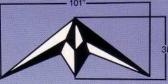


# - 1991 BUYER'S GUIDE - HAWAII CHALLENGE - SSKC REGIONALS

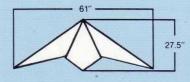
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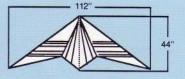


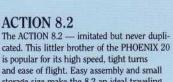
### SUPER SKY DART

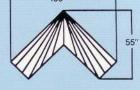
This redesign of our standard SKY DART is available in two stunning patterns. Outstanding mobility and fast, sharp turns make this kite an impressive and stylish flier.

### SKY DART

The Action Kite SKY DART receives rave reviews wherever it goes. This kite is a real winner! Its high-speed and extremely sharp turning ability should make this kite your choice for competition.





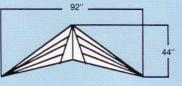


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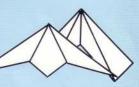
### PHOENIX 20

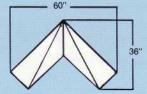
Why mess with perfection? Ths mainstay of our company has been in production for years and is still going strong. The awardwinning PHOENIX 20 is a real performer in light to moderate winds. Its large size and bold graphics are a sight to behold.



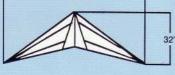
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The NO NA ME is a responsive kite, great in moderate to strong winds. It's an excellent high-performance kite for beginners or experienced fliers who want a smaller, faster, lighter-pulling delta wing.





cated. This littler brother of the PHOENIX 20 is popular for its high speed, tight turns and ease of flight. Easy assembly and small storage size make the 8.2 an ideal traveling companion.



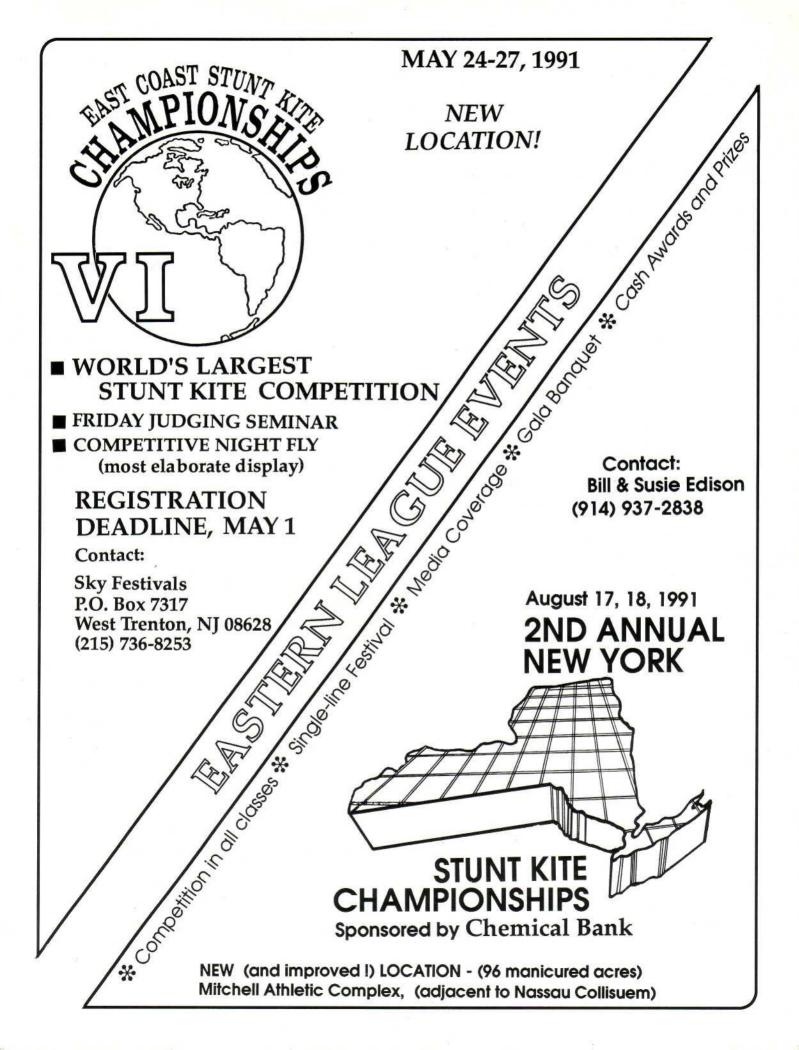
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SPRING 1991

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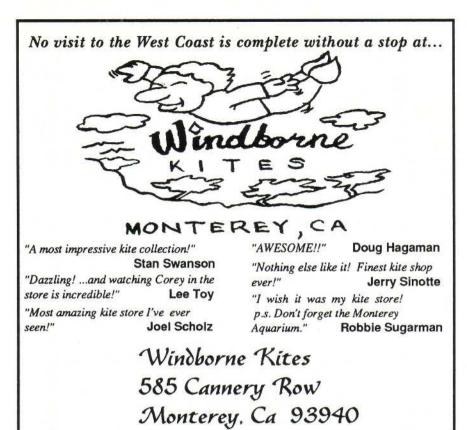
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ON THE COVER: T.C. Powers at the controls of his Rev at the South East Regionals.

SKQ Photo by Cris Batdorff

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### LETTERS...

### Dear SKQ,

Why are entry fees so high for the majority of kite contests?

Not everyone is in a position to lay out \$50-\$75 to enter a competition. Seems to me that high entry fees limit participation to the more financially well off.

Stunt kiting is in its infancy as far as a sport and if we continue to follow practices that limit participation it will surely hinder its growth.

I have two high-school students in my neighborhood who are avid flyers and they would love to compete, but the contest entry fees are so high that they are forced to observe instead of participating.

If stunt kiting is to flourish and grow as a sport, we must have "new blood" and participation by a wide range of flyers...not just a few.

### Michael Donnelly Wind Pilot Accessories Dana Point, CA

### Dear SKQ,

I'm a housekeeper from the Shilo Inn in Seaside, Oregon. I wish to thank you for giving Seaside the opportunity to see the world's best kite flyers. All the competitions were fabulous and I personally want to thank all the kite flyers that stayed at the Shilo Inn. Thank you for all your cheery hellos, your smiles, and your kindness.

I have never had the pleasure of meeting such a group of special people from all over the world.

I express my feelings for all the housekeepers from the Shilo Inn.

We all hope that someday you will return (in spite of) the misunderstandings of other departments. The housekeeping department, the heart of the Shilo Inns, enjoyed every kite flyer we encountered.

Thank you all, it was truly our pleasure serving you.

My wish for you is that the winds always be on your side wherever you may go. Thank you,

D.J. Kenny Housekeeper Shilo Inn Seaside, OR 97138

### Dear SKQ,

I am enclosing a few pictures of a replica Garber Target Kite I recently made. The kites, as you probably know, were used to train anti-aircraft gun crews during World War II, and were the original stunt kite. Rather than angling the whole kite to maneuver, they had a rudder which was moved by the dual flying lines.



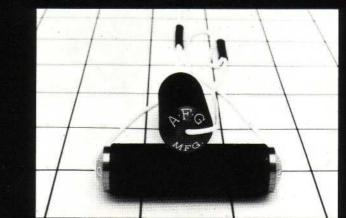
I built the kite from information in the May 1945 Popular Science and measurements and photos of an incomplete original kite. The frame is aircraft-quality spruce (¾''x¾'' for the spine and ¾''x1¾'' for the cross-spar), and the skin is 1.5 oz. spinnaker nylon, instead of the original plasticcoated rayon. Fin and rudder are 1%'' plywood, and eyebolts with wingnuts are used for all bridle and rudder line connections.

The kite has 1760 square inches of area and weighs 31 oz., and requires about the same wind as a Hawaiian or a Geo-Sport. The maneuverability seems to be somewhat between the current diamond and delta stunters. It has a terrible oversteer (about ¼ extra turn coming out of a spin).

Hope this is of interest to you and your (other) readers. Love the magazine!

Best regards, Randy Gordon-Gilmore, Benicia, CA

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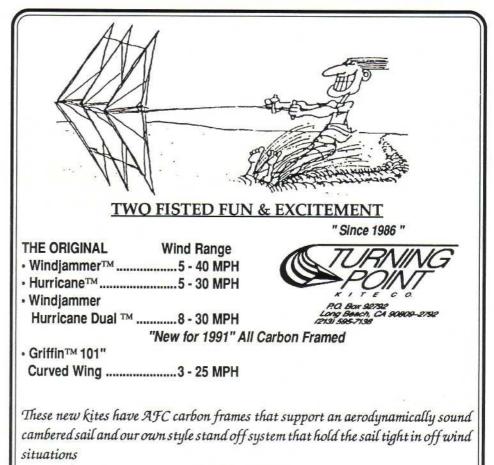
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# KTA STAGES SUCCESSFUL SHOW

The Kite Trade Association staged another successful effort this last January in Dallas. This year's trade show, the association's third since their breakaway from the American Kiteflier's Association, proved to be the biggest and best thus far. Some 65 member businesses filled 84 booths in the 12,000 foot ballroom of the Sheraton Park Central for the occasion, which ran from January 15-20.

"It's been fantastic...the best trade show that we've ever had." according to KTA President Bob Miletti of TRLBY Products. "It's bigger than last year...more professional...the quality of the booths is starting to show signs that this is a real organization and a trade group to be reckoned with." Miletti wasn't the only show attendee that appreciated the atmosphere of the gathering.

Dennis Van Fleet of Sodbuster's Sky Toys (IA) commented that it was "A great show! It just keeps getting better year after the year. What I like about it is that you're able to talk to the people that are making the kites, you learn exactly what they do." This year's convention sure made a lot of that possible...especially in the area of stunt kites!

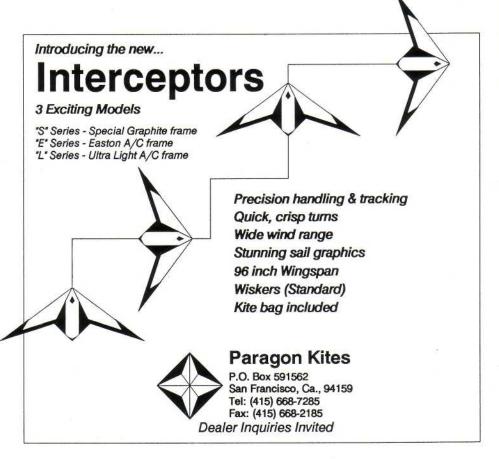
Better than 2/3 of the exhibitors showed either stunt kites or multi-line related products. There was almost more to see than could be grasped in the three active days that the trade show was open. In addition to established lines of products, we were impressed by the number of new firms and new kites represented.

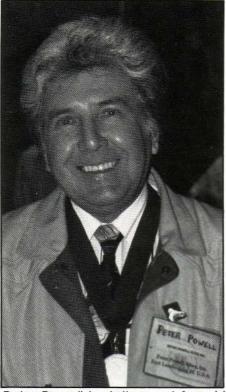
Paragon Sports Kites International showed a new entry to the field with their Interceptor (review on page 40)

PeterPowellintroduced a new auadliner: the Omni (review on page 29) Terry Crumpler of Windwalker Kites was on hand with another downsized model: this one of his popular WASP, called the Guinea. Right next door, fellow Texan Bob Childs showed his production model Wizards and a new self-launch product called "The Bone". Sharing Bob's booth was yet another Texan, Chris Dunlop, who displayed his stunning sail design efforts in another new stunter.

There were a number of other new offerings from Texas as well. Frontier Kites had three: the Team Storm (review on page 42) the Sky Rascal and the L'il Rascal. The minds at Kite Innovations have been devoting a lot of time lately to production of the Team High Fly but had time to introduce a new 11-panel, 3-color Evolution and the SS2, a downscaled (9 sq. foot) version of their soft stunter.

The California contingent was on hand with a plethora of products, both new and redesigned. Action





Peter Powell took time out from his schedule to put in an appearance at this year's show. One of stunt kiting's true visionaries, he was both "delighted and concerned" with all of the new stunters on the market. "Let us hope," he told SKQ, "that we don't forget what all this is about...having fun. That's the idea!" We wholeheartedly agree!

Kites unveiled a revamped Star Dart. Top of the Line was on hand with new sail graphics in all three of their big wings. Tom Emery of Air Art was there with his Pro Cats. Gene Carey laid out some new display ideas for his popular winders and even gave us a sneak preview of a new kite stake which he says he'll be marketing shortly.

Coast Kites showed their monumentally popular Rainbow stunters. Randy Tom of Hyperkites previewed his new Hotwing in addition to his big wings and also displayed a custom Nagel stunter... gorgeous!

Keely's Kites represented the Stinger 1000 and 750, adding a new kite, the Encore, to their repertoire. Night Flight's Jim Reible lit up the show with his product and also presented the Variflex Aero Light Frame as a super light aftermarket sparring system. Renegade Kites laid out a number of new sail designs and color options. Windwing Pro Sport displayed their popular kite, the ProSport Elliptical (review on page 30).



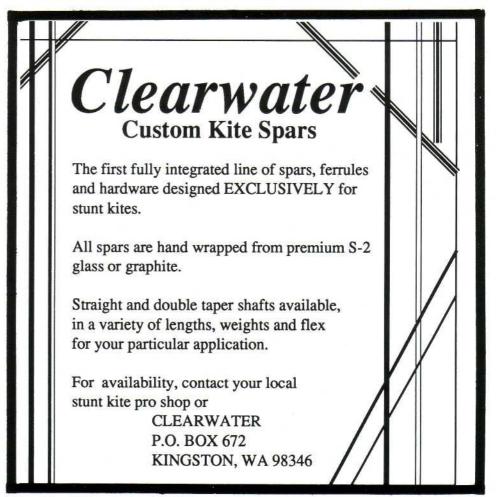
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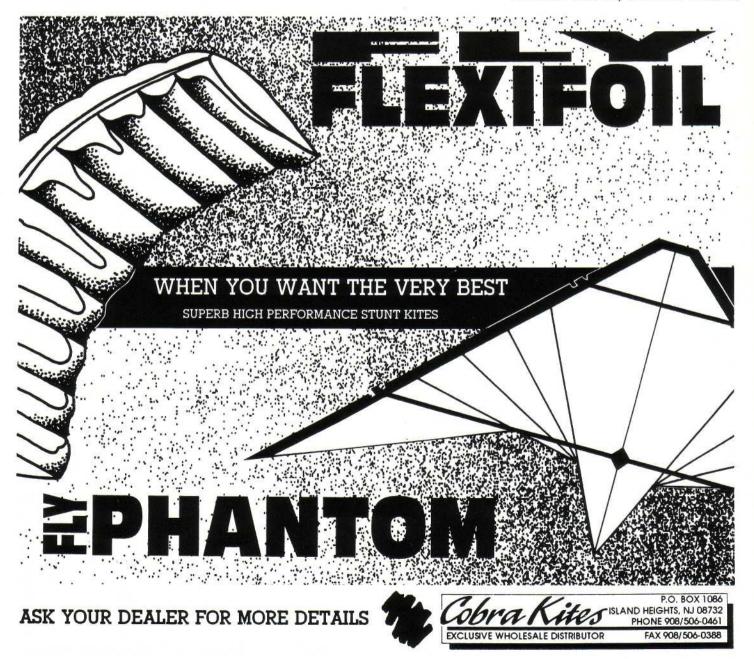


Terry Crumpler, Windwalker Kites, holding down the fort.

### KTA - CONTINUED

Revolution flyers were delighted with the showing of the new downsized Revolution 2 and a whole new batch of color combinations including both Lee Sedgwick AND Sue Taft models. Shanti Kite Spools was on hand with their usual great line of products (no pun intended!) and even some new "secret stuff"...a super-light braided Spectra.

Kelly and Nanette Smith of Haute' Stuff exhibited their line of unique items comprised of wearable kite accessories a nd, of course, their latest lighting products. Rounding out the California effort were the folks from Spectra Star Kites who used the show not only to introduce their new Acrobat and Sky Jammer models,





Bill Baker, of Peter Powell Kites, put up his usual sensational booth...and introduced a couple of new products as well. Bill's trade show circuit takes him all over the world to promote the sport and the Powell line. One of the ambassadors of the business, Bill discusses some new product changes with Billy Jones of the Kite Loft.

but to announce their retaining of Prevailing Winds as the newest Spectra Star team.

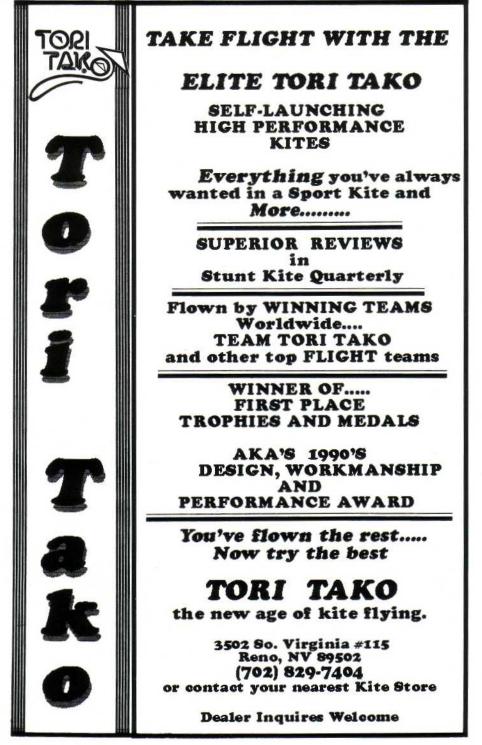
Other West Coast offerings were nearly as plentiful. Catch the Wind (OR) displayed the new packaging for their new Spiderwings (review on page 39), which now come in a variety of sizes. They also introduced another new kite, the Spidermite. Kathy Goodwind of Goodwinds Kites/Gasworks Park Kite Shop (WA) unveiled two prototypes of her new kite, the Ultra Zephyr, a Stan Swanson sparred ultra-light.

Not to be outdone by the W est Coast assemblage, East Coast manufacturers had their own representatives! Cobra Kites (NJ), were there in the persons of Ray and Jeanne Merry showing the Flexifoil Splitz. High Fly Kite Company, amply represented by the Gramkowski family put together the show's best grouping of kite building parts and equipment and also made space in their display to introduce the new Team High Fly stunter (review on page 43). Westmark Corporation (CT) was on hand to cover the bases in the ripstop department.

