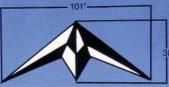


SPRING 1992 • VOL.3 NO.4 \$4.0

> ROLLERkiting check it out
 > SSKG 1992 kick-off
 > FIELD TEST expanded section
 > MEW: Wanderings, Artist's Board

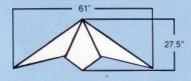
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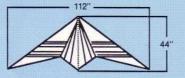


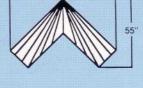
SUPER SKY DART

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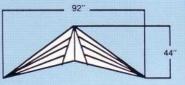


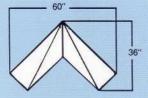
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STAR DART This kite promises viceless flying. The STAR DART is very sensitive and responsive, but also very forgiving. The STAR DART flies the way you want it to fly.

PHOENIX 20

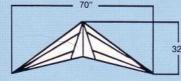
Why mess with perfection? The mainstay of our company has been in production for years and is still going strong. The awardwinning PHOENIX 20 is a real performer in light to moderate winds. Its large size and bold graphics are a sight to behold.



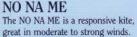


ACTION 8.2

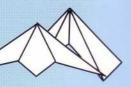
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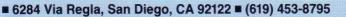


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Letter from the Editors

"We're baaaaa-ck!"

For all of you who might be wondering, all the lines are now untangled and SKQ is flying in smooth air. While we realize that there has been a lot of speculation as to the future of SKQ, let us assure you that the magazine will continue on as it has in the past... with a few noticeable, positive changes.

In the last issue, we introduced you to our new Associate Editor and Writer, Bob Hanson. In this issue, we'd like to introduce you to a few new members of the SKQ staff:

Chuck Walker has joined the staff as Graphic Artist, demonstrating his talents for layout and design, and the new look of SKQ is due entirely to his efforts. We certainly hope that you like the new format of the magazine; we're very excited about it.

For the Product Review section, we have added two new testers to the staff, Mike Fitzpatrick and Ray "Crash Test Dummy" Matyas. We solicited the help of Mike and Ray due to their broad range of experience with flying many different types of stunt kites. By including Mike and Ray into the panel of testers, we are assured of fair, even, and equitable reviews of the plethora of new kites coming onto the market. And because there are so many new kites available today, we have decided not to run this issue as the traditional "Buyer's Guide," but instead to run six to eight reviews in each issue.

You'll also notice some new columns that we are planning to continue in the future. First, there is a new piece called "Wanderings," wherein we explore new, previously-unknown flying spots in scenic locations. As mentioned in the sidebar to "Wanderings," if you encounter a new flying area in your travels, whether it's in the USA or abroad, please write in and let us know about it.

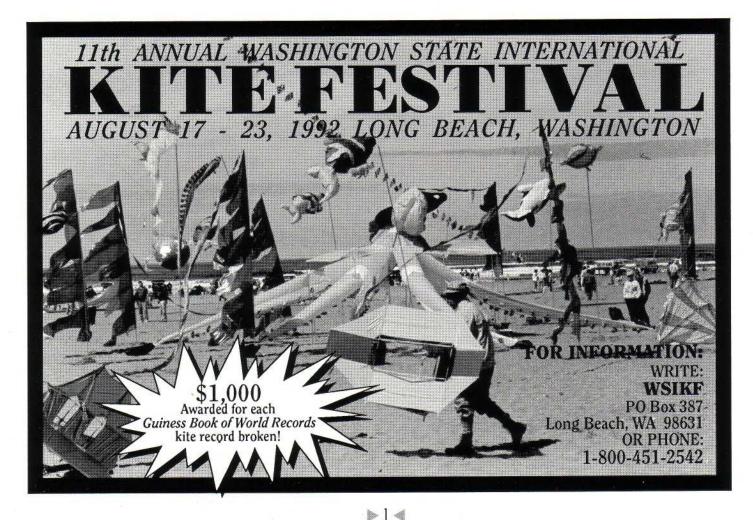
Also, we hope you'll enjoy the "Artist's Board," which will serve as an on-going forum for cartoons, drawings, and other kiterelated artwork.

It took a little while, and there were more than a few uncertainties at first, but we feel that you'll like the new changes. We're enthusiastic about the future of the sport of stunt kiting and the magazine. We feel that the two go hand-in-hand.

Good Winds & Tight Lines!

Susan Batdorff Editor Bob Hanson Associate Editor

Dick Peck Associate Editor





FEATURES

- SANDY HOOK SKC Lots of new names in Novice & Intermediate class.
 - **OUTER BANKS SKC** Tackling the wind on Jockey's Ridge.
- **GOLDEN ISLE SKC**

Great place to compete.

SELECTING SPARS How to determine a spar's relative stiffness.

ROLLERKITING Do you want more excitement while flying?

SOUTHEAST SKC How 1992's competitors are lining up.

9th ANNUAL HAWAII CHALLENGE Flyers attend from all over the world.

ARTIST'S BOARD Melinda Tackett, cartoonist.

THE SOUL FLIERS A look at the motivation behind Ballet flying.

DEPARTMENTS



SKQ NEWS

Notes from all over...including a look into demonstration flying with Air Atlantis.



EURONOTES

Includes European event calendar.

TECH TIPS Help save your kite and your patience.

WANDERINGS

Hunting island, S.C. an unexpected paradise.

FIELD TEST What's new in the air.



COMPETITION RESULTS Who did what, where.



CALENDER OF EVENTS When is it.

DIRECTORY OF OUTLETS At a store near you.

ON THE COVER: Sue Taft rollerkiting in Erie, PA (Photos Susan Batdorff)



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Attach a copy of mailing label in a letter, giving new address. If mailing label is wrong, please correct it.

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Rates and information sheets are available upon request.

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Editorial contributions, including but not limited to articles and photographs, are always encouraged. Notification is required if contribution is submitted to any other publication. Return of materials must be requested along with a self-addressed envelope with adequate return postage. Stunt Kite Quarterly reserves first publication rights in published materials unless otherwise specified. Guidelines for submissions are available upon request. Accuracy of contents rests with the individual contributor, Stunt Kite Quarterly being held harmless in the event of inaccurate copy. The views presented in Stunt Kite Quarterly are not necessarily those of the editor, staff, or editorial advisory board.

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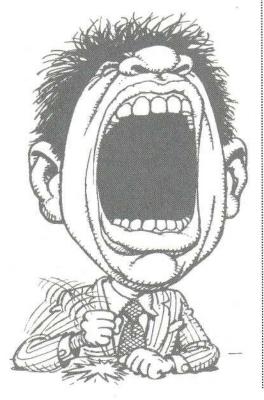
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▶ 3 ◀

Kites take illegal flight!

On March 13, 1992, the S & P Kite store in Charlotte, NC found, to their dismay, that someone had chosen to liberate almost all of their stunt kites along with handles and lines. Although many of the kites are stock. there are some that should be easy to spot. If you are offered a great deal on a kite, please keep your eyes peeled for the following: a Neptune Jaws, black with white teeth; two Pro-Comps, one a black rainbow that is blue, green, vellow from the bottom up and the other a custom Blue Moon; a Quark, aqua sail with a pink circle inside of a black triangle; Team High Fly, black and pink, sparred with 2-wrap graphite; Rev II, pink & purple; Worker Bee, blue; and a Rainbow Spin-Off that's sparred with an Easton Air Frame. If you have any information that will help solve this rip-off, please call Wendell Elliott at (704) 399-1190.



Panda Eyes - Absolutely

Warning: Eye cancer can result from kite flying unless eyes are protected!

Folks, the following letter comes to us from Bill Paxton and is based upon his own experiences. Bill has done his best to get these precautionary words out to every kite flyer. Please help him spread the word.

"On a recent routine eye examination my doctor discovered a small bump on my right eye and called in a cornea specialist. It was indeed a small tumor. Two days later I watched while it was surgically removed. No fun! I previously had no clue that it was there and was just lucky to have caught it before it had spread.

It is now known that exposure to the sun's ultra violet rays are cumulative and that with changes to the ionosphere UV radiation is becoming stronger. It is known to cause damage to the retina, iris and cornea. Like most of you, I was well aware of possible skin damage and was careful to apply 15+ sunbloc lotion to my face, ears, hands and arms. I even wore a hat with a large brim. However, because I was never bothered by glare, I did not wear sun glasses and thus got into trouble.

Obviously, the kite flying environment can make us very susceptible to eye damage, particularly if the wind is from the North and thus the sun will be in front of us from the East, South, or West.

Therefore, for your sake, please get a good pair of sunglasses with UV protection and be sure to wear them even if it's cloudy.

I sure hope some of you will take heed and keep flying for a long long time."

Bill Paxton

Southwest Stunt Kite Conference

The popularity of stunt kite competition has become evident, with almost 30 events sanctioned by the A.K.A. in 1991. After witnessing the success of the Eastern League circuit, several individuals have been hard at work setting up the infrastructure for a league in the Southwest United States.

Input for this league was solicited through questionnaires sent to area clubs. The result is that the SWSKC will work in much the same manner as the Eastern League. There will be a Board of Directors, consisting of the event organizers and no more than two chosen pilots per event.

The purpose is two fold. First, competitors in registered events will be ranked within the participating states of the Southwest Stunt Kite Conference, and secondly we aim to recognize and foster the growth of the younger kiters coming "up through the ranks." For information on the point structure, please write to the address below. Registered events will follow AKA/STACK rules.

The SWSKC is working to provide events with free computer scoring support, reports of local standings, a newsletter, field identification banners, administrative assistance, advertising, and judges training seminars. We are in the process of recruiting several major sponsors to help ensure a smooth start for the conference.

Our thanks go the organizers of the Eastern League for their support, and we wish them continued success in 1992.

If you would like more information about the SWSKC, or if you would like to list an event with the league ranking system, write to: SWSKC, 7809 Forest Path, San Antonio, TX 78233 or contact Fiesta Kite Ideas at (512) 590-7027 or (512) 326-6216.

Air Atlantis : Barnstorming in the 90'S

by Bruce Kapsten

The wind is blowing, the roar and color of stunt kites fill the air. Music is carried on the breeze as commands are shouted amongst the red-jacketed kite fliers on the field. The audience is a sea of wide eyes and open mouths as they watch in amazement while the announcer explains the intricacies of the aerial display before them.

This is AIR ATLANTIS, a different kind of stunt kite team. Created at the start of 1990 by the coming together of Connectikiters Bruce Kapsten, Gary and Maggie Engvall, and K.O.N.E. members John Lind and Wayne Davidson, AIR ATLANTIS was formed to entertain and educate the public about the sport of stunt kite flying. 1991 saw Eric Babiliewicz added to the team, while Wayne continued to fly in selected shows, spending most of the 1991 season competing with the High Flyers. Wayne has returned full-time for 1992. With a strong emphasis on safety, the team works in conjunction with community groups and various festivals to present demonstrations that offer a look at many different types of stunt kites.

Traveling with a 300-watt sound system containing tape and CD players and a P/A system, AIR ATLANTIS flies both dual and quad line stunt kites as both singles and stacks of various sizes. Several segments are flown featuring solo and team performances containing up to six flyers.

The goals and professionalism of the team have attracted extensive support from the kiting industry. AIR ATLANTIS has received custom kites and kite trains from Banshee, Revolution, Dyna-Kite, Trlby, Cyborg, and Laser. Additional equipment has



The Air Atlantis demo team pictured left to right: Bruce Kapsten, Gary Engvall, John Lind, Eric Babiliewizc, Maggie Envall.

come from Hurricane Harness, U.S. Line Co., M.L.D. Kite Bags, and Kites of Boston.

A typical show involves a lot of hard work to ensure that our audience sees the production at a level that will hopefully help them to get "bit" by the bug that we all share.

Set-up typically begins between 7 and 8 A.M. for an 11 A.M. start. The site must be safely secured, the generator set up, and the sound system assembled and tested. Then winds are measured, equipment selected and assembled, pre-flight checked, and fine-tuned. AIR ATLANTIS has "scripts" for light, moderate, and heavy wind shows that predetermine which kites will be flown, by who, and when. Nothing (hopefully) is left to chance.

Finally it's showtime. The music begins as kites leap into the sky . As they swirl and dance, a carefully prepared narrative about kite design, technique, and safety plays as the flyers go through their routines. Various types of music from classical to show tunes to rock & roll create different moods for the different types of kites.

After seven different demonstrations, the music winds down and the audience is invited onto the field to look, touch, and ask questions. Whenever anyone is interested in buying their own kite, they are always referred to a kite shop near where they live or work. No single retailer is favored over another as the support of our sport far outweighs the support of a single retailer.

During the 1990 season AIR ATLANTIS gave 9 demonstrations for groups that included the Girl Scouts, special-needs citizens, and a television crew from a major Japanese network. The demonstrations were seen by over 10,000 spectators in the course of the season.

Events attended during 1991 included the Gloucester, MA. Folk Life Festival, Earth Day at Boston University's campus in Boxborough, MA., Fifer's day celebration, the Norwalk, CT. Kite Festival, the For Spacious Skies Festival, and 3 demonstrations at McDonald's restaurants in southern Massachusetts and northern Rhode Island. The team was also seen on Boston's channel 4 promoting the Earth Day activities. 1992 will see AIR ATLANTIS doing return engagements at these events.

We are always happy to discuss our team, its organization, or possible appearances. We can be reached through Bruce Kapsten evenings at (508) 281-0489 or days through John Lind (508) 283-0442.

Shonan Coast SKC

NEWS continued

Sometimes, at

competitions, it

would seem that a lack of wind is par for the course. Due to the low wind many flyers had to take, or make, whatever field they could, and at this event, the extra field ended up being under the



Although the judges didn't follow them into the chilly water, that's where Team Kiteland gained field!

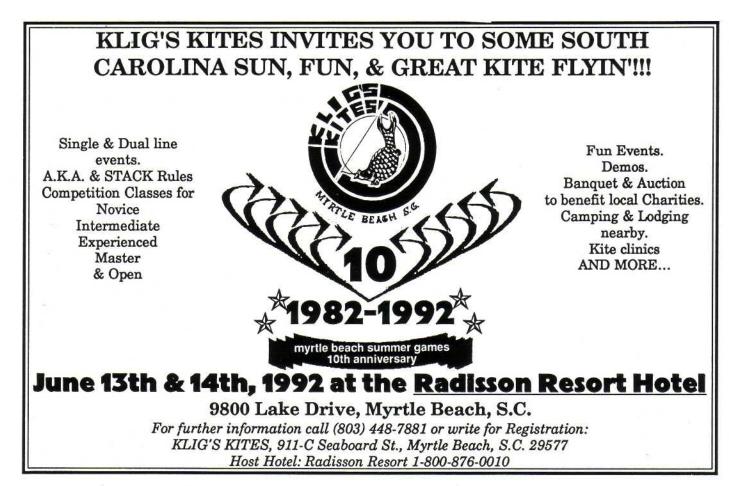
The grass is always greener on another field. Or is it?

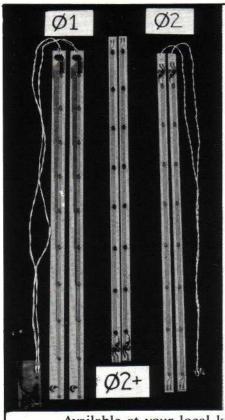
It would appear that some things are the same all over the world. Hiro Tsuchida of Team Bonzaii wrote to us about the Shonan Coast SKC held Nov. 9-10, 1991 at Kugenuma Beach in Kanagawa, Japan. While they were thankful for the unexpectedly warm day that occurred with winter approaching, they also had little to no wind ly water, that's K u g e n u m a Be a ch. Both Individual Precision and Ballet events fielded almost 100 competitors! Team Ninja, Shonan Coast locals, bested 16 other teams for first place in Team Precision and 18 teams for first place in Team Ballet. Rounding out the top three slots in ballet, Team Kite Land landed a second place, followed by Siden in third. These two teams swapped places for second and third in Team Precision. No wind, getting wet, having a great time; sound familiar?

waters

of







NITE

FLIGHT

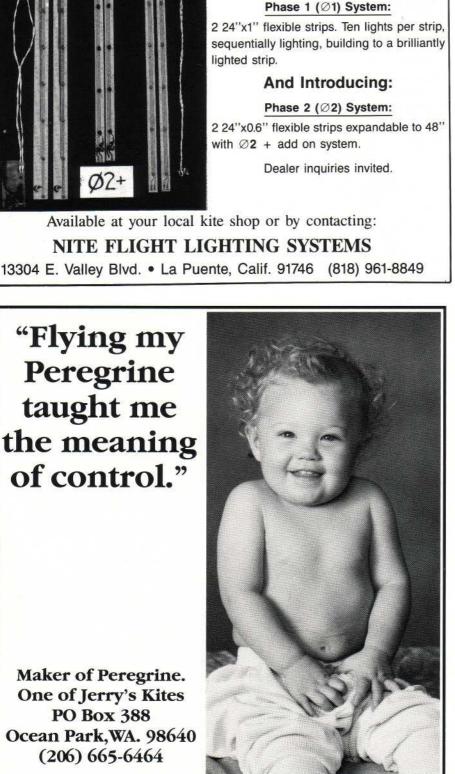
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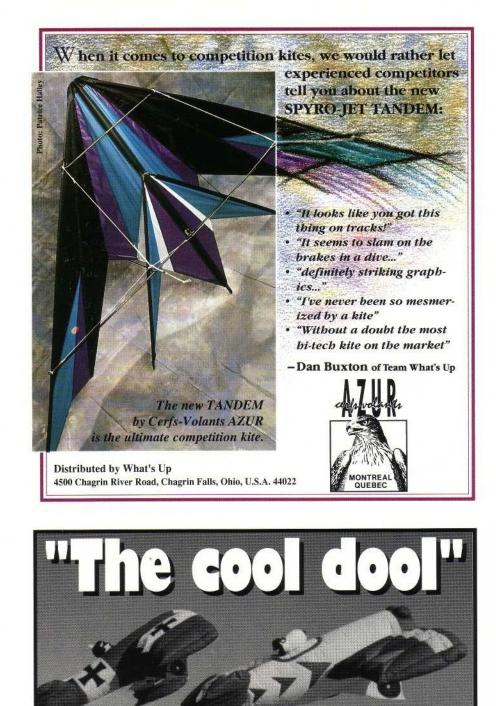
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s you can see from the events listed, the 1992 calander of European sport kite competition has been filling up during the winter months. Le Touquet, France promises to be the exciting start of team competition, with over twenty teams already registered! As happened last year, we are seeing changes on the team front. There will, no doubt, be some more surprises over the weekend of the 25th and 26th of April, but here are some of the current changes, exchanges, etc.

Johnny Claffey (ex wicked Allsorts, ex wicked Blitz, ex Team with No Name, ex Air to Air) has joined the world famous Decorators. Rumor has it that Paul Jobin paid them 5 pounds to take Johnny off his hands – but you can't believe everything you hear! The Dike Hoppers appear to have gone through some major personnel changes after their outstanding performance at last years World Cup, but will still be flying with six members as will, it is rumored, Belgium's Highlife. Holland's Highlights have changed their name to Rhythm of the Wind. Reports have it that the German team, Up Against the Wall have now split into two teams. Paul Jobin (ex leader of The Blitz, Team with No Name and Air to Air) is now flying in the number three position with the Bristol based team Slipstream. This new U.K. team promises to be strong with the talents of Kate and Bob Markham, Dom Early, and Greg Eyron combining with Jobin's long experience. Personally, I can't wait to see them fly.

France is producing more teams, with names like Crazy Diamonds, Flying Whales, Moskitos and Les Zabeilles being a few of the ones to watch out for. Switzerland is also developing competitive teams with Heaven Sent and Lucky Landing Albatros promising to put in several appearances this year. As regards Italy, Team Vulandra continues to become stronger (apparently they handle the Revolution very well into the bargain!) and making their debut soon will be the Aquilandia Team.

Pairs Ballet is new for Europe in 1992, and we anticipate the response to this competitive category will be popular. The U.K. already has a number of established pairs; The Eye Pilots, Organised Chaos and Two's Company immediately spring to mind. I'm sure that Europe will produce a large number of contenders by the end of the season.

Meanwhile, local leagues have been springing up all over the place. This would seem to be in response to the demand for Individual and, in Bristol's case, Pairs competition. STACK (Stunt Team and Competitive Kiting) sees the role of leagues as being very important in the development of our sport as they enable everyone to gain competition experience with minimal travel and cost. Gradually the leagues will help build up overall rankings and pre-qualification criteria.

On the subject of individual flyers, looking over last year's results shows that the people to watch out for this season in Europe are – Germany's Thomas 'Tommy Airport' Erfurth and Gerhard Schroff, France's Rouben Terminassian (The Terminator!) and Maxime Fellion, The U.K.'s Romney Johnstone, Mark Cottrell and Paul Jobin and Holland's Michiel Van Amerougen – to name but a few!

