## MK@NEWS

X


## OCTOBER 2019



## INFORMATION

## CLUB FLY-INS

We hold club fly-ins each month (winter included) at various sites. These are informal events and are a great way of meeting other MKF members.

## MEMBERSHIP CARDS

Your membership cards can obtain you discounts for purchases from most kite retailers in the UK, and gain you entry to events and festivals free or at a reduced cost. Please keep them safe.

## PUBLIC LIABILITY INSURANCE

All fully paid up members are covered by Public Liability Insurance to fly kites safely for pleasure anywhere in the world. If you injure anyone whilst flying your kite the injured party may be able to claim on the club insurance for up to $£ 5,000,000$. The club has Member-toMember Liability Insurance. A claim may be refused if the flier was found to be flying a kite dangerously - e.g. using unsuitable line, in unsuitable weather; flying over people, animals, buildings or vehicles. This insurance does not cover you for damage to, or loss or theft of members' kite/s.

## BUGGIES, BOARDS \& KITESURFING

Unfortunately we are not able to cover these activities within the clubs insurance policy.
'MKF@NEWS' DEADLINES FOR 2O19+

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The MKFNEWS is pleased to print articles and photographs submitted by any interested party. All submissions are reproduced at the Editors discretion, however the Club cannot be held responsible for any views or comments contained in any such articles.

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## FRONT COVER - JUST TO PROVE THAT THERE ARE SOME ROMANTICS IN THE WORLD OF KITES

Dorothy Rourke with her heart kites at Crosby:"My hubby, Mike, made the kites as a present for me for Valentines Day 2019. They can only cope with very light winds and we are still tweaking them whenever conditions allow."
The plan is available on
https://www.windhau.ch/herz-drachen

# MIDLANDS KITE FLIERS <br>  <br> SUNDAY 24th NOVEMBER 2019 APEDALE COUNTRY PARK CENTRE 

 Blackbank Road, Knutton, Newcastle Under Lyme, Staffordshire, ST5 6AX

# MIDLANDS KITE FLIERS OF GREAT BRITAIN 

Bill Souten - Chairman / Editor

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## FORTY YEARS ON - THE FUTURE OF THE MKF?

| 1 | CLUB FLY-IN SITES: Having lost several of our traditional fly-in sites recently, either by management issues with the owners, or through lack of attendance on the club's part is it time to find new, more kite flier friendly spots around the Midlands for us to hold regular flyins? Suggestions please....... ( Please use the attached sheet to nominate your proposed new fly-in site. |
| :---: | :---: |
| 2 | THE CLUBS NEWSLETTER: We aim to publish four newsletters a year, over the past seven years we have actually published 35 editions. It's a mixture of history, things that grab my attention and news of up and coming events. What would you like to see in the newsletter, or are we wasting our time. $\qquad$ |
| 3 | THE CLUBS WEBSITE: The club website is currently cared for by Sam Hale, son and nephew of two of the original members of MKF. Should we be using it more? No newsletter but a website newsletter? Sharing information etc. I realise that the Facebook pages are used by some, however this could be a real resource for members both old and new. Volunteer? |
| 4 | SALE OF CLUB KITES: THE ELEPHANT IN THE ROOM! <br> They are not being flown, and must be slowly deteriorating. What should we do? And when? |
| 5 | YOUR OWN THOUGHTS: |

Please return to Bill Souten before the Annual General Meeting to assist with our discussions.
Please feel free to use extra sheets. We welcome your thoughts.....

# A Schematic Design for Joel Scholz's "Geisha Girl" 

"The only thing better than stealing a good idea," according to Harold Writer of Seattle, "was to give one away." Knowledge is something to be shared. Following is an exchange of ideas with Joel Scholz, one of American's best kite designers, whose award-winning kite, "Geisha Girl," won him top honors and a trip to Japan at the Black Ships Kite Festival in Newport, Rhode Island.

One of the most unique aspects of this kite is its shape. Geisha Girl is what we call a "figure kite," one in which the outline shape of the kite is defined by the structural framing. As long as sound aerodynamic principals (balance, symmetry, weight, lift, and drag) were kept in mind, Joel knew he could build a kite that would fly to his liking. The accompanying diagram is presented as a schematic design and not necessarily a working set of plans from which to build this kite.

To begin with, Joel found a six-foot woman friend (he lives in Texas, remember), and drew an outline of her onto a piece of paper. After the head and body positions were set, he then added the kimono, hair, and fan. Once he had a pleasing combination, he folded the kite along the vertical axis to make it as symmetrical as possible and repositioned his details to match.

Since this was to be a one-of-a-kind kite, Joel sewed the cover without making a prototype. The kite cover is made from three-fourths-ounce spinnaker cloth. This was the first project he has sewn using "invisible" thread, a thin monofilament which "matches"
any fabric color. He warns that you must securely back stitch the seams or the thread has a tendency to unravel.
Joel's appliqué technique is to layer darker colors over lighter ones. He then cuts away the base material, sometimes appliqueing to the back of the kites and then cutting away the "face" material if it is darker than the piece he's applying.
In framing the kite, Joel started with the head and shoulders and worked his way down, testing its flight capabilities and making adjustments along the way. At first he thought it would fly similar to a dragon kite, but was not satisfied with the way it looked while flying. It needed more lift and better definition of the outline. He then added the two lower sets of cross spars and several more bridle lines before he had a kite that pleased him.