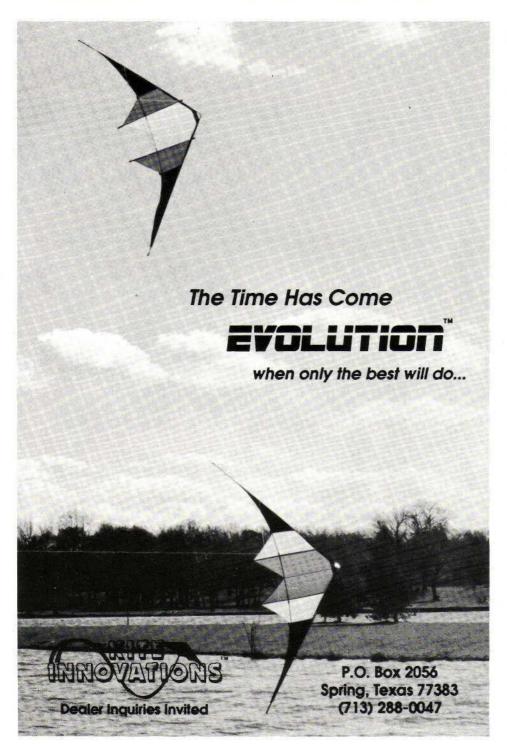
The strongest of the East Coast showings were from Florida. Skyward kites showed their entire product line of NLK's, NBK's, RBK's etc. plus the new Hawk II (review on page 41). Jordan Air Kites introduced, in addition to their Hugo and Starwatcher (review on page 45), the Quark Team Kite. The Key West Kite Company previewed their Hurricane sport kite.

In the not-to-distant-past, one we'd gotten by what was being done on the coasts, we had pretty much exhausted what was available across the country. Not so anymore! In addition to the prolific Texas manufacturers, there were a number of new faces from the rest of the middle U.S.A.

Sky Burner Kites (MI) booth showed not only their namesake kite but also a newer, smaller version, the Afterburner. Another group of KTA boothholders, the Chicago Fire Kite Com-







KTA - CONTINUED

pany (IL), previewed the line of custom-made Bee's that have become popular in the team's flight routines. Steve Shapson, Force 10 (WI) principal, was in attendance touting the massive kite as well as previewing a new harness system. Right next door, Night Visions Neon, presented one of the more spectacular lighting systems at the show.

Kitemaster International (NV) presented an upscaled grouping of their Raven, Eagle, and Jacana (review on page 46). Wing IT (NV) gave attendees a look at a prototype of their vinyl eliminator for attaching spreaders to leading edges. We also got a peek at a forthcoming new design, the Lite Wait. Skynasaur (CO) showed us the Classic 96N, 74, and 48 models in addition to their Stuntfoil 42. What's Up, (OH) gave us a look at a whole bunch of products that they'll be offering this year including several European offerings.



Speaking of foreign representation...it was massive! Highflyer's, of England introduced a new model, the Spectre (review on page 44). New to the Liteflight line was the awaited Heavy model (review on page 35).

From France, a contingent headed by Julian Wolfe Patrick represented Wolfe Design's new Big Brother (review on page 38), Little Sister, and Flashback models. From Holland, Vlieger Op was on hand to represent the popular Speedwing line, this year introducing a new large size version (review on page 48). Canada was represented by Cerfs-Volants Azur, Inc. who showed the SpyroJet line with the addition of the new Reflexx99.

All in all, the KTA kept up its reputation as the largest kiting extravaganza of the year. What's up for next time around? Sources tell us that Dallas will again serve as the host city and a planned connection with the nation's hobby retailers looms large on the horizon. Dates for 1992 should coincide fairly with this year's event.

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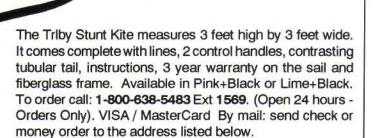
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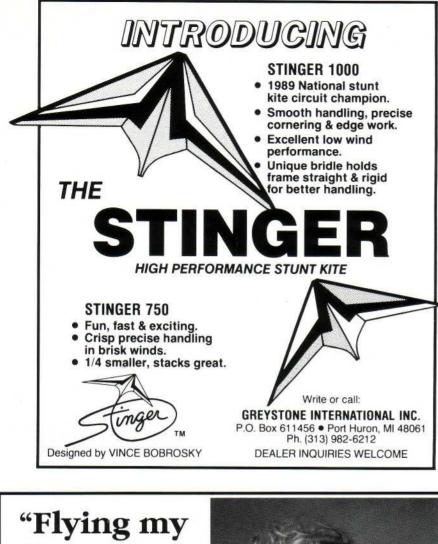
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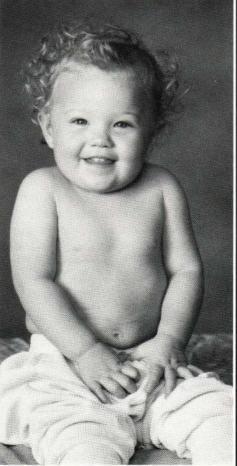
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# TIPS... and TECHNICAL STUFF!

From "Frequent Flyer" Ron Fikes of Palo Alto, CA comes even more new tips and hot items for stunt flyers and builders...

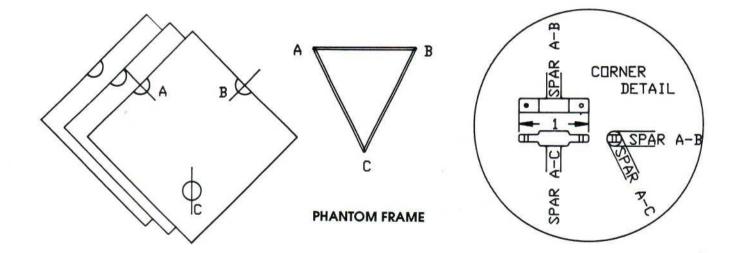
(1) Keep those old credit cards - they make excellent "creasers" when you fold rip-stop over for hems. (We tried this one...it really works! Also found out that they make good starters for tail wrapping in a pinch.)

(2) Trying to put two fiberglass tubes together but the large one is a sloppy fit over the small one? How to glue them - go to the hobby shop and buy a package of SIG "Easy Hinges". This material can be cut into strips and used as a filler between the tubing. It wicks up the CA (Cyano-acrilate) glue like crazy and does away with thick, slow-drying epoxy usually used to fill gaps.

(3) Don't have the right size punch for vinyls and want to drill instead? Put the vinyls in the fridge or freezer and drill them after they're cold...no squishing plastic...just firm and drills like a dream. Next a few more from Portland, Oregon's Don Lary. Don has been involved with kites for about ten years and admits to owning more kites and other pieces of sky garbage than he'd care to count! A frequent contributor, Don's offers the following for this "field trip".

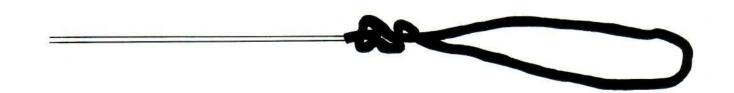
The original idea for this next one, according to Don, came from Mike Straw, of Vancouver, BC around 1985. It's a "Phantom" frame that can be used in front of stacks of diamond-stunters and was originally used with Rainbows.

Construction is relatively easy. It is made of 1/4" I.D. aluminum tubing cut to lengths A-C, A-B, and B-C and 3 one-inch-long sections which have been flattened, drilled and welded upright in the corners. When completed, the frame is then flown three inches in front of the lead kite. This will take the strain off the lead kite when flown in large stacks without the necessity of using heavy-duty sparring.



### END OF THE LINE

High Visibility orange Dacron sleeving helps to find those "lost" line ends on the field. Source: Mike Sterling/Cyborg Kites.





BY ANDY KING, THE KITE STORE LTD.

With the winter gone, the European competitive stunt kite scene wakes up to a very full 1991. Even during the winter, local leagues, which STACK has been very keen to promote, have been held and it is here that the development of the sport, at grass roots level, is beginning to take place.

Inspired by Steve Negen's (of Roar-

ing Flamingo's fame) league concept, UK fliers started leagues in 1990. The idea has spread fast and there are now some eight leagues established in the UK alone with great interest being shown by other European countries.

Leagues enable Novice, Eperienced, and Open class fliers to compete on a regular basis without



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having to travel long distances to do so. Usually three figures are pre-published and one surprise figure is chosen on the day of the competition. STACK has a league package, written by Jacob Twyford (STACK U.K. National Director) and Viv "Captain Biff" Walters (STACK Head Judge, which is available to anyone who wants it. It is hoped that the league concept will greatly broaden the base of competition and bring it to all fliers. So far, only individual events have been held but with the evergrowing number of teams, a move in this direction can't be far away.

1991 sees a number of shake-ups on the Team front. The Blitz have split up and given birth to two new teams. Paul Jobin, former Blitz team leader, will be fielding The Team With No Name, joined by former Blitz team members Johnny Claffey, Neal Young, and, rumor has it, Mike Ward. The Blast sees former Blitz members Tony "TC" Cartwright, Andy King and Sarah Kent (also a member of the now legendary Ballet Tutus) teaming up with Laurie Paget (also a Ballet Tutu). European Cup winners, the Decorators, retain their 1990 line-up and other U.K. teams include: STACK of Three, Team Merlin, Fliers FX, Organised Chaos, The Bermuda Triangle, and The Wicked Allsorts.

The Paris-based Team Flashback has also seen some changes. Maxime Fellion and Denis Perriot have left to form a new unit and Flashback, led by Julian Wolfe Patrick, has added two new members in their place. A Team Flashback II has also been formed.

Word from Holland is that this year a number of new teams will be seen with names like the Crash and All at Once. Meanwhile, the Dike Hoppers continue their career with up to six members. The Berlin-based Up Against The Wall lost their leader, Mark Heitman, at the end of last season, but have found a new member in his place. Belgium now has High Life; Italy, Team Vulandra; and Switzerland, Heaven Sent, so 1991 promises to be a very interesting year.

In terms of events, the calender is full. On the 27th and 28th of April, France has the 2nd Open du Tougnet, a team-only competition being held in the broader context of the Cerroling Festival, which also includes the annual meet of KAPWA (the International Kite Aerial Photography Association). Judges will include the U.S.A.'s Robbie "Juan" Sugarman, Viv Walters, and Helmut Georgi (Austria's STACK National Director). A number of French national competitions are in the planning stage as I write and Montpellier hosts the European Cup, which will include Individual and Team competition in all categories, during the 30th and 31st of August and the 1st of September.

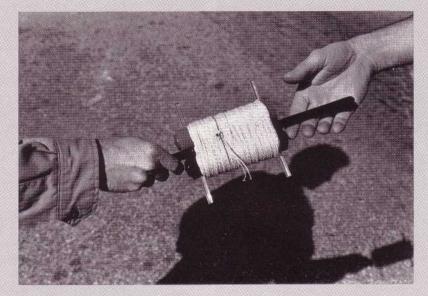
Major team-only competitions seem to be the path that many large festival organisers have chosen as a way of, hopefully, pleasing the crowd and the stunt fliers and not stealing the limelight from single-line spectacles. In this vein, the famous Schevenningen Festival, in Holland, is staging The North Sea Cup (15th and 16th of June), and the Berlin Festival holds the 2nd Berlin Cup, won by Top of the Line in 1990, the weekend of the 21st and 22nd of September.

In the U.K. Seaham, Sunderland, is holding a pairs ballet and team event on the 11th and 12th of May. The Washington, Tyne and Wear Festival of the Air is holding a teamonly competition on the 6th and 7th of July and the Bristol International Kite Festival, September 7th and 8th, sees the 3rd Kite Store Open Team Stunt Kite Championship which was won by Top of the Line in 1990. The Kite Society of Great Britain's National Stunt Kite Championships, with individual and team competition in all categories, is set for the 28th and 30th of June, Blackheath, London. Various other European countries will be confirming dates for their National competitions in the near future.

As a post script to all of the above, it is important to add that European events have adopted AKA/STACK rules wholeheartedly.

Finally, Ashton Park, Bristol is the site for the 2nd World Cup Sport Kite Championships. The event, which is presented by American Kite Magazine and hosted by STACK, will take place on September 14th and 15th.

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4500 Chagrin River Rd., Chagrin Falls, OH 44022 216/247-4222 KITE KAOS IN GEORGIA!

### **By Cris Batdorff**

Now, there are kiteflyers, and then, there are kiteflyers...real live, dyed in the wool addicts. For sure, Savannah, Georgia, is full of `em!

It's not a real long pull up from the Florida coast to this picturesque Georgia city. Having spent a few days involved in kite flying tests, we thought that it would make a pleasant way to kind of meander our way home to Texas. Good wind chased us all the way as we ran in front of a large area of low pressure working its way up the coastline. Friday afternoon brought us comfortably into downtown Savannah, where we found our way to Pat Robinson's well-stocked shop, Savannah Sails and Rails. The event itself was held a distance away, on the north shore of Tybee Island, so we spent some time wandering through the riverside shops...and watching the clouds form ominously overhead.

Saturday morning was a sketch in grey. Intermittent rain threatened to put the damper on the day's activities. In most places, it probably would have. Not here...

Genial event co-ordinator, Tom Mason, was among the first to arrive. "This'll probably clear off," he predicted. We were incredulous. It seemed to only be raining harder. But, nevertheless, onto the field we went, barriers were placed, and tents erected. Under an increasingly sullen sky, the first competitor staged in at about 11:00AM and the event was underway. The matters at hand were shortlived.

We were field directing for the fourth (and last) contestant in the Novice Precision, "Neon Leon" Cusson, when a lightning strike preempted further progress.

"Can you hit a landing?" we asked. "I'm not quite done, yet!" was the reply.

"Do it!" we instructed.





The Windswept Team, Tom and Susan Mason...first place winners in the Experienced Pairs Ballet.

W hich he did..."OUT!"...and wrapped up first place in the bargain. Joe Clark took second, with Doyle Dunn and Carlos Looper rounding out the field.

The rest of the afternoon was spent in seminar/forums involving visiting Mike Simmons and John MacLachlan (the Skyward Edge) along with Susan and myself and the WHOLE of the Kiteflyers Association of Savannah (KAOS) inside the only inside venue for the event, the Dog-Gone-It Cafe (really!).

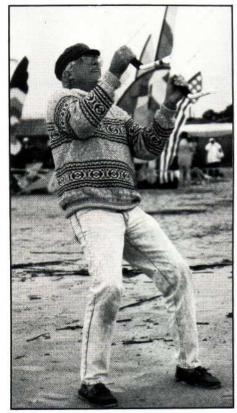
No one left. Surely the weather would clear. It did, eventually, but darkness had already taken the field. No matter, it was on to the banquet and following auction.

There were no holds barred as the intrepid group settled into hot food. Chicken, fish, roast beef... the whole magilla...and an auction that raised better than \$2000 for Special Olympics, thanks to the generosity of several manufacturers who had donated kites. Most of all, everyone was having a good time in spite of the obvious rain-out. The next day would be a bigger test! Sunday morning whistled in on sheets of rain, thunder, winds that regularly topped 35MPH and warnings of tornados: perfect kiteflying weather! Undaunted, the members of KAOS began showing up at the Dog-Gone-It.

"This won't last long. See, it's lighter over in the west," someone said. We poked out head out of the door only to be momentarily blinded by a flash of lightning.

"I'm beginning to pick up on certain atmospheric negatives, here," I responded.

"Not to worry," was the reply. "We'll be flying by noon!"



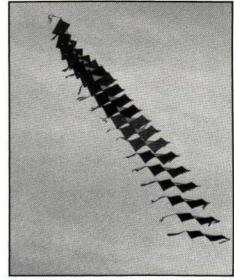
Dan Klos at the controls of his megastack of home-made quads. He claimed a new record for quads with 18.



Indeed, as if some sort of storybook tale, it happened just as predicted. The clouds parted, the sun popped out, and the winds blew (!) for just enough time to finish the rest of the events. All in all, a beautiful and horrendously windy day.

In a field littered with NBK's from the visiting Miami contingent, it was Benji Brazell flying a Spin-Off taking first place honors in the Experienced Precision. He was followed by Robert Bono and Ben Gomez, individual flying members of the Looking Skyward Team.

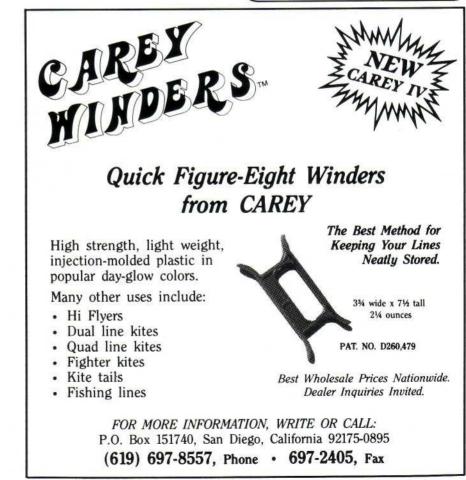
Bono fared better in the Ballet, picking up a first. Aldo Ramirez took second giving the NBK-flyers a onetwo punch with Bill Lee, flying a Razor's Edge taking third. Experienced Pairs Ballet went to an intrepid Windswept team of Tom and Susan Mason who flew a autsy routine to show that their win in Miami a week earlier was no fluke. An inspired performance in spite of the fact that an early crash managed to unseat a ferrule connection on Susan's Fire Dart and the last 3/4 of the program was flown with a broken wing. Second place went to the Looking Skyward Team who flew NBK's.



Winds that occasionally topped 35 MPH made for interesting flying, particularly for stacked kites!

There are big events, and there are small ones. The size really doesn't make much difference. This is one group of folks who take their flying seriously...and they take their fun that way too! We'll be back for this one next year!

> Complete event standings in results section



### SAN ANTONIO HOSTS FIRST REGIONAL ST. VALENTINE'S DAY WAS **NEVER** LIKE THIS!

Of course St. Valentine's Day isn't on the 23rd or the 24th of February ...everyone knows that! "But seeing as how the Alamo City Regional all began from an impromptu fly the year before which brought two (soon to marry) friends together, it seemed appropriate!" according to organizer Frank Kenisky, president of The Alamo Kiteflyers Outfit (TAKO), host club for the contest.