The scene is set for what promises to be a full and dynamic year of flying. So watch this space as I attempt to keep up with all that is taking place in Europe.

EUROPEAN SPORT KITE COMPETITIONS 1992

EURONOTES

April 18-20 ♦ Blackheath, London, England Pairs Ballet only

April 25-26 ♦ Le Touquet, France Team Precision & Ballet

May 1-3 ◆ Castiglione del Lago, Italy Individual & Team

May 8-10 ♦ Lido di Roma, Italy Individual Precision, novice - league style

May 9-10 ♦ Oostdunkirk, Belguim Details to be announced

May 24-25 ♦ Kite Society of Great Britain International Kite Festival, Scunthope, England - Pairs Ballet only

May 30-31 ♦ British Nationals Team Stunt Kite Championships, Weston-Super-Mure, England Pairs &Team

June 20-21 ◆ The North Sea Cup, Schevennigen, Holland Experienced & Masters Team

July 11-12 ♦ Oostend, Belgium Details to be confirmed

July 25-26 ♦ British Nationals, Individual Stunt Kite Championships, Boreham Wood, London, England

Sept. 5-6 ♦ Bristol International Kite Festival, The Kite Store Int'l Invitational Masters Team Precision & Ballet Stunt Kite Championships, Bristol, England

Sept. II-I3 ◆ European Cup Stunt Kite Championships, Vvouwenfolder, Zeeland, Holland Masters class only, Pairs & Team

Sept.26-27 ◆ Berlin International Kite Festival, Germany. The Berlin Cup Details to be confirmed

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TEGH TIPS

~~ LT

Stop your lower vinyls from creeping

To keep your lower vinyls from traveling up the leading edges without gluing on stoppers, which can cause a problem when you need to break the kite down for compact packaging, Ron Reich, captain of the Top Of The Line Flight Squadron, offers this tip. Run a short lanyard thru the leading edge pocket and secure one end above the vinyl and hook the other end onto the arrow knock at the tip.

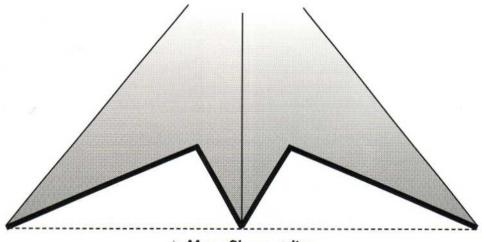
This simple remedy also helps prevent torn leading edges from the vinyl moving on impact in a crash, flying in heavy wind or just because the vinyl is old and doesn't grip as tightly anymore. An ounce of prevention...

Attach to arrow nock

Long bridle causing a problem?

Do you have a kite on which the bridle is so long that it sometimes wraps around the keel? Bob Hanson offers this solution.

Tie a length of lightweight monofilament (fishing) line from one wingtip through the keel and attach to the other wingtip. The tension on the line should be just enough to hold it steady; too tight, and it may alter the normal flex of the wings. The monofilament (20 - 40 lb. test) adds only negligible weight and virtually no wind drag.



A Monofilament line



SANDY HOOK Stunt Kite Championships

by "Billy" Bob Hanson

t's a pleasure to be able to report on something like this, folks, but the first-ever running of this Eastern League event was "perfect." (1. Per.fect adj. Complete in all respects; flawless 2. excellent, as in skill or quality.)1

Now I know what you're thinking. New Jersey, right? The butt of all those jokes you've been saving for years. Take it from a full-time resident; only part of the state has that odd smell, and we're working on the radioactivity problem even as you read this. Also, if you really have to know, the event was held a few miles off of Exit 117.

Logistically, Sandy Hook turned out to be a fantastic place to hold a competition. A large parking lot put the cars right up near the sand, concessions for food, drink, and pitstops were but steps away, and a large crowd of curious spectators, who probably would have been at "The Hook" anyway, enjoyed the show. (All right, I'm biased ... this is my "home beach.") To make matters even better or worse, depending on your point of view - New York City could be seen only about 15 miles to the north. Ah, for a Jersey boy, that's the way to see New York - from a distance!

How to have a good time on a New Jersey beach, fly a competition, yet somehow stay ahead of schedule.

The weekend of October 12th and 13th was the perfect time to hold this premier event, with crisp fall air, plenty of sunshine, and wind to suit everybody's wants. Held on a barrierbeach peninsula between the ocean and Sandy Hook Bay, the smooth and uninterrupted winds were steady throughout the weekend, except for a rather severe 15-minute squall that sent spectators scrambling for their cars, and pilots for their titanium spars.

With the able help of Sky Festivals, Fly Away Kites of Belmar, NJ, kicked off the event, the first competition of the 1991-1992 Eastern League season. One of the stated goals of this event was to provide local Novice and Intermediate pilots a chance to break into competition, gaining experience that should prove useful in events such as ECSKC. Apparently, the organizers hit their mark, with over 36 competitors in those two classes.

Speaking of up and coming Novice pilots, keep your eyes out for an absolute dynamo of a pilot. Long Islander Corrine Iasilli flew a Phantom in NIP and blew the doors off 19 other competitors, some of them three times her size, with a 77.13 final score. In her freestyle segment, Corrine chose to do maneuvers that most Experienced and Masters pilots would only grumble about. The amazing fact of it is that Corrine is only 12 years old!

The Experienced pilots turned in solid performances, with Dodd Gross running a nice ballet performance using a Paul Phillips kite that Dodd test-drove only that morning. Paul pulled up in 2nd Place about 1.5 points short of Dodd, using the same rig (So, Paul, are you ever gonna

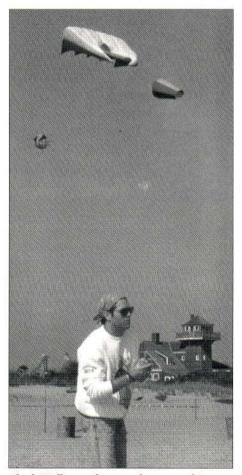
loan your kite like that again, guy?) Many of the perennial Eastern League favorites showed up, with George Baskette, Dave Baressi, Quinn Rickman, Brian "Enough Already, I Moved Up!" Vanderslice, John and Eileen Tavolacci, and Bill and Sue Edison competing with others. When the dust (okay, smog...) cleared, Chris Schultz took MIB with his popular "Menny the Mooch" routine, followed by "Billy" Bob Hanson and Bill Edison. In MIP, it was "Billy" Bob

> Why is Dodd Gross smiling? 1st place in EIB.

and Bill (just Bill) Edison again taking honors.

Since this was the first meeting of the Sandy Hook event, it was classified as an Eastern League Regional event. Based on the League's current scoring structure, point assessments for Regionals are about half that of other events such as MASKC, OBSKC, and SSKC. However, with this prime beach real estate, tremendous first-year response, and continued support of the National Park Service, look for the Sandy Hook event to be one of the true gems of the Eastern League in October of 1992.

1 Webster's New World Dictionary



Chuck Walker performs under sunny skies with good winds. With parking a few feet away, what's not to like?





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There are certain times when you feel as though you just have to get out and fly for the sheer fun of it. When you get to feeling this way, it seems as though nothing less than the perfect location will suffice.

But, where do you go when your usual haunts no longer satisfy the craving for a new experience? What should you do when you're tired of people stepping on your lines, the endless barrage of questions, the people who want to help you launch your kite when you know full well that you don't really need their help?

Perhaps, for you, the answer is a simple one: you should hit the road! Leave. Take off. Disappear. Whatever you call it, you should get out of the house and go look for that special place to fly. We have probably all done this at one time or another. How many times have you found yourself driving down the road in unfamiliar territory, craning your neck to see if a suitable field or beach lay beyond those trees, or behind those buildings?

Wanderings is a new column devoted to just such discoveries, born of our need to search out and explore new places, unknown fields, remote beaches, and above all, to live new experiences.

We'll start off this journey with a beautiful spot that Bob found while on a recent road trip, but we certainly don't want stop too long in one place. Look for more "hot spots" in upcoming issues, and, by all means, if you discover a new flying location in your travels, do let us know about it. We'd love to hear all about it, and consider it for inclusion in the magazine.

The Editors

Nandering

Yes, sometimes you really do have to get away from it all for a while. This is exactly how I was feeling just before the holidays, when I found myself sitting in a very boring two-week (or was it two-year?) computer imaging seminar in wonderful downtown Waltham. Mass., daydreaming about the upcoming Golden Isles Stunt Kite Championships. (My apologies to those Faithful Readers from the Waltham area, but heck, I would've moved a long time ago.) The class was boring and miserable. and you just couldn't have gotten me out of

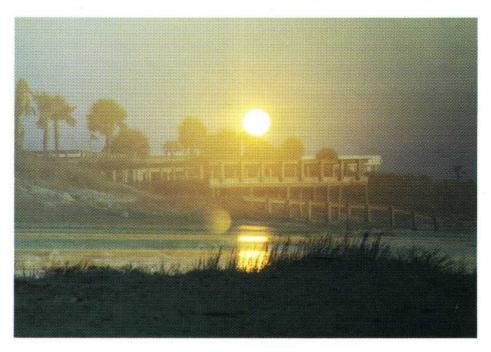
As you can tell from another article in this issue, I made it to Jeckyll Island, and had a wonderful time competing and socializing with all of the friends who attended that event. Now, tell me, given the choice of those two circumstances, where

there fast enough.

would you rather be? Right. So I did what any normal, red-blooded, workhating American would do in such a situation; I stopped daydreaming about The Big Escape, pointed the car toward warmer climes, and hit the gas with a full load of kites in the trunk.

I could take up a lot of space recounting my adventures as I worked and played along the coast, but as with any trip of this sort, one or two of those "perfect" flying fields tend to stand out in my mind.

One such place was a small island off the coast of South Carolina, far removed from any major city, called Hunting Island. I know that we have a number of readers from the southeastern states, but I'm not sure whether they know of Hunting Island. It sure didn't seem that way, at least, as I flew on island beaches that were all but devoid of human activity. Driving south on Route 17 from Charleston, South Carolina, you pass through the scenic and historic town of Beaufort, SC. Unless you're keyed up for visiting museums, historic houses, and the old waterfront area, then my recommendation is to pass straight through Beaufort, but be aware that this is the last town before going out to Hunting Island. In light of this, keep an eye out for a couple of good restaurants or food stores that you might want to visit later. After entertaining to watch their antics, demonstrating uncanny ingenuity in their quest for chow.) I found a nice campsite right behind a sand dune, set up my small tent, and wandered along a short boardwalk to the beach, marvelling in a carpet of stars in the ink-black sky overhead. Soon after, I discovered how soothing it is to fall asleep with the sound of ocean waves in the background. I found out, that night, that the beaches here are a bit small for flying unless the tide is well



passing through town, there is precious little in the way of food or modern entertainment.

Drive over a causeway extending through mile upon mile of marsh and wetlands, passing a few small towns and settlements, noting the shrimp boats and variety of waterfowl along the way. Shortly after reaching Hunting Island, which is clearly marked, you'll see a sign on the left for the Hunting Island State Park. Pull in there for a rest, visiting a lovely campground area laced with roads that wind through palm trees and evergreens, with campsites located behind the inland side of the ocean sand dunes. At that point, you may be hit with the same two realizations that I had the evening I first arrived ... you'll probably want to camp here. and dang if there ain't a raccoon in every garbage can! (It was quite

out, but this is car-camping Nirvana.

The next morning, as I sat at the campsite picnic table enjoying my morning coffee (no, I wasn't planning on flying Precision that day!), I was quite startled to look up and see a family of four white-tail deer staring me down. "Got any food?" they seemed to ask with their big ol' deer eyes. Well, I know that I shouldn't have, but I wasn't enjoying those granola bars anyway, soooo... that's what it feels like to have your hand thoroughly licked by a deer, eh?

Having exhausted my food supply, I packed my car and headed down the road for a bit more exploration. Only about a mile down the street, I found another state park entrance sign. Figuring I'd just survey the situation a bit, I brought the car around and was quite surprised when I wound up in a continued on page 16



continued from page 15

veritable tropic island paradise. As I weaved in and out of the lush, rain forest-like foliage, I felt compelled to follow the signs marked "To South Beach." After all, it's a matter of honor to find the good beaches. Parking the car in the lot, I walked a short boardwalk out to the sand, took one quick look, felt the breeze on my face... and sprinted back to the car for my kites.

The place was gorgeous! A wide, sandy beach stretching almost 100 yards from the tree line to the ocean, packed sand for at

least half that distance, and a long line of palms and foliage lining the western side. Being at the middle point of the beach, I looked northward for over two miles... no one in sight. I looked southward for another two miles, not a soul. Could it really be? No questions? No interference? No dogs sniffing my kite bag in an extremely suspicious manner?

There's a psychological level you can reach when you fly a kite in such perfect conditions, in such a beautiful location. You're not always sure just when it occurs, and you can't really put your finger on what it feels like, but it's wonderfully therapeutic. Flying in such an attractive spot brings you back to some of the reasons you began flying in the first place, and in this place, the world, at least for a little while, seems to pass you by. Your troubles don't seem so overwhelming anymore, and even if there were more people here, they wouldn't affect you. If they said anything, you'd probably just get a little blissful look on your face that shows nothing but contentment.

Someone might have asked after all those hours of pure, fun flying, "How are you doing, Bob?" The only reply from me would have been, "Perfect, now, and you?"



Details and Particulars

Hunting Island State Park 1775 Sea Island Parkway St. Helena Island, SC, 29920 Phone (803) 838-2011

Office Hours

9:00 am – 5:00 pm Mon. – Fri. 11:00 am – Noon, and 4:00 pm – 5 pm Sat. – Sun.

To get there

Take exit 33 or 38 off of I-95 near Yemassee, and head for Route 17, or if leaving from Charleston, head south on Route 17. Pick up SC Route 21 in Beaufort and continue 16 miles east to Hunting Island.

Accommodations

There are only two places to stay overnight on the island, a 200-site State Park campground, or 15 fullyfurnished beachside cabins. (Reservations suggested)

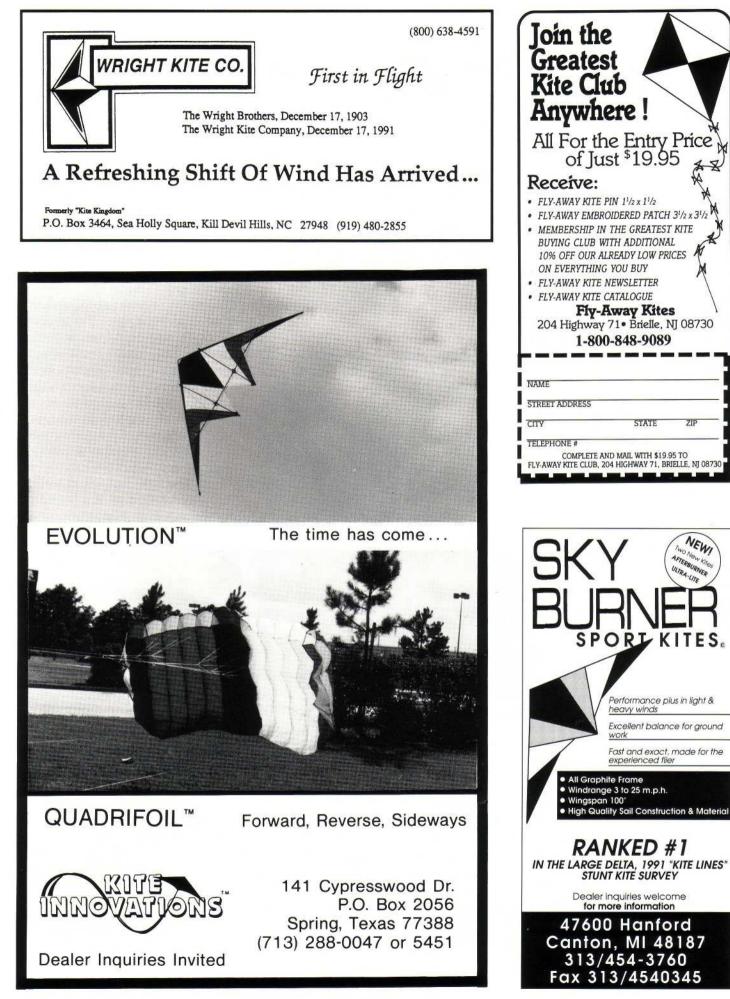
Availability in the campground is available on a first-come, first-served basis. Heated restrooms and showers are located in the campground, and all sites have electric and water hookups. A dump station is located near the campground entrance for RVs.

The cabins are located within walking distance of the ocean, and are heated, air-conditioned, and supplied with linens and all cooking and eating utensils. The cabins have two or three bedrooms, and sleep six to ten people.

Other attractions

Check out the Marsh Boardwalk, a low-impact structure that puts you in the middle of a large salt marsh. Hermit crabs, raccoons, herons, egrets, and other wildlife are quite abundant here.

You'll find a visitor's center, fishing areas, hiking trails, a lighthouse, and over four miles of beachfront with ocean swimming. You'll love it!



▶ 17 ⊲

nderstandably, not many of us have had the opportunity to be buried up to the neck in sand, unless you count the time that you fell asleep at Long Beach and little cousin Davey went wild on you with the pail and shovel. That wasn't planned that way; he was just a kid. But it seems as though kite fliers – those big kids that they are – actually

The

volunteer for this kind of assignment, if they don't truly thrive on it. Now don't get me wrong; Saturday was beautiful, but the wind picked up that night, making Sunday – well – a truly memorable experience.

"Karen! Where are you?" I called as I noticed the last little bit of our beach chair going underneath Sunday's blowing sand. "I'mf under heerf... Surfviving!" came a muffled reply from underneath a suspiciously Karen-looking mound of sand. Ah, bless her heart; making the best of the situation. But alas, so much for those peanut butter and honey sandwiches we had packed for the day.

Despite such seemingly adverse circumstances created by living, if only for a day, on top of a giant sand dune in a 25+

mph wind, the 4th Annual Outerbanks Stunt Kite Championships continued as though it were just another normal day at Jockey's Ridge State Park. Some pilots decided to scratch due to the winds, some flew excellent high-wind routines, and we had one quite noticeable spar explosion from none other than Ralph "Hawq" Offredo (finally found that C-4, eh, Ralph?) By the end of the afternoon, all Team and Master's events had been completed, the organizers were moving up to Corolla Beach for the Power Fly ... or what it's like to be on a very large sand dune when it's moving at a high rate of speed.



Casting a spell, Paul Phillips finishes1st in EIP & 4th in EIB

Challenge, and everyone left the dune area with their skin feeling wonderfully exfoliated.

But let us return now to earlier that weekend for one of those perfectweather, perfect-location kiting events that we've been blessed with recently.

Calvin Mills and crew, spearheading the coordination effort for this event on behalf of Nags Head's Kitty Hawk Kites, greeted us in the shop on Friday night for a congenial registration process. All of the required sign-in went smoothly, helped along by refreshments on the upper deck, and those of us who had by "Billy" Bob Hanson

already taken care of business took in one of those beautiful North Carolina sunsets over the dune. If you've never been to this area, it's worth a stop by one of the shops if you're anywhere near the coast. Inside Kitty Hawk Kites, just off of where they sell the kites, the shop has one of the most well-stocked toy sections I've ever seen. (Rule #1, Calvin, never put in front of stunt pilots

anything that can be thrown, spun, flown, skipped or juggled unless you're really good at ducking very quickly.)

We woke up a bit earlier than usual on Saturday to help set out the fields and get things squared away. Besides, you usually have to leave a few extra minutes to schlepp your stuff up the huge first dune. But once you're up there, you get the most incredible view of the ocean to the east, a monster dune



Steve Huff flys a three pack of quad-lined NSR's

Outerbanks Stunt Kite Championships

and the bay off to the west, and more sand and scenic beauty to the north and south. "Ah, what a playground," I thought as the morning sun revealed a sky free of any trace of clouds. And it stayed sunny and warm all day with a truly sweet 5-7 mph breeze, just enough for anyone's kites and the omnipresent Kitty Hawk hang gliders.

Everyone pitched in to help set up the fields and sound system, running tapes and wires along - and over, and up, and down - the contoured dunes. (Flying an event here has always been considered a challenge due to the uneven slope of the sand.) The event kicked off close to the scheduled starting time, and as the day played out, there were several clear "runaway" winners.Steve Huff took a number of honors with a 1st Place in EIB, 2nd Place in EIP, 2nd Place OII and 3rd Place OOB, as well as a win with Brad Spivey in Experienced Pairs Ballet. Brad also notched a win over teammate Huff with a 2nd Place finish in OQP. Our

own "Billy" Bob Hanson came through once again with three Ist Place wins in MIB, OQB, and OII, followed up with a 2nd Place finish in MIP.

Double-trouble plaque mongers were Keith Anderson with a 2nd in EIB and 3rd Place EIP, while Lou Berman, fresh from his wins at Sandy Hook, followed up with 3rd IIP and 2nd IIB. Derrick Williams also racked up two with a win in IIP and a 3rd in IIB.

