejo

HAMAMATSU KITE BATTLE
ASSOCIATION
Founded: 1727
Members: 4,000 (est.)
Contact: Shoichiro Senda, Hama-
matsu-shi, Motohamamatsu 37

HONNO KITE PRESERVATION
ASSOCIATION
Founded: May 1, 1975
Dues: ¥ 1,500
Members: 51
Contact: Mitsuo Iwamura, 2382
Honna, Mobarashi, Chiba 299-41

ITABASHI CHAPTER (Japan
Kite Association)
Contact: Hiroaki Kubo, 1-15-16
Tokumaru, Itabashi-ku, Tokyo
175

JAPAN KITE ASSOCIATION
Founded: October 23, 1969
Dues: ¥ 4,000

Members: 1,300
Contact: Masaaki Modegi, 1-12-10
Nihonbashi, Chuo-ku, Tokyo 103

JAPAN KITE PHOTOGRAPHY
ASSOCIATION
Founded: 1985
Contact: Katsutaka Murooka, 2-
42-7 Shirasagi, Nakano-ku,
Tokyo 165

KURAYOSHI KITE ASSOCIA-
TION
Founded: 1978
Members: 15
Contact: Tateki Tanimoto, Kura-
yoshi-shi, Tottori-ken, Koshido-
no-cho 1405

OSAKA KITE ASSOCIATION
Founded: January 15, 1975
Members: 47
Contact: Kaoru Kimura (Kenji
Takagi), 3-27-26 Higasi Tanabe,
Higasi Sumiyosiku, Osaka 546

SAKATA KITE PRESERVATION
ASSOCIATION
Founded: May, 1875
Dues: ¥ 2,500
Members: 23
Contact: Masami Matsuta, Toeicho
6-20, Sakata-shi, Yamagata-ken

SAKU SPRING WIND SOCIETY
Founded: December, 1926
Dues: ¥ 10,000
Members: 25
Contact: Masamachi Takahashi,
Hara 15, Saku-shi, Nagano-ken
384-01

SANJO KITE ASSOCIATION
Founded: 1868 (or earlier)
Dues: ¥ 15,000 (per team)
Members: 1,000 (22 teams)
Contact: Toshio Kubo, 1-10-15
Kitashinbo, Sanjo-shi, Niigata-
ken 955

SHIRONE KITE BATTLE
ASSOCIATION
Contact: Kazuo Tamura, Shirone-
shi, Sakura-machi, Niigata-ken
950-12

YOKAICHI GIANT KITE PRE-
SERVATION ASSOCIATION
Contact: Kyushi Nishizawa, Yoka-
ichi-shi, Yokaichi-machi 9-20

Korea (Republic of Korea)

KOREAN KITEFLIERS
ASSOCIATION
Contact: Roe Sung Kyu or Roe
Yoo Sang, 182 Younghi-dong,
Seadaemun-ku, Seoul

Malta

KITEFLIERS ASSOCIATION
MALTA
Founded: 1977
Dues: £ 1.00 (Maltese)
Members: 20
Contact: Alfred Darmania Gay,
3/107-A Rudolphe Street, Trinity
Flats, Sliema

Netherlands

INDISCHE VECHTVLIEGER-
CLUB NEDERLAND
Founded: 1983
Contact: Edo van Tetterode, 77
Brederodestraat, 2042-BC
Zandvoort

NEDERLANDS VLEIEGER
GEZELSCHAP
Founded: 1978
Dues: fl 10
Members: 150
Contact: Ton Oostveen, 39 Meen-
daal, 6228-GE Maastricht

VLEIEGER (Magazine)
Subscription: fl 15 for six issues
Contact: Redaktieteam, 2 Julius
Roentgenstraat, 2551-KT den
Haag
Comments: Attractive, thorough
bi-monthly (in Dutch) published
with care by a dedicated group
of kites/writers.

New Zealand

NEW ZEALAND KITEFLIERS
ASSOCIATION
Founded: July 17, 1984
Dues: NZ \$10.00
Members: 137
Contact: Bob Maysmor, 9 Kenef
Road, Paremata, Wellington

WAIKATO KITE CLUB
Founded: 1972
Dues: NZ \$5.00
Members: 22
Contact: Logan Fow, 45 Mears
Road, Hamilton

Norway

WIND ART GROUP
Founded: May 17, 1985
Contact: Terje Westfoss, Skipperg.
16, Frederikstad

Scotland

SCOTTISH KITE GROUP
Founded: May 7, 1982
Dues: £ 4.00
Members: 10
Contact: Frank G. McShane, South
Lodge, Garvald, East Lothian
EH41 4LW