There were many unique features of this first-time event... some of which many flyers will recognize even if they weren't in attendance. Right off, the wind decided to be finicky. (Yup, sounds familiar.) Secondly, many local businesses decided not to jump on the promotional bandwagon for this first-year effort. (Yup, that sounds familiar, too). Lastly, the kiteflyers picked up the slack, pitched in, and everyone had a great time in spite of everything else. (Yup, that sounds like the most familiar thing of all!)

Over 1000 spectators were delighted by the initial running of this two-day event, which featured competition in both single line and dual-line categories. Highfliers Joel Sholtz, Jim and Pat Lindsey, Robert Yen, Bill Mladenka and Kathie Jones, along with a number of others provided a good showing of the single-line art. Bill and Kathie's kite train won the eventual people's choice award in the category.

Dual-line competition, got started around noon with action in theDuetTeamPrecision. The premier for this event was won by Team Dillo who outpointed the visiting Team Storm from Frontier Kites. Third place honors went to the Wind Dancers.

It was Keith Anderson picking up the win in the Novice Precision. Tony Perez finished second with Larry Witacare in third.

Abel Ortega, Texas Skyriders president, swept both first place slots in the Individual Experienced events. He was followed by Donald Corley and Gary Smith in the Precision, with Tamara Joyce and Frank Kenisky rounding out the field in the Ballet.

Saturday evening saw a banquet of Texas Bar-B-Que and several drawings held for prizes donated from all over the kiting industry. The next day was dedicated to the Ballet.

It also marked the first time in our recollection that a Ballet classification was open to the Novice class. It proved to be a good move. Although there were obvious winners, some of the better routines were carded by young flyers who caught the judge's interest with their cool demeanor. Top honors went to Tom Orlik. Second place was taken by Nancy Armendarez with Ralph Pyle finishing third.

In the Duet Ballet, it was Team Storm avenging their second place rank in the Precision as they slipped past a revamped Team Dillo by I a point. The Wind Dancers added another third.

In other action, it was Frontier's Don Corley winning the Figure 8Eliminator title with a count of 111.

Because of inclement weather, the event ended on a premature, but complete note. All participants were able to finish their routines. In spite of an unfortunate scheduling conflict with the SSKC in Miami this year, the Alamo City Regional was a success. We have learned from event co-ordinators that separate weekends will be worked out in '92...great news! We wouldn't want to miss this one!

> Complete event standings in results section







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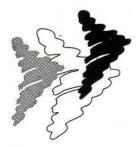
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### CSNAS HAWAII CHALLENGE The Robert Loera National Sport Kite Championships



### by RICHARD PECK, SKQ Associate Editor photos by Edmond Grignon

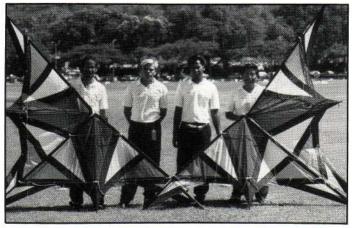
This year's Hawaii Challenge brought 52 individual flyers and 12 teams to test their skill in the fickle winds of Kapiolani Park. The one thing flyers can count on in Hawaii is the unexpected. Unlike last year's strong winds, this time around participants were treated to what the natives call "Kona winds". These are breezes that blow in off the ocean which caused considerable turbulence as the ocean side of the park is ringed with trees. Contestants, however, seemed to have a good time in spite of the rough going.

Several special crowd pleasing events were included in this year's Challenge. Four new ones were added: Individual and Team Train Kite Ballets along with Individual and Team Quad Line Ballets. These events thrilled the spectators and gave 13 individuals and 9 teams a chance to show their stuff. Seeing multiple kites with tails, flown in such a beautiful setting seemed to exemplify what kite flying is all about.

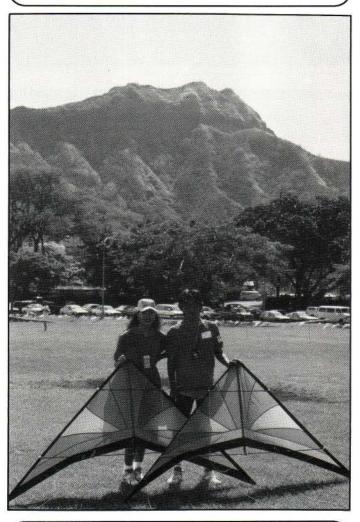
In a repeat of his last year's performance, Scott Aughenbaugh was the flyer to beat. Winning each event that he entered, Scott continued to amaze the crowds with his flying skill. Team High Performance came up Open Team winners followed closely by the Prevailing Winds. The Challenge showed the international flavor of this young sport again this year with teams from both Japan and Australia displaying good flying skills. In the Experienced Team events, Precision was won by Jams, with Team Banzai OSNAS dominating the Ballet. In all, 19 events were flown.

Each year, the Hawaii Challenge seems to bring to mind its own unique nature. Nowhere else on the national circuit can be found the beauty, international flavor, and relaxed atmosphere that is Hawaii. All national contests have their share of serious competitors, but the Challenge seems to be more fun than business. This year's event was three days in the running, allowing ample time for demonstrations and fun events. The Action Challenge, for example, is a popular contest which allows all flyers to compete against one another just for fun. Having time for demonstrations allows flexibility in the schedule to accommodate ever-changing conditions. Almost everyone wanting to fly his or her special routine had a chance to perform before an appreciative crowd.

Each year, the organizers of the Challenge seem to come up with a quality sponsor. This year, OSNAS, from Japan, was no exception. Their participation told the world just how serious Japan is about kite flying. Coupled with the countless volunteers that are the heart of any event, this year's Hawaii Challenge adds yet another success to their record!



Winners in the Open class, The High Performance Team. Below, Experienced class top slot went to Banzai OSNAS.



Complete event standings in results section







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### CHIKARA

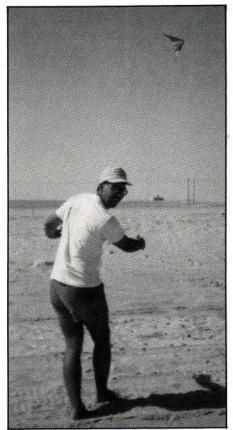
The name speaks for itself, bold, magnificent, and beautiful. A very fast kite, and a great workout in high winds. Wind range 5 - 35 mph. Colors vary (14 to choose from), very stable and easy to handle in light winds. Available in 5 wing spans: 4 ft., 6 ft., 8 ft., 10 ft., and 16 ft.

### KITES A WELCOME DIVERSION FOR THE TROOPS OF DESERT STORM

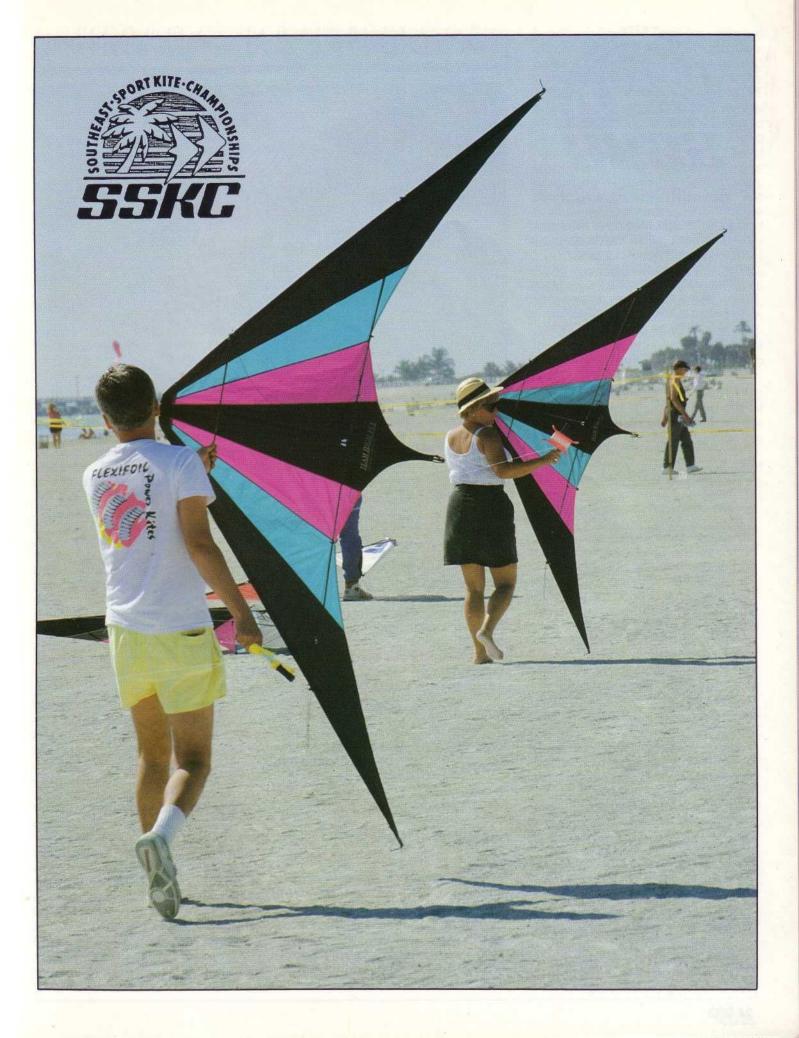
Thanks to the efforts of a great number of individuals and kite companies, the troops of Operation Desert Storm have been provided with many hours of relaxation and recreational activity while on duty in the Persian Gulf. At this writing, comunications have been received from both Skynasaur Inc., and Color the Sky, two of the organizations involved in donating kites to service personnel.

Of particular note is the letter of thanks received by Color the Sky from Air Force Master Sergeant Terry Rosta, who contacted the firm after seeing one of their ads. In part: "Thanks for the great kites! They are getting a workout! After 15 minutes with the stunt kites, (the troops are) hooked."

"I do want you to know that your generosity is appreciated more than you can guess," he continued. "The thought of war and our own mortality has been at the top of our minds for weeks. Your gift has made it possible to push that fear aside for awhile and enjoy life at its...simplest."



Master Sergeant Terry Rosta at the controls!





BY CRIS BATDORFF

Combine a bunch of winteredout kitefliers, wide beaches, and balmy weather. Add a group of proficient judges, efficient scorekeepers, and dedicated organizers. Throw in some hang gliders, great food, and a kite auction. Welcome to the Southeast Sport Kite Championships!

The premier running of this firstever winter event kicked off the 1991 U.S. competition circuitin grand style. Sponsored by Sky Festivals, Skyward Kites, the Miami Visitors and Convention Authority, and the city of Miami Beach, the SSKC was also the first event of 1991 for the East Coast Stunt Kite League. It was an unqualified success.

Run on the beach directly across the street from South Miami's colorful art-deco district, the SSKC easily provided the most picturesque setting of any event that we have thus far attended. With the clear waters of the Atlantic only 50 feet from the edge of the flying fields, judges and competitors alike found easy relief from the sun which brought temperatures into the mid-80's each day. Obviously, there wasn't much complaining about the occasional wind delays from either faction...they just gave everyone another opportunity to cool off!

Event organizer Mike Simmons, of Skyward Kites, along with a cadre of East Coast Stunt Kite League officials, kept the competitions running on an even keel for the entire weekend. Timely interventions for some spectacular exhibitions staged by Miami Hang Gliding kept the crowd's interest soaring. Appreciative spectators numbered in the thousands each day.

Saturday's round of competition began with a stirring opening ceremony...a brilliant display of hang-gliding expertise performed to the strains of the national anthem. It was a moving experience.

# JAMMIN'IN MIAMI!~



A view of the "outpost"...shelter from the sun for field crews and judges. Temperatures soared into the high 80's each day of the event.

Saturday evening saw the continuation of an event begun a couple of years ago by Bill and Susan Baker of Peter Powell Kites...a kite auction to benefit R.O.C.K.(Reach Out for Cancer Kids). Following an uncharacteristic Miami buffet of Texas-style chicken and ribs (YUM!), attendees got down to the "serious business" of buying kites and related paraphernalia. This year's offering contained a multitude of products donated from manufacturers across the country and produced a final tally that exceeded \$6000.

Competition began on Saturday, directly after the opening ceremonies with Masters Individual Ballet. Wife Susan, flying to the theme from "Ice Castles", carded a win over the Old Man (me!). Happily, I managed a second place finish just in front of Billy Jones who was flying for the Kite Loft.

Action in the Intermediate Individual Precision, which ran concurrently, saw Henry Dimmick edging out Warren Saunders by .3 of a point for the win. Third place in the contest went to Mike Moore.

The Novice Precision event was won handily by Mike O'Boyle over second-placefinisherJeremyMoore. Wayne Liebe wound up in the third spot. Experienced Team Ballet was won by Tom and Susan Mason, the Windswept team, from Savannah, GA, by a narrow .03 point. Finishing in second were the Liberty Flyers from Washington, DC. Third place honors went to the Looking Skyward Team from (you guessed it!) Skyward Kites of Miami. But the Liberty Flyers weren't done once the ballet had concluded...they went on to an easy win in the precision event, outscoring the Jordan Air Force by 3 points.

The next event on the schedule was the open-classed Individual Innovative. Fulfilling the requirements of its name, the contest proved just that...innovative. Dave Simpson emerged with the victory with a stunning display of simultaneous two-kite artistry. Second place honors went to Billy Jones who ate, drank, and was visited by a vivacious young lady (Susan Baker!), all while flying! John MacLauchlan, Skyward Edge Team-membertookthird with a great solo-flying exhibition. Alone in fourth (bloodied, but unbowed!), was Bill Baker of Peter Powell who flew the afternoon's tour-de-force. Bill and his crew set up a ground display of tanks and kites as the crowd was treated to a Peter Powell rendition of

Saddam Hussein's demise...fabulous! Hat's off to this intrepid group!

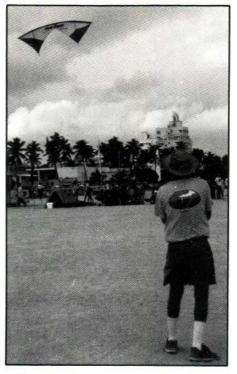
Concluding Saturday's run of events, the Masters Individual Precision was won handily by Master's newcomerBillHanson. Second place went to Susan Batdorff followed by Bill Edison in third.

Sunday was a repeat of beautiful weather but the wind took an early vacation sending competitors back into the Atlantic for more relief. Fortunately, the wind lulls were short-lived and the schedule was, more-or-less held in tact. After another brilliant hang-gliding display by Miami Hang Gliding, things got off to another great start.

First up...the Experienced Individual Ballet. In the first of his backto-back first place finishes, Quinn Rickman took a 21 point victory from Ted Dougherty, who was visiting from Texas. Robert Bono of the Looking Skyward team took third.

In the Precision event, it was Quinn, again, with a 3 point clinch over Ray Melikian. Ted Dougherty added to his ballet finish by taking third place honors.

First place in the Intermediate Individual Precision went to Mike Moore



(second in the ballet). Second position went to Ben Gomez with a narrow margin over Chris Belli.

The SSKC was the first event of the year to include a Pairs 'division. The first-time running of the Pairs, in this case, was done along with the Team event. The idea was to factor out the

top three finishing pairs for separate awards once the overall team winners slots were filled. The interesting point here was that the top three finishers in the entire event WERE pairs...thus, they got double awards for their efforts. First place went to the home-town Skyward Edge who flew a repeat of their AKA Grand National routine. Second place honorswent to another Florida team. Jim Bunce and Ruth Bradley, the Hurricane Squadron. Third place went to the Deja Vuteam of Cris and Susan Batdorff.

Quadline Precision, another open-classed event, was won by T.C. Powers who flew a technically beautiful display with a full-size Revolution. The second position was nailed down by Dennis Kucmerowski, flying a Peter Powell Omni, with a scant .03 outpointing of Bob Hanson, who flew a Revolution 2.

The first running of the SSKC was a grand success. This has to be one of the best venues possible...highly visible, beautiful weather, appreciative audiences, and an attentive staff. We've every notion to expect that this will become one of the showcase events of the circuit! See you there next year!

# <section-header> Weise Changed! State of the future is now ! To serve you even better, the entire line of Skyward Kites is available exclusively from Skyward Kite Manufacturing. From our unique NLK and NBK designs, right through the amazing new Hawk II, Styward Kite Manufacturing is ready to take your orders. We would also like to announce that Skyward Kites (Miami Beach) has been retained as our exclusive South Florida representative. P. Rotech for the introduction of our newest product...the SUPERHAWK II State MS The Back Name Nage NW 34th St. Baderhill, FL 33318 (30) 572-5094



The "Turk", Ralph Offredo, handling announcing duties.



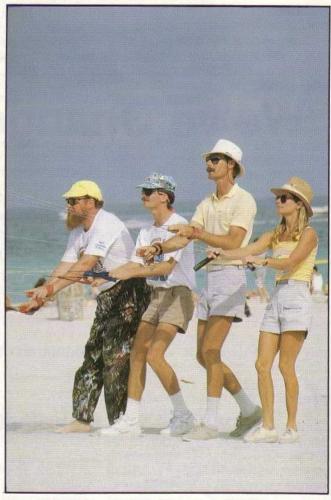
Anything to beat the heat! His Highness Herr Dolphin & Company.

a complete listing of all scores appears in the results section.

# AND HERE'S...



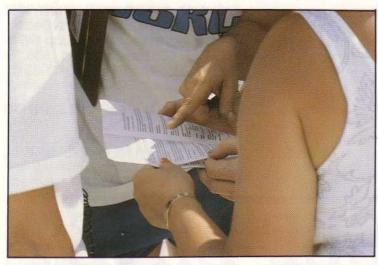
The Flying Circus Team in the Masters Ballet.



Team High Fly...a study in concentration.

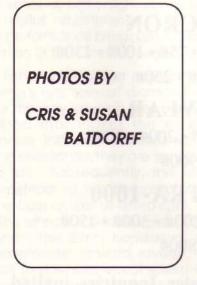


A view to the "nylon jungle".



The Black Sheep Squadron in Masters Precision.

Yes. Figures may be flown from either direction... says so right here!





The Highflyers headed towards a win in Masters Precision.