As we've seen with other Eastern League events, OBSKC-91 provided a forum for local fliers to compete without having to travel a great distance, and for Novice and Intermediate pilots to work their way "up the ranks." It also gives the Experienced pilots a place to gain valuable competition time, and by the obvious recurrence of some names, it's clear that the Eastern League is creating quite a draw. It's especially interesting to watch the potential that will be refined into future Masters entries. One just can't help but watch people like Huff, Berman, or Williams and imagine what their flying will be like in a year or two!

If you haven't yet flown at the Nags Head dunes, I suggest you put the Outer Banks event on next year's schedule. Lofting your kite around the big dune thermals is entertaining, the events are always challenging, and the scenic beauty of the area makes the trip worthwhile in and of itself. But, if the wind kicks up beyond, oh, 20 mph or so, remember to leave the peanut butter sandwiches in the car.

Adam Lavelle enjoying the winds of Jockey's Ridge.





We've heard it said that "Gulf winds bring you flying fish" and so it would seem, as Joel Sholtz of Austin, TX. brings you the new Neptune kite

7 year old Robbie Johnson shows us, There's nothing to it, but to do it!



by "Billy" Bob Hanson

ISIES

Stunt Kite Championships

Golden

Sometimes we really set ourselves up, don't we? Have you ever looked forward to an event, only to have it fall short of your expectations? In the immortal of that eminent words philosopher, Bugs Bunny, "Ehhhh... tch, tch, tch... could be." Whether problems turn out to be organizational, logistic, or simply a matter of poor location, they do tend to put a crimp in the weekend.

Having faced this sad reality in the past, it was with no small amount of trepidation that I found myself outside Jacksonville Airport, waiting for my ride to Jeckyll Island, Georgia, and the Golden Isles first-ever competition. (Jax! Talk about your basic bad karma revisited.) lust when I thought I had finally mastered the airport's prerecorded green-zone/white-zone parking announcement, Iohn MacLauchlan's Toyota came zipping over the ramps, screeching to a stop next to my well-worn luggage.

As we drove up I-95 toward Georgia, enjoying the wonderful weather and catching up on news, I couldn't get this nagging feeling out of my head that I was setting myself up for another letdown. Georgia, eh? That's where they make fire ants, right? While I had pictured wide-open beaches, palm trees, and 75-degree weather, I couldn't rid my mind of these nasty, conflicting visions of mud bogs, ants, 'gators, rain, no wind, and perhaps a few burned-out antebellum mansions thrown in to add to the misery.

Well, O' Faithful Pilots, give up any notion that you wouldn't want to be here at Jeckyll Island. It would definitely make both May and June on the "Great Places in the World to Fly" calendar!

As we roared into the parking lot of the Days Inn, headquarters for the event, I simply couldn't believe my eyes: Palm trees! Ample fields! Warm wind! Sand dunes! This place looks like a pilot's mecca!

Little did I realize, at the time, that this hotel and its property would prove to be an almost perfect location to hold the event. Next to an outdoor pool, there's a reasonably-sized patch of lawn, and that area would later become a "midnight demonstration" field for short-line fliers. Only a few yards from the building, the actual competition fields were being laid out. (The primary field has a garden, of sorts, running down one side, causing the field to be laid out in an L-shape. There's a rumor floating around that the hotel may raze this small spot in order to make a square field next year!) And about 30 yards away – yes, you can almost hear it – ocean waves were crashing onto some unseen shore.

Grabbing hold of Mike Simmons, I immediately bolted for the dunes to see if the ocean truly lay beyond.

"Cool," I mused, looking down at the beach, "do we really have to work this event?" I was already counting the limited hours left until my Sunday departure, wondering if I should call my travel agent to ask her to extend my stay by a few days.

"Les flah, bud," Mike said in a hushed, reverent drawl as we looked down upon miles of uninterrupted, flat, golden sand. For those of you not familiar with the lexicon of the southeast, I believe that what Mike said to me that day translates, roughly, to: "I do concur that this is an amazingly nice place to fly. Let us unfold our kites and have a thoroughly rewarding time piloting them, shall we, my friend?" This we did for the better part of Friday afternoon. Okay, so I'm supposing

With warm winds, sultry nights, and all the beach you could want, what's not to like about flying here?

that right about now, after all this prose. you might be pondering the all-important question, "Well? Who won?" Alright! If you must know:

Reed Welch, James McKenzie, Drew Cummins, Reed Richards, Leon Cusson, Dave Snyder, Brad Spivey, "Cubby" Saunders, Steve Huff nailed 3, Gary Sweeley, Susan Batdorff, Bill Edison, Susie Edison, Bob Hanson got 2, Roger Chewning, Dave Arnold got 2, Mike Simmons got 2, Calvin Mills, John MacLauchlan, Skyward Edge, Windswept, Black Sheep Squadron, Team Trilogy, Edison Flight & Power, and Team Shred all walked away with honors.

Happy now?

Seriously, though, there were more than a few real standouts over the weekend, and anyone who flew the event, Novice to Master, should be congratulated for giving it their best during a few marginal wind conditions.

Although Calvin Mills won OII with a multi-kite, multi-music extravaganza of color and motion (as well as garnering the "Hardest Working Pilot of the Weekend" award). John MacLauchlan drew the attention of the crowd with a hilarious routine using a quad-line, dogstaked NBK to a song called "I Touch Myself." At the appropriate lyrical passages, John dropped his kite, emblazoned with the words "MY SELF," down into his hands. The clincher was when John stripped the lines out of the dogstake, waved to the judges, and started skipping off toward the hotel with kite in hand. It's the only time I've heard people laughing and applauding a full 30 seconds before the routine was over. John, it takes a delightfully sick mind to come out with that kind of stuff. We love ya, and keep up the good work!

continued on page 23



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Golden Isles continued from page 21

In the "Gee, Where Have I Heard That Name Before?" department, you may have noticed that Brad Spivey and Steve Huff were at it again, with Steve grabbing three new hunks of wood for his wall. Guys, let us know when you move up; some of us may choose to retire!

There were quite a few treats over the weekend, including a repeat of Kim Sterling's ballet, "I'm in a Kiting State of Mind." Set to the music of Billy Joel's classic, it takes you only a few seconds to realize that it's Kim singing the lyrics, and quite well at that!

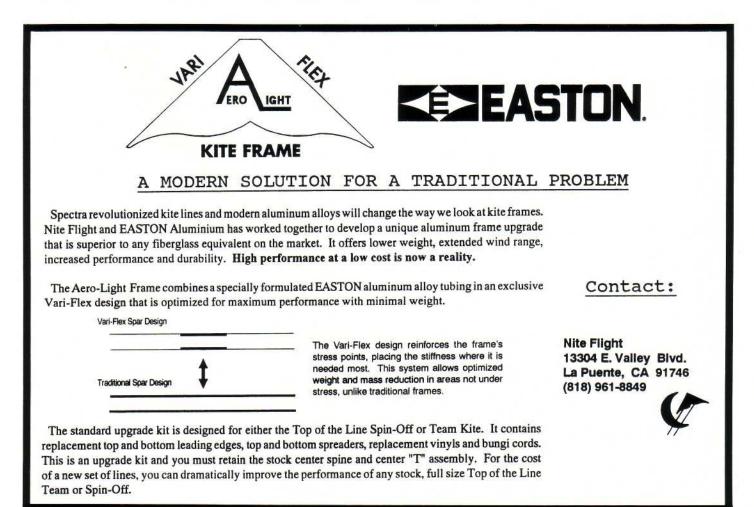
During a break in the formal events, one young local pilot had the opportunity to fly a demonstration. According to Tom and Sue Mason (and others who couldn't believe it), this guy flew one of the hottest routines of the weekend, causing eyes to bug out and more than a few jaws to go slack. It wasn't enough that he looked really cool (he had groovy shades) while flying, but it makes an old competitor's stomach knot up when you realize that he's only seven years old. (Hmmm, let's see, what were we doing when we were seven? I think I had just asked Dad to remove my training wheels....)

Masters Team Precision turned out to be a real dogfight. Team Trilogy, flying a nice set of Mariahs (a new high-wind design with a good deal of screening in the wings) held off Black Sheep Squadron for second place. But, seemingly out of nowhere – a veritable Cinderella story – Team Shred made only their second public appearance, wowing the crowd with difficult, radical moves and almost making the ground shake with the thunder of four windloaded NBKs.

Perhaps one of the finer moments of the weekend came out of IIB. As a judge for IIB, I knew that it was a toss-up between several of the routines that stood out in my mind. Being ever so coy, organizers Tom and Sue Mason tallied the scores, but adamantly refused to tell anybody who had won. Saturday evening, during the banquet, it was announced that Dawn Simmons had taken the honors for her routine, and that it was Dawn's first-ever entry in competition! What strikes me as delightful, in retrospect, is that she looked so cool, calm, and collected while she was flying. Tremendous!

So, how do we wrap up coverage of this event? I could use all the common, trite phrases, like "Put GISKC-92 on your calendar for next year," or "Once again, the organizers put on a delightful event that is bound to get even better in the future," and they'd all be true. But somehow, those words don't come close to describing the kind of weekend you can have at this place.

I might go so far as to suggest that if you're planning a bit of vacation time, you may want to spend a few days flying the beaches at Jeckyll. Maybe you do have to check it out for yourself, but I caution you to leave at home all notions of mud bogs, fire ants, tall buildings, or freeway overpasses. Instead, imagine a quiet place far from the crowds of civilization, with warm, gentle breezes, swaying palms, lots of beach, and absolutely no disappointing "setups."



Selecting spars for a new kite design

Spar type	Relative stiffness	Scale factor "S"	Weight Oz./Ft.
1580	0.189	0.659	0.105
1700	0.255 -	0.711	0.132
A20	0.32	0.752	0.2032
1800	0.32	0.752	0.145
1880	0.38	0.785	0.160
C30	0.406	0.798	0.2434
1960	0.451	0.819	0.177
E40	0.543	0.858	0.2695
ADV 250/2	0.600	0.880	0.1760
CLWTR 250-2	0.600	0.880	0.1465
2100	0.580	0.873	0.197
G50M	0.695	0.913	0.3061
2200	0.70	0.915	0.217
A/C 3-30	0.754	0.932	0.222
AERO-LITE	0.840	0.957	0.3255
2300	0.842	0.958	0.237
J65	0.91	0.977	0.3478
K75	1.0	1.0	0.3594
2400	1.0	1.0	0.260
A/C 2-71	1.0	1.0	0.2331
ADV 250/3	· I.063	1.015	2.2680
CLWTR 250-3	1.063	1.015	0.2054
PRSPR .309	1.11	1.03	0.3165
CLWTR 315-2	1.17	1.04	0.1822
A/C 4-49	1.19	1.04	0.2515
2540	1.26	1.06	0.2900
ADV 250/4	1.42	1.09`	0.3360
PCOMP .309	1.43	1.09	0.2722
FL370	1.51	1.11	0.5326
PRSPR .352	1.54	1.11	0.3529
CLWTR 315-3	1.86	1.17	0.2740
PCOMP .352	2.00	1.19	0.3086
CLWTR 385-2	2.03	1.19	0.2100
FL 414	2.25	1.22	0.6250
CLWTR 385-3	3.25	1.34	0.2800
FL505	4.71	1.47	0.8394
FL616	10.16	1.78	1.2750

Spars designated A20, K75, etc. are standard fiberglass tubular spars from Glassforms. Spars designated ADV 250/2, etc. are Advantage graphite spars from Revolution Kites. Spars designated 1580, 2300, etc. are AFC pultrude carbon spars. Aero-lite is an aluminum spar from Nite-Flite and Easton. Spars designated A/C 3-30, A/C 4-40, etc. are Easton aluminum/carbon. Spars designated CLRWTR 250-2 etc. are graphite spars from Clearwater.

Spars designated PCOMP are graphite and spars designated PRSPR are graphite and fiberglass from Glassforms

by David Lord

hen you build a new kite that is smaller or larger than the one you already have, selecting a proper spar size is always a problem. I have seen spar stiffness information in various forms. Some kite supply catalogues and kite stores have put together data sheets purporting to be spar relative stiffness data. In many cases the data is in error and in almost all cases it is not in a form useful to the amateur kite builder.

To remedy this situation I constructed a spar deflection test board and measured spar deflections for a number of various spars. The test method employed consisted of using a constant weight of 1.0 pound and a constant spar length of 2.0 feet. Since I did not have every spar size available, I decided to compare the data from the spars I was able to test against the spar's moment of inertia calculation. In every case the calculation agreed quite closely with the measured data. For measured data, spar relative stiffness is the ratio of the spar deflections. In the case of calculated relative stiffness the ratio of the spar's moment of inertia was used. Moment of inertia for a hollow tubular spar = π / 64 (o.d. ^4 i.d. ^4). To make the moment of inertia calculations valid for different spar types, like graphite pultrude, I referenced their moment of inertia calculations to a standard spar that exhibited identical deflection on the test board. This gave me a starting point from which I could calculate relative stiffness for the new spar type .

The table to the left arranges the spars in increasing order of stiffness and provides a relative stiffness number referenced to a standard K75 spar.

Now that we know the spar relative stiffness we need to know how this relates to kite size. This is accomplished by calculating Scale Factor "S", where S = Relative Stiffness to the 1/4 power. These calculations appear in the table as do the weights of the spars. The table applies to stunt kites or single line kites, however the choice of a K75 spar as reference undoubtedly makes it more useful for stunt kites; many "standard" stunt kites use K75 spars. To reference to a different spar type, divide each of the relative stiffness values by the relative stiffness value of the spar you want to be the reference. You also divide each of the scale factor values by the scale factor of the new reference.

The relative stiffness numbers in the table mean that, as an example a C30 spar is only 40.6% as stiff as a K75 spar, or a 2540 carbon pultrude spar is 126% as stiff as a K75 spar. So how do you use the data, you ask?

Well it can be used to help you select the proper stiffness spar for your new kite design. If you have a kite that uses K75 spars (or you can use a commercial example) and you want a larger or smaller kite, then you must determine what scale your new kite will be. Scale factor can be obtained by dividing the leading edge length, nose to wing tip of your new kite, by the leading edge length, nose to wing tip of the kite that uses the K75 spars. Go to the table and find the scale factor that most nearly equals the result of the division performed above. Opposite this scale factor, in the left-most column, is the correct spar size.

Example

Suppose that you have a Spin Off and you decide that you want to make a larger version similar to the one you have. After you lay out the pattern, you measure the leading edge length and find that it is 80 inches. Divide 80 inches by 64 inches (the standard Spin Off leading edge length) and you get 1.25 as the scale factor. Go to the table and find the scale factor that most nearly matches the one you just calculated, in this case 1.25. From the table you find that either a FL414 fiberglass spar or a CLEARWATER 385-3 graphite spar would be the correct choice. You can then decide which spar to use based on weight, price, or availability. Reasonably simple - no? An even better procedure is to study the chart and then size your new kite based on a particular spar. In this way you will obtain the same relative stiffness as your reference kite.

Even if your example kite and your new design are not exactly the same (nose angle, extended or non-extended spine, battens, etc.) the spar that the table suggests will still be okay. Any error will be so small as to cause only a small shift in the wind range that the kite performs in.

My own choice of references used in scaling kites is: For a light wind kite (2 to 10 mph) I use the E40 spar with a 64 inch leading edge as the reference. For a full wind range kite (4 to 25 mph) I use a K75 spar with a 64 inch leading edge as the reference. So that I don't have to do the division every time, I have prepared an additional chart referencing to the E40 spar. In the example given above for an 80 inch leading edge kite, most people would opt for a light wind version since this is a large kite. Do the calculations as suggested in the example only use the E50 spar as reference. If you found that a 2540 pultrude was nearly stiff enough and that the ADV 250/4 and PCOMP 309 were slightly stiffer than required, then you did the calculation correctly.

I hope this data will demystify spar stiffness and that the table presents the data in a way that is useful to the kite builder in selecting spars.

David Lord lives in Sumner, WA., where he is a retired aerospace engineer. After 28 years with Boeing Company, he now enjoys stunt kite flying and has been exploring the designing and building of kites for the last four years.



THE SERIES CONTINUES...



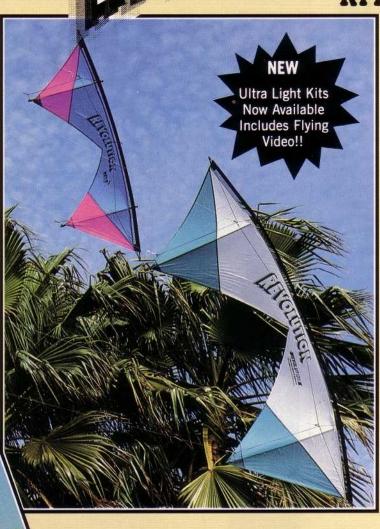
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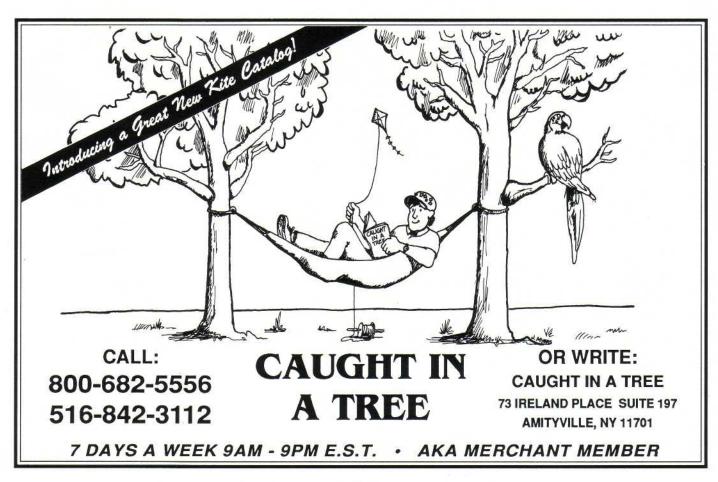
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Written by John MacLauchlan Technical advisor: Lee Sedgewick Photos by Susan Batdorff

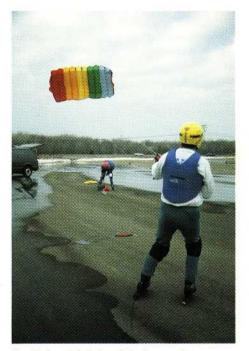
"I feel the need... the need for speed." Tom Cruise, from the movie "Top Gun"

ocketing at what feels like 60 miles per hour across an empty parking lot, with a pair of inline skates strapped to your feet while flying a power kite tacked against the wind, one experiences sheer terror mixed with exhilaration as they zoom into the newest craze to hit the world of stunt kiting: Rollerkiting. Sparked about two years ago by Lee Sedgewick and Sue Taft, who took their previous experience with snow, ice, and kites and applied that to inline skates, rollerkiting is starting to pop up in small pockets all over the country. But before you decide to dig up your old skates (you know, the pair you've had since High School that have been collecting dust ever since) and go give it a whirl there are a few things, for safety's sake, that you should consider. Let's start with the basics - skates and kites - and take it from there.

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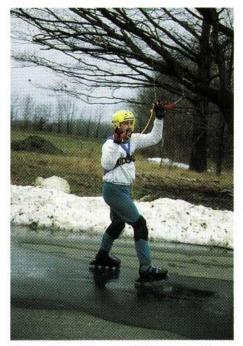
Skates

First of all, you don't necessarily need inline skates to do this, any quality skate will do. If you do have an old pair in the garage, or wherever, they will be fine provided that they are in good working order, comfortable, and provide sufficient support for your ankles. If you decide to buy a pair of inline skates, comfort and support should be your first concern, but you don't have to get the most expensive skate in the store. The moderately priced ones, generally around \$70 to



Lee Sedgewick & Sue Taft chose a dry spot that's offwind to set up.

\$90 dollars, will work just fine. Also, when you pick up inline skates, Lee suggests that in addition to the necessary padding, which we'll go into in a moment, pick up extra brakes. As you will soon find out, learning how to stop without using items like garbage cans, parked cars, and bits of shrubbery is mighty important. So wear a few of those extra brakes out, even before you pick up a kite. Lee says he relies on braking ability so heavily that his brakes are made out of aluminum and copper which last a bit longer than the usual hardened rubber brakes. As for padding, a helmet, knee pads, and wrist guards are number one priorities, so get them right up front. Why risk paying a thousand dollars for a wrist operation when you can pick up wrist guards up for about \$25.00? Safety, safety, and safety cannot be stressed enough. Now that you've got skates and pads, get comfortable on them. Spend at least several hours a week, for a couple of



"Learn how to stop, it could save your life oneday." Sage advice from Lee.

weeks, just skating.

