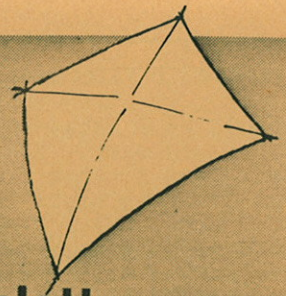


# Kite flyer<sup>TM.</sup>

The San Francisco Bay Area Kite Flying Newsletter



Vol.1 No. 4

Jan.-Feb. 1979

## announcements

ANNOUNCING TWO FABULOUS KITEFLYER KITE FLYS TO CELEBRATE "OUR" TIME OF YEAR !

#1

When: Sunday, February 25 (because we couldn't wait for March and the wind should be great) Noon to (how long can we last ?)

Where: Marina Green in San Francisco

Awards: Participation awards you can fly from your kite lines !

#2

When: March 18 Saint Patrick's Day

Where: Marina Green in San Francisco

Awards: Lots and lots including two for most beautiful, two spirit awards, two for most innovative, one Wilbur and Orville Wright award (for best try) and two for best decorated Irish kites PLUS two for most original decoration for sub-teens and two best decorated Irish kites for sub-teens ALL IN GREEN FOR THE OCCASION. As usual all awards will be for home-made kites.

SUNSET MAGAZINE has told us that our Saint Patrick's kite fly will be announced in their March issue so it should be VERY well attended. Bring your best kites and your newly made ones for what should be a great, GREAT DAY !!!

### GUEST WRITER

In this issue we are pleased to announce the addition of this column in our KITE FLYER NEWS. We couldn't be more fortunate than to start off with a guest as unknown to kitefliers as the basic thrill of flying. Possibly for very new kitefliers we would like to say that our guest is the most well known contemporary kiteflier, builder and authority on the subject. Bob Ingraham is the founder of the American Kitefliers Association (AKA) and Kite Tales magazine. Having retired from his many years of service to the kiteflying public he now has much more time for our beloved hobby.

IT ISN'T THE WIND  
by Bob Ingraham

Kites and wind have been synonymous for so long you probably have never given thought to any other factors involved in kite flying.

So, perhaps you may be surprised to learn that it isn't the wind at all which lofts your kite and keeps it there. The wind is a pussy cat. It has no muscle and therefore no force either potential or otherwise. The wind is only an ingredient in the overall recipe of natural phenomena. In itself and by itself it is really nothing. Strange?

Not at all. Wind is simply moving air. It is atmosphere in motion caused by convection and convection in turn is created by constantly changing temperatures over the face of the earth. We could just as well say, "The air is moving" instead of, "The wind is blowing" and we would technically be correct. What then, if it isn't the wind that lofts and sustains our kites in flight, is it?

Quite simple. It is atmospheric pressure, that relentless weight of air upon all the earth. It varies slightly from time to time but consistently it bears down with a force of a little more than 14 lbs. per square inch at sea level and dropping a few ounces or so with each thousand feet of elevation above the earth.

When air, which is a combination of gasses, moves about, it loses pressure. The faster it goes the less pressure it has. Thus when wind, or moving air strikes an object (in this case called an "air-foil") it creates an area of reduced atmospheric pressure in a protected portion of the object and old atmospheric pressure takes over. If it

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should be a large billboard, it will be pushed over. If it is you, you must lean farther forward to offset the pressure or be toppled backward. Your kite, being designed as it is to develop a maximum so-called "vacuum" over its top plane and held in that position by the flying line, is forced upward.

Atmospheric pressure exerts itself in all directions unrelentingly. Trying to force itself through the fabric of your kite from the bottom is the reason the kite goes up, not down. If the pressure upon it is too great or what we call excessive drag, the kite seeks to escape and in so doing usually goes to the left or right depending upon construction eccentricities.

Every object on the earth subject to the wind, is a form of airfoil. This is a word that means exactly what it says. It "foils" the direction of moving air, permitting some to pass rapidly past the rest meeting a frontal obstruction.

No matter what the velocity of the wind may be, atmospheric pressure varies but little and over quite lengthy periods of time. But, the faster the wind, the greater the creation of lift on your kite. Somewhere in the range of the wind's velocity and somewhere within the design of your kite lies a point of perfection. When the mile-per-hour wind velocity is right and the kite's angle is right, the craft flies as perfectly as it ever will. It will fly in the other ranges too but always with some limitations on its performance.