### Calendar Of Events

- APRIL 20-21, CALIFORNIA OPEN IN-TERNATIONAL S.K.C., Fiesta Island, Mission Bay, San Diego, CA. Contact: ROME-AERO Enterprises, 129 Samoa Ct. San Ramon, CA 94583-1421. (415) 723-ROME.
- APRIL 27-28, PHILADELPHIA KITE FES-TIVAL, Fairmont Park, Philadelphia, PA. Contact: Sky Feativals, P>O> Box 7317, West Trenton, NJ 08628. (215) 736-8253.
- MAY 4-5, FOUR WINDS KITE FESTIVAL, Featuring the CANADIAN NA-TIONAL STUNT KITE CHAM-PIONSHIPS. Kortright Centre for Conservation, Toronto, Ontario, Canada. Contact: Colleen Dupuis, Kortright Centre, (416) 832-2289.
- MAY 4-5, BEHIND THE REDWOOD CURTAIN KITE FLY, Eureka, CA. Contact: Eireka Chamber of Commerce, 2112 Broadway, Eureka, CA 95501. 1-800-356-6381.

- MAY 5, 10TH ANNUAL FRANKENMUTH SKY FEST, Frankenmuth, Ml. Contact: Kite Kraft, 245 S. Main, Frankenmuth, MI 48734. (517) 652-2961.
- MAY 11-12, GREAT LAKES S.K.C., Grand Haven, MI. Contact: Mackinaw Kite Co., 116 Washington St., Grand Haven, MI 49417. (616) 846-7501.
- MAY 24-25-26, EAST COAST S.K.C. VI, Wildwood, NJ. Contact: Sky Festivals, P.O. Box 7317, West Trenton, NJ 08628. (215) 736-8253.
- JUNE 8-9, 9TH ANNUAL SUMMER GAMES KITE FLY, Myrtle Beach, SC. East Coast Stunt Kite League Event. Contact: Klig's Kites, Bayefoot Landing, Hwy 17, N. Myrtle Beach, SC 29577. (803) 272-5768.

- JUNE 8-9, 9TH ANNUAL ROGALLO KITE
  - FESTIVAL, Jockey's Ridge State Park, Nags Head, NC. Family Fun Fly. Contact: Kitty Hawk Kites, P.O. Box 1839, 3941 S. Croatan Highway at Jockey's Ridge, Nags Head, NC 27959. (919) 441-4124.
- JULY 6-7, 3RD ANNUIAL CHERRY STUNT KITE COMPETITION, Traverse City, MI. Contact: Grand Bay Kite Co., 121 E. Front St., Traverse City, MI 49684. (616) 929-0607.
- JULY 13-14, BELGIAN STUNT KITE CHAMPIONSHIPS, Central Beach, Ostend, Belgium. Contact: DIDA-KITES, Gistelsesteenweg, 586, B-8400, Oostende, Belgium. 32 (0) 59-50-27-45.
- AUGUST 17-18, NEW YORK STUNT KITE CHAMPIONSHIPS, Mitchell Athletic Complex, Uniondale, NY. Contact: Suzanne and Bill Edison, (914) 937-2838.





MODEL: OMNI FABRIC WEIGHT: 1.5 oz. ripstop nylon FRAMING MATERIALS: fiberglass WIND RANGE: 6-25 MPH CONFIGURATION: double-rhomboid (721/2 inch wingspan) SKILL LEVEL: novice/intermediate MFGR'S SUGGESTED RETAIL: \$99.00 MANUFACTURER: PETER POWELL KITES

Quad-line flying has shown, in the past year, that it has the potential to provide just as much enjoyment as the more traditional two-line stunter. Events specifically designed to test the expertise of those who fly them are beginning to show up on the rosters of virtually every competition. It seems an inescapable fact that new multi-line kites are beginning to show up as well.

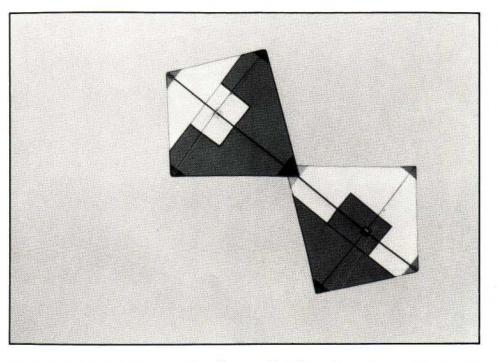
Accordingly, for the second year in a row, Peter Powell has introduced a quad-line kite at the KTA trade show. Their newest effort, the Omni, is a product that flies quite unlike anything that we have everflown before. This is evident from the first time that the flyer takes hold of the lines.

To begin with, all four of the lines are the same length. The handles, molded and color-coded, are straight instead of bent. The control is quite precise.

As the kite takes off, the most prevalent aspect of the new design comes into play. It is, indeed, omnidirectional. Left or right, up or down: it makes no difference to this one! Its performance brings up an examination of the Omni's design.

For all intents and purposes, the Omni is two "joined" diamond kites. It is the way in which they are combined that makes the product unique. Instead of the usual side-toside orientation, they are joined tailto tail. Subsequently, the kite is symetrical to the horizontal crossspreader as well as left-to-right.

The effect on performance is startling. The Omni handles all four movements: forward, reverse, and side to side with equal speed and alacrity. There is neither hesitation nor tentativeness. No coaxing is required. These four basics are performed with simplistic efficiency and



with about as much speed as the flyer may wish to achieve.

Stops and starts are razor sharp. Spins are done precisely on center. At times the kite can become a real blur and, given its symetrical design, one might have doubts as to "which way is up?" Not a major problem though. At first glance, we thought that the sail graphics on the Omni were "cute". The truth is that they are nearly a matter of practical necessity...one arrow points to the side, the other towards the sky: instant referencing for spins and other speedy maneuvers!

We found the Omni a whiz on groundwork. On hardsand, our usual flying surface, we were able to zip the kite back and forth from one edge of the window to the other, without ever launching. The Omni just slid along...at a pretty good clip, too. Off-wind, the performance was just as crisp. One of the prettier maneuvers are wing-stands. The kite's symetrical design makes this a presentation move. Quality of workmanship on the Omni is good. Both of our models were early production types and we took the opportunity to give them a good workout. Two afternoons of bashing and crashing about on rock-hard sand showed neither the worse for wear. Even in the hands of novice flyers unacquainted with multiple lines, the Omni took all that was dished out. The Powell reputation of building kites that you can pass onto your kids remains intact with this new kite.

Our models were equipped with fiberglass spars and did need a bit more breeze than we might have liked to function well. We have no doubt that lightweight models will be made available as the Omni gains in popularity.

That quad-line kites are here to stay seems to be a foredrawn conclusion. The Omni would seem to represent an advance in multi-line performance. We think that you'll like this one!

CB/SB



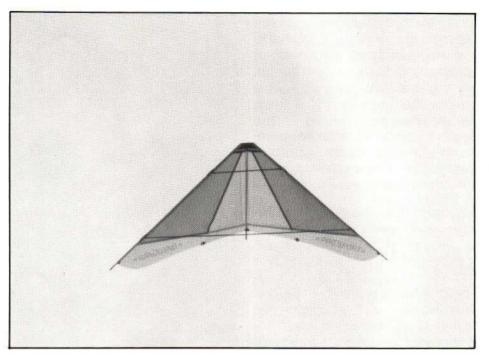
The Pro Sport Elliptical from Windwing is actually the second generation of a kite that we first saw offered last year at the California Open in San Diego. The older Pro Sport has undergone some major changes which center mainly around the treatment of the wingtips. Unlike its predecessor, which utilized the usual pointed wing ends, the new version sports an elliptical tip. Theoretically, the design improvement should reduce the drag, while improving lift and maneuverability.

Accordingly, that was precisely what we were looking for when we took the new Pro Sport out to the field. We weren't dissappointed.

We flew the kite on 100' of 135lb. Spectra and hit winds in the middle of the advertised 3-25 MPH wind range right off. With a steady 12 MPH at our backs, the Elliptical jumped noiselessly into the air...and stayed that way. The lower part of the sail, comprising the trailing edge is constructed of a clear (reflective) polymer. As it is a solid (if flexible) piece of material, there is virtually no place for noise to be generated...only a heavy swooshing sound can be heard even from observation points directly beneath the kite. Further, the polymer portion of the sail reflects light beautifully. The Elliptical would qualify as one of the prettier kites that we've flown even with lesser performance numbers.

Graphite sparring has been used to complete the high-tech package. (By the way, the Pro Sport Elliptical doesn't even come in a carrying bag...a durable clear tube is provided. It's a nice presentation but it sure doesn't fold well)

Levels of performance fluctuated with the attentiveness of the flyer. The kite flew very quickly and was basically unforgiving. This is not to imply that it flew poorly...quite the opposite. Certainly, though, it's no kite for the beginner. There was a significant amount of oversteer. If the Elliptical is given too much slack, it will wrap you up very quickly. With the lines kept taut though, the kite can provide plenty of excitement. MODEL: PRO SPORT ELLIPTICAL FABRIC: ripstop nylon/polymer FRAMING MATERIALS: graphite WIND RANGE: 3-25 MPH CONFIGURATION: delta-type (70 inch wingspan) SKILL LEVEL: intermediate/advanced MFGR'S SUGGESTED RETAIL: \$179.00 MANUFACTURER: WINDWING DESIGNS



With the lines on the fingertips, the kite zips through most types of turns with comparable ease. The least degree of control is found in undercut turns. Unless it's up to speed, the Elliptical can be lost here quickly. This happens primarily because of the kite's speed...it simply spins out of air and there is a pause as it attempts to regain forward momentum. We noticed that the effect was more pronounced in light breezes.

This ability to spin out of air also showed up in tight, successive turns. The kite would handle the first couple very nicely and then, consistently, begin to rotate around its axis. Normally, we might have termed this a problem. With the Elliptical, however, we found it largely a controllable variable. It's wholly a matter of personal preference.

Groundwork with the Elliptical was a treat. The kite landed quickly and efficiently at nearly any point in the window. We experienced no tentativeness with this maneuver at any time. In consideration of the kite's relative small size (70"), its ground performance was exceptional. We found the Elliptical to be more quick than fast. Though its ground speed was in the higher-than-average range, its one of the quicker responding kites that we've yet flown. This kite will test a flyer's co-ordination ! It also generates some pretty fair heft for its size.

Construction of the Elliptical is good, though we have no figures on the durability of the polymer portion of the sail. There isn't much seaming to worry about ripping out. Interestingly, there is no formal T-fitting on the kite. The aluminum connector is simply inserted between the spine and the sail tensioning elastic. Its smooth and, in this kite, seems to work.

The Pro Sport Elliptical is one of the better examples of the ingenuity that keeps the development of the stunt kite moving forward. Windwing has produced in its sail a pleasing blend of two materials. It has also combined two technologies, that of the stunt kite and that of windsurfing. The resultant product looks as good as it flys. This one will keep you right up there on your toes!

The new Windwing Pro Sport Elliptical represents a major design improvement in delta-wing stunt kites. Drag-producing pointed wing tips have been replaced by highly efficient elliptical tips. The result is an unprecedented combination of speed, maneuverability, smooth tracking and predictable edge control.

Construction is of the highest quality, with innovative design and carbon fiber airframe. Extremely durable and easy to assemble, the ProSport Elliptical is silentflying, powerful and fast.

Recommended for beginners and experts. Span: 70", Keel-spine: 24", Area: 850 sq. in. Weight: 9.5 oz., Wind range: 3-25+ mph.

> WINDWING DESIGNS + 1803 EASTSHORE HIGHWAY - BERKELEY, CA 94710 (415) 849-4889 - FAX (415) 849-0312 - DEALERS (800) 345-WING

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PRO SPORT=

SPOR



We got our first look at the muchrumored North Shore Radical whileattending the AKA Nationals this past fall at Seaside, Oregon.

There are a number of innovations at work on the North Shore whichwe've not seen offered before on production kites. Most apparent of these is the adjustable outhaul line on the bridle. Our test model provided us with 10 settings to either shorten or lengthen the distance that the bridle clip lies in relation to the spine.

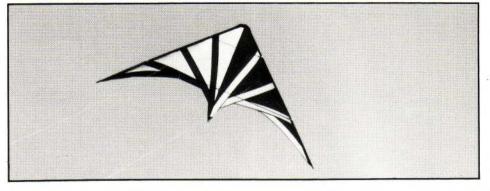
The effect of changing the bridle outhaul line can dramaticallyeffect the performance of a stunt kite. One setting might enhance the kite's turning ability, another emphasize straight line flight, and so on.

Two of these positions are conveniently marked in red or black for reference in the owner's manual. High and low bridle clip settings are marked in like fashion. While only four of the combined positions are explained in the manual (ie. red-red, red-black, etc.), the corresponding changes in the North Shore's flight characteristics point the way for the enterprising flyer to gain those attributes that he may be after.

As a further modification, the North Shore comes equipped with two spine spars: one Easton carbonaluminum for light breezes (2-12 MPH according to the manual), the other a stiff wound graphite for heavier winds (12-20 MPH).

The adjustable outhaul line, with its ability to alter performance, makes it extremely difficult to assess the North Shore's basic flyability. For that reason, we flew the kite principally from the factory's pre-set marks. Although TOL's instruction manual recommended 100-150 lb. test line, we began our tests with 100' of 80 lb. Spectra and had no problems.

Those pilots who have had their hands on any TOL product will find many similarities. Even though the sparring is quite light, the North Shore can be a fistful. There's a lot of sail area up there! Even in light (3-6 MPH) breezes, the similarity in feel to the Team Hawaiian was palpable. There MODEL: NORTH SHORE RADICAL FABRIC WEIGHT: .75 oz ripstop nylon FRAMING MATERIALS: carbon aluminum (Easton) WIND RANGE: 2-20 MPH CONFIGURATION: delta-type (100 inch wingspan) SKILL LEVEL: intermediate/advanced MFGR'S SUGGESTED RETAIL: \$250.00 MANUFACTURER: TOP OF THE LINE KITES



is a kinship in the deliberateness of tracking and turning. Perhaps the most appealing of the North Shore's attributes is this solidness.

The kite was able to hover with its nose into the wind at the very edge of the window for practically any amount of time. At the median settings, the North Shore evidenced an amount of understeer on downwind turns. We could correct the difficulty by adjusting the outhaul lines but not without altering some other aspect of the kite's performance. Interestingly, the understeer did not come into play in square or angular turns where the North Shore's marks were well above average.

The North Shore's sail, although standoffs are employed, is still cut with a generous amount of billow. The sail, in theory, is allowed to fill as increasing winds dictate, moving up and down a small amount of leeway on the end of the standoff while still presenting a three-dimensional surface to the wind. The effect produced is a slowing of the kite. Reaction times are slower than some but absolutely predictable. There are those who will view this as a limitation. In fact, where a precision performance is required, excessive speed can be anything but an ally. Like the Hawaiian, the North Shore's potential as a precise flyer is excellent.

In the landing-relaunch department, the North Shore got high marks. Again, the outhaul adjustment can come into play with its ability to emphasize particular performance features. On the factory settings, the kite has excellent "floating" ability. We were able to perform this nose up slide at virtually any point in our tests and, on a couple of occasions, managed to slip the North Shore across the entire window.

Workmanship on the North Shore is generally good. Windward facingseams are flat-felled and the trailing edge is double stitched. Our test model had some problems with the T-fitting which necessitated the regluing of the ferruling sleeve that sits under the fitting. Our kite was a prototype model. Subsequent checks with TOL assured us that the problem had been rectified on production kites. We'd also like to see the retaining vinyl on the spine moved down slightly to further retard the movement of the T-fitting in crashes.

An overview of the North Shore presents us with quite a group of newideas! The kite is adjustable to a degree that is quite new to the general kite world. While it is true that the kite can be changed to emphasize different aspects of performance, it must also be stated that an emphasis of one aspect will often produce a corresponding de-emphasis of another. We liked the factory settings best.

There are obvious similarities between the North Shore and other TOL kites, notably the Team Hawaiian. Yet, it is different enough both in design and performance capabilities to take its rightful place in the considerable Top Of The Line arsenal!



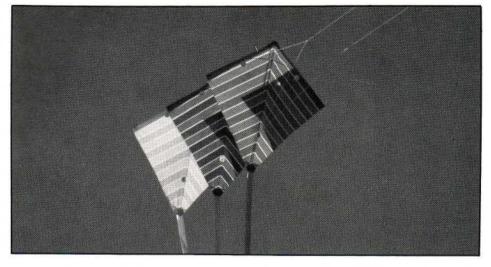
We suppose that there are a few stunt kite flyers out there whose careers didn't begin with diamondshaped stunters...but there are darned few of them. And for good reason. Not only are they superb performers, but they are purely fun to fly!

The TRLBY has, over the years, become one of the true standards for entry-level flyers. It seems appropriate in their 10th anniversary year, to review what we consider to be one of these standards: the poly-sail three pack.

Coming up with suitable flyers for the TRLBY is no problem...any passerby at a local beach or park will do just fine. We were fortunate in finding an advanced flyer who had, amazingly, never taken the controls of one. The reaction of this competition veteran? "These kites with their wonderful 50' tails can't help but entrance both the flyer and the bystander. They bring a smile to all. Fun, fun, fun. Relaxing. Takes your cares away." Yep. The same thing we thought when we flew our first set a half-dozen years ago.

From a performance standpoint, the diamond stunter is not a speed demon. It's not slow either...it's just comfortable. When it comes to tracking, it's as good as the best. It can cut turns that 95% of the deltashaped stunters on the market can only dream about. The tubular tails (included with the TRLBY package; as are lines, handles, and instructions) are natural crowd pleasers and do double duty as air brakes in higher winds.

Durability? We have run over all of oursix packs, at one time or another with our motor home (by accident, of course!) with no significant damage. Suppose you happen to get a rip in one of the brightly colored sails...no problem: simply get out a roll of clear tape and voila...good as new. Try THAT with ripstop! Oh yes, you can also bash, crash, and smash the TRLBY with impunity. They will simply pop back up for more. It MODEL: TRLBY 3-PACK FABRIC WEIGHT: duraply FRAMING MATERIALS: fiberglass (solid) WIND RANGE: 6-25 MPH CONFIGURATION: diamond (36" x 36") SKILL LEVEL: novice/intermediate MFGR'S SUGGESTED RETAIL: \$39.95 MANUFACTURER: TRLBY PRODUCTS



seems almost ludicrous, given their nearly indestructible nature, they they're also guaranteed. Virtually every part of the kite is covered by TRLBY...most for 3 years...some for the life of the kite!