On inline skates the brake is on the back, so you'll have to learn how to stop by applying pressure to your heel while maintaining balance. Granted, it's easier said than done, but it is necessary to learn. Along with knowing how to brake you must be able to turn. You'll find that shifting your weight while turning will determine just how tight that turn will be. Practice leaning into your turns. This will/help to prepare you for following curvy paths and making necessary turn-arounds when you rollerkite. If you decide to listen to music while skating, it's advisable to wear your radio on the front of your waist. This is because you will almost certainly, at some point, meet the pavement. During these unplanned "body touches" you'll generally tend to roll onto your side or your butt during a fall. And if you want to practice rollerkiting without actually launching a kite, maybe just to see what it will feel like, then Lee suggests getting a length of tie-down or bungee cord from your local hardware store. Simply tie it off to a pole, or even your car's bumper, then skate away from your anchor point until the bungee starts to pull you back. When the cord is almost fully extended make your turn. The cord will contract and you'll be able to glide back. simply Practice maintaining the same parallel path. Again, it's important to get comfortable on the skates before you try anything beyond just skating, and remember to wear all pads all the time!

W Kites

Rollerkiting is one of the few kiterelated activities that virtually requires a quad-line kite. Both Lee and I highly recommend the Quadrifoil and the Revolution 1 for several reasons. The kite's placement in the wind, along with its ability to maneuver or hold stable, all while using minimal body movement to fly the kite, is important. This precludes most dual line stunters. Also, quad-line kites make it easier to stay in power zones for speed, or to dump air to slow down. When prepping your kite for rollerkiting, the same rules apply as those for power-kiting. Lee suggests the use of 300-lb. line on top and 150lb. for bottoms. At the very minimum use 200-lb. line all around. As for the length of the lines, "There are two schools of thought," says Lee. "Longer lines, around 85 to 90 feet, will allow tor quicker power ups and handle gusty winds better, but shorter lines, around 25 to 30 feet, are more maneuverable and will allow for jumping in turns once you get better." (Don't even think about jumping now.) Also, by using shorter lines, obstacles such as telephone and light poles are easier to get around. A knotted length of link line on the bottom of the handles will allow you to adjust the maximum pull of the quad by

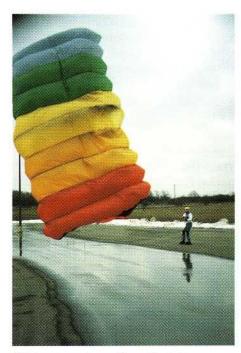


Strong lines? Go for the lean.

lengthening or shortening the lower lines. Due to deterioration and contact with concrete, be sure to check your lines for wear.

Finding a suitable place

So, now that you're comfortable on the skates, you've got all of your pads ready and your quad is power-lined out, there's only one more thing that you'll need. Quite possibly, one of the most difficult items to acquire for rollerkiting is a place to do it. The area must be flat, smooth, and free of nasty fixtures such as car stops and light poles. It must also be relatively free of trees and other obstacles that will cause bumpy winds. Where I fly, I have found a county park with both halfmile and three-quarter-mile circular bike paths. The park is relatively wide open and we can rollerkite regardless of the direction of the wind. When we first started going there we asked the park rangers if they minded that we flew kites. They agreed, as long as they received no complaints and that we



Kite turns, you turn. Piece of cake!

flew safely. Since making the transition to rollerkiting, we have not only maintained our safety standards, but we go out of our way to show the utmost in courtesy to others in the park by not flying near them or buzzing them as we go by. Lee points out that once they find a spot, they nurture it. They make sure everything looks extremely safe, and that rollerkiting doesn't interfere with the parking lots' normal operation. In other words, avoid flying during peak hours. "It's



Go for it take the jump into Rollerkiting!

hard enough to find a place to fly a stunter anymore," says Sedgewick, "but once you get out there all padded up and whipping a kite around, some property owners may have second thoughts about letting you do it because of safety and insurance reasons. So if you find a place, take care of it." Now, that you finally have the right stuff- skates, pads, helmet, power quad, and a place to fly – let's do it.

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Final Checks

Launch your kite and find the usable window before putting your skates on, then secure the kite for later launch. Make sure the kite is set a little lighter, or underpowered, than your normal setting, because when you're on your skates there will be minimal bodyweight resistance against the pull from your kite. Before making your first rollerkiting run, spend some time warming-up. Skate the intended run and check your path for sticks, stones, or any other type of debris which may cause you to tumble.

▼ Let's Go

When launching, it's important to remember that in rollerkiting you should be tacking against the wind, not going with it as a power-kiter would do. The power zone, or center of your wind, should be directly to your left or right, and the edge should be at a 45 degree angle in front of you. If your power zone is directly in front,

you tend to burst forward about ten feet and then the kite collapses. If you set it directly downwind for the launch, a sudden gust could cause you to do what's known in skating slang as a "face-plant." Winds from about 7 to 15 miles an hour are best to learn in. On launch, flex your knees into a semi-crouched position, keeping the kite about 20% to 30% inside the edge to keep the sail inflated. (If you try to take it any farther out, in these moderate winds, the kite may collapse and you'll skate past it.) At first, the sensation of the speed generated while rollerkiting is a bit unnerving. Don't panic. Do shift your body weight (to the left or right) against the kite, much as a windsurfer balances against the sail, and you'll be in for the ride of your life. Also, practice keeping your legs together like a slalom skier as this will help you maintain your balance. After the initial shock of going faster on skates than you have ever gone before, you'll learn to relax a bit and

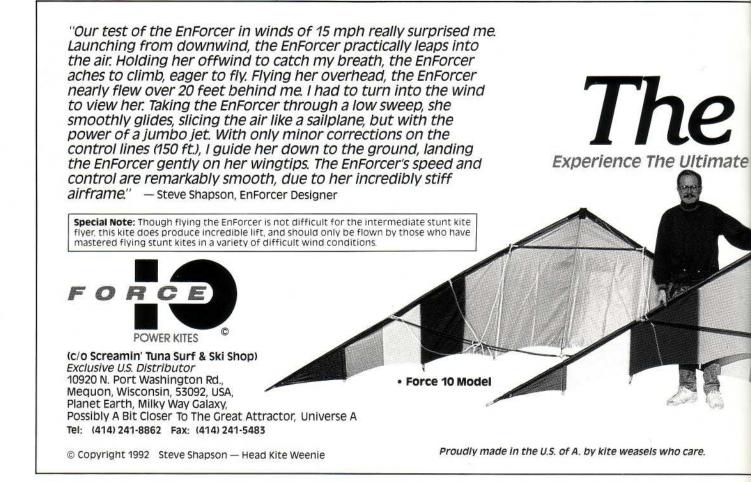


John MacLauchlan demos the art of falling. Go for the grass...

realize how much fun you're actually having. Now that you're going great, a sudden realization will probably hit you; how do I stop?

Stop This Ride!

Remember all that time you spent learning how to brake? Now's the time to put it to good use. Fly the quad out to the farthest point on the edge of the wind, lessen the pull of the kite by



using primarily the top fly lines and then apply your brakes, lightly at first. Remember, on inline skates you won't stop immediately. It will take about 20 to 30 feet for you to slow down enough to attempt a turn, so plan ahead. When you've slowed down to a comfortable turning speed, turn and direct the kite slowly back into the wind. Once your kite has made the about face, it will help you to follow along. As the kite crosses the power zone you will feel like you've been launched from a slingshot, and off you go again in the opposite direction.

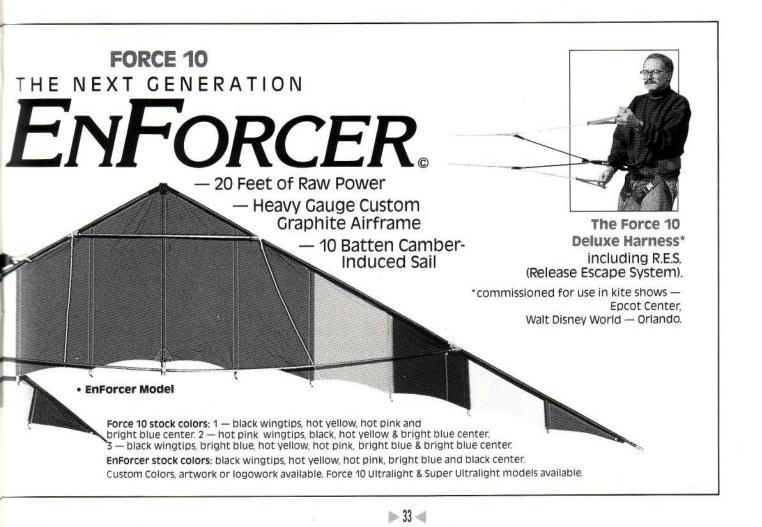
Tips

Balance is a key skill in rollerkiting. Try to avoid any movements that will upset your balance, like bringing the kite overhead to slow down on a run. This will only bring your body to an awkward standing position and a power kite jerking at your arms. One item Lee says is helpful to have with you is a push pin in a plastic carrying case. If you happen to go down (the odds that you will are overwhelming), it's a simple matter to lodge the pin in the cracks in the asphalt to secure your kite. Then, pick yourself up, dust yourself off, and start over again. In higher winds, 15 MPH and above, Sue Taft says try flying the quad by just the bridles. Windsurfing on land, what a concept!

Be sure that the winds you first start rollerkiting in are smooth. Winds that gust from 7 to 17 to 25 and then back down to 7 are the most dangerous winds to fly in. Fighting the strong pull of the kite while traveling along at high speeds in these gusty winds will wreak havoc on your balance, causing you to go down hard, very hard. One thing I've learned, and it seems to work pretty well for me, is that when I start to lose control or balance, or I find myself zipping along at speeds that are so fast that I can't stop my legs from shaking, I simply get the kite close to the ground and let it go. After I coast to a safe stop, I can always go back and get the kite. Yeah, I know it's an unwritten creed to keep the kite up at all cost, but when it comes down to safety and possible bodily harm there is no real choice!

After you get up and rolling and decide that this is really a "happenin" thang," Lee says you may want to check into a hook harness. A harness will take some of the stress off your body while 'blading along. Lee is comfortable using the harness manufactured by Ted Dougherty of Kite Innovations, as the line readily slips on and off the hook. Since personal safety is the prime consideration, don't use a harness system that you are tied into.

That's about it. All the rest you'll learn by doing, and believe me it will be one of the most exciting things you've yet discovered to do with kites. Have fun, play it safe.





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Southeast Stunt Kite Championships

Story & Photos by Susan Batdorff

Dear Gang, Great beach, great wind, great weather. Wish you were here.

elcome to the 2nd annual Southeast Stunt Kite Championships, held Feb. 22 & 23, 1992, in the Art Deco district of Miami Beach, Florida. Although the chance to thaw out in the middle of winter would be incentive enough for kite flyers to converge on the beaches of Miami, SSKC offered more. Flyers were here to enjoy the full range of events, the clean ocean winds, experienced organization, and the enticement of gaining points in both the Eastern League and American Kite Magazine Circuit. West coast, east coast, midwest and Canadian flyers arrived, and anticipation ran high. What new moves would we see? How were the teams (who'd undergone various personnel changes) going to line up? And of course, we all had the chance to see a of 1992's new kites. Final results pointed up an interesting note; the top finishers made strong showings in every event they entered. While it remains true that "on any given day, at any given time, anyone can win," could it be that the time has passed when one could classify an individual flyer or team as strong in one event but not a threat in another? Or is there perhaps no significance in these results? Time will tell.

lot

In both IIP and IIB, Dawn Simmons flew to two solid first place finishes. Note that this is only Dawn's second competitive attempt! When asked what moved her to compete Dawn told us, "I've just been watching it for a while and I finally decided that now was the time that I should go ahead and try it out." Take heed Intermediate flyers; Dawn is a solid individual contender along with flying on a relatively new precision team, Team Shred. From the land of

Canada came Richard Synergy. Richard had somehow overcome the knee deep snows and bone chilling cold, at least to the point of taking 2nd place in both IIP and IIB. (Later, Synergy also delighted the crowds during Innovative as he flew and danced with a bucket over his head. The judges weren't able to resist joining in the fun and accompanied Richard with their own line dance. Great comic relief.) Lee Scanlon bested Aldo Ramirez for third place in IIP, but Aldo secured third in IIB.

Next came the battle in the Experienced class. The winner of EIP was John Barresi. John, from San Francisco, CA., will be showing up at most events this season as he shoots for top ranking. He has set his goals and is willing to put in 7 hours a day of practice to reach them. Following Barresi in EIP, Jeremie Moore (whose job is flying kites for Disney!) came in 1 point off the lead and Michael

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Moore, looking very strong this year, came in third. In EIB Michael Moore edged Barresi out of first place by 0.3 of a point with a score of 92.97. Todd Nelson, flying the new Surge from Frontier, rounded out the top three.

Now we come to individual Masters class. I'll start by saying that the top three slots saw the same three flyers in both Precision and Ballet. Saturday morning started with what most agreed were absolutely ideal winds. Perfect winds however, are not enough to explain Bob Hanson's first place finish in MIB. With a score of 95.03 (almost 5 pts. ahead of second place) and folks saying "Did you see Bob's routine? Incredible!", we can only say he flew a stellar routine. Ron Riech was next in the final order, flying a ballet that seemed to express eternal life and hope. Completing the top three was none other than yours truly, Susan Batdorff. Flying his first competition in Master's class. Abel Ortega made a strong showing by coming in fourth in MIB.

In the team events, Storm Front placed 1st in ETP using gorgeous "stained glass" kites designed by Marty Sasaki. Team Tempest, out of CA and flying for Spectra Sport, took 1st place in ETB and 2nd place in ETP so keep your eye on them this season. Pairs Ballet saw Skyward Kite's factory teams taking 1st place finishes in the Experienced and Masters classes. Stayed tuned for the unveiling of Skyward Edge's new routine rumored to take place at the M.A.S.K.C. event.

There were a number of personnel changes on many of the teams. Top of the Line Flight Squadron is now made up of Ron Reich, Pam Kirk, Mike Dennis, and new member Paul Hodges. Paul is new to the competition circuit but hardly new to flying. In fact, prior to joining TOLFS, Paul flew kite shows for Sea World in San Diego and had the pleasure of frequently watching TOLFS practice on a field that adjoins his back yard. You



John MacLauchlan flying dog-stake. You can't screw a dogstake into this coral beach, so bring your own anchor person.

will also see another Top Of The Line team (TOL) made up of Don Tabor and members from the Killer Bees. Unfortunately, Don suffered a wrist injury on Friday, and consequently the team decided to scratch their events. Another California team. Tsunami, has added a new member. Robin Ward. previously with Prevailing Winds and now the marketing director for Spectra Sports, is flying with them. They have just advanced to Masters class and they flew with almost perfect spacing and timing. Team What's Up is now flying with four people in both precision and ballet events. What's Up members are very enthusiastic about flying the new Tandem kite, but they were disappointed that the recent winter months had restricted their practice time. The High Flyers have a new flyer too, as Wayne Davidson has returned to the Air Atlantis show. So with all of these changes, how'd they do?

TOLFS clocked everyone in MTP. 2nd place was secured by team Tsunami, and Team Shred came in 3rd. Team Shred started their freestyle portion with an interesting move. They launched after placing two kites into a wingstand and tucking the noses into one another. The effect was that of a quad line kite rising through the window, followed by a break-apart once the coupled kites were airborne.

As I watched the Masters Team Ballet, the top two finishers seemed so close that I was relieved not to have been on the judging panel. Showing terrific artistic choreography and breathtaking passes, the High Flyers came in 1st place with a score of 91.43. Team Tsunami took 2nd. Tsunami's opening move grabbed everyone's attention. Prior to starting they wrapped their lines around the kites, and launched two-by-two, doing what I would describe as somersaults through the air. This move was done without additional equipment placed on the kites. High risk move, you bet, but it was "way cool."

One issue that came up during the team events was the obvious difficulty that teams had staying within the field boundaries. Having recently received the 1992 edition of the AKA / STACK International Rulebook, I was glad to note that for an event to be sanctioned by the A.K.A., the organizers must now provide 300' x 300' fields. In fairness to the larger teams, they need that room. No organizer likes to enforce the DQ rule for flying out of bounds however, in consideration of the spectators, their safety must be ensured.

For me, Quad-line Ballet is always enjoyable to watch. Once again, Bob Hanson won 1st place flying to two pieces of music with a related theme but distinctly different styles. He splices the two pieces together in a manner that brings surprise and laughs to all. Following Bob, Calvin Mills came in second. Watching Calvin fly on short lines with his radical style is a pleasure and seems to be a real workout for him. Dodd Gross came in 3rd place and this was a relief from his overheard quoted "heartache" suffered in other events.

The Innovative event wrapped up Sunday afternoon in grand style. Ted Dougherty flew various Quadrifoils to tell the story of a young boy growing into manhood. In the beginning of his routine he somehow jettisons the kite he is flying, and there appears another kite on his lines. I was standing next to someone who said, "Wow, I've never seen a kite birth before." In fact, that is exactly what it looked like. Ted continued flying a very descriptive routine, accompanied by poignant music, into a well deserved 1st place finish. Even though John MacLauchlan flew to a 2nd place finish, he apparently had something else up his sleeves. John assures us that all technical difficulties have been solved and we will soon see another dimension to his routine. There's no mistaking the amount of fun that Innovative flyers have during their performances.

The organizers wish to extend a big "Thank You" to all who volunteered to help run this event. Once again, there was a kite auction held to benefit the Reach Out for Cancer Kids organization. They express their sincere appreciation for the monies raised.

Sometimes, the long winter stretch can seem interminable and SSKC, scheduled in the middle of February, provides so many competitors with the chance to spend a weekend doing what they love doing. SSKC continues to be a winning event for all.

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HAWAICHALENGE

International Sport Kite Championships

Story & Photos by Susan Batdorff

he 9th Annual Pacific Guardian Life Hawaii Challenge International S.K.C. held March 6-8, 1992, has again come to a magnificent close. The competition, now into its 9th year, has become a major tourist attraction in Honolulu and attracts competitors and spectators from all over the world. The event name now incorporates International to reflect this. Because of its beautiful scenery and weather, Hawaii has become the kite mecca of sport kite flying in the pacific, attracting the best pilots from around the world. Over 70 fliers from Hawaii. the U.S. mainland, Japan, Australia, Switzerland, England, Germany, and Canada attended this year's Hawaii Challenge.

Over the past three years more than 125 flyers from Japan have come to participate in the Hawaii Challenge. They have used the 'Challenge' as a model to successfully promote and organize the world's largest sport kite competition ever, the Japan Challenge, held last year in Odawara.

For the first time at this major competition, we crowned an international champion from Japan, Shuichi Sato, winner of MIP. Sato-san is also an organizer of the Japan Challenge and will be hosting the 1992 American Kite Magazine World Cup. In second place was Ross Tyson of Cairns, Australia, who is the organizer



Team kites laced with Nite Lights await sunset

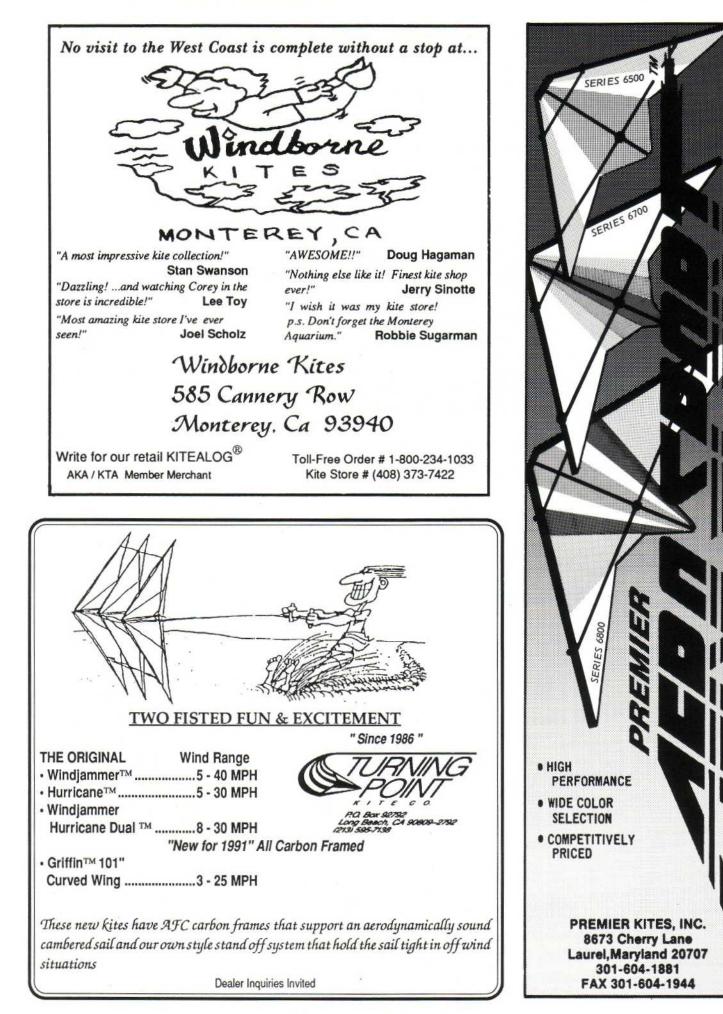
of Australia's Kites in the Tropics SKC. In the Experienced Precision category, Masahiko Aoki of Japan, was the winner with a strong lead over Shin Tojo, Japan, and Kyahn Kamali, WA. In EIB, Gary Wood, CA took 1st place with a wonderful routine. Placing 2nd with his rendition of music from the Rocky Horror Picture show was Carl Robertshaw of England, and 3rd went to Al Washington, OR.