So, don't cuss the wind if it doesn't suit your kite. Fly it in the most advantageous range. And don't blame atmospheric pressure either. If it wasn't for that old standby there would be no point in building a kite. Atmospheric pressure is a roaring lion compared to the wind which is a pussycat that does a lot of bluffing.

#### NEWS FROM SEATTLE

It seems as if the first of January is a good day for flying kites just about anywhere. Jack Van Gilder and Dave Checkley were just two of the members of the Washington Kitefliers Association who braved the cold January day to attend the fifth annual "PROTEST THE BOWL" kite fly in Seattle. They even got on television and little wonder since Jack was out to break his own record of 116 deltas on a train by successfully flying 130 tissue paper deltas!!! How about some lessons, Jack?

#### EUROPEAN KITEFLYER

The European Kiteflyer is the official publication of the E.K.A. (European Kitefliers Association). I saw my first issue when Kathy Mclean, from the Oakland Museum's Department of Special Exhibits, returned from a visit to England at which time she was in touch with editor Nick Laurie. The publication is one of worthy consideration even at a rate of \$20/year (for four issues). The first issue had 40 pages and the second had 48 pages. Each was filled with impressive articles ranging anywhere from "the origins of European Kites" to "The Birth of the Professor Waldof Box Kite." This looks like a promising publication for the real enthusiast. For more information or if you wish to subscribe write: European Kitefliers Association, Longstone Lodge, Aller, Langport, Somerset TA10 0Qx, England. The first two issues will be available for your inspection at the upcoming kite flies.

#### KITES AS ART AT THE MORGAN GALLERY

The Morgan Art Gallery in Kansas City has announced its first annual "KITES AS ART" show. The exhibition is scheduled to open on March 3, 1979 and continue until March 17. The show will include kites designed and built by Tal Streeter, Bob Ingraham, White Bird limited editions by Chris and Heloise Lochman, Lee Toy, Tom Henry, and Middle West contemporary artists. In addition to the show, informal kite flies are scheduled for the three weekends involved. The flies will take place in an area adjacent to the gallery.

The Morgan Art Gallery has been recognized since its creation ten years ago as a prime source for contemporary art in the Middle West. Often featured shows by Jasper Johns, Robert Rauchenburg, Richard Estes and others has made the Morgan Gallery known among art collectors. For more information please contact the Morgan Gallery in Westwoods, Kansas or the KITE FLYER.

#### 10th ANNIVERSARY DELTA

In a whisper of a wind or close to a gale, one kite that seems to fly consistently well is the 10th Anniversary Delta. Designed and built by Mr. Bob Ingraham the kite is a beauty to behold and an excellent all wind kite. There were three of Ingraham's deltas at the last fly and were the last kites flying before the Indian Fighters took over. We have been fortunate enough to be able to offer the 10th anniversary delta at a cost of \$30.00. Any money realized from the sale of this kite will be directly applied to the publication of this newsletter. Send your checks to Kite Flyer, 861 Clara Drive, Palo Alto, California 94303.

Past issues of KITE FLYER have made many fleeting references to the infamous George Ham, consequently we decided to feature George as our flier of the month.

George's interest in kites, more specifically in parafoils, started three years ago when he spotted a fellow flier with a parafoil aloft lifting an American flag into the air. Since that initial exposure, George has proceeded to make approximately ten parafoils, copying the basic Jalbert parafoil construction and adding his own unique touch to each one.

George can be seen almost any weekend of the year at the Marina Green in San Francisco with his parafoils in flight. One might say that George and his wife Marion are as much a part of the Marina as the green grass. George prefers to fly the "fast lane" that is, the lane closest to the jogging path. This way George keeps one eye on his parafoil and the other eye on the look out for the more exceptional female joggers -- which could explain why George always has a smile on his face and his teeth slightly gritted.

In explaining his choice of the Marina Green as his flying field George says, "I want other people to see and enjoy the parafoil." George holds true to his words, and is forever patient in his explanation of the parafoil. But kites are not the only qualifying factor of George Ham -- he has also been known to open car doors (with the keys locked inside), and one of his more fearless feats has been to turn a leak into a fountain when attempting to fix the sprinkler system at the Marina Green.

