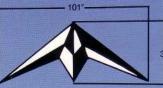


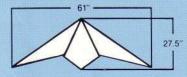
WHICH IS HOTTEST You decide. There's an ideal Action Kite for every pilot.



FIRE DART

The championship caliber FIRE DART offers precision flying, ex-cellent handling, unique graphics and a wide wind range. It is one of the most competitive stunt kites on the market.





SUPER SKY DART

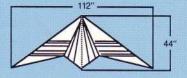
This redesign of our standard SKY DART is available in two stunning patterns. Outstanding mobility and fast, sharp turns make this kite an impressive and stylish flier.

36

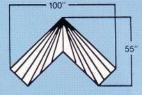
60"

SKY DART

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

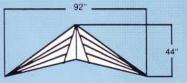
70"

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give you a unique style of flight.



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.



NO NA ME

32

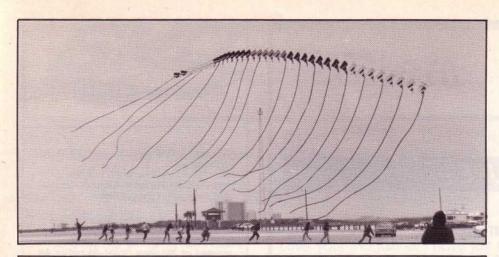
The NO NA ME is a responsive kite, great in moderate to strong winds. It's an excellent high-performance kite for beginners or experienced fliers who want a smaller, faster, lighter-pulling delta wing.

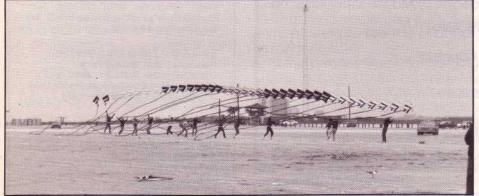


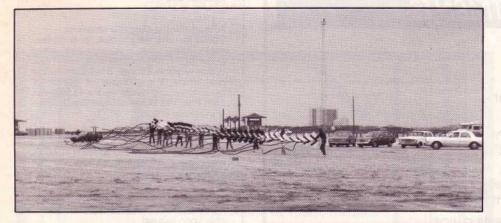


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STACKING BIG NUMBERS IN TEXAS!

It was the day before the start of the Texas Gulf Coast Challenge. The winds were howling and the sky was a leaden gray. Things didn't look good for the planned record attempt. "Pit crews" had dug two large trenches in which the fliers would sit while flying the stack only to be forced with redigging as the wind came around from the north. Still, a healthy knot of onlookers and wellwishers stood faithfully by ... this was, after all, Texas. Braggin's OK ... doin's better!

Lines were tied and re-tied. A trial effort was suggested and three XLR8's were harnessed up. Mike Simmons, a Texas native now hailing from Miami slipped into a trench and took the controls. The three-stack took off with a rush in a 29 MPH gust and Mike flew a measured 28 feet downfield with them. There was a lot of wind!

Nevertheless, the attempt went forward and after only one unsuccessful effort, Frontier had its record. Aloft for 8 minutes and 39 seconds, the 38 stack of 4-foot F-1's required six men to fly. Manning the lines were: Donald Corley and Craig Shrader of Frontier Kites, Stephen Newberry and Kevin Hill of Kites Unlimited, and Mike and Donny Simmons of Skyward Kites.

Line used in the effort was 800 Ib. Spiderline from Catch the Wind.



Photos By Cris Batdorff



Spring 1990

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ON THE COVER: Lee Sedgwick launches off a sand dune at the Sleeping Bear National Lakeshore Park in northwest Michigan. Story on page 26.

)	STUNT KITE QUARTERLY
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	Closing dates: Advertising: eight weeks prior to publica- tion date.

Editorial: six weeks prior to publication

date.



Letters . .

Dear Experts:

I am just breaking into the sport of stunt kite flying, it looks like a lot of fun, but I haven't met any stunt flyers around these parts yet. I have been flying kites for years and a source of great satisfaction for me is flying a kite that I have made myself, especially one that I have also designed. I tried this with a stunt kite, basing the design on photographs I've seen. It flies but it doesn't perform as the ones described in your magazine. I think it's time to get some help.

Would you be able to recommend to me any sources of plans for successful stunt kites? I have exhausted the library system here in Rochester and come up empty.

I would appreciate any help you could offer. Thanks.

Chuck Brugger 747 Arnett Blvd. Rochester, NY 14619 Thanks for the note, Chuck. This might be a question that some of our readers could handle. Our notes on unprotected designs are rather thin ... how about it, folks?

Dear SKQ,

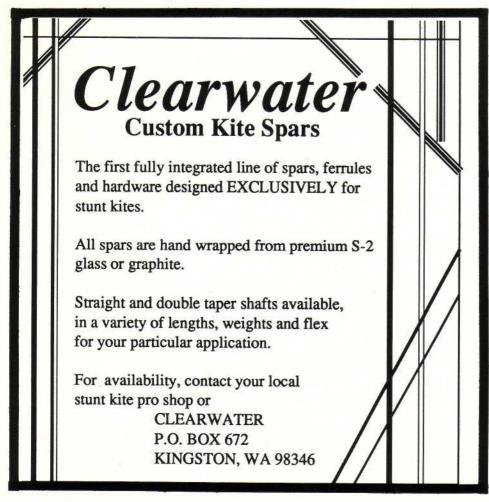
Love your magazine. I have just been reintroduced to kiting after a 45-year time frame and it is totally mind blowing to see the changes, all for the better.

At the present time I am building model aircraft (radio control). My son came up from Key West and got me started on kiting. I find the stunt kites as much fun and challenging as the airplanes. I have purchased three of the leading kite magazines and find yours most fitting my needs.

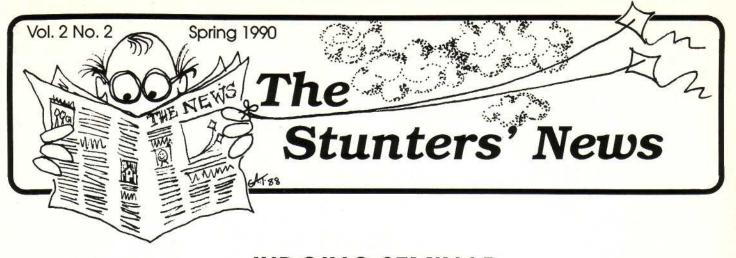
The only criticism I have to offer is us novices need more nuts and bolts and "how to do it" information. Please find enclosed a drawing of a device I worked up to tune the kite attitude on a single line kite. It is made from a radio control servo arm and I believe that they would make a fine tuning device for stunters also. **Sincerely**,

Gene Grodzinski Silver Springs, FL Model Radio Control Servo Arm Trim To Look Like This Bridle Line Woven Between 4 Holes

Thanks for the tip, Gene! And we'll work on those "How To's"!







<u>JUDGING SEMINAR</u> EAST COAST STUNT KITE CHAMPIONSHIPS Wildwood, N.J. — Friday, May 25, 1990

The tremendous growth of stunt kiting and the increasing number of competitions have resulted in an expanded need for qualified judges. Along with this has been an expressed interest on the part of more and more stunt pilots and current judges to expand their knowledge and understanding of judging and its techniques. To meet this need the "East Coast Stunt Kite Championships" will hold a Judging Seminar in Wildwood, Friday, May 25, from 12 noon to 4:00 P.M.

Some of the major areas to be covered in this four-hour seminar are:

1. Fundamental Principles and Requirements for Judging

2. Judging and Scoring Techniques

3. Judging Precision Events - Individual and Team

4. Judging Ballet Events - Individual and team

Methodology will include lectures, discussions, visuals, video and music. An optional exercise will involve actual judging practice during the ECSKCV Meet. Instructors will be: Mike Carroll, Corky Chening and Olan Turner.

If you are interested in judging, expanding your knowledge, or just curious to know how this judging business works, then the seminar is for you. The importance of judging any competition cannot be ignored or underestimated and we are interested in helping to raise the level of this vital function.

Registration for the seminar will be limited to 50 persons and registrations must be received by May 15, together with the enrollment fee. Upon receipt of your registration you will receive in return all necessary information regarding the seminar.

Cost of the seminar is \$30. (For full-time workers at ECSKC V Meet, the fee is \$15.)



IMPROMPTU BALLET?

A couple of weeks back, we received a letter from an old friend, Klyph McCormick. In addition to being Kathi Larrabee's father (Kathi is a ranked experienced class flyer), Klyph is a flyer in his own right. Now while it's always a distinct pleasure to hear from friends, this particular note that had a lot more to offer than just howdy's!

Klyph and Kathi have finally put into writing a concept that has been bandied around various flying fields for quite some time: an impromptu ballet event. Here's a rough concept.

Organizers would put together a group of tapes that fulfill the stated time and other requirements for a ballet performance. The selections would then be assigned to the flyers either by random designation or blind draw. The flyer, in turn, shortly before the running of the event, would be allowed to listen to the tape on a once-through preview basis. The tapes would then be returned to the sound personnel to be cued up.

The fun part here is that the flyer would have no idea until just shortly before the performance exactly what piece he would be flying to. Now, of course, there is the likely possibility that some of the selections used would be known to some of the flyers but that chance would exist equally for all of them ... the luck of the draw.

For scoring purposes, no points would be given in the "appropriateness of music" category. These points would be assigned to artistic interpretation by the flyer.

We think that this "event" has some real possibilities! Given the array of good music available and the diversity of flying styles, the performances could be incredible. It would also bring back something to hard competitive events that are seeing less and less of: fun. We could all use a little more of that!

Thanks, Klyph and Kathi, for the idea! Event organizers and flyers ... start your music!

C.B.

WHAT'S UP WANTS TO HAND YOU A LINE...



In fact, we'd like to hand you several lines.

POWER™ LINE

Power line is Shanti's trademark for their fine braided Kevlar.® Probably the best all around high performance stunt line, Power line stretches only 4½% and is very durable. Remember all Kevlar lines should be pre-sleeved before knotting.

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EARLY STEALTH KITE RESEARCH UNVEILED!

Manistee, MI 4-1-90 — Prompted by the torrent of letters received following the release of photos of the Stealth Kite (SKQ Vol. 2, No. 1), we have decided to investigate further into the history of this elusive craft. The following is cited from the Kite Society of Great Britain Newsletter, dated October 1985. It was recently delivered into our hands by a member of said group who, doubtless fearing prosecution under the official secrets act, wishes to retain his anonymity.

"Abridged report of the board of inquiry into the loss of the XFK-19 prototype Stealth Stunt Kites.... The board was convened to investigate the total loss of the first two semi-scale prototypes of the Stealth Stunt Kite during their first demonstration flight. Both prototypes were approximately two-thirds full size and incor-porated the latest advances in profile smoothing, size reduction, e/m translucency and optically transparent materials. In preliminary tests both kites had performed well and given no indication of their presence (apart from some noise) either on radar or to observers.

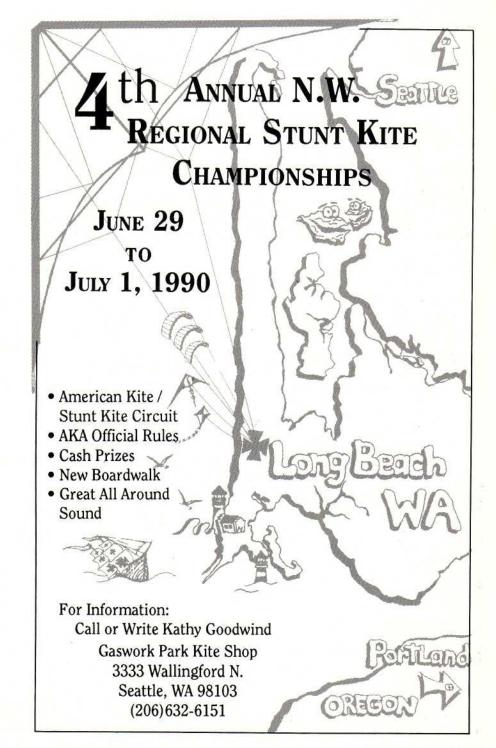
In the demonstration flight the initial takeoff and climb to operating height proceeded normally. At this point the pilots flew into the designated demonstration area and then attempted an in-line maneuver (a maneuver specifically forbidden by the manufacturers) with the result that the accident then occurred. Both of the pilots reported the flying lines (for the demonstration visible Kevlar flying lines were being used as opposed to the proposed operaboron-monoglass tional composite) suddenly became slack and (dropped) out of the sky. Subexamination of the sequent recovered line ends revealed no trace of either kite.

An immediate detailed search of the aboreal infestation (an apple orchard) downwind of the flying site proved fruitless and as of this date neither prototype has been recovered.

Having considered the evidence the board has found

that the accident was a direct result of the total invisibility of the Stealth Stunter causing a totally unexpected collision and subsequent line failure. Although both pilots were guilty of negligence in allowing the prototypes to approach this closely to each other, the board recommends no action should be taken against them. The board would also make the suggestion that future operational practice should be to keep a minimum flying separation of twice the line length between each pilot ... "

They will present further developments in the Stealth Kite situation as they become clear to us.









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GREAT LAKES Grand Haven Championships Set

Stunt kite teams and individual fliers from around the country will converge on Grand Haven (MI) State Park on the weekend of May 12-13 for the annual running of the Great Lakes Stunt Kite Championships. This is the second year for this particular event which is sponsored by the Mackinaw Kite Company.

Competition will cover five categories including Individual and Team Precision, Individual and Team Ballet, and Individual Innovative. Team Innovative will make its debut this year as a demonstration event. There will be four classes open to the competitors: Junior (for fliers 12 years and under), Novice, Experienced, and Open. The Great Lakes competition is unique in that it is the only nationally-ranked event to still offer a Junior competitive class.

Competitions will commence on Saturday at 9AM and continue through the weekend with Monday being reserved as a run-over-/rain date. According to Head Judge Robbie Sugarman, "No delays are anticipated. We are well-prepared." Robbie has been filling that Head Judge position at some of the nation's top-ranked events and has matters well in hand. The event will follow the 1990 American Kitefliers' Association rules booklet.

Event co-ordinators Steve and Bob Negen also have off-field activities and accommodations under control. The Khardomah Lodge in Grand Haven will again serve as the headquarters hotel. It has, in fact, become such a popular gathering place that it has been booked solid. Not to worry though, according to organizers, who point out that there are several lodging spots within walking distance of the beaches. Potential attendees are advised to contact the Grand Haven Chamber of Commerce at 616-842-4910.

The Grand Haven State Park has 48 acres of beach to fly on and with Lake Michigan at un-seasonably low levels the flying with Lake field is literally getting bigger each day. Those who are in the outdoor spirit may wish to camp out at the state park. For camping information contact them directly at 616-842-6020. Event co-ordinator Al Hargus reminds us that Michigan has four seasons just like evervwhere else: June, July. August, and Winter. The last of these leaves the shores of Lake Michigan with great reluctance. Evening temperatures can be expected to drop possibly into the low 30's.

For more information or even just a hello, contct: Mackinaw Kite Company - Bob and Steve Negen, at 616-846-7501. Competition will be limited to 100 participants.



MID-ATLANTIC STUNT KITE CHAMPIONSHIPS April 7 & 8 Ocean City, MD

By Roger Chewning, Sky Festivals/ECSKC

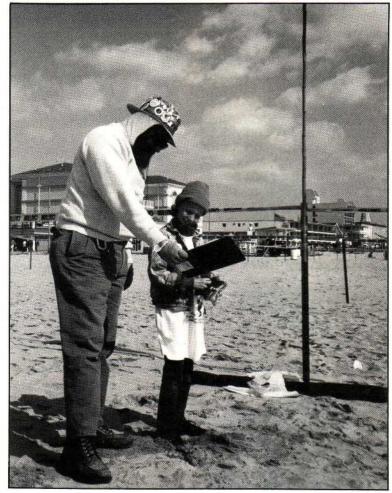
Work on the Mid-Atlantic Stunt (MASKC) Kite Championships began on March 9, with the go-ahead from Ocean City, MD. The event was pulled together by Sky-Worchester Festivals, County Tourism, and the Kite Loft. With only last minute notices, no advertising, and the Texas Challenge, expectations for attendance were low. Hopes ran high, however, as all the planning fell into place. As an Eastern League event, MASKC would provide greater opportunities for Novice and Experienced pilots, and certainly would attract local pilots.

On Friday, the rain splattered off the windshield as Ralph Offredo (HAWQ Aerolabs) and I traveled south on Route 13. We had a deja vu of traveling through the rain to the Outer Banks Stunt Kite Championships. Would MASKC be as successful? All the markers were in place, and time would tell.

The weather broke as we arrived in Ocean City. The beaches were set up, the fields in place, and the stage was set. The Kite Loft was in full swing on the final day of their Kite Retail Seminar. Few competitors had signed up by Friday night, but with no preregistration required, expectations ran high.

The head judge for MASKC would be Olan Turner, assisted by judges Mike Carroll, Marci Miller-Foley, Pete Ianuzzi, Martin Szani, Margo Brown, Bevan Brown, Mel Govig, and Ben Lentz. Competitor/Judges Ralph Offredo, Arlene Anderson, and Pete Dolphin were on hand. Billy Jones (Kite Loft) and I were on hand to fill in any gaps. At the moment we had more officials than competitors.