The number one-ranked team in the world, Hawaii's own Team High Performance, was upset in a very close battle in MTP. In their first performance here at the Hawaii Challenge and their first time competing in the masters class, Team Ramjet of Tacoma, WA, outmaneuvered High Performance by 1 1/2 points, taking out High Performance with an excellent routine that left the crowd asking for more. In 3rd place, Team Kiteland finished very strongly over veteran teams Tsunami and Air Affairs. In the battle of the titans, High Performance regained their winning style in MTB, edging out Tsunami by 1/2 points, which, by competition standards, is very close. Tsunami team Captain, Robin Ward, used some of the newest techniques. including the Spectra Sports Slingshot launch that sent their kites spinning into the skies to start what many thought would be the winning performance of the day. In 3rd place was Team Kiteland from Japan. Masters Pairs Ballet was well received with Team Banzaii of Osnas winning with a ten point margin over Teams Air Affairs I and II, with Team Dandy from lapan in fourth.

In the Experienced class team events, Wind-A-Soarus of Oregon swept both Ballet and Precision categories flying their beautiful Ramjet kites. Cutting Edge came in a close second and was followed by Switzerland's Swiss Precision Team.

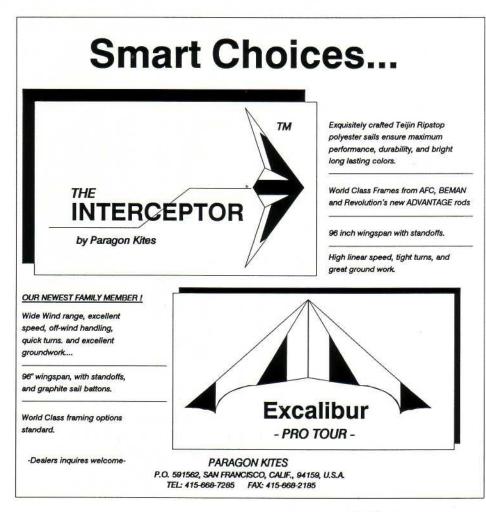
At this year's 'Challenge' we had the youngest and oldest flyers to ever compete at the same event here, with the average age of competitors being 39.5 years. The oldest competitor was 71 year old Ken Linn, who divides his time between Honolulu and Ocean Park, WA. Ken, in his first competition ever, performed a wonderful Novice Ballet routine to Emerson, Lake & Palmer's "Touch and Go," earning him second place. He was flying a hot new

continued on page 40





HIGH PERFORMANCES ENTERTAINING QUAD LINE DEMO



continued from page 38

kite from Europe, the "Jester." It was amazing to watch Ken dance around the field and time numerous "touch and goes" to the music. In third place was 9 year old Robbie Tyson from Australia. Our youngest flyer was 8 year old Luke Ozolins, also from Australia. Luke walked away with the gold in both NIB and NIP, as well as taking fourth place in Open Quad Ballet!

The 'Challenge' has always been known for its entertainment and color. and this year Luke's younger brother, five year old Andrew, flew non-stop demonstrations with both dual-line and quad-line kites. Not to be outdone, local wonderkid Brian Wallace, measuring up quite well at six vears old, flew dual line team demonstrations with father Dave. In his first performance at the 'Challenge', Scott Liston performed in the Ballet and Innovative events. Scott is confined to a wheel chair, but still continued to fly despite light winds. He used an ultra-light Wizard outfitted with a Bone.

A new award presented this year was the "Hawaii Challenge Spirit of Aloha Cup," a perpetual trophy that will be awarded every year to the international team that best exemplifies the true aloha spirit. This year's award went to Team Air Affairs from Australia. The team consists of Maris & Jan Ozolins, Ross Tyson, and Greg Gilboy. Their extended team includes Ross's wife and two children, The Ozolin's two sons, and mate Andrew Peterson. What a wonderful group!

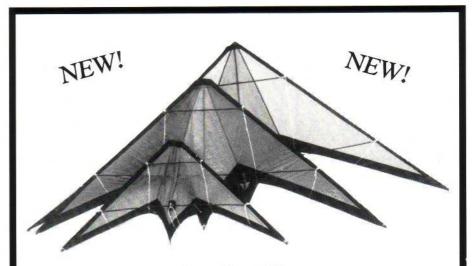
Excellent judging, facilities, and operations management have earned the 'Challenge' the reputation of presenting a quality event for the competitors and spectators. The 'Challenge' is blessed with thousands of spectators who come to beautiful Kapiolani Park at the base of Diamond Head to experience this sky spectacular. The pilots fly not only for their personal joy and thrill of competition, but for the entertainment and appreciation of the spectators. In addition to the competitions, scores of demonstrations were scheduled such as the four-man Revolution Team musical ballets, Robert Loera's power kiting exhibitions using the Stunt Buggy and Peel Kite (manufactured by Peter Lynn of New Zealand), and of course the world record Mega Team attempt. Beautiful ground displays also livened up the park with over 40 feather banners giving the illusion of sails out at sea. Kapiolani Park is still recovering from all the action and color!

The Hawaii Challenge begins and ends with a welcoming reception and awards banquet at the ocean side Elks Club. The Elks is located just three buildings down from the 'Challenge' headquarters, Kite Fantasy, and just steps away from the competition site. It's always a wonderful gathering place to greet old friends and meet new ones. The aloha spirit was everywhere.

We would like to extend a big mahalo (Thank You) to our event sponsor, Pacific Guardian Life, for their generous assistance in helping make the 9th annual Hawaii Challenge possible. Pacific Guardian Life has supported the past four Hawaii Challenge events.

The organizers of the Hawaii Challenge and other sport kite events in Japan, Australia, New Zealand, and U.S. Mainland, will come together next year to crown the Pacific Rim Champions here at the 'Challenge'. Planning has already begun for the 10th Anniversary Hawaii Challenge Celebration to be held on March 3-8, 1993. See you there!





From Dyna-Kite

FINALLY A WING KITE GOOD ENOUGH TO BE CALLED A DYNA-KITE

The Arch Angel

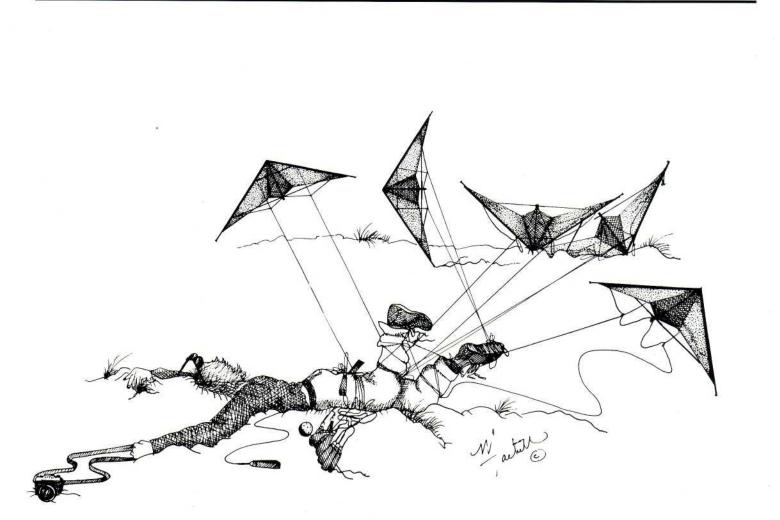
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DYNA-KITE CORP. P.O. BOX 24 THREE RIVERS, MA 01080 TEL (413) 283-2555 FAX (413) 283-4037 The range and amount of sheer talent to be found among kitefliers never fails to impress us. Along those lines, we would like to introduce Melinda Tackett. Both she and her husband have been flying for a couple of years and spend their weekends searching for wind. When that's not possible, Melinda uses her artistic talent to draw cartoons. We suspect that just about every stunt flyer will recognize the cartoon situations and we hope they bring you a smile.

BOAP

Along with doing illustrations for various publications, Melinda offers various cartoons as posters that she also signs and dates. You can contact her at Kitetoons, c/o Melinda Tackett, 7400 SW 90 Av., Portland, OR 97223.







ne of the advantages of attending sport kite competitions is that in doing so you have a chance to realize things you've never been aware of before. Quite often it's a new trick (remember the first time you ever saw a nose launch?) or perhaps it's a sequence of older, known maneuvers spliced together to form an interesting new design in the sky.

In this sport, new things are being developed all the time. But then, every once in a great while, something comes along that simply blows you away. Recently I was floored by such an experience, and I doubt that many people who saw will ever forget: the Soul Fliers had arrived.

During my relatively short tenure with this sport, I've noticed that in many ballet performances the pilot has developed a fixed routine - a set group of moves to be performed to music. Each maneuver is carefully worked out so that the pilot knows exactly where he or she should be in the sky at any given point in time, and of course, the overall intent of the routine is to win. Another group of pilots, in a similar fashion, know approximately what they would like to do, but fairly well ad-lib much of the routine. In either of these approaches, the pilot often seems to be slogging through a piece of music that they've heard dozens of times before, almost oblivious to the fact that now they have to perform in front of other people.

One of the problems with either of these approaches is that the spectators and judges often don't *feel* anything from the routine - no emotion. One of the original Masters once said that if you can make the people cry, you've flown the best routine possible. How many of us can safely say that we've managed to evoke such an emotional response from anyone in an audience? Precious few, I believe, although many would brag that they have. Do the people

Memorable ballet routines, like works of art, consist not of a planned series of strokes, but rather strokes of inspiration.

watching truly understand what a pilot is trying to say?

The Soul Fliers have taken a new approach to flying a ballet routine such that the performance comes across to us as true art. These people search through their unwritten inventory of emotions, examining what is personally important to them. Something seems to be inside of them that desperately wants to get out. Seemingly all that is needed is a valve, a creative outlet of some sort. As has been the case for so many people over so long a time, that outlet is often found in music.

You, as a Soul Flier, with a heart full of emotion, try to find a passage of music that says something, reflecting the feelings you have inside. You have always related to this music somehow. Maybe it's just a nice instrumental piece, or perhaps a musical selection that has lyrics you can believe in or understand. Whatever music that you select, this is music that reaches down to your soul and evokes emotions that might not otherwise be revealed. The conduit for expression is not complete, however, since there is no real medium for letting these emotions out... yet.

Hiers

Whether you are on the competition field or standing alone, the circuit completes when you pick up the lines to the kite. You should stand there for a minute to allow whatever inspires you, affects you, moves you, and motivates you to come back for this moment. The true Soul Flier thinks about what brought him or her to this point in time, reliving the emotions that so desperately want to be translated from a mere feeling to a physical manifestation.

Standing there quietly, you let that feeling grow on the inside, passing from your core until it spreads through your shoulders, down your arms, into your hands. In your mind, you picture your inspiration... you see a color... maybe you hear someone's voice. You let your body become, at that point, the emotion that has been taking over for so long inside as it passes from your soul.

And the translation begins.

As the music plays, you're transformed and transfixed. You don't really see, although you won't crash. You don't actually steer, you don't think... you just feel. What happens for the Soul Flier is that the music and the kite have served as catalysts for translating an intangible, abstract human emotion into a unique signature of movement. There are never two turns alike, for this translated emotion is too mercurial. There is no set pattern, there is no right or wrong place to be in the sky. And when you're done, you don't really remember. Like a lover, you feel drained but satiated, as though a longsought need has finally been fulfilled.

By "Billy" Bob Hanson

the yearning slaked by the outlet.

While watching the Soul Flier, some people might think that they see brilliant pilots performing beautiful routines. Others may see technical flying like they've never seen before. But I see something completely different. I see a soul, inspired by an emotion, burst down the lines like a fireball, transforming itself into a visible, understandable, almost living thing. Under the right circumstances, music - itself an aural art form - and the visual beauty of kites can combine to form a completely new art form for expressing one's most closely-held emotions.

We all like to be creative. We can see this in the types of kites we design and make, or in the set routines that we like to fly. Some of us are musicians, some are into the arts, others apply their creativity to electronics, and yet others write sometimes none too lucidly. But each of us, I believe, has an emotion that affects us deeply. A thought, perhaps, of something that has happened in the past. Maybe it's just a feeling or belief that you've always had that you never before knew how to express. Or maybe it's the story of your life.

Go out and find your catalyst, find the music that affects you the most and reflects something that you've been feeling. Take that moment of reflection or introspection, then show us those feelings translated through your kite. Don't worry so much about rehearsed routines, or set points and locations, don't neccessarily show us how good you are with a bunch of technical tricks. And please, don't worry so much about your score. That's all trivia, really, within the context of soul flying.

Those who know soul flying will listen, watch, understand and feel. Only then will we know what you've been trying to tell us.

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The same great features as the Moran Winder, but designed specifically to store quad line control systems. Easy figure-8 winding; includes elastic binder to secure lines and control grips.

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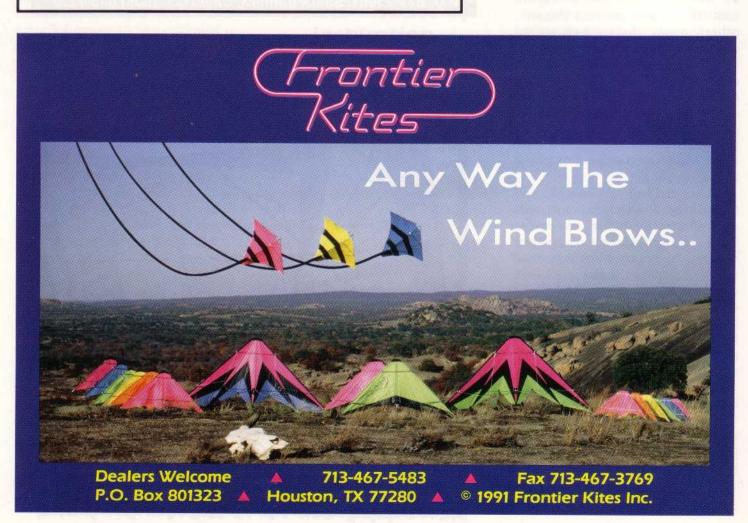
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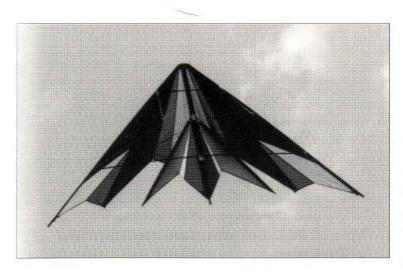
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Into The Wind 1991 Kite Catalog



When you take the Tandem out of the bag and set it up, your first impression might be that this kite will probably eat anything that gets in its way. With its large 8' wingspread, battens, airflow regulators, and seven points on the trailing edge, this kite looks like it means business – and it does. You could well describe this kite by simply saying, "We're here to do Precision, and we're not gonna mess around!"

Bolt the doors, lock the windows, and take the children off the street; Cerfs-Volants AZUR may very well have developed today's "ultimate" Team/Precision kite. In addition to its stunning graphics, bomb-proof construction, and unusual configuration, the Tandem receives high marks for all of the attributes that define a good Team/Precision kite, according to our Product Review Panel.

Basically, the manufacturer has taken a large, battened sail and added what looks like a second, smaller kite near the keel. Cerfs-Volants calls this an "airflow regulator," and these extra wing panels aid performance in a number of respects. Foremost, the regulators present a greater sail area in a 3-D configuration, so the drag profile is increased. This results in a very noticeable reduction in forward speed throughout the wind window and accounts for the kite's overall stability and lack of oversteer. According to the manufacturer's specs, the airflow regulators result in "no noticeable acceleration in dives or deceleration in vertical climbs." This is a blessing for Team Precision maneuvers, as the speed of vertical moves remains consistent, slow, and controllable.

The most striking flight characteristic of this kite is that it is an excellent straight-line tracker, with little-to-no oversteer while at the optimal bridle settings. As we took it through some rudimentary precision figures, we found that in addition to being able to easily hold rail straight passes and lines, the lack of oversteer made 90-degree corner turns sharp, accurate, reliable and easy.

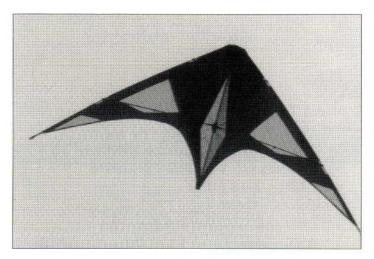
Launches with the Tandem are quick and clean, with the kite lifting readily from all launch positions. We noticed that it did have a tendency to rock slightly if the lines are pulled too sharply, but otherwise the kite receives high marks in Model: TANDEM Manufacturer: Cerfs-Volants AZUR Fabric Weight: 0.75oz. ripstop nylon Framing Materials: Wrapped graphite Wind Range: 3-25 MPH Configuration: Delta-type (92" wingspan) Skill Level: Intermediate/Advanced MFGR's Suggested Retail: \$325.00

this category. For the more unusual launches, we found that off-wind nose-down or belly-launches (where the kite is started flat on the ground with the trailing edge toward the pilot) were reasonably easy, probably aided by the low weight-to-sail-area ratio.

When testing landings, groundwork, and tight, hardturning moves, we found one of the most surprising characteristics of this kite; turning performance is extremely tight and responsive for a kite of this size. Whereas with most large deltas you have to leave a certain amount of space to complete small loops near the ground, you can run quick, tight maneuvers right down "on the deck" with little fear of running out of room. What this tells us is that the manufacturer has found a good balance between speed control, stability, and responsiveness, and it is no small feat to build all of these characteristics into a single kite.

In terms of performance around the wind window, the Tandem remains stable and predictable. Climbing very slowly and steadily toward the apex, the kite continued to seek altitude, although we found this to be dependent on the proper bridle setting. (The bridle is configured differently from most deltas, and because it is knotted at predetermined points, there are a minimum number of possible settings.) Find the right setting for the wind, and the Tandem will push the window to almost directly overhead or up to 170-degrees laterally. Pushing the window in such a manner, don't expect that the Tandem can be pulled out of the sky – it's just too stable. You might, however, have to point the nose up a bit, as the kite has a tendency to drop slightly when held out on the edges of the window.

The manufacturer makes no pretense about it; this kite was designed for Precision, and it is not intended for use as a Ballet kite, although you may find it appropriate for some routines. Cerfs-Volants set out to make a rock-solid, responsive, and accurate big-wing kite, and from all indications, they've hit their mark wonderfully.



The Moriah is a kite that was designed to meet the demands of flying in higher winds. Its most obvious feature is aimed toward this goal; the use of screen paneling as part of the sail. While using screen isn't a brand new idea, the Moriah is among the first of many such experimental kites to make the move into becoming a production model.

The screening in the Moriah affects the kite in a number of ways. The most noticeable change is that it considerably lessens what's normally thought of as the rigors of flying in high wind. The pull normally associated with high wind flying has, to a large degree, been done away with. At times, the screening can make the kite seem like it is traveling through air that is "thicker," or more viscous, than normal. This doesn't present any problem, though feedback on your lines can occasionally feel sluggish.

Our test panel agreed that while the Moriah handled straight line flight quite well, making clean, crisp, precision turns wasn't necessarily a simple task. The flyer's input while controlling the kite has to take into account where the kite is in the wind. Toward the center of the wind window the Moriah can exhibit a large amount of oversteer. Bridle adjustment will eliminate some of this, as will higher winds. On the edge of the wind, or in slower wind, the air passing through the screen can lead to understeer that shows up as a sliding effect in turns. This can be readily compensated for, and these same factors make for a kite that is guite stable, a snap to stall and glide, and reacts with agility and surety in landings. The screening also goes a long way to even out gusty winds. The Moriah handles groundwork with ease and stood out in this area, leading us to agree with Trilogy's claim that "65% more people will ask you "How the Model: MORIAH Manufacturer: Trilogy Fabric Weight: .75 oz. ripstop with fiberglass mesh Framing Materials: Carbon graphite Wind Range: 8-35 MPH Configuration: Delta-type (90" wingspan) Skill Level: Beginner/Intermediate/Advanced MFGR's Suggested Retail: \$200.00

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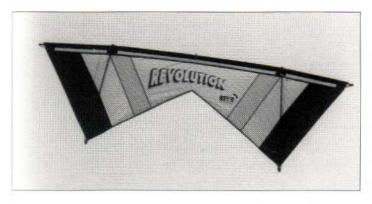
heck did you did that?"" The Moriah came up somewhat short when tested on its ability to do tight turns. As the sail area normally used for lift is limited, it takes the kite some room to gather air in the turn. Therefore, don't look for the tight buzz-saw effect here.