The big question is that if all this is available for a price that is generally less than \$40, why fly anything else? This brings us to a discussion of what the TRLBY won't do; or at least won't do easily. For the novice, it may seem a discussion of trivialities, but for the competitor there is a little more validity.

First, the TRLBY needs a fair amount of breeze to function as intended...generally 7MPH +. This can be a drawback as flyers who have acquired increased skill levels begin to push both themselves and their equipment. Secondly, there is not as large a wind window presented to the flyer. Thirdly, there are some maneuvers that are exceedingly difficult, if not impossible, with a diamond-shaped stunter. Graceful landings, sidewise "floats", and groundwork (wingstands, walking the kite, etc.) are among them. We have immense respect for those few flyers who are precise enough in their controltoperform a successful wingstand with a stack of diamond-shaped stunters on the other end of the lines!

In increased wind, there is also some distortion that occurs as the dihedral of the TRLBY does its job. This distortion is a natural occurrence. It is the way in which the kite works. It also speeds up the kite and produces some noise...but no problems.

With respect to pull generated, we found the TRLBY 3-pack in the average zone...not nearly enough to be uncomfortable but sufficient to provide good feedback. We might also note that all three kites need not be flown at one time. They are easily detachable so that the flyer can utilize either one, two, or all of them. If you should tire of two-fisted flight, there is also the alternative of hooking one line through BOTH bridle points and flying the TRLBY as a singleline unit!

Kites may come and go in this world of high-tech,mega-performance,flying machines. That's all well and good. There's another adage, however...if it ain't broke, don't fix it. For ten years, the poly-sailed TRLBY has maintained that standard. It is, without doubt, one of the best places for a potential flyer to begin his love affair with a new sport. For those who have already had their love affair blossom into an enduring relationship, the TRLBY is also quite capable of rekindling the fire. Super-duper high-tech is great...but your kite bag isn't really packed without a set of these!

CB/SB

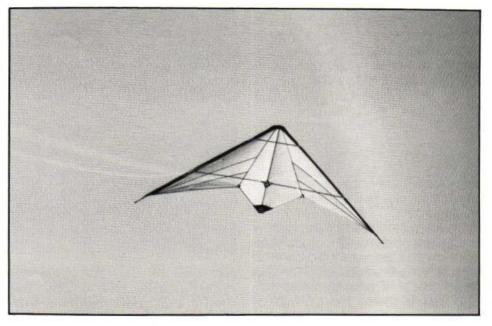


We took delivery of our first 3/4 Vortex at the AKA Grand Nationals. Our previous experiences with kites from Australia's Highly Strung Kites had been good ones, so it was with commensurate anticipation that we took the 3/4 onto the field in low-tomoderate breezes of 6-12 MPH. Flying on 90' of 135lb. Spectra, the kite proved above average in nearly every respect. A good tracker, the 3/4 got high marks in straight-line flight and in wide turns.

We experienced a bit of oversteer that was accentuated in slower air. As the winds picked up a bit, and in subsequent high-wind testing, the problem abated. It seems to us that the kite's best performance showed above 9 MPH, where it was fairly quick. The 3/4 Vortex negotiated square and angular turns with ease. Interestinaly, there were no characteristic bobbles at the finish of the acute angles. The oversteer seemed to be confined to tight turns done in sequence. The bridling seem a bit touchy at first but once we had gotten used to it, we were able to adjust out just about all of the negatives that we wanted to eliminate.

We had a much easier time with both landings and relaunches than we expected with a down-sized kite. There was little evidence of the characteristic slurring that usually accompanies the smaller kites. The moderate aspect ratio of the 3/4 Vortex is undoubtedly coming into play here. The result was that the kite functioned well off-wind, behaving much like a full-sized product. In short order, we found that we could accomplish wing-tip maneuvers, drags, and the like, with relative ease. The potential for groundwork with the kite is large.

Overall, the kite's stability was good. We were able to force it into stalls that were nicely recoverable, particularly in better wind. There also seems to be substantially less pull than one might expect as the 3/4's larger counterMODEL: 3/4 VORTEX FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: graphite WIND RANGE: 5-30 MPH CONFIGURATION: delta-type (81 inch wingspan) SKILL LEVEL: novice/intermediate/advanced MFGR'S SUGGESTED RETAIL: \$145.00 MANUFACTURER: HIGHLY STRUNG KITES



part, the full-sized Vortex generates some pretty fair heft. In part, we suspect that this may be due to the lighter weight graphite sparring materials used in the smaller version. The graphite sparring is also responsible for the virtual lack of distortion evident in higher winds.

Workmanship in the 3/4 Vortex is excellent. All fittings are solid, nononsense connections. At first, we thought that the heavy bridle lines leaned a bit towards overkill, but they certainly presented no problem in flight. Comments from flyers invited to try out the 3/4 Vortex for the first time were quite positive. "Good high wind fun, the kind that keeps your eyes sharp and runs quick," was the remark from one, "a good kite for the price".

"Sturdy all around," came from another..."this would be a good first kite." We also found that the graphics, which reverse the color pattern from one wing to the next, were a hit.

The 3/4 Vortex will keep you on your toes. Like other down-sizedkites that we've tested, this one must be actively flown. Although it is not particularly unforgiving, it's best not to let it get away from you. If there's too much slack in the lines, the kite can dump air and lapse into an unplanned float. Again, this is a lowwind occurrence which clears up completely once the wind comes up to speed.

In stack, the 3/4 Vortex is even better. Any trace of instability vanishes quite quickly with even two on the line. Additionally, one of the most interesting stack arrangements that we've seen to date is available for the 3/4. Unlike the usual in-line stacks, this kite can be had in a piggyback configuration. These double units can then be stacked in line for an even greater impression. It's quite a sight and an attention-getter as well!

If you're in the market for a good, small, moderate-to-high-wind performer and don't feel like peeling off an entire week's wages to get it, the 3/4 Vortex may well be worth a second look. It's a solid kite for the cash. And for those who like stacks and are looking for something really unusual, the 3/4 Vortex piggy-back stack will certainly fill the bill!



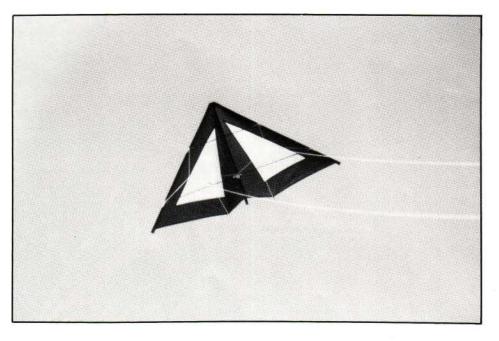
MODEL: LITEFLITE HEAVY FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: graphite WIND RANGE: 5-30 MPH CONFIGURATION: cylindrical Rogallo (56 inch wingspan) SKILL LEVEL: advanced MFGR'S SUGGESTED RETAIL: \$160.00 MANUFACTURER: THE KITE STORE, LTD.

The LiteFlite Heavy is Mark Cottrell's latest commercially available addition to the LiteFlite line. It fits in sequence after the LiteFlite (for low winds), and the LiteFlite S (for moderate winds). Like its counterparts, the Heavy is a crisp performer. Qualified by the manufacturer as an "expert" class stunter, we were moved to find out why. Our first flight test gave us the answer.

With winds in the 9-15 MPH range, we let out 90' of Spectra line... although the Heavy was portrayed as a quick flyer, its smallish size led us to believe that it wasn't a huge puller. Happily, we were correct in our assumptions. As the kite has a low aspect ratio, we also presumed that it would prove out to be more of a precision machine than a freestyler. Right again!

Like both of it predecessors, the Heavy is a sterling figures kite. It cuts square and acute angles like a razor. Unlike the low wind LiteFlite, however, the Heavy will also spin like a bandit. It is a very quick kite. Shortline team flying is an exercise that excites the senses. For a small kite, it is very stable, particularly in straight line passes at speed. In higher winds, it is not a kite for the feint of heart.

Another performance characteristic present in both other Lite-Flites can also be observed in the Heavy...this being the propensity of the kite to fly extremely high over head. It can, in fact, if flown inattentively, quickly overfly the boundaries of reasonable control. In more than one instance, we watched the kite fly through this invisible window and begin to come 'round towards us. This does not happen quickly, nor is it by any means an imminent crash situation. There is more than sufficient time to control the Heavy back into moremanageable air. Of course, there are bridle adjustments that can be (and were) made, but we found that we then encountered other offsetting aspects. Let it suffice to say



that the Heavy must be flown with an attentive eye to the kite's height.

Landing the Heavy is an agility maneuver as well. As the low points on the trailing edge are constituted by the two standoffs which are set rather close to the spine, the balance point(s) are auite critical. A couple of (very!) quick steps towards the kite while it is in stall position offwind will accomplish this maneuver. An attempt to land without forward movement on the part of the flyer will usually result in the Heavy floating across the wind slowly in a bellydown attitude. If the kite should come to rest on a leading edge, it is difficult to relaunch: simply staking your lines and setting the kite up is far easier. It is also more picturesque as the Heavy takes off like a rocket! This kite loves to fly!

We were unable to ascertain the Heavy's upper limits but are reasonably sure that it would perform well into the upper 20's if long enough lines are employed and the flyer's reaction times are speedy.

Constructionwise, there are a couple of points worth mentioning. First are the nifty rubber standoff "re-

tainers" used in all the LiteFlites. Secondly, we like the appearance of the kites in the line. The graphics in all the LiteFlites are simply and nicely done.

The elastic pockets on the ends of the sail's leading edge are absent in the Heavy...we wish that they weren't. They're a nice touch and would seem to serve their function better than the seamed sail ends present on the Heavy. Lastly, the vinyl retainers on the spine rods of both our test models came unglued during test flights. As the reinforced hole for the T-fitting is kept small, there is already precious little room for the fitting to travel. During crashes, an untimely shift could spell disaster for the sail.

If you already own one of the two previous LiteFlites, the Heavy will provide a upper-end version of the precise flyerthat you already have in the bag. If you are unfamiliar with this particular kite line, the Heavy will offer light, tight, big wind precision and stability without the usual overpowering pull inherent in most of the big boys!

# THE SIGH PERFORMANCE STUNT KITE

# **STINGER 1000**

1989 National stunt kite circuit champion.
Smooth handing, precise cornering and edge work.

- Excelent low wind performance.
  - •Unique bridle holds frame straight & rigid for better handling.



Designed by Vince BobroskyManufactured by Stinger Kite Co.

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**800-487-KITE** Available in fine kite stores everywhere.



The Encore is the follow-up to Vince Bobrosky's successful Stinger design. It is basically a full-size kite that, in Vince's own words, "is a rather radical departure from my previous efforts."

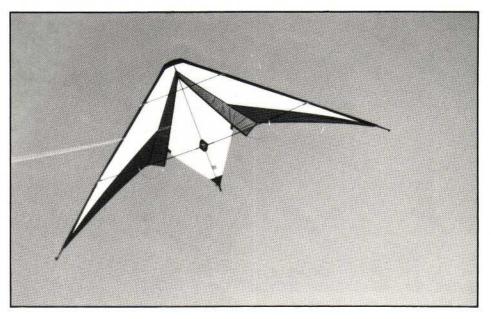
There are some vague parallels to the Stinger, but those are confined mainly to sail graphics. Beyond that, the Encore is almost completely different both in appearance and performance. The Stinger became known for its slow, precise attitude while this newest effort may best be characterized as more of an individual's kite with quite a bit more speed designed in.

The Encore is a moderate aspectratio kite. The nose is cut improbably wide. Bridles are set at shorter lengths than we were used to in Vince's previous designs. When we gave him a call to inquire as to their shortness, he responded by giving us a new set of lengths to try out...BIG SURPRISE! Our initial tests with the Encore had showed a kite with significant amounts of oversteer. That changed quickly with the new settings.

In winds of speed (10+ MPH), flying on 100' of 135lb. Spectra, we found that the Encore flew well. As a ballet kite, it may be termed as excellent depending on your individual criteria.

There are two small fiberglass battens which are inserted in sleeves from the tail of the Encore. These battens run to a point about 7/8 of the way to the nose. The protruding ends are then fitted into vinyls on the lower spreader bars and constitute standoff spars of a fashion. These battens help maintain the integrity of the sail in lower winds. In addition, they augment the channeling of air in flight rather like stabilizers. They are a help in relaunch situations as well.

There is still a bit of evident oversteer in the Encore which will be a delight for those who fly in a manner which utilizes it. The kite is able to be landed and relaunched at virtually any point. Likewise, it will do MODEL: ENCORE FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: graphite WIND RANGE: 5-25 MPH CONFIGURATION: delta-type (103 inch wingspan) SKILL LEVEL: intermediate/advanced MFGR'S SUGGESTED RETAIL: \$230.00 MANUFACTURER: STINGER STUNT KITE CO.



wingstands with ease. A sharp pull on the upper line will cause the Encore to flip from one wingstand to another on nearly the exact same spot. Without much practice, we were able to hit 6-8 in a row, each a picture of the one previous.

Undercut turns performed at the side of the window will put the Encore into an immediate "float" which can be carried nearly halfway across the field with ease. There is occasional slurring in the take-offs but it can be controlled to a great degree by keeping a careful eye on the amount of slack in the flying lines.

As might be expected, the Encore is an excellent spinner, although it occasionally slows its speed once into the spin. It doesn't cause the kite to lose much altitude, however, and can't be viewed as a problem.

The kite's wide nose makes for generally excellent turning ability. We experienced nearly no difficulty with any sort of curved turn. Alternate flying styles of push and pull turning, however, produced a bobble on the end of angled turns. This, in retrospect, is probably. in response to individual flying styles. The Encore also makes noise... something that we were not used to in Vince's kites. Don't worry though, decibel levels aren't so high as to be overpowering!

Workmanship on the Encore can be expected to be up to par. Our model was a prototype and the only casualties were both wing-end arrow nocks. If they expect folks use the Encore to its fullest advantage, these could certainly be beefed up a bit by the manufacturer.

Those devotees of strict precision may not find the Encore initially to their liking. There is an element of oversteer in this new kite. Its presence, however, is by design. The Encore wasn't plotted out as a kite for the beginner. Its place seems to be in the hands of that flyer who is looking for a specialized product to carry out specific functions. If you are one of the increasing number of flyers who finds that their love affair with their kite has extended groundward, the Encore may well be worth checking out!

> CB/SB SKQ 37



Among the various stunt kites to reach the shores of the U.S. in the last couple of years, the Big Brother and its companion, the smaller Little Sister, are insofar as we are aware, the only entries from France. The creations of Julian Wolfe Patrick, they are unusual both in design and flyability.

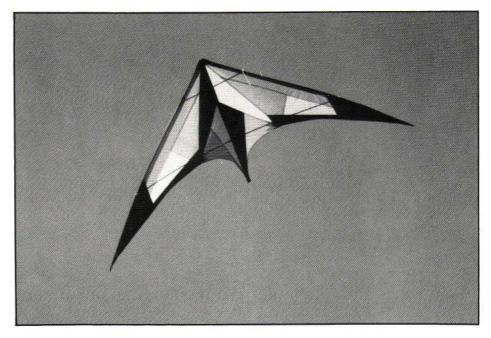
We were first made aware of this new line of products last summer and they have only recently become available for general distribution. Our initial reaction to the Big Brother was quite positive. What immediately impressed us was that the kite was virtually soundless in flight. Further, it handled wind speeds in the low single digits very comfortably. The graphics were pleasing and the general quality was very good.

When we learned about the retail pricing, however, we decided that we had better take an even closer look...a \$450 price tag is going to put a sizeable dent in ANY wallet! What transpired was several months of very close observation.

The Big Brother has a number of items in the plus column. The workable wind range seems to be from near 2 to better than 20 MPH...the best performances gained were in the area of 9. Interestingly, we have never had to make a bridle adjustment. Getting the kite to make noise of any great amount is a problem. Flyers intrigued with high decibel levels will find the kite boring if not unnerving.

Off-wind, the Big Brother ranks with the best that we have ever flown. We found it controllable to an extremely high degree. Virtually any ground work in our repertoire was handled with ease. Downwind, much of the same...square corners, odd angles, both tight and sweeping turns were smooth and concise. Landing and relaunches presented no problems either. Factually, performance-wise, the Big Brother simply didn't give us many negatives. There is a small element of oversteer that should be noted that shows up primarily in undercut turns done offwind that can put the kite into a nose-up float.

MODEL: BIG BROTHER FABRIC WEIGHT: .75 0z. ripstop nylon FRAMING MATERIALS: graphite WIND RANGE: 2-25 MPH CONFIGURATION: delta-type (99 inch wingspan) SKILL LEVEL: intermediate/advanced MFGR'S SUGGESTED RETAIL: \$450.00 (appx.) MANUFACTURER: WOLFE DESIGNS



The kite flies extremely lightly. This can prove an initial difficulty if you are used to more "weight" on the end of the lines. Most certainly, it is a product for the finesse flyer. Although it will, and has, taken some very heavy-handed treatment, the Big Brother prefers careful control.

There are a number of reasons for this particular flight preference. They also go a long way in explaining why the Big Brother flys as it does. From appearances, the kite has been specifically designed to use standoffs as sail stretchers. When they are inserted, a degree of camber is imparted to the sail which gives the leading edge a recurve shape. The trailing edge has, likewise been made in a subtle curve. The center panel of the sail is cut more generously than many other products, lending to the kite's excellent handling of low wind situations. Further, it is attached around the spine by a Velcro-type fitting enabling the flyer to make tensioning adjustments as time stretches the surface. Subsequently, the face presented is threedimensional and taut as well.

From a quality standpoint, all sail seams, save the leading and trailing edge are both wave and straight stitched. The leading edge, comprised of two layers of ripstop, is double straight stitched. The trailing edge is similarly done. Spars are held into the vinyls by way of an insert made of neoprene which seems to work very well. The same setup holds the lower spreaders in position in the T-fitting.

There are no retaining vinyls used on the leading edge to retard spreader movement...this is something we'd like to see changed. The standoffs, which are made of hollow graphite are fastened to the sail by means of tie-wraps like one might find at an electrical supply store. The area is reinforced by no less than 10 layers of fabric. At first we doubted the durability of the fittings but after 200+ logged hours of air time, they have come up none the worse for wear. All in all, this is a very solid kite.