At around midnight the snow started. At 5:00am, snowflakes the size of golfballs were falling on the boardwalk. The winds were well over 15 mph, and by 7:00am the snow had stopped, leaving the cold. Registration proceeded at the Kite Loft with the surprise of competitors entering from 10



Luke Holmes, age 11, receives some pointers from the imposing figure of Pete Dolphin. Luke was the youngest competitor at MASKC, Pete says he "ain't talkin'"....

states. Jon Reinschreiber of Paint The Sky Kite Shop in Portland, Oregon, was our most distant competitor. Eighteen Novice and fourteen Experienced competitors registered for the first annual MASKC.

Wind delays and cold drizzle postponed competition until 2:00pm. Further delays occurred when the winds slowed to 3 to 5 mph. At 4:30 we called a postponement with the Novice and Experienced Individual Precision partially completed.

Bill Osche (The Kite Loft) sponsored a dinner for all the staff and competitors. MASKC, off to a difficult start, would be a success. The following days' forecast called for warmer weather and clearing skies.

On Sunday, the competition started at 10:00am, completing the Individual Precision events. Luke Holmes, the youngest competitor at age 11, struggled with 10-15mph variable winds. The Novice Individual Precision was won by T.C. Powers of Maryland, followed closely by Quin Rickman of New York. The Experienced Individual Precision was won by Dodd Gross of Pennsylvania, followed by Rich Montminey of Pennsylvania, and Pete Dolphin of New Jersey.

Individual Ballet was a strong event, with a variety of interesting performances. The Sky Rats, Brad

Ruud and David Barresi, each flew interesting interpretations with 10' flexifoils. Ralph Offredo flew to "Amazing Grace" peformed by bagpipes. Pete Dolphin flew to a New Orleans Funeral March, and Garry Hoffmaster, a Spike Jones medley of cartoon excerpts.

Three teams competed in the Team Ballet. Arlene Anderson (AROARA KITES) and Frank Loudenslagger won the event, completing a sweep for Arlene who earlier finished first in the Individual Ballet. One group, the Evolutionary Sky Bandits, swept the Team Precision.

followed Demonstrations as spectators filled the bleachers of Ocean City's now-crowded boardwalk. George "Stackman"Panzitta with his 6' Powells; David Barresi and Brad Ruud with stacks of 10' Flexifoils; and Frank Loudenslagger with an 8-stack of Vipers completed the event.

The event was a showcase of local talent. Next year, the event will be scheduled with 4 classes of competition, Novice, Intermediate, Experienced and Masters. Planning is underway for the second annual MASKC, with a special MASKerade Ball. For the judges, staff, and pilots, this was spring training. A perfect opportunity for new competitors to get involved with competitive stunt kiting.

MID-ATLANTIC STUNT KITE CHAMPIONSHIPS RESULTS

NOVICE INDIVIDUAL PRECISION

3rd John Smith

KITE(S) FLOWN

1st T.C. Powers 77.5

2nd Quin Rickman 73.2 Firedart/Team High Fly 71.8 Team High Fly

EXPERIENCED INDIVIDUAL PRECISION

1st Dodd Gross 76.9 Hawaiian Team Kite 2nd Rich Montminey 76.4 Hawa-Bird of Prev 3rd Pete Dolphin 72.8 Phantom

EXPERIENCED INDIVIDUAL BALLET

1st Arlene Anderson 85.3 AROARA 2nd David Barresi 82.2 Flexifoil-10 78.2 3rd Pete Dolphin

Texas Wasp

EXPERIENCED TEAM PRECISION

1st Evolutionary Sky Bandits Pete Dolphin Ted Dougherty John Smith

Kite Innovation-Evolution

EXPERIENCED TEAM BALLET

- 1st Aoara Flying Circus 85.7 AROARA (Arlene Anderson/Frank Loudenslagger)
- 2nd Evolutionary Sky Bandits 58.2 Kite Innovation-Evolution (Ted Dougherty, Pete Dolphin, John Smith)
- 3rd Sky Rats 57.0 Flexifoil-10 (David Barresi-Brad Ruud)

(Right) A little chill never hurt a hardy bunch of stunt fliers. There was even some time to "relax" on the beach.

Photos by George "The Stackman" Panzitta.





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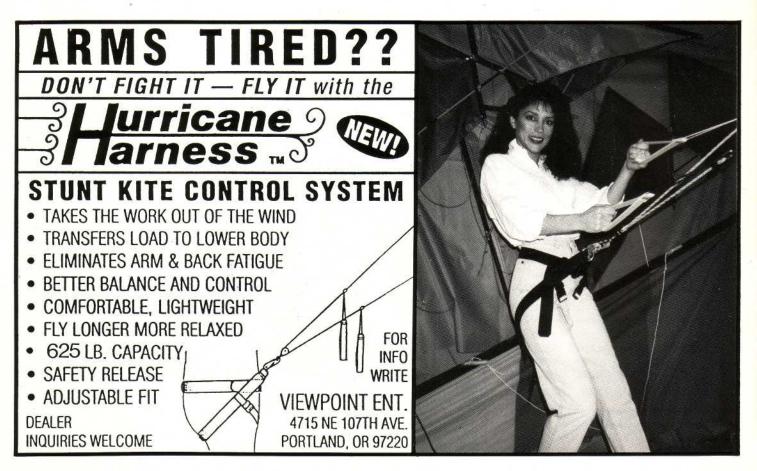
GEO-SPORT QUAKE KITE TAKES FLIGHT!

A limited edition Geo-Sport Quake kite has been reported stolen from Kaleidoscope Kites in Venice, CA. The kite was taken from the beach on March 10 and was labeled as limited production number 40. It is described as having pink wing tips and an aqua center panel.

The Quake kites were offered in commemoration last year's earthquake in San Francisco by Above It All who donated a portion of the sale price of each kite to victims of the disaster.

A \$100 reward is being offered for the return of the kite.

Late note: We have been notified by Above It All that the Quake Kite has been found!



RICHARD PECK SIGNS ON AS ASSOC, EDITOR

Richard Peck of La Canada, CA, has been named as an associate editor of Stunt Kite Quarterly, according to publisher Cris Batdorff. Richard Is head of KP Kites/Knowledge Plus and is the originator of The Air Frame (marketed by What's Up). He has been active in kite flying for several years.

"My first competition was the 1988 Hawaii Challenge," according to Richard. "I finished second in the Novice Class. A young local upstart (Scott Aughenbaugh) knocked me out of first. It was another Hawaiian, Alan Nagao, who introduced me to stunt flying in the first place," he continued. "I flew my first night fly at Sandy Beach (the site of the 1989 AKA Nationals)."

Recently, Richard has been keeping things running smoothly at many National events with his computer-based scorekeeping system. Credits thus far this year include the Hawaii Challenge, and the Texas Challenge. He has also been retained for the Great Lakes Championships.

Rumors_

Stories of yet another super-size kite (16' +) have made their way to our offices. It was seen flying in the San Diego area. Further details were unavailable at press time.

Reports persist of an omni-directional kite being developed by at least one manufacturer. The product will reportedly maneuver up, down, and sideways with no change in either speed or controllability.

Turning Point Kite Company will reportedly introduce a larger-winged stunter this year. Size is rumored to be in the 100'' range. A release date is uncomfirmed but slated for early summer.



Dealer inquiries invited.

Available at your local kite shop or by contacting: **NITE FLIGHT LIGHTING SYSTEMS** 13304 E. Valley Blvd. • La Puente, Calif. 91746 (818) 961-8849

KTA ANNUAL MEETING AND TRADE SHOW

Who's to say why folks flock to Miami. Some go to search out the Gloria Estefans and the Miami Sound Machines. Others, perhaps are trying to catch a fading glimpse of Crockett and Tubbs as their Lamborghini glides into a perfect-pink Miami Vice sunset.

I remember it as a kid who first saw the Miami Beach Gold Coast at night. It looked dreamlike and expensive. Some thirty-five years later, it still looks the same ... and is.

Strangely, the setting seemed to be appropriate. This second annual solo trade show of the Kite Trade Association had a lot to brag about: 53 exhibitors including a number from outside the U.S.; a 50% attendance increase; and, most importantly more new products than we'd seen introduced at previous shows. It was almost enough to counteract the wince that came as a garnish with the \$6.50 burgers.

One of the strip's Grand Dame's, the Fountainebleau Hotel, served as the host venue for the show. Inside the ballroom was displayed the finest of what will be offered to the buying public at stores across the country this summer. It certainly didn't take long to get into the thick of things once past the ballroom doors.

Spectra Star Kites has made a fresh entry into the stunt kite world with their new offshoot, Spectra Sports. It is a two-kite product line comprised of two delta variants, the 72'' Scorcher and the 100'' Slingshot. Several different sail graphics are offered in each design. Support merchandise includes; line, handles, grips, straps, winders, carrying bags, and clothing.

Skynasaur unveiled a new eightfooter called the Classic, which bore a resemblance to their SW96 (sans wing battens), and an upgraded version of the C-26 Skyfoil called the Stuntfoil. Look for a performance increase according to Skynasaur representatives.



Nearly more new stunters than one could easily look at were shown at this year's KTA.

A welcome re-entry to the stunt kite market was made by the Rainbow Stunter. Steve Edeiken's tried and true original, with minor updating is being manufactured by Coast Kites. The new firm is headed by Christina Davidson and Craig Stratton.

Jerry Sinotte (One of Jerry's Kites) has gone into full production with his Peregrine. Models range from basic to full custom and are available in an array of sizzling colors.

Also unveiled were the Stinger 1000 and Stinger 750, designed by 1989 Experienced Class National Champion, Vince Brobosky. The kites are being produced by Greystone International. The 750 (review on page 39) is a ³/₄-size version of its popular big brother.

Sharing the same booth was Terry Crumpler of Wind Walker Kites showing his Wasp. The kite has been a regional favorite for some time and has recently gone into limited production on a national basis.

Up the aisle, The Kit Pit from Reno, NV, exhibited four models marketed under the Kitemaster/Tako Tori label. The Swan, the Sky Eagle (review on page 45), the Night Hawk, and the Raven comprise the line.

Another new entry, Skymasters Manufacturing, showed four models of their Competition 8800 (review on page 42) all sporting sails of hot pink, hot lemon-lime, and black. These 7-footers utilize some of the newest technology on the market including stitched bridle lines and rubber T-fittings to replace the traditional wing and tail vinyls.

Texas-based Frontier Kites exhibited several colors of their XLR8 (review on page 44). This mid-size delta is available in several hot colors and is rigged for stacking as well as single operation.

The increasing popularity of the Force 10 has led manufacturer Steve Shapson to produce a "light-weight" model to add to the lineup. This one should tip the scales at about 2 lbs.; half the weight of the regular model ... not bad for a 15-foot stunter!

Peter Powell's booth was the crowd stopper with 6 video screens showing identical footage of their various products. Bill and Sue Baker had a number of new products on hand including the Mark III diamond and a revamped, graphite-sparred Sky Blazer in two sizes. Miami was also the first KTA showing of their Double-D quad-line kites (review on page 32).

Other quad-line systems on hand included the Revolution, having the first year's production now under their belt and the Quadraflex from Kite Innovations. In addition to the Quadraflex, Kite Innovations also showed the Sparless Stunter and a reworked Skybandit.

At the end of one aisle, a revamped Don Tabor (sartorially resplendent in three-piece suit and old-school tie!) presented the revamped, 12-panel, Top of the Line Spinoff. The popular design has evolved in a rayed pattern. Also, take note of the disappearance of graphite framing.

Kitecraft's Alice Mackey was showing Ralph Offredo's Hawq Aerolabs new line. Kitecraft will sew and distribute the stunters, some of which were available with Tech 1 graphite (review on page 34).

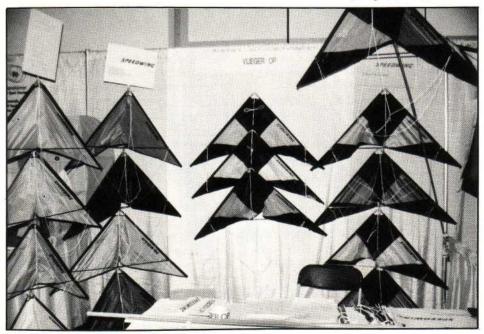
Randy Tom of Hyperkites displayed his new line of Elites. There are four kites in the new line covering three sizes and are available in an assortment of colors. Still more new entries in the stunt kite field came from Premier Kites who introduced a new diamond called the Pro and a delta-wing named the Supersport. The two kites represent Premier's initial venture into the stunt market.

From England comes Mark Cottrell's Lite Flite. It was shown in two booths: The Kite Store, Ltd., of London; and What's Up. What's Up will be the U.S. distributor of this super little light-weight (review on page 38). In addition to the Lite Flite, What's Up will also be distributing Richard Peck's Airframe as a retrofit package for several existing models.

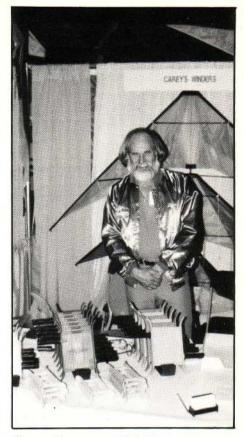
The Kite Store Ltd., also presented the MicroFlite, a small scale, taut sail stunter designed for stronger winds. Recommended range for the MicroFlite is 10-30 MPH.

Yet another entry from England was the Phantom Series from Highflyers. Both their 8' Phantom (review on page 40) and 6' Bantam Phantom are graphite sparred. An additional quad-line system is available.

In one corner of the room Robert Crowell was displaying his stunter, the Accelerator. This midsize delta is a camber-induced model. The positive dihedral created improves both relaunch and wind-dumping abilities.



Vlieger OP's line of Speedwings. These folks came all the way from Holland to show off their wares.



Gene Carey and his famous winders!

The Speedwing, popular in Europe last year was the only kite shown by Vlieger Op from Holland. The Speedwing is a smallmedium delta- type with a large difference ... no spine spar.

Triby chose the KTA convention to unveil a couple of new items. The first of these was their entry into the big-wing market, the 78inch delta-wing Arriba. This interesting addition, which is available in either ripstop nylon or high-density polyethylene, has an innovative spreader spar which reportedly makes the kite virtually stallproof. New spars are also being offered by Triby as a competition upgrade for their ripstop diamond.

Ray and Jeanne Merry of Cobra Kites were on hand to introduce their newest Flexifoil, an 8-footer. Said to have the power adaptations of their 10-footer with the maneuverability of a 6-footer, the new kite will fit into the center of the Flexifoil line, which now includes 4, 6, 8, 10, and 12.5 footers. We also have learned that Cobra will offer a variety of items emblazoned with the Flexifoil logo.





Action in the sales booths! Cheri McFadden (Skymaster and Kitemakers of San Francisco) works with Joan Kligman (Klig's Kites) at the left. Jerry Sinotte (One of Jerry's Kites) talks Peregrines with a Flags Unlimited buyer, at the right.

All of that a bit too much? Wait! There's more ... Fran Gramkowski of High Fly Kite Co., presented a complete selection of components. Including, but by no means limited to spars, swivels, line, and fittings, Fran also offered a nifty little tool for the cutting of those pesky bits of vinyl tubing.

More spars shown in the Goodwind's Kites' booth. The Clearwater line, represented at this show by Stan Swanson is a new line of high-tech graphite. In the same booth a nifty showing of Lites for Kites.

On the other side of the room Skyrod/Jetkite presented still more spars in their ultralight and highperformance weights.

In the lighting department, Nite Flite was on hand with a dazzling display of their products. New this year is the Phase II non-pulsing light system. A little easier on the pocketbook, but spectacular in the night sky!

Cochranes of Oxford came from England for this edition of the

KTA. They offered a unique selection of molded fittings that will prove to be worthwhile additions to the parts bag of any flyer. One of the more interesting items is a rubber spar socket that can be adapted to nearly any kite using standoffs.

Gene Carey of Carey's Winders was on hand with his whole line but the new, hot seller is the Carey IV. It is a compact winder to be used in either figure-8 or coil winding. Presently available in array of colors, this little unit will be making appearances in kitebags across the country this summer.

What line to wind on your new winder? Why, any of the new fluorescent lines, of course ... available at the KTA Trade Show from Shanti Kite Spools or Go Fly A Kite. And should you be looking for a bag to hold all of this stuff, don't forget to check out those available from Catch the Wind. They offered bags in hot colors from the popular small belt packs to full-size kite bags. They also can be ordered on a custom basis if imprinting should be desired.

If clothing is more your style, there's good news in that department as well. The Kite Pit of Reno, NV, offered a stylish line of multi-pocketed jackets and pants in an array of colors. Windborne Kites is also marketing a line of kite clothing including T's, shorts, pants, and sweats under the name Flyin' Fools. Flight Wear, represented by Billy Jones, offered a line of T's sporting hot graphics.

Now, lest anyone think that this was all, we might quickly point out that the foregoing products were shown in addition to a plethora of single-line kites and equipment. There were nearly more kites and accessories than could be absorbed in the time allotted ... not to mention the several instructional sessions that were held as a part of the convention.

..........