In terms of construction, in keeping with a high wind design, rubber stops have been placed by all possible travel points in order to restrict rod movement, and cutouts for the leading edge vinyls are sizeable, thereby helping to prevent sail damage if a stopper should happen to give way. The retaining vinyls for the cross spars are showing some stress after our test flights and beefing these up would complete the high wind presentation. There are rubber bands on the bottom cross spreaders which do a good job of retaining the rods in the center T, however on impact the rods are easily popped out of the leading edge vinyls. Stand-offs are held in place with solid, non-slip fittings. The bungee cord for sail attachment to the wing tips is secured through an end cap. This is a nice touch as arrow nocks have a tendency to be broken or knocked off during ground work in high wind flying. The bridle has been installed with the static line running from the center T to the clip as opposed to the more common placement on the leading edge. The bridle uses a solid-feeling key ring-type fitting for line attachment. We suggest any hook used for attaching your fly lines should also be sturdy.

If you're looking for a full size, high-wind kite that offers minimal wind resistance, quiet flight, moderate speed, and great ground work ability, (and soon an optional quad-line bridle) check out this newest offering from Trilogy.

SB

▶ 48 ⊲



Model: **REV-II** Manufacturer: **Revolution Kites** Fabric Weight: **0.75oz. ripstop nylon** Framing Materials: **Wrapped graphite** Wind Range: **5-20 MPH** Configuration: **Linked dual triangles, double-spined** Skill Level: **Intermediate through Advanced** MFGR's Suggested Retail: **\$150.00**

The important thing to remember when you fly a Rev-II for the first time is that you should ignore most of what you may have learned while flying the Revolution-I. While the Rev-II looks like a smaller version of the original, the flight characteristics are markedly different, even though the mechanics of piloting it are the same. The second thing to remember is that when you read a Product Review on the Rev-II, one can't always apply the same criteria that are used to review deltas. So, while we might say that the Rev-II "has a significant amount of oversteer," or "it's easy to stall," you have to realize that this is exactly what makes a Rev-II characteristically unique... and so entertaining!

Since by now most people have seen the Revolution-I, perhaps the best way to describe the Rev-II is to make a comparison to its larger counterpart. The first thing we noticed is that whereas the Revolution-I is fairly slow and graceful, the Rev-II is fast, "frisky," and fun. In higher winds (over 10 m.p.h.) the kite veritably zips across the sky at high speed. Tight, propeller-like spins are extremely fast; indeed, at the fastest rate of spin, you'll probably have a difficult time predicting where you'll exit. A bit of practice, patience, and clairvoyance will help tremendously.

In other maneuvers that can only be accomplished with a quadline kite, the Rev-II is remarkably responsive. Pinpoint stops are sharp and sure, and landings or launches can be accomplished from any orientation you would want - the only exception being if the kite is lying flat on the ground. All flight characteristics are quite dependent on hand movement. For example, the kite will perform corner turns or track a straight line very well, but you have to ensure that you don't move the handles once the kite is in that track. Similarly, wide, circular turns, oversteer, understeer and overall forward speed depend entirely on what the pilot does with the handles. Maybe we should explode a common myth here: Contrary to popular belief, the Rev-II flies sideways, and rather well at that. Again, it depends on knowing how to work the lines.One of the nicest features of the Rev-II is that it doesn't generate much pull, except in the highest of winds. With the combination of reduced pull and overall responsiveness, a light touch on the handles is all it takes to fly the kite effectively. Because of this, new Rev-II pilots should be careful not to overcompensate when steering.

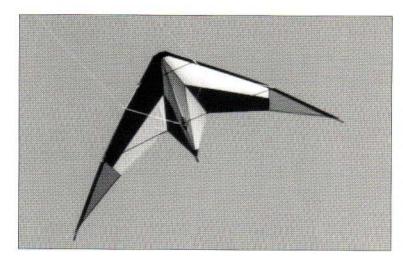
As for overall stability and stall characteristics the kite is,

happily, far less stable than its larger counterpart, partially due to its smaller, tighter sail area, which produces less lift than the Revolution-I. At the edges of the window, it's actually guite easy to pull the Rev-II out of the sky with a short, sharp forward snap of the handles. When this happens, the kite will slice out of the wind, and recovery is rather unlikely. With the kite directly downwind, however, interesting things can happen. On longer lines, if you snap the handles with the kite high and downwind with the spar down, it will slice - as it does on the edges of the window but a simple, quick reversal of the handles will stop the kite instantly. On shorter 30- or 40-foot lines, a whole new world of opportunity presents itself. You see, while some people might view these stall characteristics as a detriment, others see it as potential for interesting new moves, as evidenced by "3D" flying. By snapping the kite to a stall and catching it, you can then toss it downwind and continue flying when the kite reaches the end of the lines. (Hint: Short lines help tremendously here!)

Construction of the Rev-II is excellent, utilizing a wrapped graphite frame that is lighter in weight than the Revolution-I frame. The spar end-caps have undergone a weight reduction program, and the bungee cords that connect the end-caps to the sail help to provide a good measure of shock absorption for those almost inevitable ground hits. While the clips that attach the flying lines to the bridle may seem light at first, we have yet to see one of them give way, even in the highest wind. Setup of the kite is quick and easy, and each Rev-II "rig" comes complete with an instructional video covering setup, breakdown, and flying tips.

The lines that are provided with the Rev-II, or commonly found sold as a pre-fabricated set, are Kevlar. We've heard of many pilots making their own line sets out of Spectra, for when four lengths of Kevlar get that "worn and fuzzy" feeling, line friction is increased to the point where only a few spins can lock the lines, causing serious control problems.

One of the joys of flying the Revolution-I kite is that if you can think of something new to do with the kite, you can probably find a way to do it, allowing you to put more "personality" into your flying. Now, if you want a fast, fun quad-line kite that will also test your reflexes and prove to be like no other kite you own, pick up a Rev-II. There should be no shortage of entertainment!



The Firefly is a 3/4 size kite that bears a strong graphic resemblance to the Fire Dart, one of Eric Wolf's earliest kite designs. However, we were told that the Firefly, along with the 3/4 Bee, has been downsized from the Chicago Fire Bee. On assembling this kite you'll first notice that the Firefly presents an extremely tight sail, and insertion of the bottom cross spreaders induces a moderate amount of camber to the leading edge. All of this results in a very fast flying, tight spinning machine that seems to really come into its own when flown in winds above 10 miles per hour. While it is rated to fly in winds as low as 5 mph, it's just not the same, fun kite that we experienced when flying it in the higher wind ranges.

The Firefly is quick to react to flyer directives and will easily test your quickness of hand movement. It is much like steering a race car; handling is tight and responsive to any input from the flyer. Once we became accustomed to the speed of this kite, we rated its precision capabilities from above-average to excellent. If there are bobbles found in flight, they tend to stem from the flyer's actions and not the kite.

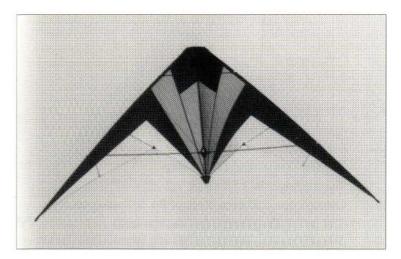
As stated, the Firefly is fast, however in a gusty wind, it takes effort to maintain any sort of steady speed control. Marks for oversteer varied amongst the test pilots, but they agreed that oversteer was most likely to show up when launching and to a lesser extent at other times. You'll be pre-warned of large amounts of oversteer, as the nose will bobble and then pick a track that it wants to follow. When this happens, your safest bet is to let the kite go in its current direction and then lead it into a turn. You can reassert control as it comes out of the turn. If this puts the kite on the ground it's no big deal, as relaunching the kite from the leading edge is easily accomplished and can be combined with the oversteer to do some fancy groundwork. Model: FIREFLY Manufacturer: Chicago Fire Kite Co. Fabric Weight: 0.75oz. ripstop nylon Framing Materials: Graphite Wind Range: 5 - 30 mph Configuration: Delta-type (74" wingspan) Skill Level: Intermediate - Advanced MFGR's Suggested Retail: \$145.00

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In the middle of the wind window, steering is very tight and requires that the flyer remember to use minimal arm movement when doing turns and spins, but playing on the side of the wind window (as well as flying in lower wind ranges), the kite reacts differently. While flying on the edge, you'll need to ensure that there is plenty of room for the kite to come around in a turn, and although it may seem at first that this kite is going much too slowly to maintain flight, it seeks its own air and will hang in there. The induced camber plays a part in this, allowing for far slower and graceful flight than you'd initially expect. While groundwork is possible, the Firefly is a fast kite and therefore much will depend upon the skill and hand-speed of the flyer. Using this kite to practice deck work will certainly improve your hand-to-eye coordination. Our test flyers found that the harlequin graphics were pleasing, with our test model presenting a three-dimensional visual effect in flight.

Overall construction is sound; panels are joined then topstitched, and dacron reinforcement has been used at major stress points. The exception you'll find is where the stand-offs have been attached to the sail, but, with the installation method that's been employed here, it's much more likely that the rubber end cap which holds the standoff in place will tear long before the sail would. This same fitting will allow for easy replacement of parts and also works to keep your stand-offs attached to the kite so that they don't get lost. The opposite end of the stand-off is also capped, and this makes for a snug fit all around. During bashes and crashes the spars stayed in place – a favorable attribute during high wind flying.

We've seen the Chicago Fire Team flying stacked Fireflys in lower winds and this seems to work quite well. We feel that the Firefly is a nimble little kite that will provide lots of fun in high wind.



.....

Yes, you read correctly, Cobra Kites in conjunction with Flexifoil Int'l has now designed a delta- shaped stunter. Their aim was to produce a high quality kite that would fulfill the flying requirements of both the recreational flyer and the serious competitor. Did they hit their mark?

Let's start with the fact that all of the tester's scores on the review sheets were within 1/2 point of each other. Further remarks and overall impressions once again saw the testers' observations in close agreement. This is an ideal response, although uncommon. Now, on to the flight characteristics.

One of the most notable features of the Scorpion is its forward speed. The kite travels at a low to moderate speed, which it maintains very evenly throughout the wind window. The flyer has the opportunity to alter this basic speed, either faster or slower, with pulling and or walking motions. Sure, most kites react to these flyer controls, however it is the minute degree, and the range to which the kite speed can be adjusted here that we found striking, and we agreed this feature would be quite appreciated by the ballet flyer who is using an intricate piece of music to fly to. The one area that doesn't offer this expansive speed control is when you're flying the Scorpion off-wind. When doing off-wind turns and loops the kite speed is slow and it is difficult to gain any real increase in the speed through these moves.

The Scorpion performs well in tight turns refusing to be pulled out of the sky, however you will find oversteer showing up when doing single tight vaulting loops, and launching after a takeoff from the leading edge. Likewise, the only place we discovered any understeer was in stall recovery, which is not unusual as a kite regains its air. Oversteer and understeer seemed to show up only when doing certain moves, unless you purposely induced these traits with bridle adjustments.

The Scorpion received high marks for overall stability. Stalling the kite on command is easily induced anywhere in the window, though getting the kite to land directly downwind requires some effort to overcome the kite's lift. It Model: SCORPION Manufacturer: Flexifoil International Fabric Weight: 0.75oz. ripstop nylon Framing Materials: Graphite Wind Range: 3-20 MPH Configuration: Delta-type (94" wingspan) Skill Level: Intermediate - Advanced MFGR's Suggested Retail: \$299.00

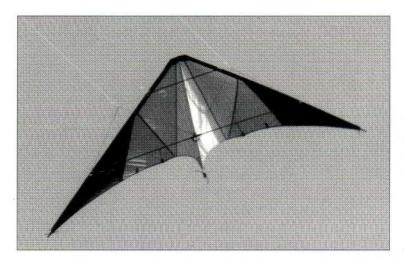
floats as though it were helium-filled, leading to a high measure of control available to the flyer and the urge to go for the flat lay-out turns. The pull generated was found to be one that made the flyer feel comfortable. In other words, the Scorpion had a "solid" feel, even when flying in the lower winds. The Scorpion readily handles ground work and remains "solid," slow, and deliberate in carrying out these moves.

Overall, the Scorpion is most graceful and flowing. Precision abilities are all there, with some work having to go into making crisp 90 degree turns. With some flying time in on the Scorpion, you will know exactly how the kite is going to respond in virtually all situations and you can fly it with a surety of action. If you should want unpredictability, adjust the bridle to detune the kite and you'll get plenty of surprises.

The Scorpion has been constructed with elements that are in keeping with the aim of a competition kite. Retaining vinyls are turned down onto the leading edge, helping to ensure a smooth line and lessening the chance that you'll snag your lines on anything. Bottom cross spreaders are secured to the center T by a retaining band and to the leading edge vinyls by a C-clamp style clip. Both stand-offs and sail tensioners are very cleanly fitted and ensure a tight sail throughout flight. Remember to slip the outer tensioner through the small sleeve on the sail. The bit of extra assembly time pays off during crashes, not having to stop and refit spars. The sail construction lives up to Flexifoil's reputation of excellent workmanship. If we were to add anything, we'd make more noticeable adjustment marks on the black bridle, and a second outer stitch line on the dacron reinforcement of the T area. Everything else is there, in a very clean package. The silk screened Scorpion name on the bag will even help you find just which black kite bag you're looking for!

So, did Flexifoil hit its mark? We believe they've produced a high quality, fun kite that will be equally at home on the competitive field or the neighborhood park.

▶ 51 ≪



We have come to anticipate that when a manufacturer has produced a winning "full-sized" kite we will soon see a 3/4 version making its way onto the market. So it was no surprise when we got our first glimpse of the El Nino, the 3/4 version of the Team High Fly, although surprised is exactly what we were upon taking the kite out of the bag and into the air.

We were told that the kite had a suggested wind range of 2-25 MPH, but we remained somewhat skeptical that a 3/4 would handle very low winds. Sure, the El Nino weighs in at a mere 6.8 ounces, but that didn't convince us that this little guy was going to fly in 2 MPH, but flying it in 2 MPH did! Now, as with most low wind kites, the El Nino doesn't generate its own lift while flying in the lightest of winds, but rest assured that this 3/4 will readily respond to the capabilities of your low wind flying skills. Putting the kite through its paces, we found the kite to have a few more surprises in store for us.

Let's start with setting the bridle. Even the smallest changes to the bridle will cause a marked change in flying characteristics (splitting the bridle over the T ferrule is detrimental to flight with this kite). Add the option of two different stand-off positions and you're virtually guaranteed to find a setting that offers the flight characteristics you prefer in a kite. The kite was initially tested in minimal wind, so predictably there was minimal pull. We later took the El Nino up in winds of 8-10 MPH. The pull generated was comparable to that of a large wing kite set for all the power possible. This is fine if you want power, but since many people fly 3/4 kites to avoid overpowering pull, we played with (tweaked) the bridle some more. Voila, the pull was easily lessened to what one would expect of a smaller kite. If you want pull, it's available. If you don't, it's easily disposed of. "Tuneability" became an apt description for the El Nino.

Model: EL NINO Manufacturer: High Fly Kite Co. Fabric Weight: 0.75oz. ripstop nylon Framing Materials: Graphite Wind Range: 2-25 MPH Configuration: Delta-type (64.5" wingspan) Skill Level: Beginner to Advanced MFGR's Suggested Retail: \$145.00

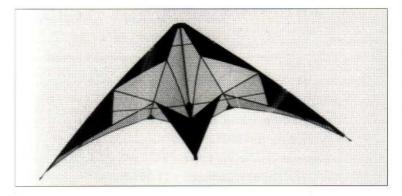
EL

Regardless of the varying bridle settings, the El Nino received solid numbers in the basic flying traits; straight-line tracking, cornering, launching, etc. The kite speed depended on setting, although it was never considered slow. We continued on, experimenting with the stand-off system. You will find the expected stand-off fitting at the apex of the trailing edge or you can move them to the fittings placed closer to the leading edge. This outboard setting was designed into the El Nino to assist the beginning flyer in accomplishing landings, stalls, floats, and groundwork. We found this to be as stated and we were able to perform these moves anywhere in the window. The experienced flyer will have no difficulty performing any of these moves or tricks with the stand-offs in either position.

The El Nino has a minimal amount of oversteer occasionally resulting in unwanted bobble. With proper flyer input this is eliminated. The kite received high marks for stability throughout the wind window including the edges, although once you're on the edge of the window you will find a measure of understeer showing up. While the kite can be pushed up to another 15 feet beyond normal stall point, this element of understeer requires that the flyer allow enough room for adjustment, particularly on down turns.

Sail graphics are simple and appealing, construction is solid with stoppers on the center T and upper leading edge. Reinforcement has been added where appropriate.

Consensus told us that the El Nino appeals to both precision and ballet flyers alike. Pricing and flight characteristics will put this kite into the hands of both the weekend warrior and the competitive flyer. It would also be a fun kite to stack and set for power in higher winds. To quote one of the test pilots, " this is a 3/4 kite that flies like an 8 footer!"



We weren't startled when Marty Sasaki told us that he had an interesting new kite that he wanted us to try. After all, we knew that this would make for his sixth significantly distinct "Marty Dart" model. In addition to beautiful one-of-a-kind kites, Marty has developed an array of both large- and smallwing delta kites, and he always gets a number of compliments on his graphic design.

When we received the kite and took it out of the bag, we found much of what we had expected – a handsome new kite, different from any other Marty-Dart we had ever seen. And again, not surprisingly, we were pleased to find the striking graphics that Marty's kites are known for, as well as his obvious attention to construction details.

During the initial test-fly of the Katana, we anticipated that we would see a smooth-flying, stable, predictable kite, and the kite delivered well on our expectations. However, when we tuned the outhaul bridles to introduce a little more oversteer, we were quite pleasantly surprised! The Katana went from a kite that would be suitable for flying Precision to a kite that promises to be an excellent candidate for Ballet routines as well.

In a smooth wind ranging 5-10 mph, we put the Katana to a number of tests (some of them fairly brutal), and the kite continued to execute well within this wind range. Let's cover, first, some of the basics.

When the aforementioned outhaul bridle is set moderately, that is with just a small amount of oversteer, the kite tracked straight-line passes quite solidly with substantial but moderate pull, and turning was tight and responsive. Through 90-degree corner turns, there was plenty of turning response for snapping well into each turn, and yet we didn't have to struggle to maintain the best angles. Off-wind stall capabilities are wonderful, with the kite coming about cleanly and quickly to a sharp, almost motionless stall. Recovery from this orientation was easy, although it sometimes took just a little extra coaxing to build up forward speed. In multiple, tight spins, we noticed an interesting characteristic; if you separate your hands only moderately, you'll get a nice, even turning rate, but if you then pull back even further, the kite suddenly becomes silent while spinning well within its wing tip. Interesting.

Then came the brutal part – groundwork. Nose launches were quick, clean, and predictable. Belly-launches were

Model: KATANA

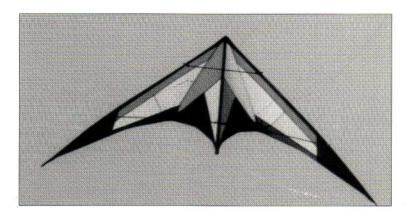
Manufacturer: Sasaki Kite Fabrications Fabric Weight: 0.75oz. ripstop nylon Framing Materials: Graphite Wind Range: 4-20 MPH Configuration: Delta-type (88" wingspan) Skill Level: Intermediate - Advanced MFGR's Suggested Retail: \$220.00

absolutely entertaining, since a quick, sharp pull on the lines caused the kite to literally jump about three feet into the air, whereupon it was rather easy to simply turn out to normal flight orientation. Variations on this move lead one to think that there might be a new, as-yet-uninvented move lurking somewhere in this kite.

Since Sasaki provided a knotted outhaul bridle line, we decided to have a little fun and really pull it in significantly. When we did, the kite seemed to lose a lot of lift and forward speed (no surprise there, yet this can be corrected by setting the normal bridle point up a bit), but we found that the Katana's groundwork capability at this setting was nothing short of phenomenal. Understandably, many kites would react this way if you either shorten the outhauls or deepen the normal bridle setting, but because of the deeplybillowed sail configuration and light weight, the kite floated through close groundwork with predictable landings and substantial oversteer. It flew so smoothly, in fact, that we consider one of its strongest suits to be the ability to roll turns downwind to an immediate landing, even in the middle of the window. Satisfied that this radical turning capability was everything we had been promised, we lengthened the outhauls beyond the factory setting. Forward speed increased, but the turning radius also increased substantially.

As is typical with any of Sasaki's kites, the Katana has a number of different panels, and all seams are doubleturned. In order to reduce noise and increase forward speed, Marty has added an extra set of standoffs running from the wing tip, inward of the sail to the horizontal spreader. He also lengthened the tail a bit, and gave the kite a lower aspect ratio and more acute nose angle than we're accustomed to seeing in his kites.

Marty designed the Katana (a Samurai's long sword) to be "a fun kite" that would also fit the needs of Individual Ballet competitors. We would venture to say that depending on the outhaul settings, this kite would hold its own quite well in Precision, also. Any way that you set it, the Katana is truly a fun kite that has a wide range of capabilities. It certainly doesn't hurt, either, that Sasaki has developed a good looking kite that would be a welcome addition to almost anyone's kite bag.