Singapore

SINGAPORE KITE ASSOCIA-
TION
Founded: July, 1982
Dues: S \$10.00
Members: 80
Contact: Michael Seet, 255 Alex-
andra Road, Singapore 0315

South Africa (Republic of South Africa)

SOUTH AFRICAN KITE
ANGLING ASSOCIATION
Founded: March, 1982
Members: 87
Contact: Peter Saayman, 11 Fair-
bridge Street, Parkrand, Boks-
burg, Transvaal 1460

SOUTH AFRICAN KITE
ASSOCIATION
Founded: April 17, 1986
Dues: None
Members: 74
Contact: Gary Silberman, 71 Burg
Street, Cape Town 8001

ZADoba SURF, ROCK AND
KITE ANGLING CLUB
Contact: A. C. Smith, Post Office
Box 1366, Nigel, Transvaal 1490

ZINGELA KITE ANGLING
CLUB
Contact: Tony Turton, Post Office

Box 203, Muldersdrif, Transvaal 1747

Spain

CLUB de COMETAS de GETAFE
Founded: September, 1982
Contact: Jose Exposito Aranda, c/Batres No. 9, Getafe, Madrid

GRUPPO COMETA INTERNA-CIONAL de MALLORCA
Founded: 1984
Contact: Falko Haase, c/Calatrava 18, Palma de Mallorca

Sweden

KITEFLIERS OF SWEDEN
Contact: Lars Enlund, Ornholmsbrinken 70, 12742 Skarlolmen

Thailand

KITE ASSOCIATION OF THAILAND
Founded: 1932
Contact: Ron Spaulding, 888/88 Ploenchit Road, Mahatun Plaza, Bangkok 10500

THAI KITE HERITAGE GROUP
Founded: August 1, 1986
Dues: baht 300
Members: 7 (at founding)
Contact: Ron Spaulding, 888/88 Ploenchit Road, Mahatun Plaza, Bangkok 10500

U.S.A.

AMERICAN KITEFLIERS ASSOCIATION
Founded: October 24, 1964
Dues: \$15.00
Members: 1,580
Contact: AKA, 1559 Rockville Pike, Rockville, MD 20852

ASSOCIATED OREGON KITERS
Founded: 1981
Dues: \$5.00
Members: 80
Contact: Eric Forsberg, Post Office Box 25616, Portland, OR 97225

BEN-FRANKLIN KITE SOCIETY
Founded: October 26, 1985
Dues: \$5.00
Members: 29
Contact: Larry Zilar, 1030 West 14th Avenue, Kennewick, WA 99337

BROOKLYN KITE CLUB
Founded: July 26, 1981
Dues: \$15.00
Members: 15
Contact: Carmine Santa Maria, 275-94th Street, Brooklyn, NY 11209

CALIFORNIA KITE GROUP
Founded: August 16, 1985
Dues: \$8.00
Members: 25 (at founding)
Contact: Corey Jensen, 585 Cannery Row, No. 105, Monterey, CA 93940

CENTRAL OHIO KITEFLIERS ASSOCIATION
Founded: July 12, 1980
Dues: \$6.00
Members: 200
Contact: David Holbrook, 457 Pittsfield Drive, Worthington, OH 43085

CHICAGOLAND SKY LINERS
Founded: March 6, 1982
Dues: \$8.00
Members: 168
Contact: Charles A. Sotich, 3851 West 62nd Place, Chicago, IL 60629

FINGER LAKES ASSOCIATION OF KITEFLIERS
Founded: September 30, 1985
Dues: \$6.00
Members: 25
Contact: William D. Connors, 116 Bentley Place, Horseheads, NY 14845

5/20 KITE GROUP DETROIT
Founded: February 9, 1986
Dues: \$5.00
Members: 91
Contact: Bruce J. Jarvie, Post

Office Box 47257, Oak Park, MI 48237

FORT WORTH KITEFLIERS ASSOCIATION
Founded: January 15, 1980
Members: 25
Contact: Lois Card, 2320 Yeager Street, Fort Worth, TX 76112

GATEWAY KITE CLUB
Founded: July, 1985
Dues: \$12.00
Members: 20
Contact: Carole Ritter, 3200 Roland Avenue, Belleville, IL 62221

GREATER DELAWARE VALLEY KITE SOCIETY
Founded: January 17, 1981
Dues: \$6.00
Members: 330
Contact: Leonard M. Conover, Post Office Box 888, Newfield, NJ 08344