## An interesting structural

 detail is at the head of the kite, which consists of five pockets in which to place the longeron.Joel explains: "With any kite I build, I leave myself some means to adjust its flight characteristics." By repositioning the longeron, Joel can correct the "lean" to one side, which was corrected with the adjustable head pocket detail. In the latest flights, she has flown with the longeron back in the center position, which Joel attributes to the fact that the kite has now "learned how to fly."

Leland Toy's article first appeared in American Kite magazine, Winter 1988.


## West Freugh kite power project set to expand after investment



A $£ 2 m$ equity investment could see staff numbers rise sharply at a south of Scotland wind energy project.
Kite Power Systems received the support from the Scottish Investment Bank, the investment arm of Scottish Enterprise.
The company currently employs a small team of five at the West Freugh air base near Stranraer where it is testing a small-scale prototype.
The workforce could rise to 30 next year on the back of the latest investment.
The company's technology uses two kites which turn spool drums to produce electricity.
It announced $£ 5 \mathrm{~m}$ of investment last year and Dumfries firm Kellwood engineering is currently helping to build a larger demonstration model.


It is hoped the workforce could eventually run to hundreds with each kite able to generate similar energy to a 100 m wind turbine.
KPS business development director David Ainsworth said the project had huge economic potential.
"The cost of electricity from this technology could be half the cost of offshore wind using conventional wind turbines," he said.
"The reason we can actually achieve those low costs is that the mass of the system is around $20 \%$ of that of a comparable horizontal axis wind turbine.
"Capital cost is driven by mass, if you can get the mass down you can get the capital cost down."
Economy Secretary Keith Brown said the technology showed "great promise".
"Scotland has recently moved into the top group of EU nations as regards innovation performance, and the commercialisation of novel ideas - such as the technology being developed by Kite Power Systems - will help to drive us even further forward," he added.


## Petition

09/06/2019 01:46

## Keep composing message

Show imageAlways show from this senderHi
Folks
I have sent this out to all those on my database who, regardless of their
opinion of how drones should or should not be
managed will understand that
this is just the first step, requiring $£ 16$ pounds just to register your
ownership of a drone and I strongly suspect
some kind of regulated test and
increased costs will be introduced into the future
If this gets passed, then the next step will almost certainly involve kites
and model aeroplanes
Please sign the petition to try and prevent such action
https://petition.parliament.uk/petitions/259863 If you are able, please send this link to all on
those on your own databases
who may not be aware

## Cheers

Big John
Dr John L Dimmock FBCS - G1-UXG
[johndimmock@media-services.co.uk](mailto:johndimmock@media-services.co.uk)

# WEDNESDAY $12^{\text {th }}$ JUNE 2019 Drone rules threaten to shoot down model flyers 

## Mark Bridge, Graeme Paton

Model aircraft pilots more used to staging dogfights between Spitfires and Messerschmitts are waging war on "excessive" bureaucracy threatening their hobby.
Disgruntled enthusiasts have made 6,000 submissions to a consultation by the Civil Aviation Authority on rules that treat them the same way as unskilled flyers of multi-rotor drones aircraft that they believe present a much greater safety hazard.
Dave Phipps, chief executive of the British Model Flying Association, said plans that require all operators of unmanned aircraft to register their models, pay $£ 16.50$ a year for a licence for each one and take competency tests every three years are "disproportionate" and threaten the hobby's survival. The BMFA represents 36,000 members across 820 clubs, owning 600,000 model aircraft. Mr Phipps told The Times that membership had fallen by 1,000 a year over two years because of uncertainty about the rules, which are due to come into force in November. It's not sustainable," he added
He said that the regulations were "more onerous" than those for pilots of manned aircraft because they introduce an annual licence fee, rather than a one-off charge, and exclude underi8s, even though a 17-year-old can gain a pilot's licence. Model aircraft pilots who do not comply can be fined $£ 1,000$
The BMFA believes that its members are being unfairly lumped together with people flying multi-rotor drones
While pilots of model aircraft Jearn their skills over months or years and tend to fly out of range of buildings, pas-
sers-by and manned aircraft, drones can be picked up from high-street shops and their automatic stabilisation and autopilot systems mean they can be flown over long distances by beginners without supervision. Drones can also easily be flown at high altitude and beyond a line of sight, while pilots of model aircraft must keep them in sight to avoid crashes.
Mr Phipps said that for junior members, their annual licence would cost almost as much as their $£ 17$ a year BMFA subscription. The equivalent registration scheme in France is free, it is $€ 5$ in Ireland and $\$ 5$ in the US. Experienced hobbyists have an average of 15 aircraft, meaning a yearly bill of about $£ 250$,
The BMFA is urging changes to the registration rules so that members pay only a nominal fee wrapped into their dues for the association, which would handle the administration.
Theregistration schemeispart of UK legislation that parallels rules published by the EU Aviation Safety Agency yesterday. These include a registration system, meaning that all aircraft are clearly marked so that they can be quickly identified by the authorities
British model aircraft pilots said that the European rules distinguished their model aircraft hobby from drone-flying and offered for exemptions for them.
Experts yesterday told the Commons science and technology committee that flyers of model aircraft had an exemplary safety record and should be treated as a special category.
Baroness Vere of Norbiton, the aviation minister, has said that the registration scheme will increase accountability for operators of unmanned aircraft. all of which pose safety threats.