Model: LITTLE SISTER Manufacturer: Wolfe Designs Fabric Weight: 0.75oz. ripstop nylon Framing Materials: Carbon Wind Range: 5-18 MPH Configuration: Delta-type (90" wingspan) Skill Level: Intermediate - Advanced MFGR's Suggested Retail: \$450.00

Upon seeing the Little Sister for the first time, most people mistake it for its larger counterpart, the Big Brother, reviewed in SKQ Vol. 3, No. 1. With a wingspread of 90", just slightly less than the Big Brother, and a similar but unique panel graphic, the Little Sister looks like, but does not qualify as, a 3/4 version of its larger counterpart. Let there be no mistake about it, though; the Little Sister and Big Brother are as different as night and day when it comes to flight characteristics.

Whereas the Big Brother has become known as a remarkably stable, wide-capability kite, the Little Sister, by contrast, is faster, much more responsive, and far less stable. In fact, one common question is, "Did it take you a while to get used to this kite?" Indeed, the Little Sister is like nothing you've ever flown before, and its extremely responsive behavior can be frustrating for one who is used to using muscle to move the kite.

Therefore, the first thing to keep in mind is that you should use a light touch on the lines. This will appeal to some fliers who like to rely on finesse, rather than power, to manipulate the kite. The second thing to remember is that since the kite has considerable oversteer built in, it really doesn't take much hand movement to spin a very tight turn. This oversteer, however, can cause quite a bit of bobble on straight-line passes, so the pilot has to be careful to hold a steady track by leaving the hands almost motionless.

One of the most noticeable attributes of the Little Sister is its enthusiasm for landing. Because of the reduced sail area, it is easy to dump wind out of the kite on a normal upturn, and it tends to settle into a nice, predictable landing. The oversteer will show up here too, though, such that it's very likely that one wing tip will touch down first. A noticeable problem with the reduced sail area, though, is the kite's lack of grace and smoothness when attempting slow, helicopter spins and off-wind work.

Because of the Sister's extreme responsiveness, groundwork and trick possibilities are almost limitless. Running through a "standard" repertoire of tricks, we were able to get the Little Sister to flip into turtles with remarkable ease, and one of the delightful things about this kite is that you can flip back out of the turtle "on demand." Off-wind nose launches are a breeze, as are belly launches. In lighter winds, the ability to flip into and out of a turtle almost anywhere in the window can make for some very interesting maneuvers, limited only by your imagination and how long you're willing to let the kite ride on its back.

If you were to experiment with fast spins, hard stalls, turtles, and other stunts, you'll probably notice an interesting design attribute – the bridle is extremely long. Given that the kite almost seems to fold in half on hard spins, it's very likely that this long bridle will catch on the keel, or your line will snag on the wing tip. This situation is easily remedied by running a length of monofilament line from one wing tip, through the vinyl piece in the keel, to the other wing tip. After stringing in the monofilament, the bridles will simply "bounce" off the keel line during aggressive maneuvers, and the action of pulling back on the flight lines helps flip the kite out of the turtle orientation.

Construction of the Little Sister is similar in many respects to that of the Big Brother. At the standoff attachment on the sail, a number of layers of fabric are sewn in a tulip design, yielding a bombproof attachment point. The laser-cut panels are laid in and sewn across the kite sequentially to compensate for the stretch and bias of the fabric, and should stretching occur over time, a sail tensioning system will allow you to pull in much of the slack. Cutting longer standoffs will help to push the sail out after many hours of flying, also.

The airframe is made entirely of Wolfe Designs' carbon sparring. The vinyls are actually a vinyl/latex hybrid that grips the spar tightly. The combination of the moderately stiff spars and light weight expand the wind range on the Little Sister, although we can't really call this a worthy low-wind kite. The best wind range for the Sister, based on our observations, seems to be between 7-to-12 mph.

Because of the Little Sister's overwhelming responsiveness, the kite is not recommended for beginners, and competitive Ballet fliers might not find the slow speed and grace required of a kite for many routines. However, if you'd like a well-built, advanced trickster that can handle higher winds, spinning blurringly fast with the ability to stop on the head of a pin, then the Little Sister is well worth the investment. **BH** COMPETITION RESULTS

SANDY HOOK SKC Oct. 12-13, 1991

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Individual Precision – Novice	
 Corinne lasilli 	77.13
2. Gilbert Velazquez	76.40
3. Jennifer Gross	74.87
Charles Stimpsen	73.87
5. Jason Augenbaugh	73.07
6. Peter Williams	72.60
7. Melinda lasilli	71.70
8. Howard Schel	70.73
9. Elmer Kingkiner	69.80
10. Dixon Leavers	67.83
11. Sean Williams	66.10
12. Dawn Jacobs	64.57
13. Doug Digeronimo	64.13
14. Shawn Scott	62.03
15. Peggy West	59.80
16. Cathy Stimpson	58.17
17. Sheri Erlich	56.40
18. Scott Gramlich	53.57
19. Stephen Schnalke	50.30
20. Marvin Lewis	48.70
21. Chris Murphy	46.13
22. George Pankewytch	45.10
22. George Failkewytch	23.87
23. Juan Figuerua	
Individual Precision – Intermed	
1. Lou Behrman	84.43
2. Mike Broyhill	82.80
3. David Snyder	78.33
4. Eileen Tavolacci	77.33
5. Howard Lamhut	77.07
6. Rene Tremblay	76.93
7. Ming Quock	74.13
8. Mark Johannesen	73.83
9. Doug Stout	73.80
10. Martin Szani	73.70
II. Steve Murphy	73.36
12. Reuben Zimmerman	73.27
13. Howard Knepple	71.67
14. Judy Winkler	69.90
15. Richard Chang	69.53
16. Lindsey Asay	68.97
Individual Precision – Experience	
1. Warren Saunders	81.97
2. Heather Morrow	78.80
3. Michael Allen	77.73
4. Mike Fitzpatrick	77.20
5. Dodd Gross	76.83
6. Robert Sterling	75.33
7. John Smith	72.70
8. Charles Stimpson	68.23
9. Rick Javens	60.10
Individual Precision – Masters	
I. Bob Hanson	94.87
2. Bill Edison	89.53
3. Dave Barresi	87.73
4. Bill Beneker	86.67
5. Quin Rickman	86.57
6. Chuck Walker	85.43
7. Brian Vanderslice	85.07
	05.07

8. John Tavolacci 9. Chris Shultz	83.40 79.20
Individual Ballet – Intermediate I. Lou Behrman	85.87
2. Mike Broyhill	82.20
3. Rene Tremblay	81.40
4. Lindsay Asay	80.37
5. Ming Quock	80.23
6. Doug Stout 7. Dave Dickerson	79.93 77.43
8. David Snyder	76.37
9. Rueben Zimmerman	74.03
10. Steve Murphy	71.27
11. Maureen Brown	70.43
12. Howard Knepple	68.50
V Individual Ballet – Experienced	
1. Dodd Gross	83.30 81.90
2. Paul Phillips 3. Chris Belli	76.47
4. Kim Sterling	75.30
5. Robert Sterling	69.17
6. John Smith	65.77
7. Heather Morrow	65.10
🖲 Individual Ballet – Masters	
I. Chris Shultz	89.57
2. Bob Hanson	87.30
3. Bill Edison 4. Chuck Walker	87.27 85.90
5. George Baskette	84.33
6. Brian Vanderslice	83.20
7. Suzanne Edison	81.20
8. Ralph Offredo	79.70
9. Roger Chewning	78.57
10. Dave Barresi	77.20
11. John Tavolacci	76.00 73.40
12. Quin Rickman 13. Bill Beneker	71.70
Team Precision – Experienced	
I. Team Image	78.08
2. ECU Corsairs	63.85
Team Precision – Masters	
I. Black Sheep	86.35
2. Team Trilogy	80.80
Team Ballet – Experienced	
I. Team Image	75.37
2. Behind the Lines	74.20
3. ECU Corsairs	66.17
Team Ballet – Masters	7/ 20
 Edison Flight & Power Trilogy 	76.20 75.63
3. Sky Ratz	49.33
V Quadline Ballet – Open	
I. Bob Hanson	93.47
2. Dodd Gross	87.57
3. Chris Belli	82.77
4. Bill Beneker	77.20
V Individual Innovative – Open	02.05
I. Joe Perron 2. Bob Hanson	82.85 81.35
3. Brian Vanderslice	73.57
4. Bill Beneker	70.12
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OUTER BANKS SKC Oct. 19-20, 1991

<u> </u>	••••••	
VIndividual Precision -	- Novice	
I. Corey Arnold	ORDAN AIR	70.43
2. Roger Kniceley	HAWK	67.57
3. Doug Laubach	MIRAGE	64.40
4. Christian Smith	NSR	63.67
5. David Monroe	HOMEMADE	63.10
		62.70
6. Dixon Leavers	WASP	
7. Dawn Jacobus	PHANTOM	61.77
Chuck Connor	6800	59.73
9. Stevo	LEGEND	58.70
 Woody Delconso 	MIRAGE	49.30
II. James Dunn	HOMEMADE	39.13
12. Micheal Power	LEGEND	24.93
	1.000	
Individual Precision -		
I. Derrick Williams	HOMEMADE	82.47
2. Joel Smith	MIRAGE	81.10
3. Lou Behrman	QUARK	80.70
4. David Snyder	NSR	79.07
5. Michael Broyhill	MIRAGE	76.13
6. Mikey Lowack	LEGEND	64.43
7. Ike Campbell	MIRAGE	62.87
8. Sherrie Arnold	QUARK	62.80
9. Jim Stroup	P. POWELL	59.63
10. Martin Szani	PHANTOM	57.83
 Steve Murphy 	QUARK	51.47
VIndividual Precision -	Experience	ha
	PHANTOM	82.60
1. Brad Spivey		80.90
2. Steve Huff	PHANTOM	
3. Keith Anderson	NSR	80.53
John A. Smith	DRAGON	79.90
5. Steve Peple	MIRAGE	75.67
6. Robert Sterling	DRAGON	70.47
7. Paul Phillips	DRAGON	69.00
8. Charles Stonestreet	SKYBURNER	68.60
9. Tom Mason	P. POWELL	68.37
10. Bruce McFarland	WASP	67.57
I I. Benji Brazell	SPIN OFF	62.50
12. Susan Mason	P. POWELL	58.47
		50.47
Individual Precision -	- Masters	
I. Chris Shultz	MIRAGE	89.27
2. Bob Hanson	MD5	78.87
W Individual Dallas In		
VIndividual Ballet – In		07.07
I. Gary Sweely	HUGO	87.97
2. Lou Behrman	QUARK	83.23
Derrick Williams	HYBRICK II	82.17
4. David Snyder	NSR	81.97
5. Adam P. Lavelle	TEAM HI FLY	80.13
6. Daryll White	FIRE BEE	79.40
7. Mike Broyhill	LEGEND	78.10
8. Sherrie Arnold	JORDAN AIR PRO	
9. Jim Killian		76.00
	QUARK	75.70
10. Joel Smith	MIRAGE	
11. Ike Campbell	WASP	75.37
 Jim Cosco 	QUARK	74.87
13. Steve Murphy	LEGEND	72.23
		72.23 68.87
13. Steve Murphy 14. Mikey Lowack	LEGEND LEGEND	
13. Steve Murphy 14. Mikey Lowack Individual Ballet – E x	LEGEND LEGEND C perienced	68.87
13. Steve Murphy 14. Mikey Lowack	LEGEND LEGEND	

Stacey Carmichael	TEAM HI FLY	81.73
4. Paul Phillips	DRAGON	81.50
5. Heather Morrow	6' FLEXI	80.77
6. Chris Belli	LEGEND	80.47
7. Bruce McFarland	NEPTUNE	80.30
8. Brad Spivey	PHANTOM	80.03
9. Dave Arnold	JORDAN AIR PRO	
 Charles Stonestreet 	SKYBURNER	77.70
II. John A. Smith	PHANTOM	77.37
12. Benji Brazell	SPIN OFF	76.77
13. Robert Sterling	DRAGON	75.33
14. Tom Mason	P. POWELL	71.20
15. Steve Peple	MIRAGE	70.80
16. Robert Hawkins	SPIN OFF	68.93
▼ Individual Ballet – M	astors	
I. Bob Hanson	NS EXTREME	88.27
2. Roger Chewning	P.POWELL 6'	83.70
3. Ralph Offredo	AIRWOLF	83.30
4. Chris Shultz	1.	79.40
	MIRAGE	/9.40
V Pairs Ballet - Experi	ienced	
 Breeze Brothers 	6' POWELLS	81.50
2. KAK Attack	6' POWELLS	73.93
3. Virginia Lovers	6' POWELLS	72.63
VA Windseekers	6' FLEXI	71.47
V Pairs Ballet - Maste	rs	
I. Windswept	6' POWELLS	86.00
Team Ballet - Open		
I. KAK		75.93
		13.75
Vad Precision - Op	ben	
I. Dave Arnold		83.03
2. Brad Spivey		82.60
3. Calvin D. Mills		82.07
V Quad Ballet - Open		
 Bob Hanson 	REV II	94.80
2. Dave Arnold	REV II	89.40
3. Steve Huff	DELTA	82.70
4. Chris Belli	REV II	78.63
5. Brad Spivey	REV I	76.07
♥ Individual Innovative	- Open	
I. Bob Hanson	REV	81.72
2. Steve Huff	NSR STACK	70.82
3. Gary Sweely	NON STACK	67.53
4. Brad Spivey	SPINOFF/QUAD	63.82
a. Diad spivey	SERVOFFIQUAD	05.02



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VIndividual Precision -	Novice	
I. Reed Welch	SWALLOWTAIL	76.90
2. James McKenzie	PHANTOM	73.10
3. Drew Cummins	WORKER BEE	72.70
4. Brian Fields	SWALLOWTAIL	68.70
5. Carlos Looper	NS EXTREME	61.33
6. Stacey Monroe	HOMEMADE	54.33
7. Doug MacFie	SWALLOWTAIL	49.53
8. Corey Arnold	J.A. PRO	32.80
▼ Individual Precision -	Intermediat	e
 Reed Richards 	EXOCET	71.70
2. Leon Cusson	PHANTOM	57.83
3. Dave Snyder	STARWATCHER	28.83
4. Daryl Lane	N.S.R.	23.97
VIndividual Precision -	Experience	ed
1. Brad Spivey	PHANTOM	79.47
2. Warren Saunders	TRILOGY	78.17
3. Steve Huff	PHANTOM	77.07
4. Charles Stonestreet	SKYBURNER	71.93
5. Robert Sterling	TRILOGY	70.17
6. Bruce McFarland	WASP	65.10

Individual Precision - I. Susan Batdorff	- Masters BIG BROTHER II	75	70
2. Mike Simmons	TRACER	74.	
3. Bill Edison	BIG BROTHER	71.	
4. Bob Hanson	BIG BROTHER II	70.	57
♥ Individual Ballet – Ir	termediate		
I. Dawn Simmons	HAWK II	84.	93
2. Gary Sweely	PHANTOM	82.	
3. David Snyder	STARWATCHER	81.	
4. David Monroe 5. Sherrie Arnold	HOMEMADE J.A. PRO	81. 79.	
6. Chip Long	EXOCET	76.	
7. Betty Rountree	PHANTOM	74.	
8. Daryl Lane	PHANTOM	72.	77
9. Reed Richards, Jr.	EXOCET	69.	30
🔻 Individual Ballet – E	xperienced		
I. Dave Arnold	J.A.PRO	82.	
2. Brad Spivey	PHANTOM	80.	
3. Steve Huff 4. Chris Belli	PHANTOM	79. 79.	
5. Ben Futrell	IMP	78.	
6. Kim Sterling	TRILOGY	78.	
7. Calvin Mills	GRAPH	77.	
8. Charles Stonestreet	SKYBURNER	75.	
9. Bruce McFarland	NEPTUNE	64.	97
🔻 Individual Ballet – M	lasters		
 Mike Simmons 	HAWK II	92.4	
2. Roger Chewning	BIG BROTHER	87.	
3. Susie Edison	BIG BROTHER	85.	
4. John MacLauchlan 5. Bob Hanson	HAWK II BIG BROTHER II	85. 84.	
6. Susan Batdorff	BIG BROTHER II	83.	
7. Bill Edison	BIG BROTHER	82.	
8. Ralph Offredo	AIR WOLF	79.	63
Team Precision - Op	ben		
I. Team Shred		81.	
2. Trilogy		79.	
3. Black Sheep		76.	77
V Pairs Ballet - Exper	ienced	-	
I. Breeze Brothers		82.	
2. VA Windseekers 3. KAK Attack		79. 76.	
4. VA Lov ers		66.	
V Pairs Ballet - Maste	NC		
I. Skyward Edge	rs	91.	67
2. Edison F & P		89.	
3. Windswept		86.	13
♥ Team Ballet – Ope	n		
I. Black Sheep Squad.		85.	70
2. Trilogy		85.	23
♥ Quadline Ballet – O	pen		
I. Bob Hanson	REV II	92.	
2. Dave Arnold	REV II	83.	
3. Calvin Mills	HOMEMADE	82.	
4. John MacLauchlan 5. Brad Spivey	QUADRIFOIL REV I	82.0 81.1	
6. Steve Huff	N.S.R.	77.	
▼ Individual Innovative	- Open		
I. Calvin Mills	- Open	84.	20
2. John MacLauchlan		79.	37
3. Bob Hanson		74.	
4. Phil Castillo		68.	55
▼ Team Train – Open			
1. Skyward Choo-Ch		84.	
 Windswept Steam Breeze Brothers C 		81.	
4. KAK Attack Expre		74.	
5. "Aeronuts"	860 - C	70.0	



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V Individual Precision –		
1. Dawn Simmons	TRACER	71.40
2. Richard Synergy	STARSHIP	67.87
3. Lee Scanlon	FOURSAIL	64.07
4. Aldo Ramirez 5. Jennifer Gross	NSR	60.60 60.33
6. Richard Chang	PHANTOM PHANTOM	59.30
7. Reed Richards	EXOCET	57.20
8. Ann Simmons	PRO WASP	55.90
9. Tom Tsamisis	PHANTOM	55.13
10. Marvin Lewis	N S EXTREME	51.66
V Individual Precision -	Experience	ed
I. John Barresi	CAL WASP	84.47
	J. A. PRO	83.37
	J. A. PRO	82.23
4. Rich Javens	TEMPEST	81.87
5. Warren Saunders	TEMPEST	81.67
6. Todd Nelson	SURGE	81.07
7. Dodd Gross	DRAGON	80.80
8. Marty Sasaki	MARTY DART	79.47
9. Steve Peple 10. Kevin Mitchell	AIRFOILS PRO WASP	78.83 78.73
11. Mike Donley	TANDEM	78.57
12. Jim Wirt	SKYBURNER	78.27
12. Keith Anderson	STINGER	78.27
14. Bob Brannen	MARTY DART	77.73
15. Mike Lathrop	TRACER	76.50
16. Brian Mitchell	GUINEA WASP	74.30
17. Pete DiGiacomo	TANDEM	68.93
VIndividual Precision -	Masters	
I. Bob Hanson	TANDEM	88.87
2. Ron Reich	N.S.R.	86.23
3. Susan Batdorff	TANDEM	85.23
4. Chris Shultz	MIRAGE	85.10
5. Pam Kirk	N.S.R.	84.67
6. Abel Ortega	STINGER	84.10
7. Ruth Bradley	HIGH FLY	82.50
8. Mike Simmons	TRACER	82.07
9. Jon Trennepohl	SKYBURNER	81.33
10. Billy Jones 11. Brian Vanderslice	MIRAGE	80.77 80.47
12. Mike Dennis	SCORPION N.S.R.	79.77
13. Terry Crumpler	GUINEA WASP	78.37
14. Ray Melikian	GOINEA WASI	74.07
🖤 Individual Ballet – In	tormodiato	
I. Dawn Simmons	N.B.K.	84.37
2. Richard Synergy	STAR ARROW	80.57
3. Aldo Ramirez	N.B.K.	77.96
4. Sherrie Arnold	STARWATCHER	76.60
5. Reed Richards	SPOOK	74.87
6. Jennifer Gross	MORIAH	72.83
	ARROW	72.00
8. Gary Sweely	MARTY DART	70.60
	CALVIN G.	67.43
·····································	HIGH FLY	65.37
II. Chuck Rountree	CALVIN G.	58.07
▼ Individual Ballet – Ex	perienced	
	J.A. PRO	92.97
2. John Barresi	CAL WASP	92.67
3. Todd Nelson	SURGE	91.57
4. Steve Peple	MIRAGE	87.37
	J.A. PRO	85.53 85.23
6. Jeremie Moore 7. Jim Wirt	TRACER SKYBURNER	85.17
8. Keith Anderson	STINGER	80.63
	J.A. PRO	79.93
10. Ted Dougherty	EVOLUTION	79.53
II. Chris Belli	MORIAH	79.26
12. Dodd Gross	SCORPION	77.43