"Scavenger" would be a good word to describe George when he is building a parafoil. In the early days of his pursuit of the hobby, he spent weeks just looking for a good, used sewing machine. After hours of searching he located three workable ones -- now the number is down to two, a used "old" White and a Sears Cam, for the fancy stitching. George also tries to refrain from purchasing the material in which he uses to sew the parafoil, patiently waiting sometimes as much as a year and a half to complete a kite until he has found just the right quantity and quality of material. His flying line winders or reels are also handmade and unquestionably sturdy. His only actual money outlay is in the purchase of flying line and even that he at times has been known to scrounge from various sources.

George the Ham is a man with a varied past. Previous to kites George made quite a name for himself in the lapidary field. In 1972, the "Lapidary Journal" wrote an article about him making complimentary reference to his methodology of working without the use of power equipment, but solely by hand.

Marion, his wife of 35 years, and George boast of not owning a TV (of course we were unable to check their closets at the time of this interview to verify) -- and thus have many ways of entertaining themselves. Marion is always present to help George launch his parafoils, his secret touch. She also provides the extra hand at those critical moments in kite making when you need such assistance.

George estimates that approximately 150 hours of working time go into the construction of his version of the Jalbert parafoil. At present he is working on a four patch quilt parafoil, which we won't go into explanation about at this time -- in fact, if you want to learn more about George, just stop by the Marina Green and there George will be flying his parafoils.

#### A KITE FILLED AFTERNOON

The kite fly at the San Leandro Marina Park was enjoyed by all who attended. We had a light steady breeze for most of the afternoon and sunny skies. As it was non-competitive, we from KITE FLYER's staff had a great time flying our kites and sharing shop talk. Special thanks to Candy Walker for a delightful picnic lunch that was enjoyed along with the fun.

Quite a contingent of kitefliers from Sacramento came down to fly their kites. This hardy bunch stayed until sunset before packing up their cars for the journey home.

Of the newly constructed kites flown: Paul Walker had a Hewitt's Flexible Kite from a design in EUROPEAN KITEFLIER, Sam Urner seemed surprised and elated that a Baden-Powell Levitor kite he constructed flew the first time out, George Ham had his incredible 52 sq. foot parafoil with 50 (count 'em) appliqued five pointed stars (it sure is a beautiful work of love and patience), Dale Vanderhoof brought down his 12 foot french military kite made from cotton fabric and aluminum spars. Dale also brought along a 10 kite delta train, it was quite a sight as it thrashed around the sky. The bridling from kite to kite seemed to be causing

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quite a bit of instability. We are hoping to hear from the Great Delta Train Master of the North also known as Jack (Swami) Van Gilder to alleviate or at least look into the problems of training deltas to fly in formation. Tom Henry's green inflating winged dragon made an impressive sight as well as several other of his homemade variety kites, including a delta, and a winged bird kite.

As the afternoon slipped by, kites went up and down, in and out of the sky. A Sanjo Rokkaku, a Stratton Bi-plane, indian fighters, Ingraham's 10th anniversary delta (a beautiful flyer), eddies, mylar dragons, bullets, a J-7.5 parafoil and my very own phone booth kite, are just a few of the kites that were flown. All and all this made for a very fulfilling afternoon

#### NEW BOOK REVIEWS

The following book reviews are brought to you via the "5/20 KITE GROUP NEWS" in Grosse Pointe Woods, Michigan.

##### Making and Flying Kites by Jack Kine

Model & Allied Publications  
Paperback, 72 pgs. \$5.00

Somewhat brief intro to kite building, concentrating on the old reliables - Delta, Sled, Snake etc. No photos, all sketches - the soft pencil type. Only one interesting plan, that of a bird kite. Several other publications cover the same ground much better - and for a lot less cost.

Recommendation - save your money.

##### Kites by Ron Moulton

Pelham Books  
Hard cover, 208 pgs. (\$15.00)  
over 200 drawings, photos

Extremely well done once you get past the inevitable history and origins. Specially written with the inquisitive experimenter in mind by the founder of the British Kitefliers Association. Basics in kite design is very good. Control line (stunt kites to us) covered extensively for the first time. A review of what's available both here and abroad is fun reading and interesting. The meat of this book is the new kite plans and the many, many super illustrations. First class art work by Pat Lloyd. A visual delight thruout, plus building hints.

Recommendation - a must for every kite builder's library.

#### SPINAKER CLOTH AND RIPSTOP NYLON

Recently the KITE FLYER NEWS has received several inquiries from members requesting to know the who, what, where and why of spina-ker cloth and ripstop nylon.