16 SKQ

AND THE WEATHER?

Seems that whenever kitefliers get together; a small local fly, the AKA Grand Nationals, or a meeting of the Kite Trade Association, the weather calls the tune. Miami had it all ... no wind, low wind, let-it-blow wind. Combine this with temperatures in the 70's and you've got nearperfect conditions. Manufacturers had a chance to show off nearly everything that they had to offer. The last day of the convention, in fact, had winds that were so heavy that many kites never saw the air outside of the baa.

Those flyers that did choose to demonstrate their products during the week did so on a field that was woefully inadequate. A narrow beach flanked by highrise hotels fronted by a boardwalk on one side and the ocean on the other is no place for an open kite fly. It was an even less appropriate location for the use of traditional length flying lines or as a venue for the education of first time flyers.

Still in all, guite apart from the issue of safety, there were a number of good chances to see several of the products in action. Particularly spectacular were the performances of some of the ultra-lights during the light wind periods. Buyers and interested spectators queued up along the boardwalk whenever the wind conditions presented themselves.

There seems to be an attitude of professionalism that increases with each passing year in conjunction with the KTA. It is to the credit of that organization that such an attitude has been fostered and nurtured. It makes us proud in our affiliation and speaks well of the sport as we head into a new decade of growth.

KITE TRADE ASSOCIATION ELECTS NEW OFFICERS

One of the many actions taken by the Kite Trade Association at their recent January convention was the election of officers for the coming year. At right, for your convenience, is a list of the 1990 officers and board of directors of the organization.

AFC, Division of MMFG

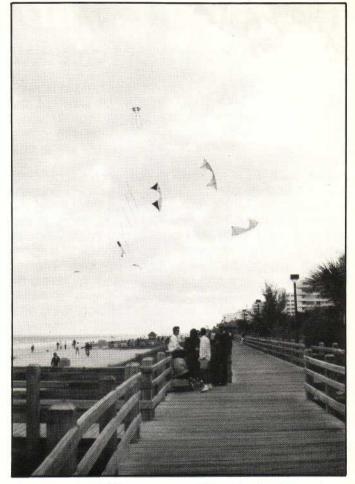
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1990 HAWAII CHALLENGE Well, You Said You Wanted Wind!!! _

Unlike the recent National contest held in Hawaii, no one complained about lack of wind at this year's Hawaii Challenge. Those flyers that like winds of 16 to 30 M.P.H. felt right at home, the others weren't sure if this much wind was a blessing or a curse.

The winds were responsible for some spectacular crashes and amusing incidents. More than one kite was sacrificed to the dreaded Kiawe trees lining the flying field. Tony Thompson made the local paper trying to fish his kite out of its sticky branches. Jim Hadzicki, flying a stack of 6 Revolutions, did a spectacular job of decorating a Kiawe tree when a giant gust caught him and he ended up doing an unplanned tree top landing.

In spite of the wind some outstanding flying was displayed. Scott Augenbaugh brought a new standard to competitive flying by winning six gold medals and one silver medal. His ballet performance had to be seen to be believed. After a spectacular wing stand in the gusty wind where he rocked the kite back and forth in time with the music, he showed the crowd it was no fluke by landing nose down in the middle of the wind window, rocked back and forth again, then took off without ever touching a leading edge.

To add an international flavor eighteen flyers came from Japan to fly. They flew well and the team ballet routine of Team Ninja was a favorite with the crowd.

Several fun events were flown besides the regular competition events. Godzilla, a large inflatable dinosaur, took his usual beating with flyers trying to knock a tennis ball off his head. In the strong winds many flyers found themselves playing "SKOGA," loosely translated as, "stupid kite on ground again."

In the Obstacle Control Challenge, out of respect for those flyers that couldn't run at least 20+ M.P.H. the rules were modified to omit the usual landings. With the gusty winds several flyers ended up with a DNF, (did not finish) because of crashes.

Friday night visitors to Kapiolani Park were fascinated to see strangely lit unidentified flying objects landing all over the park. On close inspection they found kites and flyers alike illuminated with all kinds of lighting systems from strobe lights to long slinky glow sticks. The continuing trade winds made night flying a pleasure.

After the formal competition all flyers were invited to participate in an attempt to break the record for the largest stunt kite team. This resulted in much excitement as kites flying at different speeds on different length fly lines attempted a simple figure eight. At times it looked like moths flying too close to a candle as some of the less stable kites fluttered to the ground.

George Baskette gave a power kiting demonstration with his Nitro Fly Man Lift. Using a stack of Flexi Foils tethered to the ground, he showed the crowd what power kiting means by flying suspended off the ground in a harness. Ede Sabo was master of ceremonies at the banquet held at the nearby Elks Club. Several lucky flyers were awarded trips to Malaysia by Malaysia Airlines. Winners included Scott Augenbaugh, Kathi Larrabee, and the High Performance flying team. A personal touch was added to the awards ceremony when Klyph McCormick, Kathi's father, had the pleasure of presenting one of the Malaysia trip tickets to his surprised daughter.

Scott Augenbaugh won the Open class Individual Precision and Individual Ballet events. Other event winners included Malcom Moore in the Innovative event, Mitch Onoyama winning the Individual Precision - Experienced Class, Mark Dicicco First in the Individual Precision - Novice Class, and Nadine Koba winning the Individual Ballet Event - Experienced Class.

The teams had their work cut out for them in the strong winds. Team event winners were, Team Precision - Open Class - High Performance from Hawaii -Team Precision - Experienced Class, Team Takoya No. 1 from Japan. The Team Ballet Event was won by High Performance, followed closely by Team Ninja from Japan.

Another pleasant surprise was giving each flyer a contest results printout which included how they scored in each event, and their final scores. The flyer's ability to compare their scores to the other contestants no doubt provided interested reading for many on the long trip home.

Most agreed this was the best Hawaii Challenge ever.

EXPERIENCED TEAM PRECISION

1. Todiff Takof a Ho. T	0 11 7 0
2. The Sunshine Flyers	56.02
3. Tori Tako Flight Squad.	26.92
OPEN TEAM PRECISION	
1. High Performance	84.58
2. Elite Flight Team	78.57
3. Hawaiian Delights	74.50
4. Kite Fantasy Team Hawaii	73.18
5. Team Ninja	60.77
6. Team Samurai	56.20
EXPERIENCED TEAM BALLET	
1. Team Takoya No. 1	72.50
2. Tori Tako Flight Squad.	68.93
3. Team Wings	63.03
4. The Sunshine Flyers	59.63
OPEN TEAM BALLET	
1. High Performance	81.90
2. Team Ninja	81.73
3. Kite Fantasy Team Hawaii	81.30
4. Team Samurai	81.23
5. Elite Flight Team	80.57
6. Elite Flight Team 2	72.83
7. Hawaiian Delights	25.00

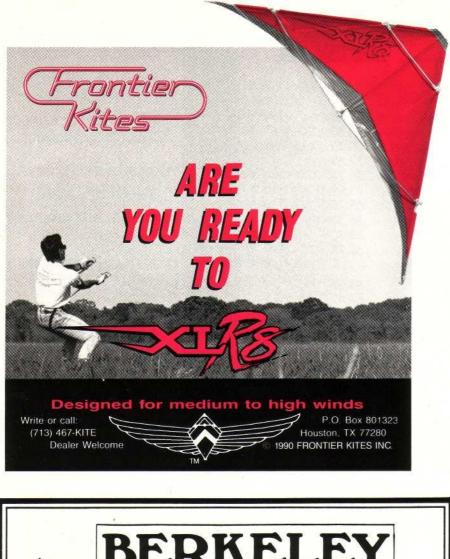
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1990 HAWAII CHALLENGE RESULTS

NOVICE INDIVIDUAL PRECISION

NOVICE INDIVIDUAL PRECISION	
1. Mark Dicicco	84.45
2. Phillip Lauer	84.30
3. Duane A. Cabe	80.12
4. Su Li Xiang	77.52
5. Kimiko Ishida	75.73
6. George Cornelius	71.92
7. Stan Chang	68.78
8. Jerry McGregor	66.77
9. David Midgley	66.70
10. Robert D. Hamilton	65.78
EXPERIENCED INDIVIDUAL PRECISION	
1. Mitch Onoyama	89.25
2. Lathi Larrabee	87.42
3. Linda M. Indie	86.17
4. Nadine Koba	82.92
5. Takumi Hagiuda	
	82.83
6. Ryohei Shiohata	81.00
7. Shuichi Sato	79.42
8. George Baskette	77.42
9. Klyph McCormick 10. K. Brian Fox Jr.	74.08
	69.50
OPEN INDIVIDUAL PRECISION	
1. Scott Augenbaugh	82.92
2. Alan Nagao	80.50
3. Malcolm Moore	74.25
4. Hideo Wakuzawa	71.17
5. Kiyoshi Kawakatsu	69.67
6. Priscilla Nagao	69.42
7. Masahiko Aoki	68.67
8. Brian Hirose	67.75
9. Satoshi Nishimura	66.50
10. Stan Mullikin	58.92
EXPERIENCED INDIVIDUAL BALLET	
1. Nadine Koba	89.17
2. John A. Oliver	88.27
3. Kathi Larrabee	87.80
4. Satoshi Ishida	87.23
5. Mitch Onoyama	84.47
6. Ryohei Shiohata	78.83
7. Hiroshi Konno	77.17
8. Klyph McCormick	74.90
9. Yoshihiru Yamaguchi	74.73
10. Takumi Hagiuda	73.27
OPEN INDIVIDUAL BALLET	10127
1. Scott Augenbaugh	00 47
	92.67
2. Alan Nagao 3. Brian Hirose	85.17
	84.73
4. Malcolm Moore 5. Priscilla Nagao	81.37
	76.13
6. Kiyoshi Kawakatsu 7. Hideo Wakuzawa	75.50
	73.07
INDIVIDUAL INNOVATIVE	
1. Malcolm Moore	90.27
2. Scott Augenbaugh	87.87
3. Joe Hadzicki	87.08
4. Alan Nagao	83.40
5. John A. Oliver	70.83

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Š	the pit





Rumors.

At least one open class innovative flyer has been spending many hours working out with a fair-sized stack of Revolutions. New routines forthcoming ... film at eleven!

Brainbridge/Aquabatten, Inc., is reportedly considering the addition of new colors of hot neon ripstop in 60'' widths. Look for a possible introduction late this summer.

A major manufacturer of arrow shafts is presently considering the introduction of a product line made specifically for the kiting industry. Reportedly under consideration are one-piece lengths up to, possibly six feet. Composition is reportedly thin wall graphite.

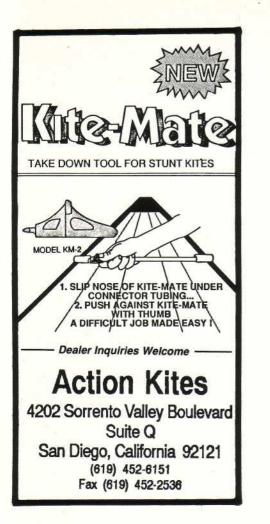
Rumor has it that there WILL be an international event scheduled in Japan. Dates and locations however, are still "up in the air."

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The real "original" Godzilla has apparently taken up PERMANENT residence in the Southern California community of San Diego. Imitation Godzillas are reportedly popping up everywhere. The initial big green guy reminds flyers that they're getting off light if contest organizers don't hire the real thing ... seems the knock-off Godzillas don't mangle kites nearly as bad as the real one!

Look for the introduction of a new quad line kite this summer. Two different sizes of the new kite have been seen in the air in Germany. The appearance is of two, sideby-side, symmetrical diamonds.

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2. Lights must have a self-contained power source. (i.e., No batteries, generators, etc., from the around)

3. Kites must remain in flight at least 30 seconds.

Challenges will be accepted at any time during the A.K.A. Convention and National Competition, October 10-14 in Seaside, Oregon. Tentative date for the night fly is Saturday, October 13, 1990.

Any comments or questions, please call Jim Reible, Nite Flight Lighting Systems, at (818) 961-8849.

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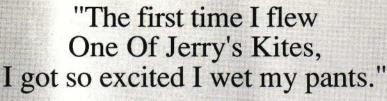
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		Satellite Beach (407) 777-790	n, Florida 32937-0798	
L.E.D. Color(s)		Satellite Beach (407) 777-790	n, Florida 32937-0798 1	
L.E.D. Color(s) Model		Satellite Beach (407) 777-790	n, Florida 32937-0798 1	
L.E.D. Color(s) Model <i>Ship to:</i>		Satellite Beach (407) 777-790	n, Florida 32937-0798 1	

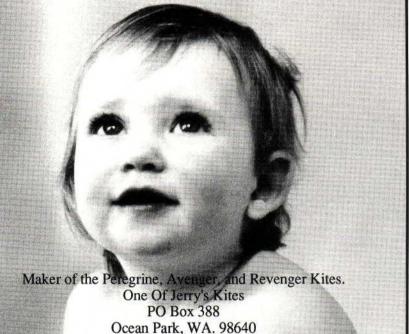
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WORDS FROM THE WIZARD!!

Have you ever wondered what compells Midwest stunt kite fliers to brave the bitter cold winter winds to enjoy their hobby?

Well it's the "heaviness" of the winter air, of course! or the density of the air (weight per unit volume a cubic foot of sea level air weighs about .075 pound at 59 degrees). The denser the air, the more lift can be generated. The less dense the air, as happens with increased altitudes, the harder it is to keep your kite in the air. By the way, colder air is denser than warmer air, hence less running to keep that ultralight airborne in the winter.

So the next time that local stunt kite braggard says that he can fly in 2 MPH, just look him straight in the eye and say, "Fine, but at what temperature?"



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SKY FESTIVALS GEARING UP FOR 5TH ANNUAL EAST COAST STUNT KITE CHAMPIONSHIPS

Top competitors from the U.S., Canada, England, Germany, and Holland will convene on the beach at Wildwood, NJ, on May 26, 27 & 28 for the fifth running of the East Coast Stunt Kite Championships. One of the oldest events in the stunt kite world, the ECSKC annually provides a showcase for the world's top flying talents.

This year, with the cancellation or postponement of a number of other events, the ECSKC may hold even more importance for those vying for position in the rankings.

There will also be a new event making its debut on the East Coast program: Individual Quadline. The requirements of this precision-based event will be three compulsory maneuvers and 30 seconds to 2 minutes of free-style. Team Innovative, making its second showing at the ECSKC, will again be run as a demonstration event.

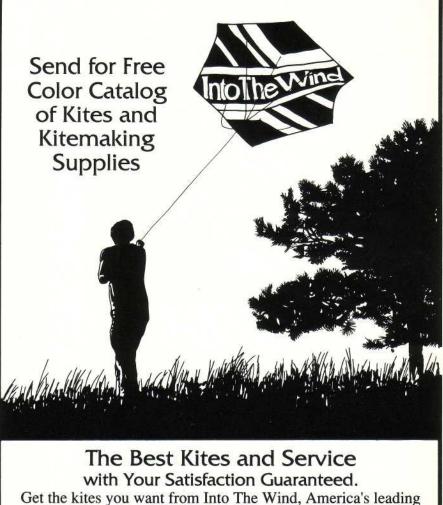
Now, lest the event start sounding "too official," please allow us to mention that the usual Wildwood hoopla is in full swing as

Rumors.

Look for the availability of Easton aluminum-carbon shafts to be offered as an accessory sparring package for Top of the Line kites in the near future. A deal between the two companies is reportedly in the offing.



2514 S.E.Ankeny St. #4 Portland;Oregon. 97214 C.O.D.phone:503-234-3604 well. Any number of "surprises" have already been hinted at by East Coast organizers (perhaps, even chocolate sundaes at Uncle Lou's!). Again this year, a rumored night fly is being scheduled. We might even see another renegade T-shirt of the sort to rival even the now-famous Fly The Sahara! Only one thing is certain ... you'll never know if you don't go. We've been reminded by ECSKC organizers that events will be capped at certain levels so, if you haven't done so, get those forms in. There may even be some good breaks on air fare to Philadelphia, but check with Sky Festivals first at: 215-736-8253.

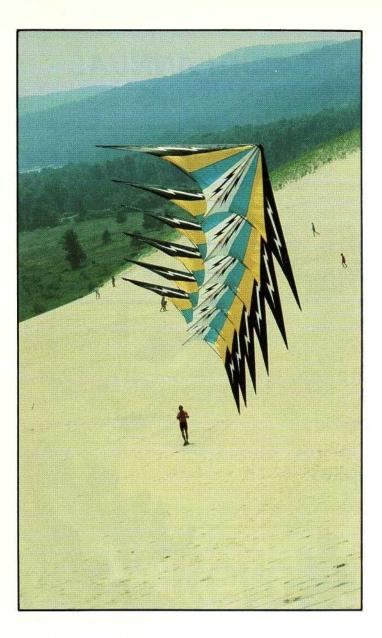


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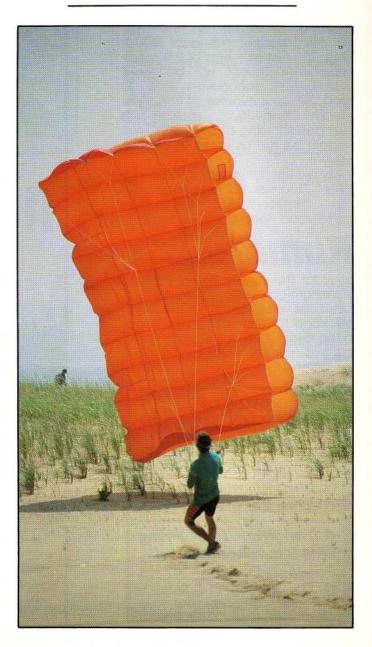
POWER FLYING

It was one of those picture-book days: turquoise skies, good winds, and nothing to do but fly. Sue Taft and Lee Sedgwick had taken a few days off to visit friends in Michigan. This particular day, the decision had been made to fly the Sleeping Bear.