## YOU CAN FLY THEM better in SAFETY

THIRTY-FOURTH ANNUAL


Washington State International Kite Festival August 18-24, 2014-LONG BEACH. WA

## For the Masonic Registef.



AERIAL VOYAGES
OF MR. CHARLES GUILLE' IN TEE UNTTED STATES.
" Spernit humun fugiente penna."
Scorns the base earth, and crowd below ; And with a soaring wing still mounts on high.


## Kite Aerial Photography

August 25, 2015 by Scran | 3 Comments

Recently we've been getting to grips with the kite aerial photography kits provided by Dr. John Wells of the Scottish National Aerial Photography Scheme (SNAPS). As you can see we visited Tantallon Castle for a practice flight. We were quite pleased with our results \& the potential for learning.


We are planning on piloting this activity with schools over 2015/16, so if you are interested please contact us \& lets's go fly a kite!
We believe exploring the aerial photography collections on Scran, in combination with the active learning involved in kite aerial photography, could lead to all sorts of creative learning.


For example, studying aerial photography can support the following Curriculum for Excellence experiences \& outcomes within Social Studies.

- describe the major characteristic features of Scotland's landscape and explain how these were formed (SOC 207a)
- discuss the environmental impact of human activity (SOC 2-08a)
- explain how the physical environment influences the ways in which people use land by comparing the local area with a contrasting area (SOC 2-13a)
- use knowledge of a historical period to interpret the evidence and present an informed view (SOC 3-01a)
- compare settlement and economic activity in two contrasting landscapes (SOC 3-13a)
- explain the impact of processes which form and shape landscapes on selected landscapes in Scotland, Europe and beyond (SOC 3-07a)
- evaluate the changes which have taken place in an industry and debate their impact (SOC 4-05b)
- discuss the sustainability of key natural resources (SOC 4-08a)
- 



Salisbury Crags Holyrood Park

- assess the impact of developments in transport infrastructure in a selected area (SOC 4-09b)
- describe and assess the impact of human activity on an area (SOC 4-10a)
- explain the development of the main features of an urban area and evaluate the implications for the society involved (SOC 4-10b)


## Categories: Collections on Scran

Tags: Italy, Photography, students | Permalink Views of North Berwick \& Vicinity (3) October 20, 2015 by Scran | 0 comments Here's the final update on the partnership work with Mrs. Dalgleish's wonderful Primary 5 class, at Law Primary School in East Lothian. After bated breath, the wind got up enough strength allowing us to complete our exploration of aerial photography. The sun shone, we went outdoors \& finally flew the kite aerial photography kit. See how we fared by browsing through the gallery below.


Yes, we did it:)


Law Primary School


Preparing for lift off


Looking across to the Bass Rock


Primary 5


Look!


Up, up \& away!


The school before extension 2015


Aerial photography in action


Exploring local aerial photography on Scran


Online Research


My house, in 1974


Mapping Archives to Aerials


Sharing our findings


The Exhibition


Looking for visual clues

## Some Fodder for Creativity

POSTED ON DECEMBER 28, 2012 bY SCOTT SKINNER


In my last article for KiteLife I wrote about the importance of not plagiarizing original designs of kite makers (at least not without permission!) but this month I am making a case for learning from replicating archival designs that are part of the public domain. I've made it a point to avoid making this column a "kite making" forum, but this month, as an early Christmas gift (or perhaps a late Halloween curse), I thought it would be fun to look at some obscure historical kite designs and think about how we might bring them to back to life in the $21^{\text {st }}$ century. l've chosen a variety of designs, most of them in some way cellular even though they are a far cry from the standard Hargrave style. But let me start with a flat kite, one that l've had personal experience with. It's a three-stick variant that I first saw on a French postcard and was proposed as a lifter for early $20^{\text {th }}$ century camera equipment. I've only made a small variation, but you can see how beautiful this Genki-like design can be.

Here's the patent drawing and my interpretation from the Beaufort Series of three-stick variants.


Now on to a particularly interesting bird kite design: this is the Vogeldrachen (bird kite) by German Arno Haft. It's a design from the 1930's and I like it because of the geometric shapes that make up its whole. This could be a wonderful platform for geometric patchwork or applique piecework. It's also a straightforward design that could be a kitemaker's first cotton project or adapted as a stylish paper-andbamboo flyer.


From a Polish kite book by Pawel Elsztein.