The Big Brother is not a kite for everyone...by the same token, however, the Mercedes-Benz was not designed as a mass-consumption auto. The price tag cannot be ignored. Neither can the potential for performance. We're inclined to agree with whoever said: "You get what you pay for." This one's worth it!



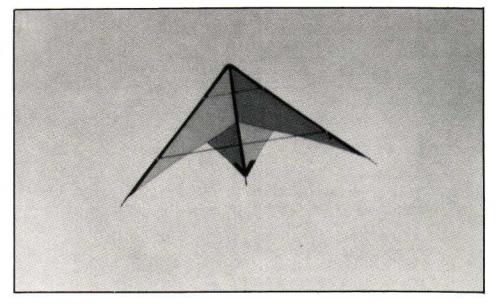
Note: The Spiderwing II is the second kite in a modular kite series by Catch The Wind. The grouping is comprised of four models, each of a separate sail configuration, with interchangeable sparring sets. Because of the greatly differing performance levels, we have decided to review each as a separate kite.

The Spiderwing II is an interesting exercise in kite building. The second in Catch the Wind's interchangeable wing series, it sits in the middle of the wind range for the entire line. We chose initially to fly it on the high end of its intended spectrum in breezes of 12-15 MPH.

Flying on the Spiderline provided with the kite (as are a pair of flying straps), the kite showed us a good deal more than we had initially expected. (Earlier flights with a prototype set had proved questionable in some areas) There was a momentary stall, rather like a very short halt, just after the Spiderwing had launched. It was almost as if the kite was deciding a direction in which to proceed. Then it took off like a rocket. This brief pause happened on nearly every launch for the duration of the afternoon. The kite lost no altitude. just delayed slightly before beginning its sustained flight.

The Spiderwing's performance was generally above average, although it was obvious that we were at the kite's upper wind level. There was considerable wing distortion that was accentuated by gusts. It showed up primarily as wing-tip oscillation although there was also a fair amount in the inside leading edge in tight turns. It was not unusual but rather characteristic of kites at the upper levels of their range.

Tight and angular turns showed up as good numbers for the Spiderwing. We experienced varying amounts of oversteer which didn't appear to be severe and was reasonably controllable. The kite's turning ability was enhanced by its overall speed, which was likewise above average. At MODEL: SPIDERWING II FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: filament-wound (fiberglass) WIND RANGE: 2-18 MPH CONFIGURATION: delta-type (78 inch wingspan) SKILL LEVEL: intermediate MFGR'S SUGGESTED RETAIL: \$119.95 MANUFACTURER: CATCH THE WIND



times, the Spiderwing even appeared to accelerate in turns though line pressure was kept constant. Accordingly, the pull generated by the Spiderwing was a bit more than might be expected for a kite of this size.

Off-wind flying was good but reauires a light touch. Although we were able to land and relaunch the kite with comparative ease, its lack of standoffs made us pay more attention than we might have had it been so equipped. Once it is on its back, it's fairly well down. While the addition of them would probably enhance the kites low-wind performance as well as undoubtedly improving its relaunch capabilities, it may be that their addition would hamper the modular approach that has been taken with the Spiderwing line.

At first glance, the Spiderwing appears to have been constructed very quickly. The graphics employed are simple...construction is straight forward. Seaming is basic...no frills. This says nothing about the kite's ability to handle accumulated hours of air time. It appears the kite can take it. We presently have about 5 hours on our test kite over varying wind conditions and have found very little evidence of stress. The one item that we did encounter problems with lies at the T-fitting. The lower spreaders are held in place firmly by a rubber band-type item. This rubber band fits over two clips which one might find on a ball-point pen. These clips are glued to the lower spreaders, one per each. Do they work? Yes. Do they present a "professional" type package? No. The problem is that our rubber bands broke (or were misplaced). Perhaps, if the clip system is going to be retained, a couple of spares might be packaged for easy replacement.

The Spiderwing II is an exercise to attempt to produce in modularized form, a "kite for all seasons". It has been constructed within certain parameters. To do otherwise would defeat the purpose of the idea. The constraints of having to utilize the same sparring in each sail design present a set of limitations to which concessions must be made. The kites produced fly well. Whether or not other specific products can outperform each individual Spiderwing design is a moot point. Certainly few, if any, will come close to the total design concept. There is, most likely, something here for everyone!



We caught our first glimpse of the Interceptor at the AKA Nationals last fall. It was just through the camera lens, though, and we never got to fly one. The KTA convention in Dallas afforded us our first chance to nab a couple from Paragon's Craig Wong. The models that he set up for us were both "S" versions utilizing heavy graphite frames (AFC 2540).

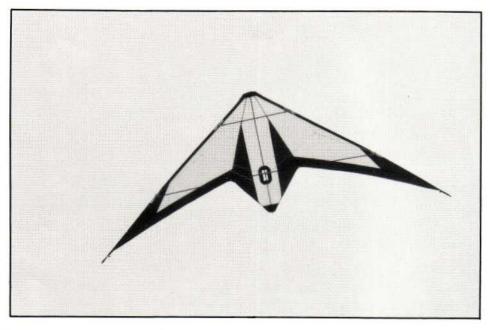
From the onset, it was obvious that these units were intended for significantly heavier winds. They were a shade smaller than the usual "fullsize" kites. The fittings used were positive and heavy. Although standoffs were employed, they were on the short side. Still, the sail was quite taut.

Undaunted by the obvious, we took the Interceptors out in some verylight wind (4-5 MPH). The performances were below average...this particular model simply wasn't designed for this low stuff! As the wind picked up, so did the kites' effectiveness. At 8+MPH, we began to get a glimpse of the capabilities of this particular model. Flying on 110' of 135lb. Spectra, the Model S's cut some very nice figures. Straight line tracking, tight and wide turns, and angular maneuvers all got marks significantly above average.

As the winds breached the midteens, the Model S's really started to get into it. Surprisingly, the kites were not as fast as we had anticipated. This made the Interceptor a natural for team flying. There are a couple of other factors that will help the team aspect, as well.

The first of these is the Interceptor's relatively small amount of pull. This is a real plus in high wind. Lighter team members won't have to struggle to hold their ground with this one.

The second factor is the near absence of either over or understeer. The kite can be very accurate. Couple this with an available window of better than 170 degrees and MODEL: INTERCEPTOR FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: graphite (AFC .2540) WIND RANGE: 7-25 MPH CONFIGURATION: delta-type (99 inch wingspan) SKILL LEVEL: intermediate/advanced MFGR'S SUGGESTED RETAIL: \$149.00 MANUFACTURER; PARAGON SPORTS KITES INT'L



better than average overall stability and the Interceptor begins to look even sweeter.

Turning our attentions to the Interceptor's construction, we noticed some "echoes" of another kitemaker. The seams and general construction reminded us of George Edmonds' Geosport. Checking with Paragon's Craig Wong confirmed the notion: the two are close friends. The kite is, like most of the "Marina Green" products, very well made. Reinforcement is applied in the usual stress points and appears very clean. All seams are rolled and zigzag stitched. The trailing edge is both single and zigzagged.

Retaining vinyls are placed both above and below the spreader vinyls on all wing fittings. This will present some problems when spar placement eventually has to be done, but in the meantime, they're going nowhere! Vinyls on our highwind models are thick-walled. This is one very solid kite!

The nose on the Interceptor is cut wider than many kites. Thisserves to enhance the flexibility, and therefore the turning ability of the kite. Our test models had only one flaw: that being that the spine could have been a bit longer. When the retaining bunji cord was tightened, the resultant pressure on the sail worked to pull it towards the center from the standoffs rather than tighten it on a nose-to-tail basis. There are two ways to deal with the situation: either raise the bridge (lengthen the spine), or lower the river (shorten the sail). When we contacted Craig, he had already remedied the problem in the second manner on production models.

The Interceptor S was built to withstand some pretty significant wind. We have little doubt that it would continue to function, distortion-free, into the 30's. Although we tested them primarily as team kites, they have obvious capabilities as individual performers. Those fliers who are looking for great amounts of pulling potential or blinding speed should probably take their search elsewhere. They have, however, earned a place in our kite bag. Their potential as a mid/high range team kite is too good to be ignored!



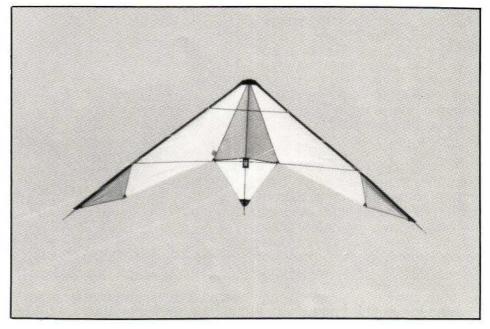
When you've got a successful kite on your hands, it seems only fitting to introduce an update now and then. This is exactly what Mike Simmons has done to his basic Skyhawk. This new version carries the same basic centerpanel design with the changes showing up on the outer wings.

Unlike its predecessor, the Hawk II is equipped with dualstandoffs...but with a twist: the outboard of the two runs from the trailing edge to an extension of the lower spreader vinyl on the backside of the sail. This is the first adaptation of this type that we have seen in some time. It is faintly reminiscent of the old Vertical Visuals Griphon. The intent here seems to be that of a sort of "battenless batten". It works...kind of.

Like most of Skyward's line, the Hawk II works the ground with ease. Turning, likewise, is in the above average category even with the presence of significant oversteer. Like the companion NLK, NBK, and RBK, the II's oversteer is engineered in. It's also designed to be easily controllable. It accounts for the kite's ability to float, or sideslip, with comparative ease. It also accounts for a somewhat diminished wind window (about 155-160 degrees).

By comparison to other kites in the line, the Hawk II is a fistfull. Even in breezes of 10-12MPH, the pull can be substantial. Although the kite is a fair performer, it is a heavy flyer. This quality doesn't persist on a proportional basis out to the edge of the window. On the sides of the wind, the II is quite light in its touch but can be tentative in its execution. We were unable to place the kite on the ground with great precision, although getting it there was certainly not a difficulty.

Launches are accomplished easily but can be a bit provisional at the sides of the window. Our model had an obvious preference for the downwind side. Takeoffs after pulling the kite into a wingstand were easier, by far, in that direction. MODEL: HAWK II FABRIC WEIGHT: .75 oz. ripstop FRAMING MATERIALS: graphite (AFC 2400) WIND RANGE: 2-30 MPH CONFIGURATION: delta-type (102 inch wingspan) SKILL LEVEL: intermediate/advanced MFGR'S SUGGESTED RETAIL: \$175.00 MANUFACTURER: SKYWARD KITES



Square and angular turns were handled cleanly and without fanfare. The Hawk II goes through these paces nicely but with a heavy hand. This is not to imply that the kite is slow...it's not...but it's no speeder either. We suspect that the sparring utilized would make these even better in high wind situations.

There is a modicum of noise produced by the Hawk II. It comes mainly from the fact that the outer portions of the sail are not held in a taut position by the outboard standoffs. Again, it is a nice resonant buzz that many will enjoy.

Workmanship on the "II" is quite good, but there are a couple of minor items that need to be addressed. First, the outboard standoffs need to be capped on the upper ends. Ours kept wanting to force their way through the holes in the vinyls created for the wing spars. Secondly, we'd like to see the vinyls themselves beefed up a bit. The sparring of the Hawk II is on the heavy side, so the potential is certainly there for higher wind usages. The present vinyls are thin-walled and give in to distortion in those situations. (Subsequent checks with Skyward have informed us that the vinyl problem has been dealt with).

All of that notwithstanding, the HawkII is a kite that loves to fly. There is also something to be said for the comparative pull generated. Even breezes in the mid-teens will give the flyer a fair tug. In the speed department, the Hawk II is slightly above average. These two items combine to produce a kite that is quite capable of giving the flyer a good afternoon's exercise. Once the winds pick up, we have a feeling that this could turn into a real workout.

The Hawk II is a second generation kite. It's reasonable to expect that there be improvements made in the basic design...and there are. Flyers who enjoy ground-work as part of their flying routine will find an ally in this kite. The built-in oversteer may take some getting used to, but the payoffs are worth the effort!



When we first saw Frontier Kites new Team Storm at last January's KTA show, our first impression was... Wow!...that's a whole bunch of sail! It's going to pull us right out of our socks! With a wingspan of 100" and a spine of 43", it's truly one of the bigger sail areas available in what might be referred to as a "standard" size kite.

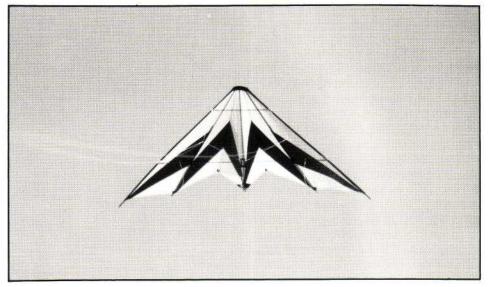
Accordingly, a couple of weeks later, with the wind buzzing back and forth between 15 an 20 MPH, we put our standard 135lb. line back into the bag in favor of 120' of 300lb. Spectra. Turns out that we could have probably gotten away with 200lb. but in the gusts, we sure appreciated the extra poundage!

The Storm proved to be singular in one overwhelming aspect...itsspeed. The kite is beautifully slow. Slow, you say? You bet! And virtually unshakable. Completely solid. There was virtually no trace of either over or understeer. The Storm's low aspect ratio design allowed it to perform whatever command we gave it with steady deliberation.

The kite's pull is solid and remains steadily so for such time as it's kept in the power zone. It is a uniform pull, with an absence of jerks and jostles. The pleasant part here, is that the kite moves slowly in spite of the heft. What this means is that the Storm can be taken overhead, turned directly downwind, and landed there with only a moderate amount of forward movement...this in fairly stout wind.

In the same turn, the Storm functions well off-wind. It lands quietly and takes off without bobble or fanfare. There is no slurring or dipping. If the takeoff position is from a wingtip stand, the Storm will simply proceed slowly across the field at whatever height above the ground the flyer is capable of maintaining.

When a kite of size moves slowly in large winds, it is usually for one of two MODEL: TEAM STORM FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: graphite WIND RANGE: 6-25 MPH CONFIGURATION: delta-type (100 inch wingspan) SKILL LEVEL: intermediate/advanced MFGR'S SUGGESTED RETAIL: \$230.00 MANUFACTURER: FRONTIER KITES



reasons: either the bridles are set in the wrong position or the kite was simply designed to perform that way. In the case of the former, there is usually a characteristic "porpoising" as the kite tries to override the setting. Happily, there is a complete absence, of any "fishy" maneuvering on the part of the Storm. We must conclude that the design was one of intention.

The Storm is very stable, its reactions being predictable in nearly every case. One flyer's comment was that the Storm flew as if the control lines were rigid...a move on the part of the flyer resulting in a corresponding move by the kite...no less, no more.

There is a moderate amount of noise produced by the Storm. It is not particularly overwhelming. This in spite of the fact that the kite is equipped with four standoffs. These standoffs "divide" the trailing edge of the kite into three sections. The outermost of these three is where the tension is least, subsequently producing the noise. It's possible that a stiffer outboard standoff spar might alleviate the problem.

In the quality department, the Storm gets good marks. All seams, save the trailing edge are double stitched. The trailing edge is rolled and single stitched. There are retaining vinyls below both upper and lower spreader connections on the leading edge. There are also retaining vinyls on the spreaders themselves assuring the same fit each time the kite is assembled. Quick change bridles are also employed along with heavy duty line clips. Dacron is used to reinforce stress points.

We could, in fact, find only one area for suggested improvement. The lowerspreaders must be inserted through the T-vinyl each time the Storm is assembled. A ferrule on the end of one serves as the center connection piece for the other. This fitting, because of its frequent removal and replacement, has a tendency to enlarge the vinyl and becomes loose very quickly. We'd like to see a solid fitting that either remains "attached" to the spine or is treated in some other way so as to retard movement.

The Team Storm holds every potential of becoming a team kite of note. Potential flyers should be prepared to respect its size and pulling ability. It is not a kite of speed...in fact, it ranks with the slowest that we have tested. That is appropriate for its intended function...team flight. This is going to be a good one!



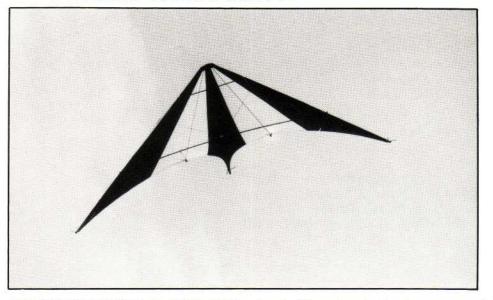
There's a lot of Ted Dougherty in the new Team High Fly...and a number of the innovations that we first saw utilized in his Evolution kite. This latest version of the Team High Fly, for instance, boasts the same T-fitting and wing end pieces. Our test model was also equipped with Easton carbon-aluminum spars which gave it an extended low end wind range. Accordingly we chose to begin our flight tests right down at the bottom...2-4 MPH.

Flying on 110' of 80lb. Spectra line the Team High Fly scored well above average in nearly every category. What we noticed right away was the kite's great stability. At one point, we put the kite directly overhead and grabbed both lines with one hand. The High Fly stood stationary for nearly 2 minutes. It was easily controlled and very forgiving in all circumstances.

For a kite of it's large size, the High Fly is not a big puller. A lot of this can certainly be attributed to the overall lightness of the product. Still, the comparative small weight vs. size didn't detract from the kite's ability to hold a smooth track. We were always aware of the kite's presence as it gave us good feedback even in the real light stuff.

Speed, similarly, is not a prime consideration for the High Fly. Its maneuvers are performed with nearly deliberate slowness. This flight characteristic held true whether the kite was directly downwind or out on the edge. This should help things out nicely in situations where the kite's maneuverability is under inspection. There are a couple of things that may account for this characteristic.

The first is that there is a fair amount of billow in the sail even though the kite is equipped with standoffs. At the lower end of thewind spectrum, the sail can be seen to move forward towards the flyer in the turns rather like a tacking sailboat. It seems, at times, as if the lower spreaders could almost be a bit longer. That, howMODEL: TEAM HIGH FLY FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: carbon/aluminum (Easton) WIND RANGE: 3-25 MPH CONFIGURATION: delta-type (103 inch wingspan) SKILL LEVEL: novice/intermediate/advanced MFGR'S SUGGESTED RETAIL: \$195.00 MANUFACTURER: HIGH FLY KITE CO.



ever, would negate one of the very positive aspects of the Team High Fly.