HAWAII KITEFLIERS ASSOCIATION
Founded: 1968
Dues: \$6.00
Members: 100
Contact: Dave Wallace, Post Office Box 612, Pearl City, HI 96782

HOOSIER KITEFLIERS ASSOCIATION
Founded: October 20, 1986
Members: 20
Contact: Dave Burduss, Post Office Box 1041, Anderson, IN 46015

KITE LINES (Magazine)
Founded: 1977
Subscription: \$11.00 (four issues)
Circulation: 10,000
Contact: Valerie Govig, Publisher-Editor, 7106 Campfield Road, Baltimore, MD 21207

KITE SOCIETY OF WISCONSIN
Founded: September 9, 1978
Dues: \$5.00
Members: 65
Contact: Jeffrey Kataoka, 2266 North Prospect, No. 501, Milwaukee, WI 53202

KITES OVER NEW ENGLAND
Founded: March, 1980
Dues: \$5.00
Members: 90
Contact: Hank Manseau, 33 Ledge-wood Road, Framingham, MA 01701

LONG ISLAND KITEFLIERS ASSOCIATION
Founded: April 1, 1973
Dues: None
Members: 60
Contact: James T. Linnen, Post Office Box 547, Yaphank, NY 11980

LONG MEADOW KITEFLIERS
Founded: September 19, 1970
Dues: None
Members: 30
Contact: Edwain L. Grauel, 799 Elmwood Terrace, Rochester, NY 14620

MARYLAND KITE SOCIETY
Founded: January 25, 1969
Dues: \$8.00
Members: 150
Contact: William A. Rutiser, 8412 Townecrest Court, Gaithersburg, MD 20877

MINNESOTA KITE SOCIETY
Founded: September 1, 1985
Dues: \$5.00
Members: 6
Contact: James W. Ogland, Post Office Box 776, Wayzata, MN 55391

NEWPORT KITE GROUP
Founded: February 22, 1986
Dues: \$5.00
Members: 42
Contact: Anthony Bisbano Jr., 196 Homestead Lane, Portsmouth, RI 02871

NORTHAMPTON KITEFLIERS ASSOCIATION
Founded: April, 1981
Dues: None
Members: 15
Contact: Dorothea Szabo, 12 Bridge Street, Northampton, MA 01060

NORTHERN CALIFORNIA KITEFLIERS ASSOCIATION
Founded: April 26, 1986
Dues: \$15.00 (lifetime)
Members: 47
Contact: Bob Hampy, 756 Plumas Street, Yuba City, CA 95991

OHIO SOCIETY FOR THE ELEVATION OF KITES
Founded: April 8, 1974
Dues: \$5.00 (lifetime)
Members: 100
Contact: Constance Pederson, 1200 Fairhill Road, No. 207, Cleveland, OH 44120

PORTABLE AIR FORCE
Founded: September 15, 1984
Dues: None
Members: 15
Contact: Robert Gregory, Post Office Box 855, Omak, WA 98841

RAINBOW KITEFLIERS SOCIETY
Founded: September 26, 1982
Dues: \$10.00
Members: 85
Contact: Kevin Olds, Post Office Box 4344, Flint, MI 48504

RARITAN AREA FLIERS
Founded: October 17, 1986
Dues: \$6.00
Members: 60
Contact: Raymond V. Brandes, Post Office Box 1094, Edison, NJ 08818

TEXAS FLYERS
Founded: 1986
Contact: Lymon Hall, 4014 Richmond Avenue, Houston, TX 77027

WASHINGTON KITEFLIERS ASSOCIATION
Founded: 1971
Dues: \$8.50
Members: 190
Contact: Pacific Science Center, 200 Second Avenue North, Seattle, WA 98109

Wales

SNOWDON BALLOON, KITE AND HANG GLIDING CLUB
Founded: October 25, 1984
Dues: £ 1.00
Members: 23
Contact: Mike Bithell, 11 Bontuchaf, Bethesda, Gwynedd