Arno Haft's Vogeldrachen, a ripstop, paper, or cotton project.

Note the Pawel Elsztein above, I think it might make a nice lifter and it looks to be a very stable design, as well. It might make a nice KAP (kite aerial photography) lifter or just a beautiful sky sculpture with its mix of open spaces and overlapping panels.
Next, are two plans by notable Frenchman Jonathan Frantzen. Made in traditional materials of his day, these are sophisticated kites that can fully immerse the builder in the kites, techniques, and materials of the early $20^{\text {th }}$ century. Made in contemporary materials I have no doubt that these would be spectacular.

## The Frantzen liffer and airplane kites.



The next two designs are cellular kites, but are inspired by early airplanes. One, by Curt Mobius is from his Drachen-Bau und Sport (1955), while the other is from Experimental-Modellflug, from 1968. Both are rather elementary winged-box variants, but present interesting graphic possibilities. I really like the Curt Mobius airplane that eliminates surface on the front panels of the box to make the aircraft body. On the "drachenmodell" I could envision more taper on the wings, changing their shape radically, or modifying the aft wings' size or shape.
These two "airplane" designs can take the maker in very different directions.


The last two plans l've included here are from very different patent drawings: the first, from about the time I came to kiting in the late 1970's, and the second from the years between WWI and WWII. It's hard to see yourself as an "old-timer," but I wonder what percentage of Kitelife readers remembers Don Dunford's Flying Machine? This was one of the first radical two-line stunt kites and was a big departure from simple diamond kites modified with two lines. I've always loved the threedimensional shape of this otherwise flat-surface kite. I'm afraid that the model that I own is buried deep within my kite collection so I can't vouch for the flying characteristics. But everything about this design suggests stability and it might make a nice single-line flyer. The last kite is by Conrad Dahl. His SelfBalancing kite looks to be a nice platform for
experimentation, especially the three-wing version.
How many of you remember the Dunford Flying Machine?

(plans above: Dunford at left, Dahl at right) I hope that at least one of these kite designs might inspire you to make something unexpected and challenging. Each can be attacked in a variety of ways and your finished product will be unlike anyone else's. As an example of how powerful simple variations of a single design can be, l'll circle back to some of the three-stick kites in my Beaufort Series. Inspired by Beaufort's scale of wind force, I made twelve three-stick kites to signify each of the Beaufort numbers. Starting with a simple hexagon, I then varied the three spars to finish with some surprising (at least to me!) variants.
Beaufort series 1, 4, 5, and 7, three-stick variations.


The challenge is on! Create a kite based on one of these designs and share with us by uploading it to the Drachen website using the post and share feature.

## Scott Skinner <br> Drachen Foundation

I'll readily admit I stole this article $\qquad$ however I think it may inspire so members to create something of real interest. Bill Souten Ed.


## Flying high - inventor George Pocock.

## Pioneer kite runner

In the early 19th Century Bristolian inventor George Pocock became fascinated by kites and their potential to lift, pull and move objects. Two hundred years later Inside Out West has recreated one of his kite experiments on Weston beach.

In the early 1800s George Pocock was a Methodist preacher, school master, and father of 11 children living in Bristol.
When he wasn't busy with his career and family, he was playing with kites - his experiments were ambitious, dangerous, and usually involved his own children.
Pocock loved to show off his inventive genius. In one stunt he put his young daughter in a wicker chair, hoisted her up in to the air with kites and then flew her across the Avon Gorge.

Fortunately she survived and went on to become the mother of the cricket legend W.
G. Grace.

## Cult following

In 1827 Pocock published a book entitled "The Aeropleustic Art or Navigation in the Air by the use of Kites, or Buoyant Sails".
But it was Pocock's invention of a horseless carriage powered by kites, called a Charvolant, which thrust him into the public eye and earned him a cult following.


Recreating George Pocock's kite. Unfortunately no Charvolants survive today but at the Museum of Bristol they do have one of Pocock's kites.
Paul Chapman is a kite historian who has been investigating Pocock's obsession with kites:
"I think at the time, the whole of that period people were interested in aviation - balloons anything that would go in the sky.
"Everything aeronautical of that time is fascinating - obviously as a young boy Pocock wouldn't have been able to fly in a balloon but he would have been looking at the sky thinking what could he fly".

## Geoge Pocock

Born 1796. Employed as a teacher at Prospect Place in Bristol.
Invented the "Charvolant", a kite-drawn carriage.
Experimented with pulling loads using kite power.
Patented the design of his "Charvolant" buggy in 1826. He found a way of using two kites on a single line to provide sufficient power to draw along a buggy carrying several passengers similar to modern kite buggying.

Also suggested his kites could be used as auxiliary sail power for ships, a way of dropping anchor and helping with rescues from shipwrecks.