Sleeping Bear Dunes are the focal point of the National Lakeshore Park of the same name about 2/3 of the way of the Lake Michigan coast of Michigan's lower peninsula. According to legend, a mother bear and her two cubs were attempting to swim across the lake. The she-bear made it and decided to rest on the Michigan side where she fell asleep. The two cubs were not so fortunate and gave up just short of the shoreline. They are represented by two offshore islands, North and South Manitou. The dunes left today cover nearly 8 square miles and boast a vertical drop that ranges between 300-400 feet. Located on Lake Michigan, the winds are usually constant and around 15 MPH. A near perfect spot for flying.

Lee and Sue were joined this particular day by Paul VanNocker and Cammie Crane, friends and fellow fliers from Grand Haven, Ml.; and yours truly. Kites flown spanned offerings including Super Darts, Spectrum Darts, Fire Darts, and even a 10-cell parachute/parafoil.

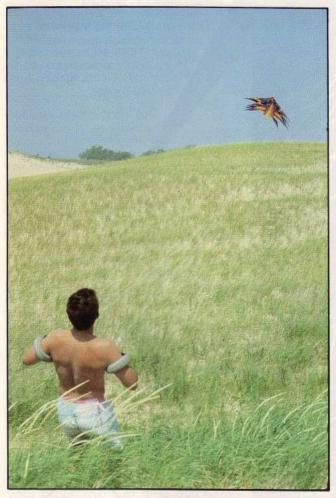
> In the photo at the lower right, Lee struggles with the 'chute. A six-pack of Spectrum Darts just above the main face at the upper left ... again, Lee at the controls.



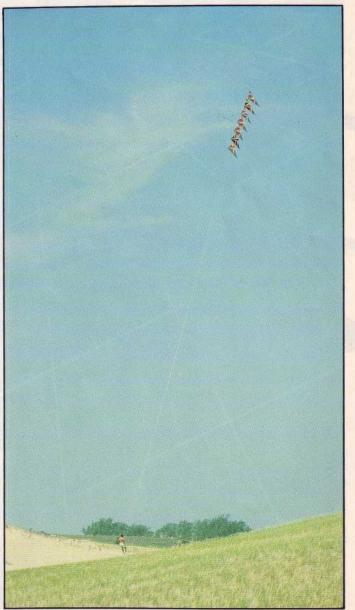


Upper left: Super Darts over Glen Lake from the top of the dune. Paul VanNocker at the controls. Lower photos show Paul heading through the elephant grass back to the "encampment." Both Lee and Paul took "strolls" with their stacks and although the wind wasn't particularly strong on this day, each occasionally had a real handful!

ON THE SLEEPING BEAR



Photos by Cris Batdorff



INTRODUCING Not just another stunt kite, but a conceptual break through... a series of stunt kites, all with the same interchangeable frame.



Our Concept: We have gone back to the most elementary principal of sail-powered craft: for optimal performance you must use different sail configurations for various wind conditions. The SPIDERWING series allows the flyer to enjoy the same freedom of choice that a sailor has to match his sails to the wind.

Our 2 Meter Frame: Constructed from ultra light fiberglass tubing, our frame starts out with the least amount of weight necessary to provide structure. Each wing spar has a unique three-piece system that enables an amazingly effort-free disassembly process for sail changes. The spines, which remain permanently attached to their respective sails have built-in dihedral tubes. The kites are capable of standing free, like a tripod.

Our Bridle: All SPIDERWING kites are entirely harnessed with SPIDERLINE, the original Spectra kite line. SPI-DERLINE bridles insure minimal wind drag and distortion, low line weight, and a near absence of line stretch. All of these factors are extremely critical in gaining the highest performance edge out of a kite's bridle.

> Our Flying Line: The SPIDERWING kite series has been especially designed to take full advantage of SPIDERLINE, the world's strongest kite line. Each kite comes equipped with a total of 200' of SPIDERLINE. Also provided is a pair of flying straps.

> > Our Wings: We have four different wing configurations in our 2 Meter SPIDERWING Series. Each has its own personality and unique flying qualities. Often, all four wings can be flown in the same wind conditions, but each has its

best range, with higher wing numbers indicating higher wind speeds in that range. Our 2 meter frame is entirely interchangeable between the 4 kites, with the exception that SPIDERWING III has a shortened spine.

SPIDERWING I Sail Area: 8200 sq. cm. Skill Level: Advanced. Wind range: 1-7 mph.

SPIDERWING II Sail Area: 5300 sq. cm. Skill Level: Intermediate. Wind range: 2.5-18 mph.

SPIDERWING III Sail Area: 5100 sq. cm. Skill Level: Intermediate. Wind range: 5-22 mph.

SPIDERWING IV

Sail Area: 4100 sq. cm. Skill Level: Advanced. Wind range: 6-26 mph.

Each kite is available in a complete ready-to-fly package or as a Sail-and-Spine set only. Call us today at 800-227-7878.

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NEW PRODUCTS

MORAN Aerobati



Model 1 control grips are the newest item offered from Moran Precision Aerobatic of Santa Barbara, CA. Bi-conical in design, the grips are comprised of UV-resistant closed cell foam wrapped around a thick-wall PVC tube base. Bridle lines are ½-inch Dacron with a 480lb. test Spectra core. 350lb. test swivels are also provided. Grips are coded with high-contrast colors for identification of flying lines. Suggested retail: \$20.



Now you can finally return that screwdriver that you've been using to stake out your stunt lines to the tool drawer. The Kite Stake from Litewinds Kites of St. Louis, MO, is the item responsible. These 9-inch long stakes should do the job nicely. Retail should be about \$5.00.



Tired of bruising your knuckles as you try to remove your spreader spars from the vinyls? The Kite-Mate might just be the answer to your problems. Just slide the nose of the Kite-Mate under the connector tubing and push against it with your thumb ... viola! This new, unbreakable take-down device is from the Dedrick Design Company of San Diego, CA. Retail pricing should be around \$3.50.



released by Carey Winder has just been released by Carey Winders of San Diego, CA. This newest product in the line can be used for either figure-8 or circular line pick-up. Also adaptable for flying handles, the Carey IV is available in a variety of colors. The base composition is high-impact plastic and measures $3\frac{3}{4}$ "x7½". Suggested retail is in the \$4.50 range.



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SCIMITAR

Our newest kite, and hottest design. Faster and more maneuverable than the Chikara. We scalloped out the trailing edge and truncated the wing tip to reduce drag and increase the speed range. Very little pull even in high winds, clean ground passes, stalls, and side skids wing tip stands are made easily with this most impressive new stunt kite. 20 colors to choose from, custom sails are available. Available in 4 wing spans: 6 ft., 8ft., (our standard model), 10 ft., and 16 ft. Wind range - very light to very high!



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.

NIGHT FLY!

Is there anyone who cannot remember their first night-flying experience? Mine was done with a 10-foot 'Foil (black, no less) wthout the aid of any of the popular lighting accessories on the market today. It was scary ... it was fun ... it was completely different! You're never really sure where the ground is in relation to your kite and the lines always seem to be a half-mile long. For the first time, I can remember having to count wraps in the line instead of using my eyes to verify whether or not they were twisted.

Today, there are a number of lighting products on the market to both aid the flyer as well as helping create just the "right" visual effect in the night sky. We'll review them all in the next few issues!

Starting off are two relatively new products in the light show: the Phase 1 System from Nite Flight Lighting Systems of La Puente, CA.; and the Sky-Motion System from Tronology, Inc., of Satellite Beach, FL.



PRODUCT: PHASE 1 SYSTEM SUGGESTED RETAIL: \$54.00 MANUFACTURER: NITE FLIGHT

The lighting systems of Nite Flight are strip-type setups as opposed to single light or diodes. The model that we flew during our first "test" was the Phase 1 System. Basically, the Phase 1 is comprised of two flexible strips each of which contains ten lights.

The strips light sequentially and progress through red, yellow, and green. The final result is all lights on. It looks rather like a flying set of dual staging lights akin to those used at dragstrips around the country. Pretty nifty.

The lead cables run to a control board which is recommended to be affixed near the T-fitting; usually to the spine spar. Power, as with most systems, is from a 9V battery is turned on by attaching the lead clip. The control board is a bare unit. All of the circuitry is exposed but the payoff here is that it also lightens the whole devices substantially.

The light strips can be attached nearly anywhere on the kite. We tried them in several locations which was made easy by the holes drilled in each end of the strips. The bunji cord provided makes the strips adapatable for leading edge positioning by slipping them through the existing holes made for the spreader vinyls. With the same ease the strips could be fastened between upper and lower spreaders across the face of the kite.

The Phase 1 is not intended as a permanent fixture on the kite, though, doubtless it could be made as one. The idea here is portability. If you don't need lights, simply remove them and store

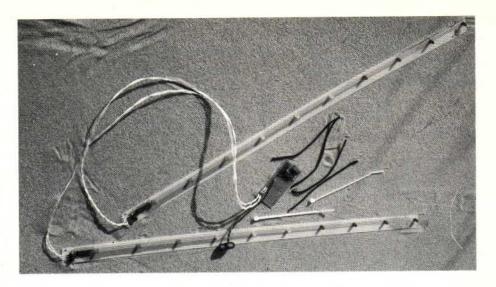


PRODUCT: SKY MOTION SUGGESTED RETAIL: \$79.95 MANUFACTURER: TRONOLOGY, INC.

The Sky Motion package from Tronology, Inc., is the company's "mid-range" lighting unit. At \$79.95 a copy, it rests between the Star-Lite system (\$69.95) and the Aero-Lite (\$82.95). For that kind of cash, potential customers have a right to expect a good deal. Fortunately, those willing to part with the money will probably not be disappointed.

The Sky Motion is a 5-light, dualcolor system. The colors used are red and green and the interesting item here is that they change back and forth as the kite is maneuvered. This feat is accomplished by means of a mercury switch in the unit's chassis.

The whole system is quite complex by Tronology's instruction sheet makes installation easy by walking the owner through the entire process. The five L.E.D.s are all



them in your kite bag until the next night fly.

The lights functioned well in all but the heaviest winds. As the breeze picked up, we just moved the strips to a less criticial position on the kite and flew on. Nite Flight states in their directions that one can expect approximately three hours of light from one battery. Our set actually got closer to four.

The Phase 1 system was great fun, primarily from the standpoint of being able to easily switch light locations. At a suggested retail of \$54.00, we found them to be a good buy as well!



individually cabled to fit virtually any "standard" sized kite on the market. Components used are high quality in every case.

Vinyls are enclosed to fit over the kite's spreader bars and serve as receptacles for the L.E.D.s. The connecting cables are then run down the leading edges and into the chassis which is fitted to the Tassembly. Power for the unit is a 9V battery which is not provided.

The chassis is pre-assembled and self-contained. It also has a convenient on-off switch ... there are no connectors to pull when you want to shut the power down.

In several hours of flying which included, by the way, some NASTY crashes, the Sky-Motion performed admirably. We were unable to bounce even one part loose. As an interesting sideline, using Tronology's new installation materials (a Velcro-like substance), we found that we could detach the chassis, thereby removing most of the system's weight. This enabled us to fly the kite in light daytime breezes and switch back to the lights when we choosed.

While the Sky-Motion can not be viewed as an inexpensive system, it can certainly be looked at as an exceptional one. It will not be for everyone. For the flier, however, who demands the quality and is willing to pay the price, the Sky-Motion should provide many hours of spectacular night-time flight.



In the rapidly developing world of quad-line flying it seems only natural that different kites will develop to achieve different purposes. As with their dual-line counterparts, quad-line flyers from all skill levels need to have their various demands filled. The Peter Powell Double-D sits comfortably in one of those available niches.

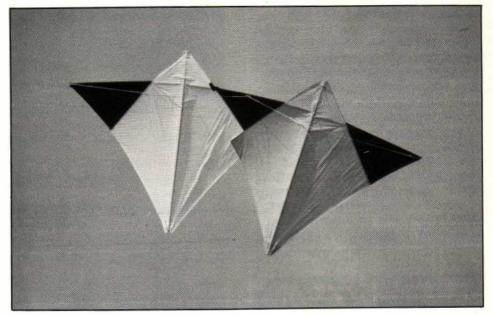
Peter Powells have been around for a good long time and may well make the claim to have gotten more people into stunt flying than anyone else. Their reputation has been to make good quality kites at affordable prices. The Double-D takes the Powell method into the quad-line market.

A point must be made about the reviewing of quad-line kites in differentiation to dual-liners. In many cases, comparing one to the other is the old "apples and oranges" analogy. With dual-line kites, basically a pull to the right will net the flyer a right hand turn ... a pull to the left, a left hand turn and so on. The main items open for discussion are handling characteristics.

Quad-liners are somewhat different in that there exist some maneuvers that one kite may be able to perform but not another. Anyone who as struggled through an inverted launch with a quadrigged, delta-type stunter will appreciate the comparison.

What we seem to have then, in the Double-D, is the perfect entrylevel quad-line kite. We found it to be a very forgiving machine, particularly in one area. The kite does not stall should the flyer "accidentally" revert to the traditional dualline flying style. This, to that large bunch of us who are still given to memory lapse while flying these four-line mechanisms, is a point which looms large, inded.

The Double-D is also slow enough in its reaction that those learning mistakes can often be compensated for. Subsequently, we spent a lot less time on the MODEL: DOUBLE DIAMOND FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: WIND RANGE: 7-25 mph. CONFIGURATION: side-by-side diamonds with cannard MFGR'S SUGGESTED RETAIL: \$136.00 MANUFACTURER: PETER POWELL KITES



ground with this kite that has been usual. Not to say that it isn't fast in the air ... it just gives you time to think!

Propeller-type spins did not seem to be the Double-D's forte. The spin seemed to center around either the left or right bridle point. With much practice, we were able to move the axis towards the center, but never got it dead on. This would seem to be a function of the kite's shape rather than its handling characteristics.

The kite also seemed to hover best on a horizontal rather than a vertical basis. This is a marked difference to most other quads. It made landings and launches a breeze.

One of the things that sets quad-line kites apart from the dual-liners is their ability to achieve backward flight. This is frequently a frustrating experience as most kites present difficult profiles when reversed. The Double-D, happily, flies quite well in this position. In fact, it was nearly as stable in one direction as the other.

The handles that come with the Double-D are color coordinated to the kite. We found this to be very helpful, particularly, to the beginning flyer. The grips are located in a fairly good position for most maneuvers but those who had done extensive flying of more complex figures found them a bit too high.

Workmanship of the Double-D is up to Peter Powell standards. The spreader spar is loaded through one end of the kite. This is accomplished by bending the entire unit like a recurve hunting bow. As is usual with Peter Powell kites, bridles are pre-set at optimum settings.

The use of 1.5 oz. ripstop is a real plus for the Double D. It handles all but the heavy winds with ease. The trailing edge is zig-zagged and straight sewn. All items point to a typically long-lasting Powell design.

The Double-D represents another durable design for which the Peter Powell firm has become known. It is, in our estimation, one of the better places to begin a love affair with quad-lining. This without mentioning a price that makes the whole package singularly attractive. If you're contemplating a move into this fascinating new aspect of stunt flying, the Double-D looks like a right direction!

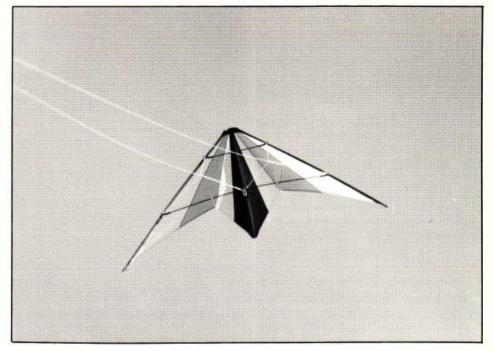


When Action Kites introduced the Moon Dart last fall, it at first appeared to us that we might be looking at a 3/4-size version of their popular Fire Dart. Given the acceptance of the Fire Dart, we were prepared to accept the Moon Dart as a logical next move ... a kite like the Fire Dart only smaller. When the package arrived. however, we were pleasantly surprised. Though there were obvious visual similarities, this was a different kite. The wing tips were not nearly so angular. Less acute as well was the tail anale. In fact the Moon Dart appeared more a cross between Fire and Super Sky Darts done on a smaller scale.

Flight characteristics of the Moon Dart confirmed the comparison. Having had the opportunity to fly the kite in wind speeds ranging from a mild 4-5 MPH up to gusts of 26 MPH, we found the Moon Dart behaved a bit like each of its big brothers. The low end for the kite would seem to be around the 7 MPH marker. Below that, the Moon Dart becomes fairly tentative in its flight patterns. Up at the high end, however, this new Dart seemed like it could take whatever we dished out.