We spoke to a number of experts in the field of speciality cloth production and turned up a recent book on the subject entitled "Sail Power." It was written by Wallace Ross and published at a price of \$22.50 by Alfred A. Knopf in 1977. We offer the following review as the voice of experience from the staff of the KITE FLYER and our consultants.

For the most part, Howe & Bainbridge Co. in Massachusetts produces the most consistent and dependable Spina-ker cloth. It is available at most sail lofts, some kite shops and from the manufacturer in large quantities.

Ripstop nylon is available from a dozen manufacturers and is sold in small quantities and limited colors at various sporting goods and camping supply retail outlets. It has been our experience that ripstop is O.K. for kites and certainly better than cotton in most aspects, but it is also very slippery to work with and rather heavy in some kites.

Before we go any further with the pros and cons, it is of some interest to look at the construction methods used in preparing the finished product.

Since any woven fabric has a certain amount of give or stretchyness, it is important to the kite or sailmaker to know why and where it exists. A cross section of the fabric will reveal that it is composed of extruded nylon filaments which cross over and under each other at right angles to form an inter-laced pattern. The filaments running the length of the fabric are known as the "warp" threads, across which the "weft" or "fill" threads run at

right angles. Fig.A. The threads do not lie flat as they cross over and under each other. This weave is called the "crimp," from the old Dutch word meaning "to shrivel." Fig.B. This crimp causes stretch in any woven fabric and there is no way known to avoid the elongation but you may have more crimp in one direction than another.

Bias??? We have all heard the word used, but in the case of fabric, some people call it one thing and others another. Bias in the case of kite-making or sail construction is the diagonal of the fabric. Fig.C. You may have noticed that on most kites the diagonal of the fabric is never at right angles to the struts or

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bearing load. The exception is the case of a poorly constructed kite or the kitemakers hope for pocketing in the fabric at a predetermined location

A rule of thumb is that the more loosely woven the cloth, the more easily it will elongate along the bias. Alternately the more tightly woven the threads, the greater the stretch along the thread line due to the steeper crimp of the fabric.

In an attempt to alleviate this situation, several steps are added to the manufacturing process to stabilize the cloth and particularly to overcome bias elongation.

After weaving, the fabric is run through a soap and high temperature washing procedure. Fillers are often added after this point in the process. The fillers are pressed into the minuscule cavities in the weave pattern to prevent the threads from sliding over one another. This can reduce the bias elongation to a third of what it was originally. The filling process also decreases the leakyness or porosity in the fabric. Another step may be added to the fabric in the form of a finish such as a type of polyurethane. Finally the fabric is calendered. A calendar in this case is two rollers that apply heat and tons of pressure to the cloth as it passes between them.

All of this processing leads to many advantages but to another disadvantage, reduced tear resistance.

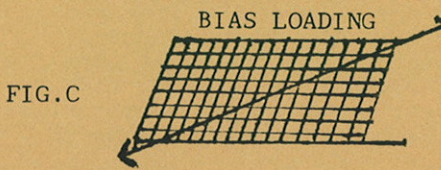
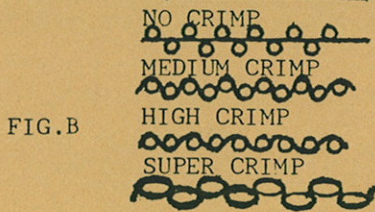
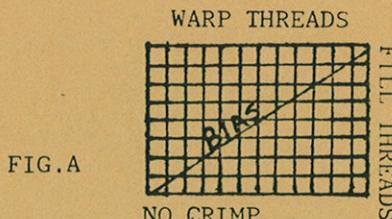
Spiner cloth comes in a fairly wide range of colors and weights. The weights are: 1/2 oz., 3/4 oz., 1.2 oz., 1.5 oz. and 2.5 oz. By the way, these weights are set by the American Bureau of Standards and their "yard" of fabric measures 36x28.5 inches. When the spiner cloth is purchased it is sold by the running yard and has a width of 41 inches.