## Recreating the kite

Inside Out West decided to recreate a prototype version of Pocock's buggy working from his original designs.
Pocock's own prototype was literally a plank of on wheels, driven by his son.
For the kite's frame Pocock would have used wood but we are using glass-fibre to give it strength.
The kite skin in the museum was made of waxed cotton but we are trying out a modern alternative - rip-stop nylon.
Our finished version is much smaller than Pocock's would have been.
To test it we decided to take it to Weston beach, a popular spot for modern day kite buggying.
We're worried our kite will be ripped apart before it even leaves the ground so we enlist the help of former Kite Buggy champion, Dom Early.
If anyone can get our Pocock kite into the air it's him.

## Flying high?

The kite is fiendishly complicated - four individual lines will control it once it's in the air. If any one of the lines are the wrong length even by a fraction - the kite will come crashing down.


Trials and tribulations on the beach.
Finally - we're ready to go but something's clearly gone wrong and our first attempt comes crashing to the ground.
We re-adjust the control lines and check for damage before trying again.
This time it works.

It might be an unusual design but our prototype Charvolant is a great success. Our expert Dom is impressed, "George knew what he was doing... I can get it to go left, I can get it to go right."
It's proof that Pocock had it right all along. If only he was around today to see what he'd started.

## Another look at George Pocock, his splendid charvolant, and a spanking machine... <br> Feb052016



Today let us hear it for a Bristol school teacher called George Pocock. O.K., he was mildly eccentric, and yes, maybe his invention of a machine to spank multiple miscreants at the
same time was perhaps ahead of its time but hey, discipline was important at the George Pocock Academy at Prospect Place St Michael's Hill, Bristol. He called his invention the Royal Patent Self-acting Ferule and of course it is a travesty of history that George never made a fortune from his brilliant idea. Synchronised spanking - it could have made it as an Olympic sport....
Instead we have to remember George for a splendid flight of fancy called the charvolant a kite-based form of transport which astonished the public and royalty alike, from 1826 onwards.
George had been born in 1774. When he was 26 he had opened his Prospect Place
Academy in Bristol with the stated objective of turning boys into successful young
businessmen. He was a wonderful eccentric and had devised a number of curious things as an aid to learning, including the idea of celestial globes (inflatable balloons 45 to 65 feet in circumference filled with air, inside which the teacher could stand on a pedestal lecturing his attentive pupils on astronomy. Transparent holes in the globe would mimic the positions of the stars, enabling those inside to get the impression of being in the centre of the Universe admiring it through eye glasses).
George had always been fascinated by kites. He wrote how as "a little tiny boy, I learnt that my paper kite would draw along a stone on the ground, tied to the end of its string." Years later he strapped his daughter Martha into an arm chair, attached it to a pair of kites, and flew her 300 feet into the air. She subsequently recovered and went on to become the mother of England's most famous cricketer - W G Grace.


In subsequent experiments he harnessed a pony chaise to a pair of kites and discovered that it was possible to move up to half a ton on the carriage, depending on wind strength. He made a number of 'charvolants' for these first horseless carriages, and it was claimed that the Pocock kite carriages could race mailcoaches from Bristol to London and back. A pilot kite was fed out first, followed by one or, if needed, two main kites. The four ropes enabled the "charioteer" to steer even along a road at right angles to the wind. "Thus," he found, "whatever road the car may travel by a side-wind, the same road it may return by the same wind; and where there is space for traverse, as on plains or downs, it is possible to beat up against the wind."
To slow down or stop the driver would slacken off one of the ropes, collapsing the main kite and forcing a hoe-like brake into the surface of the carriageway.
In 1826 Pocock obtained a patent for his charvolant and 2 years later demonstrated it at Ascot racecourse to King George IV. Immediately afterwards, he raced against horse-drawn coaches on the road between Staines and Hounslow, winning easily. The charvolant could allegedly reach speeds of twenty miles per hour. Pocock wrote about journeys from Bristol to Marlborough stating that the charvolant beat one of the London stages
to Marlborough by twenty-five minutes, even though the stage had a fifteen minute head start. Of this journey Pocock comments: "This mode of travelling is of all others the most pleasant: privileged with harnessing the invincible winds, our celestial tandem playfully transpierces the clouds, and our mystic moving car swiftly glides along the surface of the scarcely indented earth; while beholders, snatching a glance at the rapid but noiseless expedition, are led to regard the novel scene rather as a vision than a reality."


Pocock wrote a book with the handy little title 'The Aeropleustic Art or Navigation in the Air by the use of Kites, or Buoyant Sails' which was published in 1827 . In it he describes an instance when the charvolant had the impertinence to overtake the carriage of the Duke of Gloucester - a mark of extreme bad manners. He made up for his rudery by stopping and allowing the Duke to overtake, thereby commending himself to the Duke. One added advantage of the machine was that it escaped all road tolls. Toll gate operators sought to charge drivers according to the number of horses using the road - but as no horses pulled the charvolant no fee could be levied. As Pocock remarked "There is a peculiar satisfaction in not being detained at toll-bars. The pains and the penalties which there arrest common travellers, never intercept this celestial equipage. The Char-volant, then, has the distinguished prerogative of conferring this Royal privilege; and those who travel by kite travel as Kings".
"The herald-bugle is sounded - the gates fly open - you pass unquestioned" Pocock marveled.
On 18 July 1828 at the Liverpool Regatta ten men crossed the Mersey against strong tides
and winds with a kite-drawn two-masted boat, "to register great surprise among the nautical parties who witnessed it" (The Engineer).
Pocock was carried away by the potential of his kite-drawn invention, announcing that he estimated that a party of six might cross the Sahara in 10 days and 10 hours for a total cost of about £80. "Is it too fond a hope that, by the system of œropleustics, those sands may be navigated as the sea, and thus a most speedy and safe communication be opened between the east and the west of the interior?"