It was very quick thought not as much so as some of the other kites tested of a similar size. This lack of blurring speed meant a welcomed increase in controllability.

The characteristic feeling of control loss due to diminished size was far less present with the Moon Dart than in many other of the "mid-size" kites that we'd flown. Even off wind in mid-range breezes there was a positive responsiveness with this kite that made landings and relaunches tangible to the flyer. This situation continued to present itself as long as the wind remained fairly steady. Too much gustiness had a derogatory effect on the kite's offwind handling, however, This was lessened, to a good degree, by the addition of standoff spars. The MODEL: MOON DART FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 5-30 MPH CONFIGURATION: delta-type (83 inch wingspan) MFGR'S SUGGESTED RETAIL: \$99 MANUFACTURER: ACTION KITES



condition of the kite's occasional "flattening" in the wind was nearly eliminated altogether. As anticipated, they also had a positive effect on the kite's abilities in lower wind situations. Stability increased markedly....

There was a moderate amount of oversteer with this kite. It seemed to us that the Moon Dart held out good potential for use in stacks. Although there was a hefty pull in evidence in winds above 20 MPH, it wasn't enough to be termed significant.

Our prototype Moon Dart had an occasional problem which revolved around the unseating of the lower spreaders. We solved the problem easily with a wrapping of tape and Action Kites has informed us that smaller vinyls are being used on the production models.

We discovered the Moon Dart to be a consistently accurate performer. The comparison to Action's other Darts is obvious once it has been flown. It has the agility of the Fire Dart without the expanse of sail. The relative speed involved is more akin to the Super Sky Dart. Ground work seems a cross between the two. Given the kite's size, however, it may require more ability to fly well than either of its larger cousins. It is considerably more touchy.

We've pulled, pushed, and powered large kites through many maneuvers. Not so with the midsize kites. The Moon Dart is no exception. The largest challenge presented to the "big wing" flyer here will be that of over-control. Those big arm movements can result in quick disaster here! The Moon Dart keeps a watchful eye towards such things, answering the flyer with over-rotated skidding turns and earthward plunges to test his reactions.

It is a kite that must be flown. Of the mid-size kites tested, this was one of the two which held our interest. It always presented a challenge. For those pilots who enjoy a calm, docile flying machine, the Moon Dart may be a bit too unpredictable. For those who enjoy a kite that must be, if not tamed, at least "gentled" a bit, the Moon Dart should provide many hours of stimulating flying!

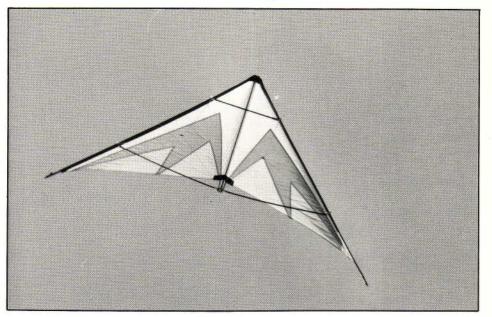


Amid all the glitz and new products at the KTA trade show was a kite that didn't seem to be garnering a whole lot of attention. Sure the kite had great graphics and good colors but, at first glance ... just another delta, right? Not so!

Ralph Offredo of Hawa Aerolabs has been a flyer for five vears, a competitor for four, and a kitebuilder for three. What initially began as an attempt to build a kite that would generate less pull than the bigger wings has evolved into the Bird of Prey. The evolutionary process has precisely followed the original plan. Straight from the bag, with no ad-justments, the kite handled with ease every test that we put it through.

With a wingspan of only 80 inches, the Bird of Prey flies like a much larger kite. It has none of the skitterish qualities of some of the scaled-down deltas. It was a solid performer in light breezes of less than 4 mph exhibiting very little either over or understeer in any turning situation. Landinas and relaunches were accomplished easily in spite of the fact that the kite is not equipped with standoff spars. Still, there was no tentativeness on the part of the Bird of Prey in any of the ground maneuvers. Take-offs were without wobbles under all wind conditions.

Straight line flight was a breeze with this kite and, although wide radius turns were carved with a bit more efficiency than the tighter ones, minor bridle adjustments corrected the problem handily. This is not to say that the Bird of Prev performs at a lower level in tight turns ... it doesn't. In fact, the lower aspect ratio of this kite makes it a very stable performer, indeed. In very low wind con-ditions, however, the kite can lose power in tighter turns. Occasionally, in sail configurations of this type, that can set up a stall situation. The Bird of Prey reacts by going into a gentle floating spiral maneuver as the kite powers MODEL: BIRD OF PREY FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 2-30 MPH CONFIGURATION: delta-type (80 inch wingspan) MFGR's SUGGESTED RETAIL: \$165.00 (graphite spars) MANUFACTURER: HAWQ AEROLABS



down. We found the situation to be completely controllable while, at the same time, predictable.

As was intended, the Bird of Prey has a much diminished pull. This held true even in winds of 15-20 mph where the kite continued to perform very well. We were able to stall the kite most frequently in a direct overhead position. Stalling off-wind and down-wind was able to be accomplished but with more effort.

In the speed department, while the Bird of Prey is no speed demon, it can eat up the sky in pretty large slices as the winds increase. There was a little distortion in the frame in winds approaching the 20 mph mark but not enough to be overly significant. We never got the impression of not being in complete control of the kite.

There are a couple of other plusses in connection with the Bird of Prey. The aluminum ferrule Tfitting is guaranteed for the life of the kite. This is also true of the harness swivels. Both guarantees are contingent upon normal flying conditions being observed and will be replaced by Hawq Aerolabs free of charge should they fail.

There are only a few items of detraction at this point. We'd like to see stoppers added to the leading edge spars to prevent slippage of the spreader vinyls. Although this was not a problem during our testing period, as the "loosens up" a bit, it may kite present itself as one. Constructionwise, we'd like to see the spine sleeve made a bit tighter. The holes through which the bunji cords are attached to the sail at the spine's base are set a bit too wide. This creates a small bunching of the sail at this point. None of these items, however, presented any problem during our tests.

All in all we were impressed by the Bird of Prey. Taking it straight from the bag, on the factory marks, we proceeded to fly it for nearly an hour. The response was crisp in all wind conditions and we found it to be very forgiving as well. It should make an exceptional team kite. There were no negative surprises as the kite was well-mannered and easily controlled. An observer whom we asked to take a turn at the lines commented that he "could fly this kite all day." We're inclined to agree with him!

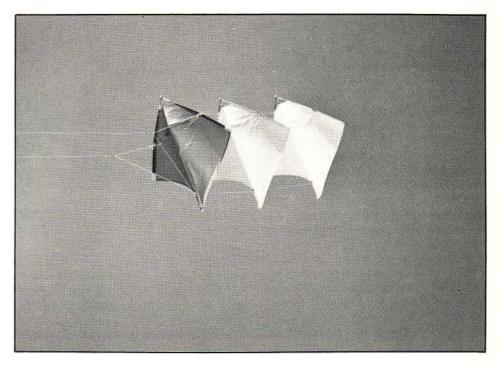


If you're an East Coast flyer, you're probably aware of the Mirage. We saw our first one on the initial Wildwood video as its originator Mike Jones flew it brilliantly to victory. We obtained our first set (a used one at that) in the parking lot of Kitty Hawk Kites in Nags Head, North Carolina. They were sold out at the time but managed to locate a three-pack available to this that was Michigan kite crazy who was just passing through.

Now, some three years later, we've just obtained our third set and, apart from some minor changes in construction techniques, find that the basic design has changed very little. Our original set flew beautifully and, happily, the new ones are every bit as good if not better! There are a number of improvements worthy of note: the airframe is now guaranteed for life. Additionally, the whole kite has been "permatuned" so the flyer will, ideally, not have to mess with a lengthy fine-tuning process after purchase.

The Mirage flys differently than most of the kites that we have in the bag. It can, on ocasion, be a frustrating kite ... particularly during the launch. It is similar to, but still unlike, other diamondshaped stunters. Self-launch is accomplished by first positioning the kites with the leading edge on the ground, nose upwind to either right or left. A pull, weighted to the upward side will get the kites airborne. A second even pull will "lock" the stack into position.

Once you're in the air, the fun begins! Mike has said on several occasions that the Mirage flies like "it's on rails." That's a pretty fair statement. Although very sensitive to the flyer's touch, our stack tracked rock-steady. Particularly impressive is the kite's turning ability. The Mirage has a tendency to "power down" in spins producing a very graceful series of turns. The potential for extremely tight radius turns results in the Mirage's propensity for solid ground work. MODEL: MIRAGE FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 8-18 MPH (base); to 30 MPH (modified) CONFIGURATION: rhomboid diamond MFGR'S SUGGESTED RETAIL: \$29.95 (single); \$99.95 (triple) MANUFACTURER: JONES AIRFOILS



Once again, the control is very sensitive, but with a minimal amount of practice, even a beginner can cut those greatlooking, right-down-on-the-deck moves. The kite's ability to dump air in the turns makes it predictable even in very tight situations.

As the wind picks up into the high teens, flyers will want to take advantage of one of the modifiavailable cations from the manufacturer. Mike is producing as an additive package, a sparring modification called Trusstix. These are essentially substitute spreader spars that brace the spine in two places instead of one. They very effectively extend the kite's range into the mid-twenties, virtually eliminating any distortion. We flew our stack with and without Trusstix in winds of 20-25 mph and found them to be a very worthwhile option.

Above and beyond Trusstix, a substitute spine spar is offered that will reportedly extend the range of the Mirage into the thirties with no performance drop-off.

Unfortunately, we were not able to test this further option as the winds decided not to co-operate.

In these higher wind situations, the Mirage is capable of exerting a pretty fair amount of pull. It's also capable of some pretty good speed. The real fun here, though, is working the kite at the edge of the wind. The Mirage makes good use of the window and remains controllable throughout. Turns either up or down at the edge are no problem for this kite.

The Mirage is a kite that is made for the finesse flyer. If you're looking for power or blinding speed, you probably won't find it here. It is a kite that flirts with the wind, taming it with sensitivity rather than harnessing it for power. Dyed-in-the-wool Mirage flyers will also tell you that the kite improves with age. If your flying style is characterized by the use of tact rather than force, there may just be a Mirage in your future!



I met Mike Simmons at Peter Powell's "Air Affair" in the summer of 1989. Along with Dan Ward, Mike was one-half of the 5th Street team that took second place in ballet. Since then, he's been hard at work!

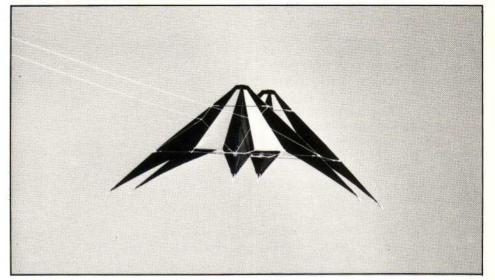
Fascinated with the performance of competition-modified stunters, Mike began visualizing a kite with out-of-the-bag flight characteristics that matched what he'd seen. The kites had to be capable of quick, nearpropeller-like spins; be precise; and have a propensity for ground work. The process has led to the NLK ... a Nice Little Kite.

The NLK fits comfortably into mid-range size. It also has a companion "big brother," the NBK (you guessed it ... the Nice Big Kite), that fits the "regular size" mold. An RBK (Really Big ... etc.) is rumored to be on the way.

At first glance, the NLK appears just another mid-range. The shape is different, but not overly so. What IS unusual is the employment of dual standoffs. The trailing edge has been deeply (and widely) notched on either side. There is a 9-inch swath of fabric in the center of each side of the training edge that is square to the ground. This bit of sail is kept at bay by the two standoff spars. The use of two such spars enables the pilot to somewhat regulate the amount of "three dimensionality" in the kite's sail. Unusual, yes ... but in appearance, no more than a novel look.

It is in the air that the design, in combination with some very short bridling, proves its point. The NLK is possessed with only moderate speed. It was not designed, however, to tear the sky apart. Its turning ability, on the other hand, is incredibly good. We flew our tests with a stack of two NLKs at Mike's recommendation. They performed in perfect unison.

Nearly at whim, the NLKs would spin. Ground touches, wing MODEL: NLK FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 7-30 MPH CONFIGURATION: delta-type, notched trailing edge (78 inch wingspan) MFGR's SUGGESTED RETAIL: \$130-\$140 (single) MANUFACTURER: SKYWARD KITES



stands, and landings were easy enough as to become nearly (dare we say it?) boring. Square turns were no problem maneuvers. With not much practice, a pilot can take the NLKs to the edge of the window, set them on a wingtip, pull on the upper line, and the kites will respond with a flip; setting the tips back nearly in the same place.

If the NLKs have a drawback, it is in the area of wide turns. The window is somewhat restricted but not overly so. The kites are very responsive to flier commands so seem to perform best on shorter lines. We used 90' lines and had no trouble making use of nearly all of the usual window but it did require some arm motion in the upper portions.

With such a fast-turning kite, a higher that normal amount of oversteer might be anticipated. We did just that and found it to be present but not at nearly the rate we had thought. A simple, quick forward movement of the controls would alternately "freeze" the kite's actions or straighten out the oversteerage. By and large, the kite was capable of executing turns precise once the mechanisms were understood and utilized.

The NLK is still basically a kite

that is produced on a one-at-atime basis. It is not a full-production product. Graphite spars are utilized throughout. A spare spar for each kite is also included in package. Nevertheless, each don't look for letter perfect seaming. Some parts may also need some small modifications (nothing beyond the occasional spar sanding). And there are some things that we'd change. We'd like to see the standoffs attached to the sail by a different method. Our NLKs had them tied to the arommet holes by Spectra line. As there's a considerable amount of pressure on the sail in these points we'd like to see the areas reinforced and the spars secured by bunji cord to absorb some of the shocks.

In consideration of the NLK's performance levels, we're willing some minor to accept construction. in shortcomings Those will certainly improve the Skyward Kites gets more into the swing of manufacturing. It seems doubtful, however, that we're going to see more in the area of flight potential. Then again, we like it just fine the way it is! If groundwork is high on your priority list, you'll want to test-fly a set of NLKs!



"Now let met get this straight, Sid ... under \$50 for this kite?" We were talking with Sid Tibble of Kite World in Indialantic, FL.

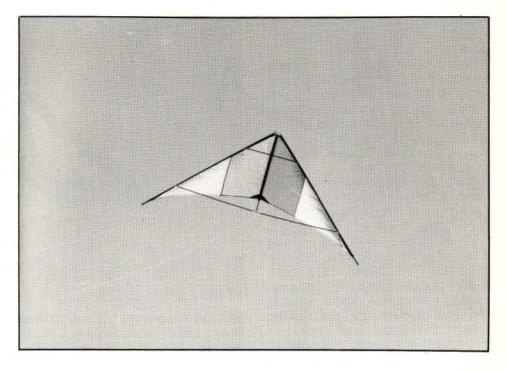
"You've got it right," he replied, "and that's not a sale price either! It's made right here in Florida and it's called the Tsunami."

OK. So we'd gotten another one to test ... a little delta-type ... but in consideration of the price, we weren't getting our hopes up. We'd spent a lot of time looking for reasonably priced entry-level delta-shaped stunter for our retail operation. By and large, we had been disappointed more times than not. A week or two later we were standing on the sand at Ormond Beach and guess what was the next kite to come out of the bag ... our little Tsunami. The winds were marginal, 4-5 MPH at best. A lot of the new kites had been struggling.

Up went the Tsunami ... and up it stayed. The performance was not of the glowing, rave review type, but it flew. Nice straight lines, wide turns, moderately tight turns ... the Tsunami did them all without much difficulty. Oh sure, there was a little backing up on our part from time to time and occasionally the kite needed a little coaxing but in view of the performances of the other finely-tuned machines that we had just flown, the Tsunami had no reason to hang its head.

It seems plain that this has not been designed as a competition kite. Of course, this is not to say that it couldn't be flown competitively. The point being made here is that the Tsunami looks more to be a well-done attempt to put a good product in the hands of an aspiring flyer at a very reasonable price. That it does handily. It is a no-nonsense kite. There are no fancy sail graphics. There are no gimmicks or gadgets. Our kite was a simple tri-color design. The nose was constructed of two pieces of vinyl, one of which was drilled to

MODEL: TSUNAMI FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 6-35 MPH CONFIGURATION: delta-type MFGR's SUGGESTED RETAIL: \$45 - \$50 MANUFACTURER: BLOWIN' IN THE WIND



acommodate the insertion of the other. The whole assembly is left uncovered. This design has been used by many kitemakers for years and has proven itself to be both cost efficient and functional.

Wing tips are comprised of a vinyl endcap. The wing tip bunji cord is passed through a hole in the end of the cap, which is then slipped over the end of the bare spar.

It may seem at first brush that this spartan construction method might break up in high winds. Not so. We were informed by Larry Wade of Blown' In The Wind, manufacturer of the kite, that the Tsunami would take a great deal of same ... perhaps as much as 30 MPH. We remained skeptical but decided to take Larry at his word.