13. Mike Dunley	TANDEM	76.63
14. Mike Lathrop	TRACER	76.10
15. Calvin Mills	GRAPH	73.30
16. Kevin Mitchell	GUINEA WASP	70.73
17. Pete DiGiacomo	TANDEM	68.70
18. Tom Mason	SKY BLAZER	68.53
19. Bob Brannen	MARTY DART	66.53
20. Marty Sasaki	MARTY DART	65.50
🖤 Individual Ballet – 🏲	lasters	
1. Bob Hanson	LITTLE SISTER	95.03
2. Ron Reich	N.S. VIP	90.73
3. Susan Batdorff	LITTLE SISTER	90.00
4. Abel Ortega	STINGER	86.30
5. Ruth Bradley	HIGH FLY	85.56
6. Pam Kirk	N.S.R.	85.43
7. Bill Edison	LITTLE SISTER	84.76
8. Chris Shultz	MIRAGE	84.30
9. John MacLauchlan	TRACER	84.07
10. Brian Vanderslice	SCORPION	83.80
11. Roger Chewning	LITTLE SISTER	80.60
12. Jon Trennepohl	SKYBURNER	79.90
	BANTAM	79.57
13. Billy Jones 14. Mike Dennis		79.23
	N.S.R.	
15. Ralph Offredo	AIRWOLF	79.03
16. Suzanne Edison	BIG BROTHER	78.90
17. Ray Melikain	HUGO	77.10
18. Paul Hodges	N.S.R.	72.53
Team Precision – Ex	perienced	
I. Storm Front	MARTY DART	83.42
2. Tempest	SLINGSHOT	79.28
2. Tempest 3. Team Image	HIGH FLY	64.28
4. Ground Control	PRO WASP	62.18
		17 EN 1845 ().
Team Precision - M	asters	01.70
I. T.O.L. Flight Squad		91.72
2. Tsunami	SLINGSHOT	84.72
3. Team Shred	TRACER	83.80
4. High Flyers	HIGH FLY	82.43
4. High Flyers 5. Trilogy	HIGH FLY TEMPEST	82.38
4. High Flyers 5. Trilogy 6. Black Sheep Squad	HIGH FLY TEMPEST I. BIG BROTHER	82.38 76.52
4. High Flyers 5. Trilogy	HIGH FLY TEMPEST	82.38
4. High Flyers 5. Trilogy 6. Black Sheep Squad	HIGH FLY TEMPEST I. BIG BROTHER TANDEM	82.38 76.52
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet – Exper 1. Still Looking Skyw 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM 'ienced	82.38 76.52 69.50 81.87
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet – Exper 1. Still Looking Skyw 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM 'ienced	82.38 76.52 69.50
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw 2. Dynakite Breezin' 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM 'ienced	82.38 76.52 69.50 81.87 81.10
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet – Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM 'ienced	82.38 76.52 69.50 81.87 81.10 79.70
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw 2. Dynakite Breezin' 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM 'ienced	82.38 76.52 69.50 81.87 81.10 79.70 75.07
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM 'ienced ard	82.38 76.52 69.50 81.87 81.10 79.70
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Master 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM 'ienced ard	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Mastee 1. Skyward Edge 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM ienced ard rs N.B.K.	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Mastee 1. Skyward Edge 2. Duet 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM ienced ard rs N.B.K. HIGH FLY	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Master 1. Skyward Edge 2. Duet 3. Windswept 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM ienced ard rs N.B.K. HIGH FLY SKY BLAZER	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Master 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Exper 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard rs N.B.K. HIGH FLY SKY BLAZER rienced	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet – Exper 1. Still Looking Skywa 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet – Master 1. Skyward Edge 2. Duet 3. Windswept Team Ballet – Exper 1. Tempest 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM ienced ard rs N.B.K. HIGH FLY SKY BLAZER	82.38 76.52 69.50 81.87 81.10 79.70 75.07 75.77 87.40 86.50 86.27 79.80
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet – Exper 1. Still Looking Skywa 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet – Master 1. Skyward Edge 2. Duet 3. Windswept Team Ballet – Exper 1. Tempest 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard rs N.B.K. HIGH FLY SKY BLAZER rienced	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Master 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Exper 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard Tienced SLINGSHOT	82.38 76.52 69.50 81.87 81.10 79.70 75.07 75.77 87.40 86.50 86.27 79.80
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper Still Looking Skyw. Dynakite Breezin' Double Vision KAK Attack VA Windseekers Pairs Ballet - Master Skyward Edge Duet Windswept Team Ballet - Exper Team Image Ground Control 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard N.B.K. HIGH FLY SKY BLAZER Tienced SLINGSHOT HIGH FLY PRO WASP	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper Still Looking Skyw. Dynakite Breezin' Double Vision KAK Attack VA Windseekers Pairs Ballet - Maste Skyward Edge Duet Windswept Team Ballet - Exper Team Image Ground Control Team Ballet - Maste 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard N.B.K. HIGH FLY SKY BLAZER Tienced SLINGSHOT HIGH FLY PRO WASP ers	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Exper 1. Tempest 2. Team Image 3. Ground Control Team Ballet - Maste High Flyers 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard N.B.K. HIGH FLY SKY BLAZER Tienced SLINGSHOT HIGH FLY PRO WASP ers HIGH FLY	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Exper 1. Tempest 2. Team Image 3. Ground Control Team Ballet - Maste High Flyers Tsunami 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard Tienced SLINGSHOT HIGH FLY PRO WASP Ers HIGH FLY SLINGSHOT	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet – Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet – Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet – Exper 1. Tempest 2. Team Image 3. Ground Control Team Ballet – Maste High Flyers Tsunami T.O.L. Flight Squad 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard N.B.K. HIGH FLY SKY BLAZER Tienced SLINGSHOT HIGH FLY PRO WASP Ers HIGH FLY SLINGSHOT d.N.S.R.	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Exper 1. Tempest 2. Team Image 3. Ground Control Team Ballet - Maste High Flyers Tsunami T.O.L. Flight Squad What's Up 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard Tienced SLINGSHOT HIGH FLY PRO WASP ERS HIGH FLY SLINGSHOT d.N.S.R. TANDEM	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper Still Looking Skyw. Dynakite Breezin' Double Vision KAK Attack VA Windseekers Pairs Ballet - Maste Skyward Edge Duet Windswept Team Ballet - Exper Team Ballet - Maste Ground Control Team Ballet - Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard N.B.K. HIGH FLY SKY BLAZER TIENCE SKY BLAZER TIENCE SLINGSHOT HIGH FLY SLINGSHOT J. N.S.R. TANDEM MORIAH	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper Still Looking Skyw. Dynakite Breezin' Double Vision KAK Attack VA Windseekers Pairs Ballet - Maste Skyward Edge Duet Windswept Team Ballet - Expe Team Ballet - Maste Ground Control Team Ballet - Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard SINGH FLY SKY BLAZER TIENCESHOT HIGH FLY PRO WASP ERS HIGH FLY SLINGSHOT J. N.S.R. TANDEM MORIAH	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper Still Looking Skyw. Dynakite Breezin' Double Vision KAK Attack VA Windseekers Pairs Ballet - Maste Skyward Edge Duet Windswept Team Ballet - Exper Team Ballet - Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy Quad Ballet - Oper Bob Hanson 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard N.B.K. HIGH FLY SKY BLAZER TIENCE SKY BLAZER TIENCE SLINGSHOT HIGH FLY SLINGSHOT J. N.S.R. TANDEM MORIAH	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper Still Looking Skyw. Dynakite Breezin' Double Vision KAK Attack VA Windseekers Pairs Ballet - Maste Skyward Edge Duet Windswept Team Ballet - Exper Team Ballet - Exper Trempest Team Ballet - Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy Quad Ballet - Oper Bob Hanson Calvin Mills 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard N.B.K. HIGH FLY SKY BLAZER Tienced SLINGSHOT HIGH FLY PRO WASP Ers HIGH FLY SLINGSHOT d.N.S.R. TANDEM MORIAH N REV II REV I	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50 84.53
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Maste 1. Tempest 2. Team Image 3. Ground Control Team Ballet - Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy Quad Ballet - Oper Bob Hanson Calvin Mills Dodd Gross 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard Tienced SLINGSHOT HIGH FLY PRO WASP ERS HIGH FLY SLINGSHOT d. N.S.R. TANDEM MORIAH REV II REV I QUADRIFOIL	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50 84.53 84.13
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet – Exper 1. Still Looking Skyw 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet – Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet – Maste 1. Tempest 2. Team Image 3. Ground Control Team Ballet – Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy Quad Ballet – Oper Bob Hanson Calvin Mills Dodd Gross Thom Powers 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard N.B.K. HIGH FLY SKY BLAZER Tienced SLINGSHOT HIGH FLY PRO WASP Ers HIGH FLY SLINGSHOT d.N.S.R. TANDEM MORIAH N REV II REV I	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50 84.53 84.13 80.13
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Maste 1. Tempest 2. Team Image 3. Ground Control Team Ballet - Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy Quad Ballet - Oper Bob Hanson Calvin Mills Dodd Gross Thom Powers John Barresi 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard Tienced SLINGSHOT HIGH FLY PRO WASP ERS HIGH FLY SLINGSHOT d. N.S.R. TANDEM MORIAH REV II REV I QUADRIFOIL	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50 84.53 84.13 80.13 80.03
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet – Exper 1. Still Looking Skyw 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet – Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet – Maste 1. Tempest 2. Team Image 3. Ground Control Team Ballet – Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy Quad Ballet – Oper Bob Hanson Calvin Mills Dodd Gross Thom Powers 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard Tienced SLINGSHOT HIGH FLY PRO WASP Ers HIGH FLY PRO WASP ERS HIGH FLY SLINGSHOT d. N.S.R. TANDEM MORIAH T REV II REV I QUADRIFOIL HOMEMADE	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50 84.53 84.13 80.13
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Maste 1. Tempest 2. Team Image 3. Ground Control Team Ballet - Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy Quad Ballet - Oper Bob Hanson Calvin Mills Dodd Gross Thom Powers John Barresi 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard Tienced SLINGSHOT HIGH FLY PRO WASP ERS HIGH FLY PRO WASP ERS HIGH FLY SLINGSHOT d. N.S.R. TANDEM MORIAH T REV II REV I QUADRIFOIL HOMEMADE REV I	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50 84.53 84.13 80.13 80.03
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet – Exper Still Looking Skyw. Dynakite Breezin' Double Vision KAK Attack VA Windseekers Pairs Ballet – Maste Skyward Edge Duet Windswept Team Ballet – Exper Team Image Ground Control Team Ballet – Mast High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy Quad Ballet – Oper Bob Hanson Calvin Mills Dodd Gross Thom Powers John Barresi Billy Jones Dave Arnold 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard N.B.K. HIGH FLY SKY BLAZER Tienced SLINGSHOT HIGH FLY PRO WASP ERS HIGH FLY PRO WASP ERS HIGH FLY SLINGSHOT d. N.S.R. TANDEM MORIAH T REV II REV I QUADRIFOIL HOMEMADE REV I PHANTOM	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50 84.53 84.13 80.03 77.70
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Maste 1. Tempest 2. Team Image 3. Ground Control Team Ballet - Maste High Flyers Tsunami T.O.L. Flight Squad What's Up Trilogy Quad Ballet - Oper Bob Hanson Calvin Mills Dodd Gross Thom Powers John Barresi Billy Jones 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard Tienced SLINGSHOT HIGH FLY PRO WASP ERS HIGH FLY PRO WASP ERS HIGH FLY SLINGSHOT d. N.S.R. TANDEM MORIAH T REV II REV I QUADRIFOIL HOMEMADE REV I PHANTOM REV II	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50 84.53 84.13 80.03 77.70 77.43
 4. High Flyers 5. Trilogy 6. Black Sheep Squad 7. What's Up Pairs Ballet - Exper 1. Still Looking Skyw. 2. Dynakite Breezin' 3. Double Vision 4. KAK Attack 5. VA Windseekers Pairs Ballet - Maste 1. Skyward Edge 2. Duet 3. Windswept Team Ballet - Exper 1. Tempest 2. Team Image 3. Ground Control Team Ballet - Maste 1. High Flyers 2. Tsunami 3. T.O.L. Flight Squad 4. What's Up 5. Trilogy Quad Ballet - Oper 1. Bob Hanson 2. Calvin Mills 3. Dodd Gross 4. Thom Powers 5. John Barresi 6. Billy Jones 7. Dave Arnold 8. Mike Donley 	HIGH FLY TEMPEST I. BIG BROTHER TANDEM Tienced ard Tienced ard Tienced SLINGSHOT HIGH FLY PRO WASP ERS HIGH FLY PRO WASP ERS HIGH FLY SLINGSHOT d. N.S.R. TANDEM MORIAH T REV II REV I QUADRIFOIL HOMEMADE REV I PHANTOM REV II REV I PHANTOM	82.38 76.52 69.50 81.87 81.10 79.70 75.07 55.77 87.40 86.50 86.27 79.80 75.73 68.13 91.43 90.00 84.77 80.33 79.03 90.50 84.53 84.13 80.13 80.13 80.03 77.70 77.43 76.00

V Individual Innovative	– Open	
I. Ted Dougherty	QUADRIFOILS	80.85
2. John MacLauchlan	N.B.K.	76.53
3. Paul Hodges	N.S.R.	72.80
4. Calvin Mills	HOMEMADE	71.05
5. Richard Synergy	BUCKETKITE	65.15
6. John Barresi	REV & N.S.R.	65.05
▼ Team Train – Open		
I. T.O.L. Flight Squad	NS EXTREME	92.10

1. I.O.L. Flight Squad	NS EXTREME	72.10
2. Dynakite Breezin'	DYNAKITES	81.13
3. Windswept	P. POWELL	77.27

HAWAII CHALLENGE

Mar. 6-8, 1992

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VIndividual Precision – Novice	
I. Luke Ozolins	77.9
2. Andrew Peterson	76.7
3. Richard Alger	74.5
4. Chester Koga	69.7
5. Dru Hansell	66.9
6. Robbi Tyson	64.4
7. Scott Liston	50.9
V Individual Precision – Experience	d
I. Masahiko Aoki	79.0
2. Shin Tojo	72.6
3. Kyahn Kamali	71.8
4. Klyph McCormick	70.8
5. Yumi Fujimora	70.5
6. Al Washington	70.3
7. Gary Wood	70.2
8. Yoshiharu Yamaguchi	70.0
9. Toshiya Shiga	68.3
10. Ron Scheidler	66.0
II. Carl Robertshaw	65.9
12. Hisashi Saito	64.7
VIndividual Precision – Masters	00 1
I. Shuichi Sato	88.2
2. Ross Tyson	85.3 85.0
3. Burt Sumida	
4. Jim Baldo	84.7
5. Rod Guyette	84.7
6. Michael Barclay	84.3
7. Jan Ozolins	83.3
8. Giacomo Pati	82.5
9. Jeff Hilliard	79.8
10. Martin Waltenspuhl	78.6 78.4
I I. Alan Nagao I 2. Brian Hirose	
	74.6 72.7
13. Allan Gullien	55.5
14. Gregory Gilboy	55.5
Individual Ballet – Novice	
I. Luke Ozolins	84.5
2. Ken Linn	82.5
3. Robbi Tyson	81.8
4. Andrew Peterson	79.1
5. Wayne Glenn	75.3
6. Dana Martel	73.7
7. Richard Alger	73.4
8. Dru Hansell	72.1
9. Chester Koga	66.1
10. Scott Liston	64.2
Individual Ballet – Experienced	
I. Gary Wood	83.9
2. Carl Tobertshaw	77.2
3. AI Washington	76.4
4. Craig McReynolds	76.1
5. Yoshiharu Yamaguchi	75.5
6. Masahiko Aoki	73.4
7. Hisashi Saito	72.8

8. Klyph McCormick	72.2
9. Jerry Hobbs	72.0
10. Yumi Fujimora	71.7
II. Shelly Hobbs	69.3
12. Kyahn Kamali 13. Peter Shields	61.4
	55.0
Vindividual Ballet – Masters	89.5
I. Alan Nagao	87.6
2. Jim Baldo 3. Allan Gullien	87.1
4. Burt Sumida	85.2
5. Brian Hirose	85.0
6. Shuichi Sato	82.7
7. Ross Tyson	80.5
8. Martin Waltenspuhl	78.8
9. Giacomo Pati	78.1
10. Gregory Gilboy	63.1
Team Precision – Experienced	
I. Wind-A-Soarus	64.8
2. Cutting Edge	60.0
3. Swiss Precision Team	40.2
Team Precision – Masters	
I. Team Ramjet	87.9
2. High Performance	86.4
3. Kiteland 4. Tsunami	84.9 82.9
5. Air Affairs	80.8
	00.0
Team Ballet – Experienced	
 Wind-A-Soarus Cutting Edge 	67.6 65.3
	05.5
▼ Team Ballet – Masters	94.2
 High Performance Tsunami 	93.7
3. Team Ramjet	88.8
4. Air Affairs	85.8
5. Kiteland	82.5
V Pairs Ballet – Masters	
I. Bonzaii Osnas	94.7
2. Air Affairs II	83.5
3. Air Affairs I	82.8
4. Team Dandy	82.0
Train Ballet – Experienced	
I. Wayne Glenn	79.5
2. Ray Taylor	76.5
3. Peter Shields	76.2
🔻 Team Train Ballet – Masters	
I. Air Affairs II	72.9
🔻 Quadline Ballet – Open	
I. Allan Gullien	89.5
2. Burt Sumida	87.7
3. Alan Nagao	86.1
4. Luke Ozolins	76.8
5. Ray Taylor	76.5
6. Andrew Peterson	76.4
7. Masahiko Aoki 8. Martin Waltensphul	76.3 74.0
9. Carl Robertshaw	71.8
10. Robbi Tyson	71.7
11. Craig McReynolds	71.3
▼ Individual Innovative – Open	
I. Allan Gullien	81.9
2. Burt Sumida	80.2
3. Shuichi Sato	73.5
4. Scott Liston	65.4

72.2



May 22-25

East Coast S.K.C. Wildwood, NJ. *Contact:* Sky Festivals, (215) 736-8253 or Fran Gramkowski (609) 429-6260

June 6

OK Kite Fest Ardmore, OK. *Contact:* Fiesta Kite Ideas, (512) 590-7027

June 13-14

Summer Games Myrtle Beach, SC. *Contact:* Klig's Kites (803) 448-7881

June 13-14

Yakima Valley Kite Fest. Union Gap, WA. *Contact:* Debbie Rodgers (509) 966-2249 days Pat Teague (509) 966-3812 evenings

June 19-21

Sandy Beach S.K.C. Sandy Beach, HI. *Contact:* Alan Nagao (808) 947-7097

June 27-28

North West S.K.C. Long Beach, WA. Contact: (503) 357-7557

July 25-26

California S.K.C. Berkeley, CA. *Contact:* Tom McAlister (510) 525-2755

Aug. 15-16

New York S.K.C. Uniondale, NY. *Contact:* Kite Works (914) 937-2838

Aug. 17-23

Washington State Int'l. Kite Fest. Long Beach, WA. *Contact:* 1-800-451-2542

Aug. 22-23

Northwest Michigan S.K.C. Manistee, MI. *Contact:* Harlen Linke (616) 723-8630

Sept. 19-20

Boston Area S.K.C. Cambridge, MA. *Contact:* Don McCasland, (617) 742-1455

Sept. 26-27

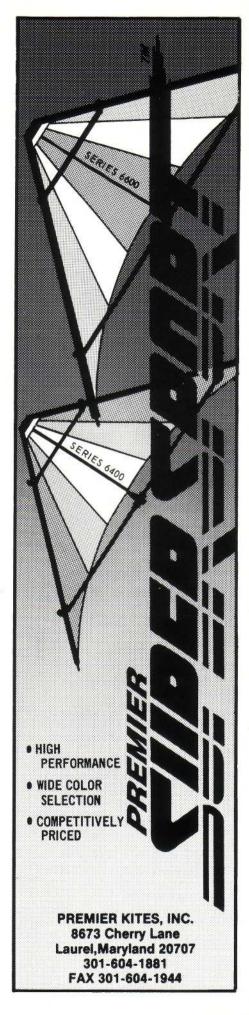
North Coast Challenge Seaside, OR. *Contact:* (503) 996-3083

Sept. 29-Oct.4

AKA Nationals Lubbock, TX. *Contact:* Gary King: (806) 762-8553

Oct. 10-12

Sandy Hook S.K.C. Highlands, NJ. *Contact:* Sky Festivals, (215) 736-8253 or Fly Away Kites, (908) 280-8084







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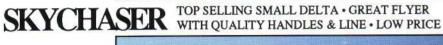
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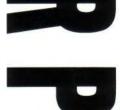
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