THE OLDEST

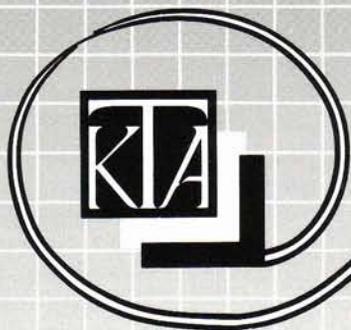
FOUNDED	COUNTRY	ORGANIZATION
1727	Japan	Hamamatsu Kite Battle Association
1835	USA	Franklin Kite Club
1868 or earlier	Japan	Sanjo Kite Association
1875 May	Japan	Sakata Kite Preservation Association
1885 or earlier	USA	United Kite Raising Association
1887	USA	ABCD Kite Flying Club
1895 May 2	USA	Boston Aeronautical Society
1900 or earlier	USA	Bayonne Kite Club
1901 or earlier	France	Societe Francaise de Navigation Aerienne
1909	France	L'Association Cerf-Voliste de Nancy
1909 or earlier	England	Kite Flying Association of Great Britain
1909-1911 (?)	France	Ligue Francaise du Cerf-Volant
1909 August 1	France	Le Cerf-Volant (Magazine)
1910 earlier	England	Kite and Model Airplane Association
1913	Belgium	Delta Club de Bruxelles/Belgique
1918	Japan	Sagara Kite Preservation Association
1926 December	Japan	Saku Spring Wind Society
1932	Thailand	Kite Association of Thailand

We have no information in our records to indicate that any kite organizations were founded during the years 1933 through 1962. The next club on our chronological list is the International Kitefliers Association, founded by Will Yolen in 1963 (USA).

FLY WITH US!

For information of KTA, write:

Kite Trade Association
113 W. Franklin Street
Baltimore, MD 21201



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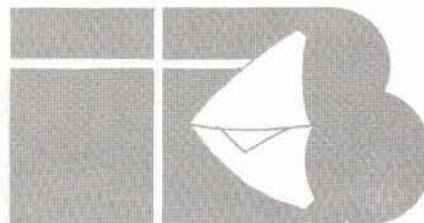
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Mike Bithell writes: I call this kite the Eight-Winged Box, but it is a variation on the Dymaxion Box, which is a part of a series of kites I am developing based on the shape of the Platonic (regular) and the Archimedean (semi-regular) solids.

Both designs use square pieces of fabric for the outer wings. The squares are connected along their diagonals to the four outer edges of the central box.

The Dymaxion Box has the cell width equal to the side of the wing square. This design produces what can only be called a high-aspect ratio kite. The Dymaxion Box flies really well and has quite an impressive tumbling ability.

The Eight-Winged Box has the cell width equal to one-third the diagonal of the wing square. This design produces a kite that will fly in light winds with great stability. Unfortunately, the Eight-Winged Box starts to misbehave sooner as the wind speed increases. Then it becomes more lively and has been known to go over the top. In fresh to strong winds, the kite needs a tail. The Eight-Winged Box can also tumble, but it is not as good at this game as the Dymaxion Box.

The bridling on these kites is the simple two-leg yoke. I started flying them on four-leg bridles, but they seem happier on two. The bridle in the photograph is four-

legged, but it is adjusted so that the back two legs are redundant and hang loosely. I use the back two bridle points to hang a tail (or tails) from nowadays.

The sails are made from ripstop nylon with the grain following the leading edges. They are hemmed, but not taped. The cells are sewn to the wings and then pockets are sewn into the cells to take the 1/4-inch dowel longerons. The cell bracers are 3/8-inch dowels. The kite is 38" tall and the wingspan is 49". I built the kite in 1986.

The kite has been displayed at workshops and has flown on hills and mountains around Bethesda and, of course, on Pant Dreiniog, our local flying site.

The photograph was taken by Malcolm Boater, a founder-member of the Snowdon Balloon, Kite and Hang Gliding Club—and a good friend of mine.

The scenery in Wales is magnificent, especially in Snowdonia, the perfect backdrop for airborne sculpture. Sheep and hill ponies are grazed on the mountains and there is a huge slate quarry overlooking Bethesda. Our local flying site used to be a slate quarry, then a rubbish dump and, finally, was reclaimed in the early 1970s. Now we fly kites on it—a very sensible use for old slate quarries, I am sure you will agree.

THIS KITE LINES SERIES features a reader's kite picture on a whole page in *full color* in each issue. Yours could be the next one! What kind of kite photograph qualifies for this honor?

- First, the kite must fly well. Supporting information must be included describing the kite's typical flight and giving its dimensions, materials and history.

- Second, the kite must be beautiful. Agreed, beauty is in the sky of the beholder. This is an openly subjective criterion.

- Third, the kite must show some quality of originality in either form, craftsmanship, color, decoration or use of attached elements.

- Fourth, the photograph (as a separate consideration from the kite in it) must be of high artistic and technical quality—sharp, well-framed, rich in color. For printing, we prefer 35mm or larger transparencies. We can also use color prints if they are 8" x 10" or larger. Tip: we favor vertical format over horizontal.