In view of the reduced tear resistance of the highly finished cloth, a kitemaker could do well to keep in mind their own flying habits when choosing the correct weight of fabric. The loading differences are not drastic in the lighter weights of fabric so for increased durability a kitemaker might care to choose a 1.5 oz. weight for a heavy wind kite and a 1.2 oz. fabric for lighter wind kites. The staff of KITE FLYER NEWS has found the 1.2 oz. Spiner cloth a good all around fabric that is relatively easy to use. The price of 1.2 oz. Spiner cloth averages

**SUBSCRIPTION RATES ARE GOING UP**

On January 1, 1979, we raised our subscription rates from \$3.00 to \$5.00 per year for six issues.

\$3.40 a running yard at sail shops. We are working at getting together a large enough order to buy the fabric direct from the manufacturer for KITE FLYER NEWS members. Our price will be \$2.15 a running yard, postage paid if we have enough interested members to do this. Please contact us if you have any more questions concerning Spiner cloth.



**KITE SITE**

**QUESTION:** What do you call a large, flat, grassy, unobstructed, field with plenty of parking and a view of the Golden Gate Bridge???

**ANSWER:** A kite flyer's paradise, depending on the wind of course, better known as the MARINA GREEN in San Francisco. After scouring the Bay for obscure kite sites to entice other kite crazies to come out and fly, we have returned to the Mecca of Northern California Kite Flyers, and have adopted it as KITE FLYER'S official Kite Site. To get those of you who are unfamiliar with the site we will be having our next two kite flys here.

The Marina Green is located just west of Fort Mason off of Marina Blvd. between Scott and Webster streets. Parking is plentiful and for those of you into jogging or watching people jog there is a Par Course that encircles the area. Toilet facilities are located at the eastern end of the field and there are grocery stores as well as sandwich shops nearby, in case you forget anything for a picnic.

The final plus for this kite site is that the location always provides plenty to do near by if, in the unfortunate event, there is no wind.

## THE JALBERT PARAFOIL

After studying the plans of the sled and the bullet kite, we feel you are somewhat prepared to look into the Jalbert parafoil. We are not suggesting that the parafoil is easy to construct or that it was conceived through Dom Jalbert's studies of the sled type kites. According to Dom Jalbert his inspiration to build the parafoil occurred to him when he was flying his private plane from PATRICK airbase to his home in Boca Raton, Florida. Having previously built hundreds of kites, barrage balloons, Kytoons and having also invented the Jalbert parachute, the idea of building a totally new kind of kite was pressing upon him. The idea to build an airfoil shape kite completely from spinaker nylon occurred to Dom Jalbert during this flight to home base.

Upon landing in Boca Raton, Jalbert took a yardstick, opened the gas tank cap and measured the depth of the wing. He then measured the width or the cord of the wing and headed off to the drawing board. Within another day the first parafoil was being test flown outside the Jalbert aerological laboratories in Boca Raton. The date was March of 1963.

Dom Jalbert has recently turned the production of the parafoil and his laboratory over to his son, Paul Jalbert. The inventive mind of Dom Jalbert is certainly not one to ever retire but his physical health is not always so good. So at 73 years of age Dom has said that he is going to take it easy and do some visiting around the country with the company of his wife. We certainly are looking forward to spending some time with them if they make a visit in our direction.

Paul Jalbert now has the responsibility of maintaining the family tradition his father started. It appears that Paul will not only be able to handle this charge but will add his own name to the list of well known sailmakers in the world.

The history of Dom Jalbert's life to date is an incredible story which should inspire any kitemaker or inventor. In the next issue of KITE FLYER we will tell the story of Dom Jalbert and offer some detailed characteristics of the Jalbert Parafoil.

Dear Kite Flyer:

"Sacramento Area Kite News"

The following members of the Sacramento Kite Club; Eddie Walden, Sam Urner, John Nordstrom, Tricia Walhen, Dale Vanderhoof and Calvin Harris attended the San Leandro kite fly. Everyone had a great time. The weather was sunny and warm with a light, steady wind. It was nice to see so many new kites and meet new friends.

The winds in the Sacramento area have been almost nill in October and November. Lots of people are making new kites and waiting for heavy winds of Winter and Spring. See you at the next fly, blue skies.

The Phantom Duck of the Sky,  
"Quack Quack"

WHO ARE YOU? -- OR WOULD YOU RATHER  
REMAIN ANONYMOUS?

We will be publishing a list of subscribers in our next issue. It is intended to allow other members of the kite flying interest to contact one another for kite flying or to carpool to kite flys. If you do not want your name on the listing please notify us in writing by February 28, 1979.

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# Kite Flyer

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