Returning home to Michigan, it wasn't long before Old Man Winter whipped up something appropriate. In winds ranging into the high 20's, the Tsunami, performed even better. It was very fast and handled turns of all varieties easily, even knocking off the occasional landing and relaunch. The only drawbacks seemed to be in the size of the available wind window (about 110), and the moderate amount of oversteer.

These two items conspired to slightly curtail the off-wind performances of the Tsunami. Once again, however, it must be emphasized that we were flying a unit designed primarily with the entry-level flyer in mind. In that account, the tests could only be viewed as exceptional.

There's an old saying: You get what you pay for. The Tsunami from Blown' In The Wind seems to take some rather ungentle pokes at this old adage. While no one's getting a Maserati at Corvette prices, we can remember a time when a serviceable new vehicle could be had off the showroom floor for under a thousand bucks. Could just be those times are here again!



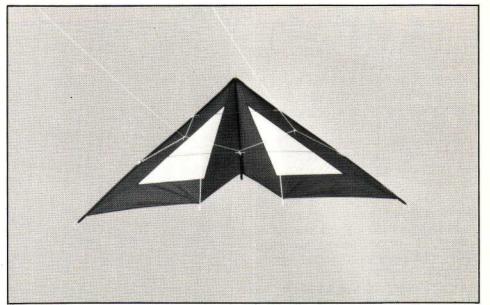
We had seen the Liteflite before; most notably at the recent AKA Aloha Nationals and had been impressed with the kite's flight characteristics. We were not able to obtain one for testing, however, until recently. At the onset, it was plain that we had gotten our hands on a very nicely done piece of work. If this was not the best light-wind kite that we had flown to date, it was certainly among the top three.

Testing the Liteflite on a near windless day (1-3 mph), we found that the kite did, indeed fly perfectly. The "speed" of the kite ranged downward from near normal to excruciatingly slow. At the same time, there was no loss in performance levels. At no point did we feel as if we were "pulling" the kite through the sky. Control was maintainable at all times.

Straight line flight was right on the money ... no wobbles, no swerves, no hesitancy. Turns, both large and small were executed with ease. Additionally, there seemed to be a complete absence of either over or understeer. Landings and relaunches went just as smoothly.

It was when we came to that portion of the flight that called for square and acute angle turning that we anticipated the kite showing a bit of a problem ... but it simply wasn't in the cards. The Liteflite responded perfectly. Even though the kite flew at an extremely slow speed, which was expected from the diminished wind levels, angular turns were no problem ... a simple pull or push and the Liteflite assumed the desired angle without a smidgen of control loss.

As an added bonus, the Liteflite used nearly 180 degrees of wind window. This is no mean accomplishment in little to no wind without considerable movement on the part of the pilot. At the edges, the flier may, with alacrity, turn the kite either up or down to regain the center of the wind. Further, in stalling positions on the MODEL: LITEFLITE FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 2-12 MPH CONFIGURATION: delta-type (95 inch wingspan) MFGR'S SUGGESTED RETAIL: \$170. MANUFACTURER: THE KITE STORE, LTD.



edges, overhead, or downwind, the kite was quite easily recoverable. When placed in stall, the kite goes into a controllable hover, losing altitude nearly imperceptibly.

As per the instruction/information sheet furnished with the Liteflite: "If you want a stunt kite for stronger winds then this isn't the kite for vou - flving it in stronger winds will not break or harm it, it just won't fly well." We tested this statement and found it to be correct, although the actual falling off does not occur rapidly; i.e., the kite doesn't "fall to pieces" as the wind kicks into the 13-16 mph but, only rather, suffers slightly diminished performance levels.

There are a number of new ideas at work in the Liteflite. To begin, the kite utilizes a lightweight graphite frame that is small in diameter and yet quite rigid. The wingtips are positioned inside the leading edge. This is accomplished by pulling a loop of line placed at the wingtip so that the spar can be inserted into a reinforced elastic sleeve. The end effect is a very clean wing end. The spine spar is treated in a like matter.

Standoff spars are positioned inside a pair of looped rubber holders, one of which affixes to the bottom spreader, the other to a loop attached to the trailing edge of the sail. This produces a very handy method of dealing with a formerly involved process of cutting vinyls, gluing, and the like. The rubber holders do wear out but are easily replaced when necessary.

We did notice that there are no vinyls attached to the leading edge spars to forestall any movement on the part of the spreader vinyls. As the Liteflite is not designed as a high wind product, however, these may not have been deemed necessary.

It's easy to see why the Blitz Team selected this particular kite with which to compete. It's precise and able to handle those very light wind situations without losing that precision. In a pinch, it will also handle a good deal more without sacrificing a great amount of handling. Those flyers who have been searching for an ultra-lowwind kite that can carry the precision moves may be able to end their search here. For those who already have their low-wind favorites, the Liteflite is a product that demands comparison!



Last fall we were aware that a deal was in the works to manufacture AKA National Champion Vince Brobrosky's kite, the Stinger. It was no surprise to find it offered to retailers at the Miami KTA convention. It was, however, news to us when we got an additional showing of a 3/4 size version, the Stinger 750.

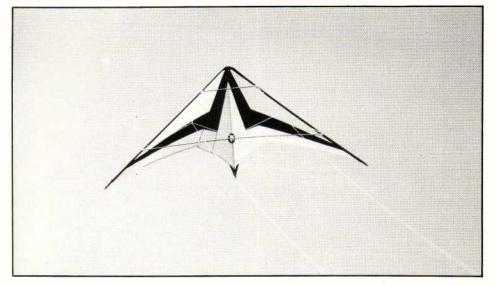
Sporting the same crisp graphics as its larger brother, the 750 is a faithful downsizing effort. Flight characteristics are comparable as well, though the 750 is designed for and performs better in significantly higher winds.

Flying the larger model, now called the 1000, had gotten us used to a slow but exacting mode of flight. In fact, it was that slow precision that first attracted us. Those who have had the opportunity to watch the Stinger's designer, Vince, fly, will quickly be able to recognize the 1000's flight pattern.

From the onset, the 750 seemed a shade different than the 1000. The kite had more than a trace of the exacting flight characteristics, especially in comparison to other mid-size kites. It is significantly quicker than the 1000. While the kite does appear to launch in a like fashion, similarities begin to slowly fade from that point on. Depending on the bridles used, there can be a fair amount of oversteer with the 750.

We were sent an improved set of bridles for the kite that we took delivery on the KTA. In all fairness, ours was a prototype made for the show; not the mass production model presently available. The new bridle took care of a lot of the oversteer. It did not cure one other minor difficulty that we encountered, that being the kite's "diving" into turns. It is nothing major but worth noting that the 750 likes to power down when thrown into tight spins. This produces a spiraling maneuver that we viewed as a plus in the aesthetic column but a minor detraction in precision.

MODEL: STINGER 750 FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 7-35 MPH CONFIGURATION: delta-type (78 inch wingspan) MFGR's SUGGESTED RETAIL: \$110-\$125 MANUFACTURER: GREYSTONE INTERNATIONAL



In the performance department, the power-down proved to be to the only significant detraction. Launches, landings, and turns (particularly angular) were all handled with ease by the 750. With practice, the speed can be controllable. Off-wind, the 750 proved as agile as the 1000 but required more push from the wind. We felt comfortable with the 1000 in winds of 5 MPH but needed closer to 8 before the same feeling emerged with the 750.

Once the slight oversteer is dealt with, the 750 also got good marks on the edges of the window. It is possible to float the kite, which seemed a bit unusual for a mid-size unit. Shorter lines made the flying more fun and enabled us to get the most out of the kite's great responsiveness. As the breezes crack into the mid-teens and even the low 20's, the 750 begins to show what it can do. We were impressed with the shortness of arm movement needed to fly the kite.

There are some changes, however, that may be appropriate. The length of the spine is a problem. When the kite rests on the ground in typical "twopoint" stance, the resting point is on the base of the spine spar. A trimming of even one inch would solve the problem and, in our estimation, not hurt the flight characteristics of the kite.

In the workmanship department, the 750 could use some minor adjustments ... and we do mean minor. Areas of stress created by the standoff spars have been reinforced. Likewise has been the tail piece and the hole through which the T-fitting is inserted through the sail. The hotknifing of the fabric could be improved a touch.

The 750's trailing edge has been triple zig-zagged. Graphic work has been double stitched. All of this is to the credit of the kite. The seaming, however, could be generally straighter. These glitches will undoubtedly clear up as production steps up a bit.

Summing up the 750 is not an easy task. The Stinger 1000 is a hard act to follow. This smaller version decidedly has a place in the bag. We liked it best when flown in stack ... primarily in front of a 1000. If you are seeking an uper-level performer in mid-range size, the 750 could be the perfect choice. For those who already own the larger kite and would like to carry some of its performance abilities into a wind range beyond which it can be comfortably flown, the 750 should not be neglected!



Towards the end of last summer, we began hearing rumblings of a spectacular low-wind kite being produced in England. It was named after its designer, Tim Benson, and boasted of an alleged wind range that lay somewhere between a breath and a vacuum.

Now we'd heard enough aspiring snake-oil salesmen in our time to recognize what we thought at first was a spurious claim. It was that fact that led us to question the fellows in the Highflyers' booth at the trade show.

"Just how low-wind are we really talking here, guys?"

"Three or four miles per hour, for most folks ... less if you're good. How good are you, anyway?" came the reply. Our honor having been suitably questioned, we left (with a Phantom under our arm).

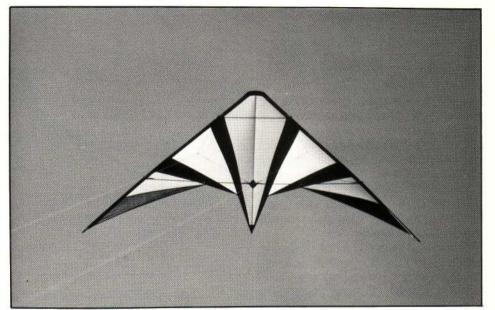
A few days later we found ourselves on a stretch of sand just south of Daytona Beach. A sailor would have called us becalmed. Time to test the new machine. Out came the Phantom.

After about 1/2 an hour with the kite we brought it down. It had been good but certainly less than spectacular. Perhaps our flying ability had been impugned justifiably.

A couple of months passed, and a few phone calls made. In talking to the U.S. representative for the Phantom we surmised that, perhaps, the bridles had been put in the wrong position.

Bearing that in mind, we awaited a windless day. Eventually, our patience was rewarded and we headed, once again, for the flying fields. Our first test, with the marks positioned a half-inch high produced a non-flight. The kite rose a few feet, then floated back to the ground. Time to get radical. Here was a kite that weighed virtually nothing and yet it would not fly!

We decided to pull the nose in by an inch-and-a-half. Wow! The Phantom took off as if there was actually a strong breeze. It's performance was spectacular and MODEL: PHANTOM FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 2-18 MPH CONFIGURATION: delta-type (96 inch wingspan) MFGR's SUGGESTED RETAIL: \$200-\$270 (depending on options) MANUFACTURER: HIGHFLYERS



exacting. Within three minutes we were flying it as if it were an old friend. The only oversteer or understeer that we experienced was that which we put there. Square and angular turns were right on the money.

The in-place wind window was nearly 180 degrees and could reach beyond that easily. Offwind work was the most fun as the Phantom stayed controllable right to the edges. Turns either up into the wind or undercutting it presented no problems. Landings and relaunches were likewise, effortless.

Though ultra-tight turning ability was not one of the Phantom's strong points, it was easily spun on the wingtip. It reacted to commands from the flyer in very quick fashion and proved to be extremely sensitive to those commands. It was so steady on the straight line passes that, without great effort, we could work right down on the deck.

In the construction department, the Phantom got good marks with some reservations. As fliers begin discovering that the kite WILL function in more wind than the advertised ultra-light condition, they will certainly begin to test out its upper limits. It seemed to us that the single-stitched trailing edge may show up as a flaw in that instance. The Phantom also utilizes a rather interesting system of rubber banding to assure that the lower spreader spares are kept in position. While they certainly accomplish this purpose, they can present the flier with an amusing amount of frustration.

There are also items about the Phantom that bear out praise: most notably the treatment of angles on the trailing edge. Each angle presents a stress point on the kite and thus, has been reinforced. A small point but one worth mentioning. The tail of the kite has also been reinforced with the same webbing material used on the nose.

The Phantom is a specialized kite built for a specialized purpose. While its graphite spars seem to hint at another level of performance in higher winds it would seem an abuse of design. It is, likewise, a kite that may not fit conveniently into everyone's budget ... on the other hand, neither does a Lotus Turbo. For the competitor or serious flyer who wishes to fill a low-wind slot in his kitebag, the Phantom should do the job quite nicely!



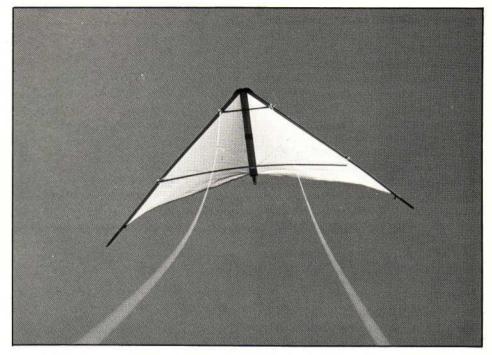
Last summer we had the opportunity to fly one of the kites manufactured by Highly Strung Kites and were impressed with its quality. It was not until the Aloha AKA National Convention, however, that we were able to actually purchase a couple for testing.

One of those kites was the Auster. In passing, this kite has a visual similarity to the 3/4 Spinoff by Top of the Line. A closer inspection reveals that this is much less the case than originally thought. To begin, the Auster has a significantly higher aspect ratio. The upper spreader is located much closer to the nose and is much shorter (4+ inches) than the 3/4's. Additionally the lower spreader comes through the sail instead of beneath it. The bridling is also done in different fashion. The comparison breaks down even further in flight characteristics.

The higher aspect ratio of the Auster, while being far from severe makes for a very nimble flying machine. The payoff here is that one must be alert not to divert too much attention away from the task at hand. Bridling is located closer to the spine requiring, again, attentiveness on the part of the pilot. The sail lies fairly flat on the frame so what billow is achieved is arrived at principally by the flex of the leading edge spars.

While it may seem that all of these facts might combine to make the Auster a difficult kite to handle, strangely they do not.

In the past three months, we've had occasion to fly the kite in nearly all types of wind. The Auster was very quick through the turns, with a tendency towards oversteer. This held true in all but the lightest conditions. In higher MODEL: AUSTER FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 6-25 MPH CONFIGURATION: delta-type (76 inch wingspan) MFGR's SUGGESTED RETAIL: \$75 MANUFACTURER: HIGHLY STRUNG KITES (Melbourne, Aus.)



breezes, the sail's tautness tended to over-rule what should have been bent towards distortion. Subsequently, the Auster held up extremely well, even at the upper limits of its suggested range. In all cases, the use made of the flight window was very good, the flyer retaining control right out to the edge.

Pull generated by this kite is a little on the heavy side for the sail area involved. This is owing, we suppose, to the tight sail. It may be for the same reason that the Auster was not one of the easier kites to pull into a stall ... it seemed always to be wanting to drive forward. On occasion, however, most notably off wind, we were able to force one upon it.

As is the case with several of the higher aspect ratio kites, the Auster becomes a little skitterish in stall situations. It is at this point that the flyer must be on his toes. The less the billow in the sail, it seems, the quicker the kite wants to "turn its back" on its pilot. Once the kite has performed this maneuver, it takes a dandy flyer, indeed, to prevent it from going to ground!

The Auster handled landings and relaunches with conditional ease in spite of the absence of standoff spars. However, when troubled by the errant cross wind, the kite could become like the proverbial "leaf in the wind." Landings far off wind provided us with some tense moments particularly in periods of gusting or swirling air.

Still in all, the Auster was good fun to fly. There is much to be said in favor of those kites that give back as much as they're given. This is a kite which must be flown, not tended. A beginner will on occasion have his hands full with the Auster, the barb being that no prior notice will be given. For the flyer who wishes to verse himself a little more in the area of control, the Auster might just be a very good place to start!



One of the new lines shown at this year's KTA convention in Miami Beach was the Skymaster Competition 8800 series. Basically a large wing delta, the 8800's have taken dead aim on what is perceived to be an ever-increasing team flyer's market. There is only one kite in the Skymaster bag at this point and it occurs in four color selections ... all combinations of black, hot pink, and a hot lemon color.

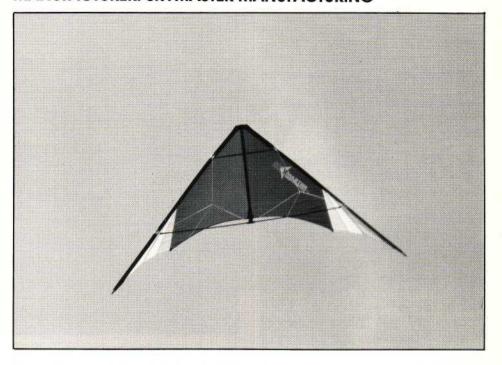
All right, you may say (paraphrasing Donald Sutherland in Kelly's Heroes), they're pretty ... but can they fly?