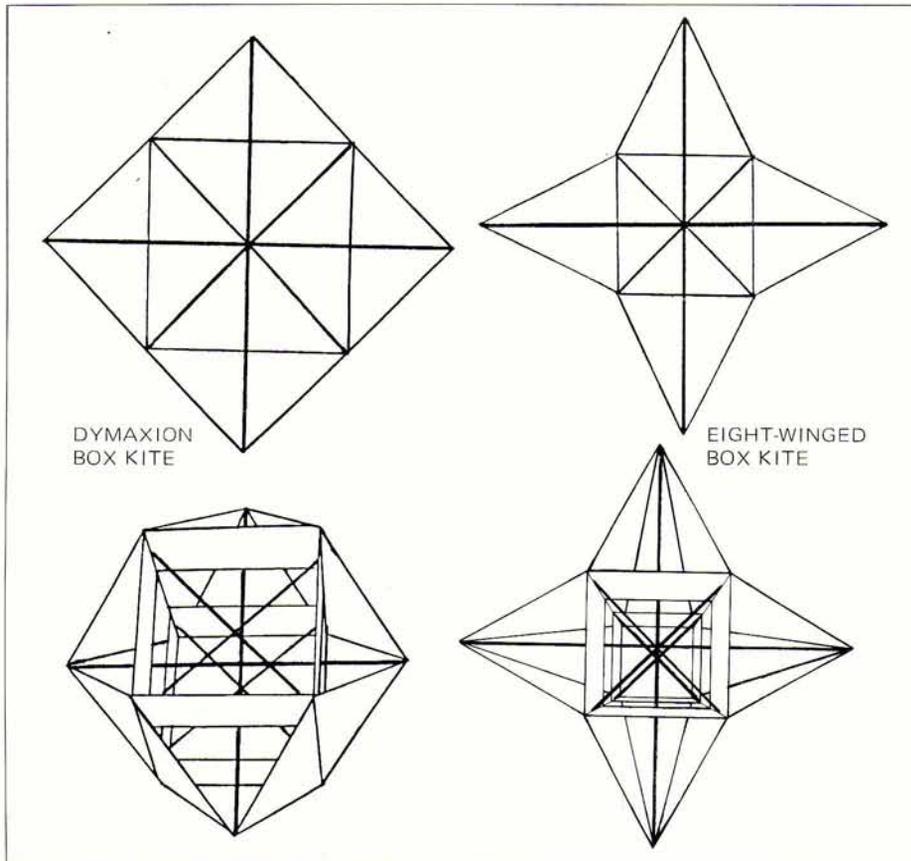
The photograph should be taken in one of two modes: as a close-up of the kite in the sky, the kite filling at least one-third of the film area; or as a background-inclusive shot, showing people, scenery, etc., behind the kite. In any case, the kite should be shown well, although not necessarily flying, as long as the supporting information establishes the kite's flyability. In fact, background features give a reference point and sometimes increased interest to a picture.

We suggest you take many pictures of the kite. Snap it in the sky, at festivals, morning, noon and night—even indoors on display. Discard any preconceptions of what a "correct" kite photograph should be. Then send us no more than *five* photographs of *one* kite at a time. To avoid risk of sending an original transparency or photograph, you may send a duplicate for review.

Ship in stiff protective packaging and enclose a self-addressed envelope with stamps or international reply coupons for return of your material—otherwise, we cannot guarantee its return.

Photographs submitted must be not previously published. After publication in *Kite Lines*, further rights revert to the photographer and kitemaker.

Kite Lines credits both kitemakers and photographers. A photographer may take pictures of a kite not his or her own, but in such case should ask the kitemaker's help in supplying information for the submission. *You* are invited to enter! You have nothing to lose but your obscurity. ◇





Number Ten in a Series

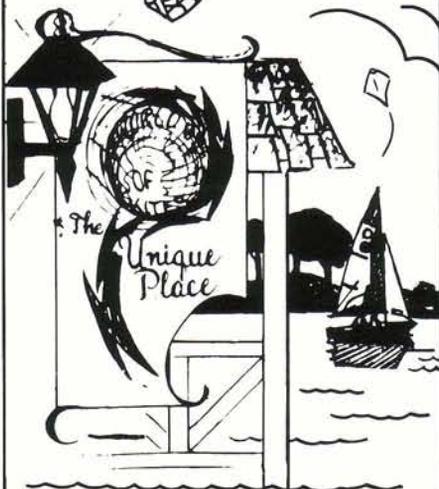
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