He was convinced kites could be used to assist sailing ships i.e. as auxiliary sails. He also suggested using kites in the case of a shipwreck, using them to drop anchor. Pocock does, however, acknowledge that "portions of the plan are not practicable"
For a number of years the use of kites seemed on the point of reaching a breakthrough in everyday transport, but then came the railways and eventually the motorcar, and Mr Pocock and his splendid invention were consigned to history's rubbish bin... I think it is a shame, so let us hear it for a mad school teacher with a flight of fancy. George, you are a hero!


Paul Chapman January 28, 2017

Interesting...the Invitations is new to me. I have the Pocock Charvolant books...the first, and then the History published after his death. A long series was devoted to him in the Boy's Own Paper. The M-Shed museum in Bristol has an original Pocock Juvenile Kite (no sticks) on display but this is a small one. I helped out with that dreadful TV programme of a few years ago..provided the source material but the fellow who made the thing scorned further help and the attempt on Brean Down was cringeworthy. Apparently the Charvolant was exhibited on St Augustines at around the time the first book was published....I have a copy of the flyer...but no images from the exhibition....help?

(1)


Many thanks to Claire and Dave Hardwick for their efforts at Stoke 100 Kites.....
( Organised chaos I believe is what they said!!)


26 et 27 octobre 2019
Base Nature François Léotard - Espace Caquot
10h00-18h00



I had been wondering if I could so something origami-like out of fabric when I came across this idea of folded star kites. In Germany, they are called "Faltstern" [folded starl, and as origami art, they have been made with paper for nearly 100 years. The kites using this technique are the brainchild of Florian Janich and Marcus Ertl, who kindly granted me permission to develop a class of my own and encouraged me to further explore the technique.
It's an interesting concept that is fun and produces amazing results. Oh, and it's really easy. Creative or curious people might even take the concept further with different types of folded projects.
The kite is made from squares or rectangles of fabric that are folded into points, sewn flat, and then sewn together to create a star-shaped kite. The magic happens when the kite is back lit by the sun. The translucent fabric acquires different tones where it is folded upon itself and creates beautiful, crystalline patterns: The kite for our class was approximately $48^{\prime \prime}$ in diameter. WARNING: The process can be addicting.

The Square Base and the Rectangle Base illustrations are my renditions of diagrams found online or in the book, Window Stars - Making Folded Stars from Colored Papers, by Thomas Berger. An Internet search of "window stars," "Waldorf stars," or "Waldorf window stars" will get you lots of patterns and variations. Here is Florian's Banner site where you can find pictures and more complete plans for actually building the kite: www.bannerinnung.de/ Marcus can be found at www.colorful-sky.de/home. html.


## The MAGIC STAR Kite

By Ron Ortega

## SQUARE BASE

1. Crease diagonally. Find center.

2. Fold outer points to center.
3. Fold upper edges to meet at center crease.


Steps 4 and 5 are variations on Step 3.
4. Fold outer edges to center then reopen to create a reference line.

5. Fold lower edges to reference lines.

RECTANGLE BASE $2 / 3$ RATIO

1. Crease rectangle in half lengthwise.
2. Fold all four corners to the center crease.
3. Fold upper edges to the center crease.


north-easterly wind and fairweather cloud. Needless to say you have to pick your day.

Come spring and those days start to arrive. Pilots launch from the White Corries ski centre - the chairlift gives easy acoess to a perfect hillside that looks out across Rannoch Moor. To the north, Ben Nevis is visible; head far enough south and you reach the Mull of Kintyre; to the west is Glencoe.

Taking off at 2 pm from 700 m into a perfect sky 1 flew out from the hill to find my first thermal. Paragliders fly on
the same principle as soaring birds - they need rising air to stay up. In the main this means thermals - rising masses of warm air that trigger off slopes facing the sun. The trick is to catch a thermal, climb in it like an eagle to the couds, and then glide off to find another. Mountains are perfect for paragliding because the thermals tend to drip off the summits of the peaks. The game then is to fly from peak to peak, picking up thermals and gaining altitude as you go.
"Bof!" the first thermal of the day showed itself. Catching a thermal is like hooking a fish: it feek alive. I
was up, circling higher, but the thermal was scrappy and not great. I headed back to where l'd found it first and hooked into the "core", the central part of a good thermal That's it! Like riding a horse to the clouds the thermal took me higher and higher, until I was 150 m above the 1108 m summit of Meall a'Bhuiridh. For fun I flew right over the top of it, until I could see the summit between my boots. "That's the way to bag a Munro," I thoughtI

Heading back north and exploring more lift I climbed higher until, as I topped out at 2000 m it was time to head
off for what I'd come for. Buachaille Etive Mor needs no introduction to anyone who loves the hills of Scotland. It guards the entrance to Glencoe and is one of our most iconic mountains. This was the first step on my journey through Glencoe, along the Aonach Eagach and then back again. A 40 km flight that would take a little over two hours through some of Scotland's finest scenery.