In typical devil-may-care style we took our Model 8804 boldly out onto the beach to test it in 5 MPH. (Actually, it was gusting to near 7.) The results? Very nice, even though we were well below the manufacturer's suggested range.

The 8800 is a shade on the heavy side which, of course, makes it a great straight-line tracker. Turns, running the gamut from large to tight radius and angular were easily accomplished.

Landings and relaunches were done, similarly, without incident. Kite speed and pull generated were normal for a kite of this size. In fact, the 8800 exhibited a designed ability to "slip" wind which showed up most noticeably at the edge of the wind window. The result was that the kite could be stalled in several places and recovered at the whim of the pilot.

A few days later, when the wind kicked up into the high teens, we took the Skymaster out again. It was plain from the onset that we had hit the middle of the kite's optimum range. The 8800 was near rock-solid and yet still exhibited the nifty off-wind abilities that we had glimpsed during the low-wind sessions. Oversteer increased but only slightly. The only problem showed during off wind wing-tip touches and stands where the kite had an occasional penchant for turning its backside to the wind MODEL: COMPETITION 8804 FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: black plus hot pink and yellow WIND RANGE: 8-24 MPH CONFIGURATION: delta-type with scalloped trailing edge (90 inch wingspan) MFGR's SUGGESTED RETAIL: \$129.00 MANUFACTURER: SKYMASTER MANUFACTURING



and going to ground rather quickly.

There are also a number of technical innovations utilized on the Skymaster kites that bear more than just a mention. The kites all make use of a new T-fitting that we have not seen before. These one-piece hard rubber units replace the usual vinyls on the leading edge and at the base of the spine. On the leading edge, the wing spars simply insert through the T with the spreader spars fitting into the bottom of the assembly. The result is a profile which is very clean both aesthetically and aerodynamically.

The same T-fifting used at the base of the spine is held in place by a piece of Velcro. Things are clean here as well. It will be an interesting test of time to see how long this particular arrangement will continue to give good service.

Still another interesting feature encountered on the 8800's is the employment of stitched bridle lines. Again, the net effect here is that the kite is cleaned up significantly. It does, however, mean that the manufacturer must produce bridle lines that are consistently of the exact same length. Incidentally, the lines are also colored in lime green to match the 8800's.

The Skymaster 8800 Series holds the promise of being a viable team kite. It has that feel when it's flown ... it's solid, it's controllable, and necessarily consistent. It is a kite that appears to carry out the wishes of its originators who have quite obviously designed the particular that product with market in mind. We liked the way that it dealt with differing wind situations ... confidently. We also liked the manner in which it let us know that we had something fairly substantial on the other end of the lines. Not too much pull, but enough to let you know that you can't relax for very long. All of which can be said without mentioning a very appealing price tag. We're likely to see a good number of these in the sky this vear

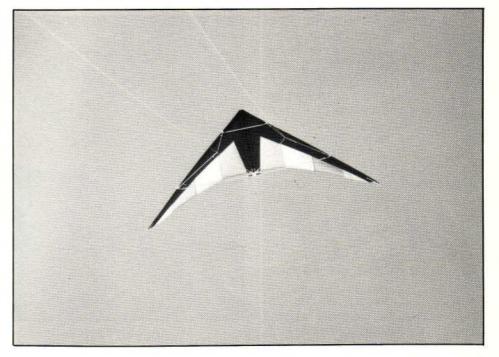


The Eliminator was sent to us by Puffin Kites a few months ago and since then it has journeyed around the country during our flying tests. Upon first assembling the kite, we were struck by some of the more severe angles involved (halfway up the leading edge, the wing is less than 9" deep). Obviously, it seemed, this was a high wind machine. About 3/4 of the way towards the spine, the trailing edge takes a turn back to level and the sail size increases quickly. The graphic use to which the sail design has been put is both striking and simple. The Eliminator garnered good comments everywhere it was flown.

In spite of the cut of the kite, the Eliminator is not a small unit ... nor does it fly that way. We first flew it in winds that ranged from 15 to 24 mph and it performed admirably. In upper range winds the kite is extremely quick. Also, as is the case with most kites sporting a basically flat sail, it spins like crazy! Wingtip turns are certainly no problem here ... in fact, less-than-wingtip turns are handled quite nicely. Additionally, it is one of the quieter kites that we have tested which speaks well of its efficiency.

Straight-line flight appears relatively stable although, given the Eliminator's speed, it would be difficult to tell if anything untoward was happening. There is also an interesting lack of distortion in the leading edge. This is something of a surprise considering that the kite is sparred with comparatively lightweight materials. Both oversteer and understeer characteristics wound up well within acceptable limits, neither presenting a significant problem.

It was during the light-wind situations that some interesting surprises surfaced. A marginal afternoon with breezes averaging 4 mph provided the perfect opportunity for the low wind flights. Yes, MODEL: ELIMINATOR FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 7-28 MPH CONFIGURATION: delta-type (79 inch wingspan) MFGR's SUGGESTED RETAIL: \$80.00 MANUFACTURER: PUFFIN KITES



the Eliminator flew. Performance levels were not comparable to those in more wind ... but it DID fly.

The only areas affected appeared to be the off-wind and square or angular turning ability. The kite was able to be pulled from the sky but considering that we were flying at about 50% below the suggested minimum wind level, the occurrence was certainly understandable. We were able to stall the kite almost at will in the light stuff but found, quite happily, that it was nearly always recoverable. Of course, there was virtually no pull ... something that couldn't be said once the wind picked up! Even taking into consideration the relatively small sail area, the Eliminator is capable of putting up an invigorating tussle with the wind.

The kite is not equipped with standoff spars so, basically, when it crashes it's generally not possible to relaunch without going downfield to stand it up again. Given the cut of the sail, however, we are at a loss as to where they might be positioned. The angle that is taken by the trailing edge puts it above the lower spreaders at the logical point for their installation, namely, at the curving point of the sail. Fortunately the Eliminator seems to function quite well without them. At no point did we feel uncomfortable about losing it during landings and takeoffs.

Taking all aspects into account, the Eliminator is a very worthwhile kite ... especially in view of the price. Sure, there are some minor things that we'd like to see changed: the nocks on the ends of the wing spars are not taped and perhaps a little heavier treatment could be done on the nose. The aspect ratio might be a little high for some pilots to feel comfortable with. All of which doesn't hurt the flyability of this kite at all. We found that the Eliminator was a challenging and fun kite to fly. A stack, in our opinion, would be even more exciting. We plan to make that our next move with this neat little performer.



Even though the XLR8 has been on the market for a number of months, we did not get a good, first-hand look at one until the recent KTA convention. It was hard not to notice the brilliant colors of fabric used in these kites .. particularly the blue. It is, perhaps, the most striking of the four colors offered: nearly fluorescent.

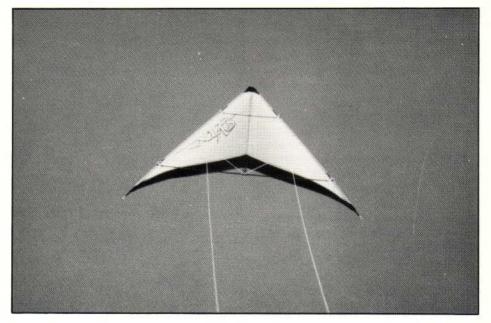
This is significant when coupled with the fact that the sail material is 1.5 ounce ripstop. 1.5 ounce ripstop nylon is about 1/3 more UV (ultraviolet) resistant than .75 ounce so those great, hot colors will stay around a bit longer. That can be important if you want to spend a lot of time on the flying field.

The XLR8 is basically a mid-size delta shape of moderate aspect ratio. This is fairly important in kites of less than "full size." If the aspect ratio is too high, this generally means that the performance will be a bit skitterish. This is brought about by a configuration that is characteristically very wide in the wingspan department while being quite short from nose to tail.

The reverse of this situation, a moderate wingspan with a longer nose-to-tail length will produce a kite that is very precise but lacking in great speed. Happily, the XLR8 lands in the mid-zone where the kite is fast but not uncontrollably so, and precise without becoming boring.

In the air, the kite generates a surprising amount of pull in only moderate wind. A stack of three XLR8's can present quite a handful in moderate breezes of 10-12 MPH. We experienced a bit of oversteer with the single unit that disappeared for the most part once we trained up a couple more kites. This was an easy process as the stock XLR8 comes with attachment loops for train lines pre-attached.

Most maneuvers were performed without incident. other than the aforementioned bobbles MODEL: XLR8 FABRIC WEIGHT: 1.5 oz. ripstop nylon COLORS AVAILABLE: fluorescent: pink, blue, yellow, or orange with black WIND RANGE: 8-45 MPH (single); 10-35 (stacked) CONFIGURATION: delta-type (70 inch wingspan) MFGR'S SUGGESTED RETAIL: \$80-\$85 MANUFACTURER: FRONTIER KITES



created by the oversteer in tight corners, all of the turns went well. The XLR8 had a tendency to stall directly overhead, but back down into the wind nicely. Landings and relaunches were generally easy but off-wind, the kite would occasionally get "blown down" by gusts.

There was also very little "slurring" on take-off. Once again, the aspect ratio came into play. There was also some power loss as we approached the edge of the wind. Our tendency was to view this as normal behavior however and it presented no major problems.

The XLR8 comes without standoff spars. While we did not install them, it seemed that the low-end performance levels would have improved noticeably with their addition. They also would have a probable good effect in off-wind situations. In fact, the range might be extended significantly below the suggested 8 MPH minimum. As a heavy ripstop is being used in the sail, we're relatively sure that it would take an additional strain without too much difficulty. High wind performance was within anticipated good ranges. The XLR8 is obviously built for these higher-wind confrontations. There were only a couple of points that were worth addressing. First, the bunji cord used at the spine "T" fitting appeared to be a bit small for flying in heavy wind. We have, however, been informed by Frontier that the cord in question is being replaced while this is being written. No problem!

Secondly, we'd like to see the trailing edge of the XLR8 doubleseamed or zigzagged. The kite is not quiet in the air. While this is music to the ears of many a pilot, it means that the trailing edge is undergoing a real workout and is taking a lot of whipping. A different seaming style holds the promise of extending the life of the product.

If you like a kite that will give you a good performance in midrange winds and the prospect of not having to put it away as the weather kicks up, the XLR8 may be the kite for you. If you have a desire to flirt with both speed and power ... build yourself a stack!



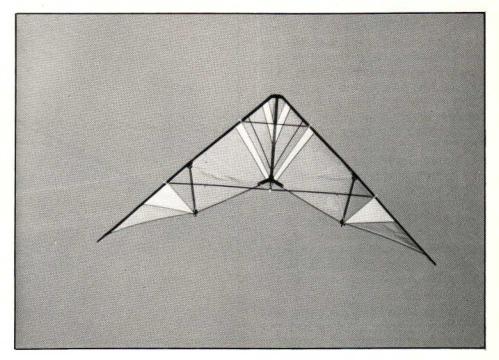
The Eagle 1 is one of the newer breeds of large-wing delta stunters that utilizes wing battens leading to the forward edge to dump air in higher wind situations. The result in this design is a kite with diminished pulling power in spite of the occasionally large sail area.

At first glance, the Eagle looks somewhat awkward ... the wings appear to be too long for the rest of the "body." This is a misjudgement that disappears quickly once the kite becomes airborne. Adapted particularly to mid-range breezes of around 12 MPH, the Eagle transforms into a rather graceful flying machine.

Our first testing opportunity saw very light winds of only 3-5 MPH where in spite of our best efforts, we could coax no more than slightly better than average results from the kite. There was a nearly complete absence of pull from the Eagle and we found that by simply stepping towards the kite, we could stall it in nearly every instance. We could, however, recover it just as easily. Instead of "coming towards us" as some kites are prone to doing, the Eagle began a controllable floating maneuver and stayed aloft.

As the winds increased during further flying on subsequent days, the same floating attitude again caught our attention. In fact, even as the wind speed reached into the mid-20's, we were able to repeat the effect at will. Subsequently, we spent a good deal of time exploring the off-wind possibilities of the Eagle. In an off-wind stall, a pull on the upper line produces a beautifully lazy, high roll. A tug on the lower line gets the flyer a very quick wing-under turn with a moderate amount of oversteer right back into the typical floating attitude.

The possibilities for stalwart edge work are all too obvious with the MODEL: EAGLE 1 FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 8-35 MPH CONFIGURATION: delta-type (96 inch wingspan) MFGR'S SUGGESTED RETAIL: \$120.99 (basic); \$129.99 (custom) MANUFACTURER: KITEMASTER (TORI TAKO)



Eagle. In fact, the weakest area of performance was directly downwind where the kite occasionally has the appearance of "hurrying" through its moves. There is a tendency towards oversteer in tight maneuvers, particularly in square or angular turns. The kite is considerably more responsive to push turning than pulling.

That notwithstanding, the Eagle's ability to dump air through use of its sail design and the visual off-wind capabilities far outweigh the points of detraction. As with any other kite, we found that the more time we spent flying the kite, the less that problem areas showed their heads. Squares simply required more precise control ... ground passes the payment of more attention to the task at hand. The off-wind performance just got better!

We did find some distortion of the Eagle, particularly in winds above 20 MPH, but performance was not visibly affected. Approaching 30 MPH there was some shuddering encountered. Pull generated, however, remained diminished at all wind speeds.

Our test model was equipped with standoff spars at our request but we flew the Eagle both with and without them. To our surprise, the kite, in our opinion, performed better without. While it is true that a sacrifice is made in the area of self-launch, the gain in execution is worth the trade. Even without the standoffs, ground work, including touches, landings, and relaunches can be done in complete confidence owing to the kite's floating ability.

We had fun with this kite ... the more we flew it, the better we liked it. If you have a penchant for edgework, you may want to give the Eagle 1 a test flight!



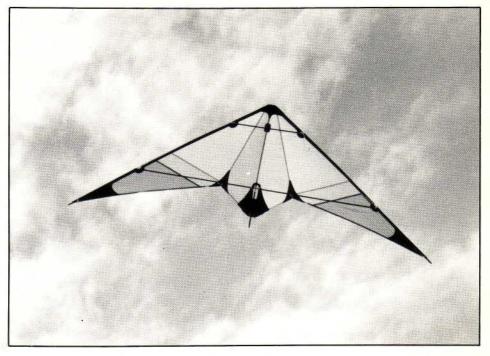
The Geo-Sport Ultralight is one of the more interesting light wind flyers that we have tested. When we examined our initial order, our first impression was that this was not a lightweight. Things just looked too heavy: the bridles certainly weren't made of the usual smallish stuff; the vinyls weren't either; ditto the bunii cord used. For all intents and purposes, this particular Geo-Sport looked like all the others. It was, therefore, with relatively low expectations that we unsleeved the kite on the beach at Ponce Inlet, just south of Daytona Beach. The wind was so low that nothing was even registering on our highfalutin' wind meter!

Standing the kite up at the end of the lines showed only an occasionally half-hearted billow in the sail ... Oh well, we pulled on the lines anyway. Big surprise!

The Geo rose immediately to a very nice apex and went into perfect hover awaiting the next command! An hour later, we had put the kite through some fairly complex maneuvers with the only real minus factors showing up as a slight bit of oversteer and a somewhat restricted wind window.

Of course, the pull generated under these conditions was practically nill. Stalling was also fairly easily accomplished. Still, relaunching was not a difficult task and, even though we had to backpeddle a shade at times, the Geo was easily kept in the air.

As the winds picked up later in the week, we got an even better chance to see just what the Geo would do under more viable conditions. Predictably, it got better. The turning ability of the kite increased markedly as did the speed. It was also a good puller, particularly in light of the fact that it was a lightweight kite. MODEL: GEO-SPORT ULTRALIGHT FABRIC WEIGHT: .75 oz. ripstop nylon KITE WEIGHT: COLORS AVAILABLE: varied WIND RANGE: 2-20 MPH CONFIGURATION: delta-type (110 inch wingspan) MFGR's SUGGESTED RETAIL: \$160 MANUFACTURER: ABOVE IT ALL



It seems that the Geo-Sport Ultralight is an attempt to bridge some gaps that exist between light-wind kites and their heavier counterparts. This particular Geo has obviously been constructed for durability as well as light-wind use. There is still the customary sail reinforcing done near the standoffs and spreader spar vinyl entry points. Likewise reinforced is the hole through which the T-assembly fits through the sail. Additionally, there is a further reinforcement at the point where the top spreader sail to crosses the prevent wearthrough. This would seem to be a bit of overkill for an ultralight.

Likewise the use of heavy bridle lines and vinyls ... all of whch serves to heighten the upper end wind limit but which may detract from the lower. Nevertheless, the Geo-Sport Ultralight flew ... and flew well!

Through all of the tests, the kite performed at a level that could best be characterized as better than most. In view of the fact that most of the other light-wind models were graphite-sparred, this comparison takes on even more depth. It was crowding the top of the list in the landing and relaunch department. It was a very stable kite as well. Even further, the kite is adaptable to quad-line with bridles and handles available from Above It All.

Constructionwise, the kite is well built. The trailing edge seams are double AND zig-zag sewn. Sail graphics are single stitched, folded, and then zig-zagged. There should be no problem with the sails in any instance.