It is one of the more forgiving kites that we have tested. At very few points in our tests did we become involved in "unplanned" maneuvers that we felt we could not escape from easily.

The only situation which presented a bit of problem was that the Team High Fly showed a tendency to lose altitude coming out of upwind turns. Pulling on the upper lines to gain lost altitude sent the kite into a vaulting semi-stall at the turn's apex. It was, however, predictable and could be compensated for without much problem.

The real forte of the Team High Fly was enhanced by its great stability. That was its offwind capabilities. There is a marked bit of oversteer that may take some getting used to. Once mastered, though, the kite is capable of precise landings and takeoffs. It will also wingstand with ease. The only real difficulty encountered regarding the touchy steering is the slight bobble after sharp turns as the kite overcompensates in the return to straight-line flight.

Those who like sound with their flights will find the Team High Fly in the mid-range of the decibel level...this owing to the looseness of the trailing edge. There isn't so much as to prevent you from hearing your music, but it will certainly let you know that it's there.

We noticed an absense of retaining vinyls on the leading edge of the Team High Fly. In time, the spreader vinyls are going to want to travel along the wing rods. A similar situation is present on the spine T-fitting. That element on our test model slid in both directions with impunity. Once again, as the hole in the sail for the fitting is barely 1 inch in diameter, retaining vinyls or a workable substitute may be in order lest the fitting travel in crash situations.

The Team High Fly was produced as a high-performance stunter that could be offered in several option packages. The kite is also available, according to High Fly Kite Co., sparred in either graphite or the more standard filament-wound epoxy (K-75). The other consideration was that it be made at a price that wouldn't maximally stress the public pocketbook. To that end, the Team High Fly is pretty well on target. You're going to see a lot of these in the sky this summer!



The Spectre from Highflyers (England), was presented to us by one ofthe companies principles, Steve Walton, during the AKA Grand Nationals. "This is our 'novice' kite," he had said.

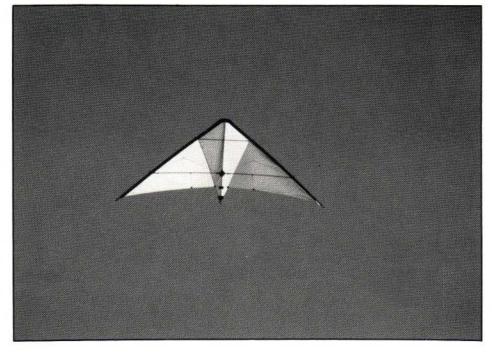
"Why the grin?" we replied. "Give it a try...." he shot back. Now we understand!

The Spectre is a fuller-sailed version of the extremely responsiveBantam (reviewed in Vol. 2, No.4) and it has lost little in the translation. Our lowwind tests in 3-6 MPH revealed that the Spectre was quite at home. Marks in nearly all categories were significantly higher than average. Flying on 90' of 80lb. Spectra, we were particularly impressed with the kite's landing-relaunch abilities. Even in winds which were plainly less than the kite would have preferred, wing work was easy and fun.

The available wind window was anticipated, and the Spectre was speedy enough to make good use of it. Even more of a surprise was the amount of pull generated. It didn't pull us off our feet for sure, but even in 5 MPH you are well aware that there's something out there at the other end.

Plainly, though, the Spectre was designed for a touch more wind. This fact translated to over-rotation in the tighter turns. It also showed up in the time that the kite took to recover after sharp, angular maneuvers. Subsequent flights in 15-19 MPH showed no trace of the over-rotation.

Flights at speed, however, did show us something else. This was avery fast kite! It wasn't quite as fast as the Bantam, but it certainly didn't miss it by much. The same smoothness that we had noticed in low breezes carried through to the high wind as well. Corners involving angles of any sort were a breeze. Likewise, smooth curves of any size were done with ease...and quickly! It's effect was to raise our confidence MODEL: SPECTRE FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: graphite WIND RANGE: 3-35 MPH CONFIGURATION: delta-type (82 inch wingspan) SKILL LEVEL: novice/intermediate/advanced MFGR'S SUGGESTED RETAIL: \$170.00 MANUFACTURER: HIGHFLYERS



level...and we all know what that means!

The responsiveness of the kite combined with our newly heightened sureness to temporarily override our common sense. Within seconds we were attempting what is called by some the famed "spiral of death". You know...that high-wind maneuver where the screaming power dive terminates in a blinding spin with the kite bare inches off the ground... followed by the grim realization that you have absolutely no idea of when to pull the kite out to avoid a real good bash. You guessed it...WHAM!

Sure we broke it...we'd have broken a pick-up truck had it been one! Surprisingly, however, the damage wasn't done to a wing spar. Nope. We broke aferrule...about a5-minute repair and right back in business.

A discussion of sparring brings up another interesting point. The upper spreader is very tight in terms of length. So much so that when the characteristic rubber bands are attached to the wing and center vinyls from the lower spreader, the effect is to lessen the tension on the sail. The upper spreader bar is also located quite a distance from the nose. As the bridle adjusting line runs from the upper wing vinyl to the lower, settings are kept ratherfar outboard. This may account for the over-rotation at lower speeds.

Workmanship on our Spectre was excellent. Stoppers are placed below both upper and lower spreader vinyls to ensure no travel. This has, likewise been done above the Tfitting to retard movement in crashes. Reinforcement has been placed at all stress points.

The Spectre has been touted as a novice kite...and it certainly fits that definition. It is easy to fly by almost anyone who should happen to pick up the lines. But for a pricey retail of \$170, it had better be a lot more than that. Happily, it is. The Spectre may be just the kite for someone who wants to start at the top. The price won't buy you experience, but it will get you a kite that will keep pace with each hour of learning.



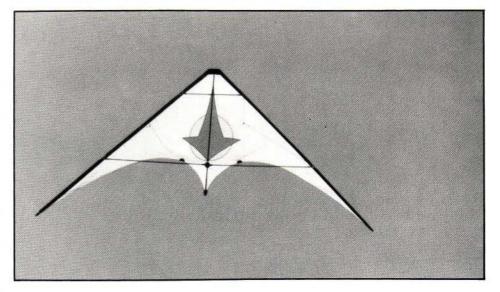
The Starwatcher, from Jordan Air was introduced to us at the AKA convention at Seaside, Oregon. It is similar to, and yet completely different from the Hugo (named after the hurricane), which is manufactured by the same firm. The similarity is that a un-compromised bit of Dean Jordan goes into each one. This is noticeable both in the execution of the sail graphics and the manner in which the kite handles its intended wind situation.

The Hugo, befitting its namesake, is mainly designed for higher wind adaptations. The lightweight graphite-sparred Starwatcher is geared for extreme low winds. Accordingly, we began our testing in breezes which ran the gamut of 5-9 MPH, then later the same day, 15-17 MPH. We flew the kite first on 90' of 80lb. Spectra, then switched as the wind increased to 110' of 135lb. What we found was a kite that seemed to feel at home in mid-range wind, though clearly preferring the more ticklish situations presented at the bottom of the range.

The Starwatcher is a standard-size kite...8' right to the inch, yet it tips the scales at under 9oz. It has a longer spine than its big-wind counterpart and the trailing edge has been cut to a deeper arc. The result is that the oversized center portion couples with sharper wingtips to produce the snappy performance needed to handle light wind. The design also helps to noticeably reduce the kite's pull once the wind breeches the double digits.

For a kite of this size, there is significantly less pull than one might expect. It didn't hurt the performance, though. For all its light weight, the Starwatcheris a cold tracker...smooth and straight.

Although the kite handled all turns easily, it did want to drop altitude slightly in spins. It also had a tendency to slow a bit with each successive revolution. This was only evidenced in very low breezes and we found MODEL: STARWATCHER FABRIC WEIGHT: 1.0 oz. ripstop nylon FRAMING MATERIALS: graphite WIND RANGE: 2-16 MPH CONFIGURATION: delta-type (96 inch wingspan) SKILL LEVEL: intermediate/advanced MFGR'S SUGGESTED RETAIL: \$190.00 MANUFACTURER: JORDAN AIR



that we could alleviate the situation by pulling slightly on the upward line at the bottom of each turn. There was no evidence of either over or understeer in any flight.

The kite landed and launched easily once we got used to the idea that it would rather be in the air! It's light enough that on occasion, it launched on its own. Although it may be viewed as skitterish by some, the Starwatcher will accomplish wing work neatly as long as the proper amount of finesse is used. Sure, you can wham the kite without worry of it breaking up, but with a little practice, the Starwatcher is also capable of being very light on its ground legs. Most anyone can fly the kite: it will take longer to fly it to its fullest potential.

Once the flyer acquaints himself with the handling attributes of the Starwatcher, he will find himself in command of a significantly enlarged flight window. The kite is able to float across the wind in situations that would find many others on the ground.

The Starwatcher got better than average marks in the stability department. This is attributable to the kite's enlarged center panel and the use of standoffs to tension the sail. A unique feature of the Starwatcher is its standoff attachment system. They are actually fastened to the trailing edge by a snap system. This ensures that the same cross-section is presented to the wind (a depth of 71/2") while producing an extremely clean back side of the kite. You won't have to worry about hooking lines over the standoff vinyls here!

Dean Jordan feels strongly about his kites. Each one is guaranteed to be free from manufacturing and parts defects for 90 days. We doubt, however, whether he ever has to make good on his claim...the quality here can only be characterized as excellent. After all, what can you say about a kite maker who doesn't levy an extra charge for custom graphics?

The light-wind Starwatcher is a kite that can, certainly, be flown by everyone...it is an easy performer and quite forgiving. And yet, it is not a kite for every flyer. Light wind flying requires a more special, lighter touch. The Starwatcher nearly demands it. Once the element of finesse is brought into play, the kite can be flown to its true potential...a superlative lightweight!



The Jacana, re-introduced at the year's KTA convention, is the "BigBoy" of Tori Tako's three kite line. With a wingspan of 100" and a spine length of 38", it's a big kite in anyone's book. New sail graphics and some construction changes have made it even more appealing. In a stunt kite world in which we are constantly bombarded with mid-size products, the Jacana is a like a pleasant trip home.

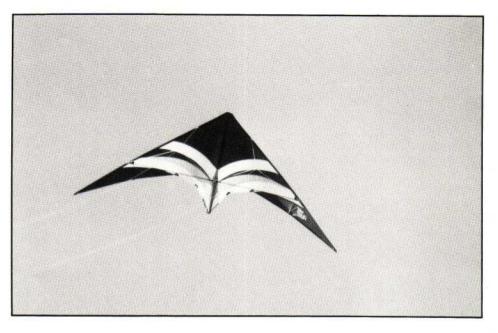
We first flew the kite in a low wind setting (3-5 MPH) on 90'of 80lbSpectra line. Its performance was less than stellar. There was a noticeable amount of oversteer which we eventually corrected by shortening the center portion of the bridle lines. Obviously, we were not working with a light-wind product. It flew, but plainly we were at the bottom limits of the acceptable wind range.

About two week's later, we unsleeved the Jacana in 18 MPH winds andhooked it to the end of two 120' lengths of 300lb. Spectra...BIG difference! If you've been resting on your backside all winter, this is one kite that will quickly identify all of those sagging muscle groups.

The Jacana scored above average in all categories and exceptionally well in a couple of them. Evidence of low-wind oversteer was reduced to a slight bobble at the end of the turns. The kite tracked smoothly with slightly more zip than one might expect from a full-size product.

One of the more enjoyable points was the Jacana's enlarged flight window. We were able to work it easily through 170 degrees and in some cases, further. Performance off wind was notable, with wing tip touches, landings, and relaunches all handled in very stable fashion.

In spite of the fact that the Jacana utilizes two standoff spars on each side of the wing, and employs wing battens to boot, it still generates a lot MODEL: JACANA FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: graphite WIND RANGE: 5-25 MPH CONFIGURATION: delta-type (100 inch wingspan) SKILL LEVEL: intermediate MFGR'S SUGGESTED RETAIL: \$199.95 MANUFACTURER: KITEMASTERS INT'L (Tori Tako)



of noise. True, it's fairly resonant noise, but folks are still going to hear this one from waaaay down the beach!

There are a number of ideas employed in the making of the Jacana that we liked. The leading edges are three part systems, the ferrules of which fall beneath the spreader vinyls. These ferrules are cut into three pieces and the vinyls are glued directly to the center portion. Slippage of the vinyls is virtually impossible plus, if an exchange needs be made to replace the occasional broken rod, the vinyls/ferrules come off without a struggle...nifty!

Reinforcement has been added at all the proper stress points. Thetrailing edge of the Jacana has been single stitched and zig-zagged. All kite graphics save one front panel are rolled seams. The arrow nocks on the ends of the standoff spars have been heated and flattened around the bunji cord to prevent them from being accidentally jettisoned during flight. Wing battens are secured by Velcro tabs and are made of graphite.

The only item that we might question is construction of the vinylT-fitting. Rather that drilling the vinyl straight through to accommodate the spine, the rod is inserted through one end then out through a hole in the side...an arrangement more conventionally used in leading edge treatment. The fitting then protrudes through a 1" diamond-shaped hole in the sail. The problem arises as the upper part of this hole rides up over the vinyl fitting. As pressure on the sail increases in high wind, the tendency is for it (the sail) to ride down on the fitting. This could lead to tears in the fabric rather quickly. A crash on the nose and the resultant forward movement of the spine could accelerate the situation.

As an overview, the Jacana was a delight to fly. On the particular day that we chose to test it in the winds that it was designed to handle, it proved a runaway favorite for everyone that flew it. It's a large, powerful kite with the wherewithal to handle turns and groundwork easily. It is a loud kite...it is a brassy kite...and when the conditions are right, it's got enough in the performance department to back it up!



The Probe Ultra Light is an interesting package of new ideas. Atbase, the kite is an exercise in simplicity of design. There is nothing fancy about the design...no frills, no excesses. An examination of the kite reveals a number of items both present and lacking. The leading edge wing tips are bare spars with end caps. Over these end caps are stretched tabs of elastic from the sail which are, in turn held in place by the next larger size end cap. It works!

The lower spreader rod, a one piece item, is secured to the bare endof the spine rod by a length of surgical tubing. Lower bridle ends are cross-tied to the spreader before it is placed onto the spine. There is no conventional T-fitting...and that works too!

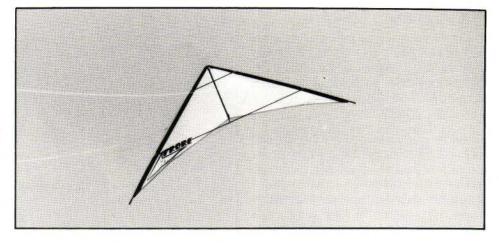
The actual spine rod fits inside a case of Dacron which forms a stiffened keel on the face of the kite. The total package presents itself as an 83" kite that weighs only about 61 ounces. With a spine of only 181 inches, it also presents us with one of the higher aspect ratios that we have tested.

Initial testing of the Probe UL was done at the low end of its 2-20MPH spectrum. In light wind of 3-5 MPH, the kite garnered numbers well within average. Lines used were 80lb. Spectra at a length of 90 feet. The Probe UL tracked well and handled sweeping turns with comparable ease. Likewise, square and angular turns went well. Tight, repetitive turns, however, showed a bit of problem.

The UL is capable of turning extremely quickly...so quickly, infact, that we found ourselves constantly watching so as not to pull the kite from the air. A couple of items conspire to bring about the condition: first, there are no standoff spars on the Probe; and second, the sail is fairlytaut. We were able to "pull" the kite from the air at virtually any point by a yank on the lines.

This is not to say that the Probe UL is difficult to fly. In fact, we found it

MODEL: PROBE UL FABRIC WEIGHT: .75 oz ripstop nylon FRAMING MATERIALS: filament-wound (fiberglass) WIND RANGE: 2-20 MPH CONFIGURATION: delta-type (83 inch wingspan) SKILL LEVEL: novice/intermediate MFGR'S SUGGESTED RETAIL: \$69.95 MANUFACTURER: K-LINE KITES



quite flyable. Unlike most higheraspect ratio kites, the Probe UL launches straight up virtually every time...there is little or no slurring from any point of takeoff. It proved to be above average in the stability column and utilized a good deal more wind window than comparably-sized products.

The lack of standoffs leads to one further problem that is common toflat-sailed kites: when it is down, it is truly down. Although we were able to pick the kite up from the leading edge, the diminished sail size makes this a difficult option. The saving grace here is that in most instances, the kite is forgiving enough to avert most unplanned ground contacts. In many cases, such as a downwind turns performed on the sides of the window, an uneven pull on both lines will "shoot" the Probe through the turn with ease.

The Probe UL's long (38 inch), straight, trailing edge, producesgood amounts of sound even in the lightest winds. This same long edge combined with a bridle that locates the clips at a fairly outboard position allows the kite to "float" across the wind window in a nose-up attitude. While most pilots view this as a deficiency, the malady is controllable, to a high degree, by the flyer and can add some interesting variances to the standard flight routine.

There are relatively few things that we would change on the ProbeUL.

There are no stops on the leading edge either above or below any of the vinyls. At lowered wind speeds, this presents no problems as the vinyls are attached by running the spar though the end, then out the side rather than by a drilled hole through both "sides" of the tube. It may prove a different story in high winds. Likewise, upper bridle points are attached around the leading edge spar above the upper vinyls. They are free to ride towards the nose. A simple slipping of one part of the securing loop below the vinyl provides an easy alternative. We'd also like to see some stops added on the lower spreader to prevent the bridle lines from sawing on the tubing that attaches it to the spine.

Workmanship on the Probe UL is generally good. Although it is essentially a two-piece sail, the sewing is well done and fittings are clean.

At a suggested retail of \$69.95, the Probe UL holds the prospect of genuine light-wind flying at a price that will be within the grasp of many. That it will improve the skills of the flyer is a foredrawn conclusion...light air is, perhaps, the hardest situation to master. While there are a host of other products that may perform the same function in better fashion, it seems doubtful that they will do so as economically!



The large version of the Speedwing is an exercise in simplicity. In fact, when we opened the bag, we thought that some parts had been left out. Only three spars comprise the working skeleton of the kite...two leading edge rods and a lower spreader. There is no spine. There is no upper spreader.