Arriving at the Buachaille at 1800 m I climbed again to 2000 m and savoured every moment above the mountain. All too soon though I was on my way 》


west, gliding in a straight line to Buachaille Etive Beag before finding a good thermal above the first of the Three Sisters, Beinn Fhada.

From there I could see the magnificent Aonach Eagach. This rocky traverse is one of the best days out in the Scottish mountains and I knew it well on foot. But by air, well that was another thing. I headed across the valley and then soared straight along it at 300 m above, its rocky spires directly below me. Days tile these don't happen often!

Reaching the Pap of Glencoe I turned and, with the wind now at my back, started to head back along the Aonach Eagach, flying slowly and deliberately, enjoying the moment. Hopping back across the valley I retraced

my flight towards the Buachaille. I failed to find a thermal on Buachaille Etive Beag and so I was low as I cruised past Curved Ridge at eye level, a classic climbing route on Buachaille Etive Mor, poinling my toes and hoping for some lift around the corner.

My prayers were answered as a light tug on the lines signiffed rising air. I turned, turned again and soon I was climbing and wheeling back towards the douds, the wind filling my sail. As the thermal formed into a solid climb taling my up at $3 \mathrm{~m} / \mathrm{s}$ towards the clouds I knew I would now make the car park at the ski contre. Id done it: flying Clen Coce and traversing the Aunach Eagach hy air was in the loge. I hay back, relaved, amid drank it all in. 》>

## - 8

${ }^{6}$ My prayers were answered as a light tug on the lines signified rising air. I'd done it!"


## About Paragliding

Scotland has a devout and dedicated band of mountain paraglider pilots. They will tell you it is not a teachyourself sport. For an introduction to the sport and a list of clubs and schools see the Scottish Hang and Paragliding Federation website at www.shpf.co.uk.

## About The Author

Ed Ewing is editor of Cross Country Magazine, an international paragliding magazine. Originally from Edinburgh he has travelled and flown in mountains from the Andes to the Himalayas, but the West Highlands and Clencoe still have a very special place in his heart and a firm grip on his imagination.
www.edewing.co.uk

## About The Photographer

Jerome Maupoint from France is a professional paragliding photographer and spends his time on location in many exotic mountain ervironments around the world. In recent years he has developed a love of exploring Scotland, spending weeks at a time hunting out new flying sites in the Highlands and Islands of Scotland. He lives in Annecy.
www.jeromemaupoint.com ©


Specialised tuition
is needed to master


1<br>3,314,630<br>FISHING KITE<br>Edgar R. Lewis, Sr., 6690 SW. 98th St., Miami, Fla. 33156<br>Filed Feb. 15, 1966, Ser. No. 527,440<br>4 Claims. (Cl. 244-153)

This invention relates to a fishing kite whereby to float over the water and support a bait at the surface of the water and with the kite being held above the water by normal air currents.

The kite comprises a square fabric cover that is expanded by triangular rods, having fitment into the corners of the kite and with means connected to two adjacent corners of the kite to constitute a connecting means for a fishing line or the like and with the fishing line being connected to a pivotal point of the rods by adjustable means.

In the drawings:
FIGURE 1 is a top plan view of an assembled kite constructed in accordance with the invention,

FIGURE 2 is a bottom plan view of the kite in assembled form showing a bridle that is connected to a pivotal point of the expandable type rods,

FIGURE 3 is an edge view of the structure illustrated in FIGURE 1,
FIGURE 4 is an enlarged view of one corner of the kite showing the mounting means for the cross or expansion rods,

FIGURE 5 is a view similar to FIGURE 4, but taken upon the opposite side of the kite,
FIGURE 6 is a fragmentary sectional view of one corner of the kite,

FIGURE 7 is a fragmentary sectional view through an adjustable bridle, connected with the kite and taken substantially on line $7-7$ of FIGURE 3 , and

FIGURE 8 is a sectional view taken through the collapsed rods for supporting the kite in an operative position.