Still, we'd like to see how much the performance levels in lowwind situations might increase if the Geo-Sport Ultralight were produced without all the reinforcement steps. This is in recognition of the fact that a light-wind specialty kite often makes a sacrifice of durability in the transition. While undoubtedly the kite would be able to take less punishment, it may hold the prospect of making this already good kite even better!



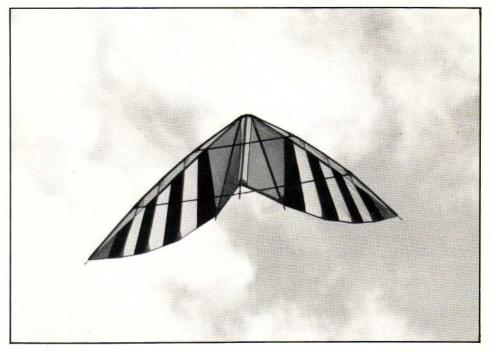
"George Peters is a craftsman and artist living along the edge of the Rocky Mountains in Colorado where he makes and flies kites under the name of Flying Colors." So reads the final paragraph of the instruction sheet for the Wind Machine, George's latest dual-line creation.

The Wind Machine is unlike virtually any kite that we have thus far tested. Each is a handmade expression of the artist. Our test model combined no less than 9 colors of ripstop and dacron. It is doubtful in our minds that the Wind Machine could be manufactured on a mass production basis.

Basically the kite is a delta shape. There are a number of things at work here to make it a spectacular flyer. The leading edge is curved slightly rather than straight. There are five wing battens on each side of the kite. Three of these run from leading to trailing edge. The fourth is a lonaitudinal which has been placed slightly below the leading edge. The fifth runs from the nose to the trailing edge. Standoff spars are positioned at the base of this fifth batten. Field insertion of all of these varying-size rods can make for a bit longer assembly time than normal, but the results are well worth the effort.

Having completed the project, the flyer will find that he has assembled a cambered airfoil of a very interesting design. As the Wind Machine is a hand made kite, he may also find, as we did, that not all of the component parts are exactly interchangeable. The only other stunter that we have tested with similar vagaries is the Banshee. Left side wing battens fit best on the left side, and so on.

Although the Wind Machine is not a light-weight, its design efficiencies proved more than adequate to handle low-end breezes in the 4-7 MPH range. It was here that we first noticed one of those qualities that set the kite MODEL: WIND MACHINE FABRIC WEIGHT: .75 oz. ripstop nylon (principally) COLORS AVAILABLE: varied WIND RANGE: 7-25 MPH CONFIGURATION: delta-type rounded leading/trailing edge (102 inch wingspan) MFGR's SUGGESTED RETAIL: \$200 MANUFACTURER: GEORGE PETERS/FLYING COLORS



apart in its tests. The Wind Machine made so little noise that it was, at first, disconcerting. We were to find out later that this "nonoise" response was not limited to periods of low wind.

Equally impressive was the kite's response to pressure on the flying lines. During periods of very low wind, the customary flyer compensation is the well-known "backpeddle maneuver." Though this can be done with the Wind Machine, there is a much easier solution: simply pull on the lines.

The kite responds by gliding forward ... not just a few feet, but by several ... while maintaining perfect control. Without much effort we found ourselves "powering" the kite through large figure 8's, dives, and even squares using this method. Usually it took no more than two pulls to get through any maneuvers.

When the breezes freshened up a bit the Wind Machine began to come into its own. Still nearly soundless, the kite continued to perform at a very high level. The only item worth noting was a bit of oversteer. This is largely attributable to the sensitivity of the kite to the flier's commands. A sharp hand motion works well to overcome the situation.

We also saw a continuation of the Wind Machine's ability to glide but at this point it seemed, rather, that the kite was "grabbing air." The curved leading edge design also causes it (the edge) to dip down, creating the airfoil. This, in addition to giving the kite great amounts of drive, makes it very stable.

In an era where mass-produccharacterizes the tion marketplace, it's always a welcome and refreshing discovery that individual craftsmen still toil over their labors of love. There is no accurate scale upon which to compare the Wind Machine with those of the large scale production shop. Both have their redeeming features, both have their eccentricities. The Wind Machine is a beautiful piece of artistry. That it also happens to be a brilliant performer is merely icing!



Ray Hanchett's first project that involved sewing was the reupholstering of his 23 T bucket roadster. The machine was an old Singer treadle and the workshop was a back bedroom in his house. An interest in stunt kite flying has led him here ... to the creation of the Overdrive.

The Overdrive is, in Ray's words, a combination of the virtues of the Team Hawaiian, the Spinoff, the Fire Dart, the Wasp, and the Spiro-Jet. It is, in actuality, much more than that.

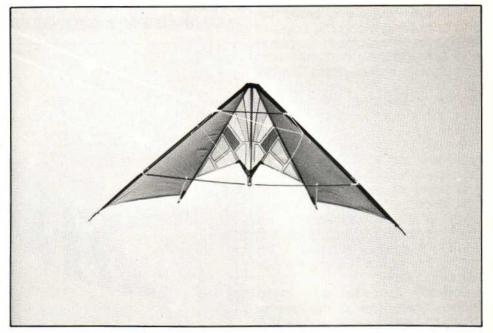
The most readily noticeable aspect of the Overdrive is the quality of craftsmanship involved in its production. Almost apologetically, Ray wrote us that there were some "flaws" on the trailing edge. We couldn't find them. Neither could some of the country's better kitemakers as we displayed the kite at various competitions. The seamwork is so good that the word "overkill" came to be commonplace.

Our model, one of the custom "Maximum" Overdrive models was a taken from a stained-glass concept (Ray used to do a little of that as well). Hidden seams, double stitching, zig-zags ... they're all here. There is not a loose piece of fabric on the entire kite.

Dacron has been used on the leading edge and re-inforcement positions. The entire trailing edge of the tailpiece has likewise been covered.

in the air, the kite's pull belies its size. Though not a small kite at 96'', there is significantly less pull generated than in kites of comparable size. This again, had been one of Ray's aims.

Performance levels were good in nearly every category. The Overdrive is a kite that likes to power down in tight turning situations. This is evidenced particularly in decreasing radius turns. Initially, the Overdrive lunges into the spin, doing perhaps three very quickly. After the initial number there is a palpable decrease in MODEL: OVERDRIVE FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 5-25 MPH CONFIGURATION: delta-type (96 inch wingspan) MANUFACTURER: RAY HANCHETT/TRIANGLE ENTERPRISES



power and the kite attempts to turn the spin into a tight looping maneuver.

There is a slight bobble after tight spins and extremely quick angular turns. This bit of oversteer can be remedied by the lengthening of the lower outer bride lines. (Ray, incidentally, has remedied this problem in the 3/4-version of Overdrive which will be the reviewed in a subsequent issue.) These items combine to make the out-of-the-bag Overdrive a shade less precise than it might be. We might also add hastily that none of the problems are what we considered to be major ones and can be solved handily by a small bit of fine tuning.

The same items that conspire against the Overdrive in the absolute precision department work to advantage in the free-style realm. The oversteerage is not an out-of-control rotation. It is very predictable and to a very large degree controllable. We were never struck with the feeling that we had lost command of the kite. The slowing rotation of the spins make for very graceful spiral turns both off and in the center of the wind. The sail's ability to slip air by the notched trailing edge also gives rise to a floating ability at the wind's edge which many find a nice plus to have in the old trick repertoire. The Overdrive's "power down" mode in the turns makes for some easily executed high rising turns in the same position.

We've had opportunity to testfly the Overdrive in vastly varied wind conditions and find it at its peak in the usual 9-12 range. The kite is capable of being very fast. The payoff for the speed is somewhat diminished stability. In winds above 20MPH the kite can distort. This is particularly in evidence in periods of gusting wind. To a good degree, this may be a function of sparring material and spreader placement.

All of which only serves to verify that the Overdrive's flight characteristics are its own. Ray Hanchett set out to produce a kite that, while combining features from other models, would stand on its own as an individual. He has accomplished his aim. The Overdrive is an effort that could stand apart based on craftsman alone. It is, though not incidentally, an excellent flyer!



Last summer at the East Coast Stunt Kite Championships, we noticed a couple of new kites being shown on one of the practice fields. Competition was running hot and heavy so all we had time to do was grab a quick photo or two and hand out a business card.

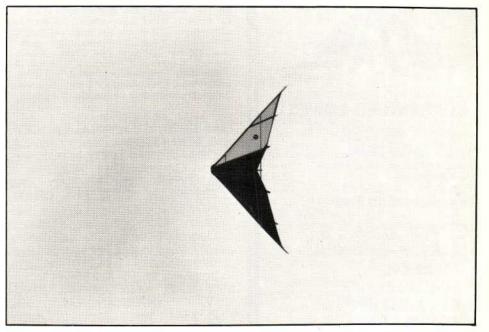
A month or so later, we received a call from the kites' designer, Chris Lubinski, who said that he had a few models that he'd like to send us to try out. By last fall, we had obtained three of Chris' kites, the Wind Toy being one of them.

The Wind Toy is a small to midsize kite with a moderate aspect ratio. The sail is relatively taut, as it is on all three models which were sent to us. This generally labels the product as a higher wind kite. Best flight winds, true to form, were in the mid-teens to mid-twenties. The three kites sent to us were primarily of the same design with additional wind battens being added to adapt the kite to higher wind settings.

The sail configuration is reminiscent of a couple of kites already on the market, most notably Air Art's Cat Kite. The wing battens, however lean towards the kite's nose rather than away from it. Construction is quite good, even though it is easily noticeable that the Wind Toy has been an individual effort. One of the interesting features is the application of Dacron to the trailing edge.

The performance levels of the Wind Toy are quite high. It exhibits the usual characteristics of any basically flat-winged kite. The higher the wind, the better the performance. At the low end of the kite's range, the sail would often flatten out as the edges of the window were reached. The Wind Toy's efficiency of design enabled us to pull a lot more than our fair share of these would-be crashes out of the fire.

With the wind at a comfortable 12MPH, the kite was an entirely different animal. Gone was any tentativeness whatsoever as what MODEL: WIND TOY FABRIC WEIGHT: .75 oz. ripstop nylon COLORS AVAILABLE: varied WIND RANGE: 7-40 MPH CONFIGURATION: delta-type (62 inch wingspan) DESIGNER: CHRIS LUBINSKI



could have almost been viewed as a timid flyer in low wind became a bullet. There was a small amount of oversteer but nothing that could be deemed a problem. Landings were difficult owing to the kite's small size and its penchant for flight.

As the wind increased, yet another aspect of the Wind Toy began to show up ... its turning ability. We have flown a goodly number of kites over the past three years but never before have we flown one that blurred in the turns so completely. On repeated occasions we threw the Wind Tov into tight spins. Not only did it move too fast for us to catch a alimpse of what we were looking for ... wing distortion ... but there was no hope of knowing where the kite would be headed when it was brought out of the spin. This was not an isolated instance or two, but rather a consistent reaction. Yes, the kite would always pull out quickly (very!) and cleanly, but the direction was beyond our sensory abilities.

The more tests we gave the Wind Toy, the more it seemed to present us with interesting effects. Overhead, in what seemed to be a hover, we jerked the lines in an attempt to stall the kite. Again, with the same unusual results: the kite would proceed beyond a straight overhead position to an attitude of about 10 degrees past vertical where it wold hover for as long as ten seconds. At this point the Wind Toy would drift with the wind in perfect nose-up attitude until it regained the power zone.

If one line was tensioned during the kite's "drift," it would simply invert and continue the procedure. We were unable to "pull" the kite from the sky with any degree of consistency.

In winds which ranged into the high 20's we did notice some shuddering from the Wind Toy in straight-line flight. Realistically, we had probably exceeded the kite's best range.

The Wind Toy is not a kite for everyone. It was designed with specific purposes in mind and seems to hit those on the mark: it turns very well, and can be exceedingly fast. To put this one in the hands of a beginning pilot would be a mistake. Likewise, to put it in the hands of someone who thinks that their reactions are very good may well prove to be a humbling experience.

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(SKQ NOTE: We are interested in listing in the stunt kite calendar, ALL kinds of stunt kite events, not just large national competitions. No stunt kite gathering or games are too small. No stunt kite fly-in is unimportant. Send your event care of SKQ. Include pertinent information, especially contact telephone number and location. Because of the large number of events and types of competitions listed, we suggest that you contact the event coordinators for possible changes.)

- MAY 19-20, 7TH ANNUAL BALLOON & WINE FESTIVAL, Temecula, CA. Closed Team fly-off in conjunction. Contact: (818) 957-4393.
- tion. Contact: (818) 957-4393. MAY 19-20, FIRST BELGIAN AND EUROPEAN STUNT KITE CHAM-PIONSHIPS, Oostduinkerke, Belgium. Contact: Le Nouveau Cervoliste Belge, % Raoul Fosset, Regional Director, 27 Rotselaerlaan - 1980 TERVUREN, Belgium. Tel. 02-767-99-25.
- Belgium. Tel. 02-767-99-25. MAY 25-28, 2ND ANNUAL JUNC-TION INTERNATIONAL KITE RETREAT, Texas Tech University Center; Junction, Texas. Stunt kite workshop. Registration fee required. Contact: Betty Street, (806) 745-6803.
- MAY 26-28, 5TH EAST COAST STUNT KITE CHAMPIONSHIPS, Wildwood, NJ. All classes: Precision, Ballet, Innovative. Contact: Sky Festivals, P.O. Box 7317, West Trenton, NJ 08628. (215) 736-8253.
- JUNE 9-10, 8TH ANNUAL SUMMER GAMES KITE FLY, Radisson Resort Hotel at Kingston Plantation, Myrtle Beach, SC. Contact: Klig's Kites, Barefoot Landing, Hwy. 17, N. Myrtle Beach, SC 29577. (803) 272-5768.
- JUNE 9-10, 1ST ANNUAL YAKIMA VALLEY KITE FESTIVAL, West Valley Community Park, Yakima, WA. Junior, Novice, Intermediate, & Open Class Individual Precision. Individual & Team Choreographed run as unclassed events. Quad-line demos. Contact: (509) 965-3966.
- JUNE 9-10, FRENCH STUNT KITE CHAMPIONSHIPS, N. Paris.
- 16-17, STATE JUNE 2ND ANNUAL OREGON STUNT KITE CHAMPIONSHIPS, "D" River Wayside, Lincoln City, OR. Intermediate, Experienced, and Open: Individual and Team: Choreographed and Precision. Contact: Eric and Genny Forsberg, Rt. 2, Box 373F, Forest Grove, OR 97116.

- JUNE 29-JULY 1, NORTHWEST STUNT KITE CHAMPIONSHIPS, Long Beach, WA. Contact: Cathy Goodwind, 3333 Wallingford North, Seattle, WA 98103. (206) 632-6151 or 633-4780.
- JULY 6-8, NORTH COAST STUNT KITE GAMES, Maumee Bay State Park, Toledo, OH. Contact: Uncle Wilbert, (419) 537-7036.
- JULY 6-8, CHERRY STUNT KITE COM-PETITION, Traverse City, MI. All classes: Precision, Ballet, Innovative. Contact: Grand Bay Kite Co., 121 E. Front St., Traverse City, MI 49684. (616) 929-0607.
- JULY 27-29, EUROPEAN CUP, BLACKHEATH STUNT COM-PETITIONS, Blackheath, London, England. Contact: Tony Cartwright, 78 Dongola Rd., London, England N17 6EE. 01-808-1280.
- JULY 28-30, BERKELEY KITE FESTIVAL AND STUNT COMPETITION, Berkeley, CA. Contact: Highline Kites, 2314 Dwight Way #4, Berkeley, CA 94704. (415) 843-7579.
- 7579. AUGUST 25-26, NORTHWEST MICHIGAN STUNT COM-PETITIONS, Novice, Intermediate; Precision, Ballet. Contact: Sandcastle, 356 River St., Manistee, MI 49660. (616) 723-4344.
- SEPTEMBER 1-3, WEST COAST STUNT KITE CHAMPIONSHIPS, Marina Green, San Francisco, CA. Contact: Kitemakers of San Francisco, 5739 Christie Ave., Powell St. Plaza, Emeryville, CA 94608. (415) 652-1661.
- SEPTEMBER 7-9, THE KITE SOCIETY CONVENTION. BRISTOL INTERNA-TIONAL KITE FESTIVAL. Ashton Court, Bristol, England. Contact: Martin Lester, 40 City Rd., Bristol, England BS2 8TX.
- SEPTEMBER 22-23, BERLIN KITE FES-TIVAL, Stunt Competitions, Berlin, West Germany. OCTOBER 10-14, 13TH ANNUAL
- OCTOBER 10-14, 13TH ANNUAL AMERICAN KITEFLIERS ASSOCIA-TION CONVENTION AND NA-TIONAL COMPETITIONS. Seaside, OR. 1-800-452-2151.
- OCTOBER 27-28, CAROLINA KITE FEST, Atlantic Beach, N.C. Stunt Competitions. Contact: Don & Jeri Dixon, Kites Unlimited, P.O. Box 2278, Atlantic Beach, NC 28512. (919) 247-7011.

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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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TOP OF THE LINE KITES 3015 St. Charles Pl. San Diego, CA 92110 (619) 224-8505

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te model shown HAWAIIAN TEAM