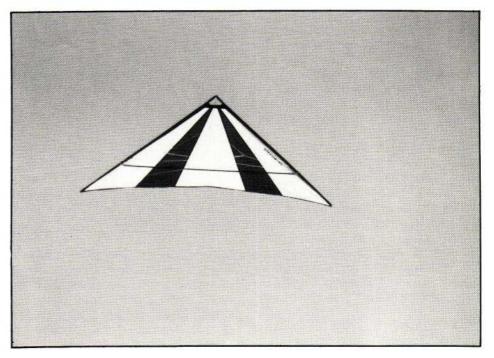
Bridling is, as might be imagined, unusual. Basically, it is a three-point crossover system that ties into the lower spreader vinyls and a metal ring which is line-suspended from the nose. The effect is that which we used to get when we played "cats cradle" as children.

OK. So would it fly? That was the question we asked ourselves when we positioned the bridle on the marks, lifted the kite by the clips and watched as the nose assumed a downward attitude of nearly 35 degrees. The answer was a qualified "perhaps"

In light winds of 3-4 MPH, we had to adjust the Speedwing significantly before it would take to the air either with or without assistance from a field crew. At that point, the kite flew marginally. Perhaps we had picked the wrong day. Certainly, we had picked the wrong wind.

Another afternoon rolled around which saw the breezes at 12-15 MPH and, again, we unsheathed the large Speedwing. This time, we had gotten it right! Bridle adjustment on the kite is critical. Positioning the settings on the marks, we found that the kite would only hop around, just off the ground. Following the instruction manual, we set the clips 1/4" closer to the nose and the kite shot into the air.

Lacking the structure to confine the billow of the sail, the Speedwing is an unusual flyer. When gusts hit the sail, it billows, flexing the spreader rod, and narrowing the profile that is presented to the wind. This can make the Speedwing somewhat jerky in flight but not overly so. MODEL: SPEEDWING FABRIC WEIGHT: .75 oz. ripstop nylon FRAMING MATERIALS: filament-wound (fiberglass) WIND RANGE: 5-30 MPH CONFIGURATION: delta-type, no spine (69 inch wingspan) SKILL LEVEL: intermediate MFGR'S SUGGESTED RETAIL: \$130.00 MANUFACTURER: VLIEGER-OP



Wide turns which utilized the Speedwing's bowing lower spreader.proved good with one very interesting point. We could only force the Speedwing so far. In the case of a decreasing radius turn, there is a point at which the kite will turn no tighter. No amount of additional pressure on the lines would force the Speedwing to go deeper into the turn. It simply stayed at its maximum. This could be a real asset in the precision department. Square and angular turns were handled by the kite without problem.

The large degree of billow in the sail had yet another positive attribute. We found that we were able to pull the Speedwing out of the wind quite easily, particularly overhead, let it fall, and then save it before it crashed by pulling on the lines to "re-inflate" the sail. It's a nifty looking, and quite safe maneuver with this kite!

Lacking standoffs (we're not sure exactly how they might be attached on a kite of this configuration), the kite's landing-relaunch abilities are somewhat impaired. When we did coax it to the ground, it was generally a good solid landing, though we had to be careful to not let the kite fall too far backwards lest it collapse. Not that this presented much problem... the Speedwing is launchable from nearly any position. The flyer just manipulates the rear edge of the sail to a facing position, jerks the lines and the kite will take to the air.

It will also take a dead-on, pulling on the lines, ground bash at speed, better than any filament- wound fiberglass-sparred kite that we have ever flown. There is not much that can be broken.

As there is little tension on the trailing edge of the sail save that presented by the lower spreader and induced by the wind, the noise level of the Speedwing fluctuates a good deal. It can be pleasantly quiet one moment and quite resonant the next.

As a precision flyer, the Speedwing can stand on its European record. We see it, however, as a kite with great design capability as a highwind machine. At that, it may be one of the best in the business!

# SOUT HEAST CHAM PIONSHIPS FEBRUARY 23-24, 1991

INDIVIDUAL PRECISION NOVICE

	INDIVIDUAL PRECISION (Final)	- NOVICE
4. 5. 6. 7. 8. 9. 10	Mike O'Boyle Jeremy Moore Wayne Liebe Duane Horton Martin Hathaway Jane Hawkins Mike Giannini Tim Welch Bill Garrett . Alex Curbelo . Dave Eaton	76.90 75.20 72.63 72.36 72.33 68.26 66.26 65.93 66.93 62.90 62.13 58.76
	INDIVIDUAL PRECISION - I (Final)	NTERMEDIATE
5. 6. 7. 8. 9. 10 11 12 13 14		79.96 79.66 77.43 75.50 75.40 73.53 71.76 69.90 69.83 67.83 67.83 67.30 66.60 65.00 65.00

# INDIVIDUAL BALLET - EXPERIENCED

(Final)	
1. Quinn Rickman	84.30
2. Ted Dougherty	81.80
3. Robert Bono	80.80
<ol> <li>Dave Arnold</li> <li>Benji Brazell</li> </ol>	80.10
	77.16
<ol><li>John Grodzinski</li></ol>	76.90
7. Ben Futrell	73.86
8. Bill Lee	73.00
9. Jim Younce	70.00
10. Ray Melikian	67.06

MARCH 2-3, 1991

KAOS KITEFEST '91 RESULTS

### INDIVIDUAL PRECISION - NOVICE (Final)

1. Leon Cusson	Phantom	77.83
2. Joe Clark	Spin-Off	77.30
3. Doyle Dunn	North Shore	68.46
4. Carlos Looper	(Home made)	67.00

# INDIVIDUAL PRECISION - EXPERIENCED

	(Final)	
<ol> <li>Benji Brazell</li> </ol>	Spin-Off	78.33
2. Robert Bono	NBK	70,87
3. Ben Gomez	NBK	68.17
4. Bill Lee	NBK	65.00
5. Drew Commins	Hawaiian	58.90
6. Aldo Ramirez	NBK	48.90

# INDIVIDUAL BALLET - EXPERIENCED

	FINCI	
1. Robert Bono	NBK	83.60
2. Aldo Ramirez	NBK	77.23
3. Bill Lee	Razors Edge	76.37
4. Ben Futrell	NBK	75.33
5. Ben Gomez	NBK	74.43
6. Gary Shallbetter	WASP	66.77
7. Benji Brazell	Spin Off	64.03

# TEAM BALLET - EXPERIENCED

(Fir	nai)	
1. Windswept	Firedarts	73.80
(Tom & Susan Mason 2. Looking Skyward (Robert Bono/Ben G	NBKs	63.73

	nal)	
1. Michael Moore		84.76
2. Ben Gomez		81.70
<ol> <li>Chris Belli</li> <li>Aldo Ramirez</li> </ol>		81.56
4. Aldo Ramirez 5. Paul Phillips		79.13 76.80
6. Lucia Phillips		74.36
<ol> <li>Lucia Phillips</li> <li>Spot Ramirez</li> </ol>		73.66
8. Henry Dimmick		70.00
9. Cheri Jenkins		68.80
10. Chris Cooper		62.23
11. Terry Nergaard		60.43
INDIVIDUAL PRECI		CED
1. Quinn Rickman	inal)	81.76
2. Ray Melikian		78.70
3. Ted Dougherty		76.40
4. Jim Younce		76.16
5. Benji Brazell		74.76
6. Robert Bono 7. Dave Arnold		73.60
7. Dave Arnold		73.43
8. John Grodzinski		72.50
	ALLET - MASTERS	
1. Susan Batdorff	Big Brother	87.60
2. Cris Batdorff	<b>Big Brother</b>	86.90
3. Billy Jones	Phantom	86.30
4. Ruth Bradley	Squadron Dart	84.00
5. Bob Hanson	Thunder Hawq	83.13
6. Roger Chewning	Flexifoil (3)	82.93
7. Frank Loudenslage 8. Jim Bunce		82.16
	Squadron Dart	82.10
9. Mike Lathrop 10. Susie Edison	NBK	81.33
11. John MacLauchla	Flexifoil NBK	81.00 80.83
12. Bill Edison	Flexifoil	79.46
13. Arlene Anderson	Aroara	79.06
14. Pete Dolphin	Team High Fly	78.80
15. Fran Gramkowski	Team High Fly	78.46
16. Steve Santos	Team High Fly	77.93
	CISION - MASTER	S
1. Bob Hanson	Thunder Hawa	91.00
2. Susan Batdorff	Big Brother	88.40

**INDIVIDUAL BALLET - INTERMEDIATE** 

(Final)

84.76 81.70 81.56 79.13 76.80 74.36 73.66	<ol> <li>Bill Edison</li> <li>Ruth Bradley</li> <li>Cris Batdorff</li> <li>John MacLauchlo</li> <li>Mike Lathrop</li> <li>T.C. Powers</li> <li>Pete Dolphin</li> <li>Jim Bunce</li> <li>Billy Jones</li> </ol>	Peter Powell Squadron Dart Big Brother IN NBK NBK Phantom Team High Fly Squadron Dart Phantom	86.16 86.06 85.96 84.33 83.63 74.43 71.26 68.16 67.33	
70.00 68.80 62.23 60.43	TEAM PI EXPE	RECISION - RIENCED Final) Trilogys Jordan Airs	74.20 71.20	
81.76		- EXPERIENCED		
78.70 76.40 76.16 74.76 73.60 73.43	1. Windswept 2. Liberty Flyers 3. Looking Skyward 4. Kapitol Air Korps 5. Screeming Klig-on	Jordan Airs	77.23 77.20 71.36 70.73 65.83	
72.50		LET - MASTERS		
87.60 86.90 86.30 84.00 83.13 82.93	<ol> <li>Skyward Edge</li> <li>Hurricane Squad</li> <li>Deja Vu</li> <li>Edison Flight &amp; Pow</li> <li>Team High Fly</li> <li>Flying Circus</li> <li>Highflyers</li> </ol>	Hawk IIs Squadron Darts Big Brothers	93.50 88.83 88.33 88.30 86.36 86.23 86.23 86.06	
82.16 82.10	INDIVIDUAL INNOVAT	TIVE - OPEN (Unclo Final)	ussed)	
81.33 81.00 80.83 79.46 79.06	1. Dave Simpson	Spin-Offs eter Powell Wing	84.13 78.66 72.93 71.93 20.00	
78.80		DLINE (Unclassed	0	
77.93 91.00 88.40	1. T.C. Powers 2. Dennis Kucmerow 3. Bob Hanson 4. Bill Edison 5. Billy Jones	Final) Revolution ski Omni Revolution 2 Revolution Phantom	84.76 81.13 81.10 70.30 50.43	

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3 Bill Edison



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# INDIVIDUAL PRECISION - NOVICE

	INDIVIDUAL PRECISION - NOVICI (Final)	E
1. 2. 3. 4. 5. 6.	Phil Petersen Dru Hansell Gary Miyata Chester Koga Janice Gull Shea Gull INDIVIDUAL PRECISION - EXPERIENCE	88.20 86.13 85.87 85.40 81.87 80.53
1. 23.4.5. 6.7.8. 9.10.	(Heat 1) M. Takahasi Jeff Burr Hiko Tsuchida Jan Ozolins Klyph McKormick M. Aoki H. Saltoh Raymond Taylor Russell Satchwill Shizuo Daigoh INDIVIDUAL PRECISION - EXPERIENC (Heat 2)	94.00* 90.67* 89.00* 88.67* 87.00 85.67 85.00 84.00 83.33 71.33 <b>&gt;ED</b>
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	Bert Sumida George Vance Chun Ross Tyson S. Satoh S. Seto Tomas Sasaki Maris Ozolins Y. Yamaguchi Yumi Fulimori	82.33* 81.93* 80.40* 79.67* 79.20 77.27 76.93 75.00 74.80 72.93 CED
1.23.4.5.6.7.8.	Hiko Tsuchida S. Satoh Bert Sumida Jeff Burr George Vance Chun Jan Ozolins Ross Tyson M. Takahasi INDIVIDUAL BALLET - EXPERIENCE	85.27 84.47 83.73 83.53 82.67 82.20 81.93 79.47
1. 2.3.4. 5.6. 7. 8. 9. 10. 11. 12. 13.	Ross Tyson Y. Yamaguchi Tomas Sasaki INDIVIDUAL PRECISION - OPEN	82.00 81.73 80.03 79.13 78.57 77.83 76.83 76.83 76.03 69.43 69.43 65.30 65.10 64.23
1.2.3.4.5.6.7.8.9.	(Final) Scott Aughenbaugh Alan Nagao Alan Guillen Darrin Skinner Jim Richey Kathi Larrabee-Ramirez Robert Hamilton Chuck Bradford Laurie Richey INDIVIDUAL BALLET - OPEN	92.42 89.83 86.00 85.33 79.67 77.25 72.00 68.92 61.17
1.234.567.89.10	TEAM BALLET - EXPERIENCED	93.53 90.27 87.17 86.43 84.77 82.37 78.93 76.17 73.40 52.97
1. 2.	(Final) Banzi Osnas Dandy	95.20 74.83

	(Final)	
1. 2.	Banzi Osnas Dandy	

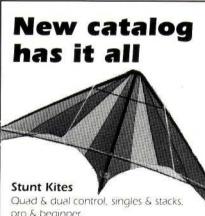
	TEAM PRECISION - EXPERIEN (Final)	NCED
1. 2. 3.	Jams Dandy Air Affair	69.78 52.78 16.00
	TEAM PRECISION - OPE (Final)	
1. 2. 3. 4. 5.	Team High Performance Prevailing Winds Tokoya No.1 Tsunami Flight Team Zephyrus	96.62 92.67 91.40 90.20 82.65
	TEAM BALLET - OPEN (Final)	
1.234.567.	Team High Performance	95.10 93.60 89.20 82.90 81.70 81.27 78.73
	INDIVIDUAL INNOVATIVE - Une	classed
1. 2. 3. 4. 5.	(Final) Scott Aughenbaugh Alan Nagao Phil Castillo John Oliver Bert Sumida	96.00 90.47 88.02 76.00 75.63
1	NDIVIDUAL (TRAIN) KITE BALLET ENCED (Final)	- EXPERI-
1. 2.	Johnna Doyle Raymond Taylor	69.47 62.30
	INDIVIDUAL (TRAIN) KITE BALLE (Final)	T - OPEN
1. 2. 3.	Scott Aughenbaugh Alan Nagao Chuck Bradford	88.00 79.67 75.30
	TEAM (TRAIN) KITE BALLET - EXPE	RIENCED

#### IEAM (IKAIN) EXPERIENCEL (Final)

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## TEAM (TRAIN) KITE BALLET - OPEN (Final)

	(rinoi)	
1.	Tori Tako	83.93
2.	High Performance Zephyrus	83.30
1. 2. 3. 4.	Team Hawaii	82.17 78.40
	INDIVIDUAL QUAD-LINE BA ENCED (Final)	llet - expe <mark>r</mark> i-
1. 2. 3.	Raymond Taylor	76.77
2.	Chris Banal	75.13
3.	Shizuo Daigoh	67.13
	INDIVIDUAL QUAD-LINE BA	ALLET - OPEN
1.	Scott Aughenbaugh	83.27
2.	Bert Sumida	83.17
1. 2. 3. 4.	Alan Guillen Alan Nagao	82.17 80.23
4.	Alun Nuguo	00.23

# SAN ANTONIO **REGIONAL RESULTS** FEBRUARY 23-24, 1991

# INDIVIDUAL PRECISION - NOVICE (Final)

(Final)	
Keith Anderson	24.8
Tony Perez	23.3
Larry Whitacre	22.8
Michael Ramos	21.3
Henry Clark	20.6
Tom Farnsworth	19.7
Ralph Pyle	18.5
Albert Almendarez	18.0
Chris Hammock	17.1
Blair Gray	14.4
Cheri Duchene	13.5
Efren Garcia	11.9
Paul Smith	11.2
Nancy Almendarez	10.1
	Tony Perez Larry Whitacre Michael Ramos Henry Clark Tom Farnsworth Ralph Pyle Albert Almendarez Chris Hammock Blair Gray Cheri Duchene Efren Garcla Paul Smith

# INDIVIDUAL PRECISION - EXPERIENCED

	(Final)	
1. 2. 3. 4. 5. 7. 8.	Abel Ortega Donald Corley Gary Smith Greg Hernandez Craig Shrader Michael Blackshear William Steel Frank Kenisky	24.2 22.6 21.4 21.2 21.1 18.1 17.2 14.9
	INDIVIDUAL BALLET - NOVICE (Final)	
1. 2. 3.	Tom Orlik Nancy Almendarez Ralph Pyle Blar Crav	24.6 21.7 21.0

2.	Nancy Almendarez	21.7
3.	Ralph Pyle	21.0
4.	Blair Gray	20.2
5.	Tom Farnsworth	19.9
6.	Brandon Kivell	19.5
7.	Keith Anderson	17.9

# INDIVIDUAL BALLET - EXPERIENCED

25.6
21.8
21.1
19.4

## PAIRS PRECISION (Final)

1.	Team Dillo	23.6
2.	Team Storm	21.4
2. 3.	Wind Dancers	12.1

PAIRS BALLET (Final)	
Team Storm	20.0
Team Dillo	19.5
Wind Dancers	12.5

## BRAND:

TOP OF THE LINE KITES

MODELS:

HAWAIIAN TEAM regular and ultra light SPIN-OFF FREE STYLE regular and ultra light

CONSTRUCTION:

FANTASTIC, TWICE VOTED "BEST MANUFACTURED KITE" A.K.A. NATIONALS

PERFORMANCE:

TOTALLY AWESOME CRISP PRECISION DYNAMIC EDGE WORK POWERFULLY CARVED ARCS RAIL STRAIGHT GROUND PASSES TWO STRING KITING AT ITS BEST!

AVAILABILITY:

PROFESSIONAL KITE STORES WORLDWIDE.

MANUFACTURING QUALITY KITES FOR PROFESSIONAL, EXPERIENCED, AND BEGINNING FLYERS

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2.3

te model shown HAWAIIAN TEAM



Congratulations

Dennis Kucmerowski 2nd place with a Double Diamond 'Omni' quad line

Southeast Stunt Kite Championship 1991





Congratulations

Bill Edison - 2nd place with a Mark III Billy Jones of Kite Loft 3rd place with a 'Wing'

Southeast Stunt Kite Championship 1991