Referring specifically to the drawings, there has been illustrated particularly in FIGURES 1 and 2, a generally square fabric flexible kite 5 , formed of any desirable material and having its edges hemmed, as indicated at 6. The kite 5 , as illustrated is square in shape and its corners are reinforced by corner tabs 7 that are stitched or otherwise connected to the fabric of the kite.
Adapted to have connection to the opposite corners of the kite, are reinforcing plastic tubes 8 and 9 . The tubes 8 and 9 are hollow tubular members, tapering from their central portion to the point where they connect to the corners of the kite. The tubes 8 and 9 are connected together by cylindrical plugs 10 and 11 into the open inner ends of the tubes 8 and 9 and are frictionally held therein and whereby to constitute a pivotal point for the tubes 8 and 9 , by a cotter pin 12, that passes through apertures of the plugs 10 and 11 and with the cotter pin having an open cylindrical head 13 and whereby the tubes 8 and 9 are pivotally supported together to swing to and from a collapsed position and to also constitute the spreading means for the kite 5 . The head 13 of the cotter pin 12 is connected to a swivel 14 that is connected to an adjustable toggle 15, in a bridle 16.
Each of the adjacent upper corner tabs 7 is connected to a bridle 17, that has connection to the bridle 16 and with each of the opposite corners 7 being provided with hooks 18, that have hooked engagement into the
open ends of the tubes 8 and 9 whereby the kite is effectively connected at the ends of the tubes 8 and 9 to spread the kite 5 into a relatively taut position. The tubes 8 and 9 adjacent their outer open ends are provided with plugs 19 and 20 and whereby the tubes 8 and 9, with the plugs 10 and 11 are sealed against the entry of air or water. The ends of the tubes 8 and 9 are connected to the tabs 7 by wire loops 21 and so that the kite may be collapsed by swinging the tubes 8 and 9 upon the pivot 12, collapsing the kite 5 whereby the kite may be rolled into a relatively small elongated package.

In the use of the device, the kite is spread, as indicated in FIGURES 1 and 2 and the ends of the tubes 8 and 9 are connected to the tabs 7 by the wires 21. The pivotal member 12 fixes the tubes 8 and 9 together and the swivel 14 of the bridle 16 is connected thereto and projects from the central swivel point outwardly for connection to the bridle lines 17. The bridle lines 17 and 16 are then connected to a fishing line 22, upon which the fishing bait is connected, to float upon the surface of the water by the action of the kite, floating thereover.
It will be apparent from the foregoing that the fishing kite of this invention has provided a noveI means for fishing from relatively small boats and may be fed outwardly from the boat and floats over the water by the draft of normally prevailing winds. The kite may also be employed to hold a small signal light or a radio antennae and is capable of folding into a slender package by unhooking lower corners and the kite is adjustable as to height by the center bridle. The entire device may be folded into a relatively small package for carrying or storage.

It is to be understood that the invention is not limited to the precise construction shown, but that changes are contemplated as readily fall within the spirit of the invention as shall be determined by the scope of the subjoined claims.

I claim:

1. A fishing kite of the character described including a generally square section of fabric, the fabric upon four sides having a hem, the kite being collapsible and held in an extended floatable condition by a pair of crossed tubular rods, the rods at their central section being pivotally connected together so that the kite may be collapsed, means upon each end of the rods that have hooking engagement with corner tabs for each corner of the kite, the rods being pivotally connected together at their central portion by a cotter pin that passes through apertures and with the cotter pin upon one end being provided with an opened eye and bridle means connected to adjacent corners of the kite for subsequent connection to a fishing line.
2. The structure according to claim 1 wherein the rods are formed of portions of tapered tubular plastic construction, tapering toward outer ends and with the inner ends of the portions constituting the larger ends and with the larger end of each portion being coupled together by a frictional plug, the outer or small ends of the rods being closed by frictionally engaged plugs so that the rods for their major length are hollow and fioatable.
3. The structure according to claim 1 wherein the tubular rods are in normal expanding position with respect to the kite to maintain the kite in a fully expanded position and with the rods at their pivotal point being collapsible so that they shift to parallel positions for collapsing the

## 3

kite, the rods at each end being provided with hooks that are connected to the corner tabs to maintain the rods against displacement from the kite, the bridle being connected to two adjacent tabs and also connected to the eye of the cotter pin and with the connecting means for the bridle having a swivel that is connected to the eye of the cotter pin and also to the bridle and slidably adjustable means for the connection of the bridle to the eye of the cotter pin for controlling the angularity of the bridle.

4
4. The structure according to claim 2 wherein the rods at their outer ends are fixed to the several tabs by hooks that extend through the tabs and that overlie the terminal ends of the rods and means associated with the
5 bridle, comprising a swivel that is connected to a fishing line.

No references cited.
MILTON BUCHLER, Primary Examiner.
10 P. E. SAUBERER, Assistant Examiner.

April 18, 1967
E. R. LEWIS, SR

3,314,630
FISHING KITE
Filed Feb. 15, 1966



Fig. 4



Fig. 2

Fig. 7


INVENTOR. EDGAR R. LEWIS SR. $B Y$


## Winds of the world

Around the globe there are countless names for local winds that recur throughout the year. Sometimes they are caused due to geographical features such as mountains and bodies of water, other times they are at certain times of the year due to local climates.

In this list we look at some of the most notable local winds around the world:

| Berg | Bora | Chinook | Etesian |
| :--- | :--- | :--- | :--- |
| Foehn | Haboob | Harmattan | Khamsin |
| Levant | Leveche | Mistral | Scirocco |

## Berg



## Location

South western coasts of South Africa and Namibia
Etymology
Afrikaans berg meaning 'mountain' Description
Winds which blow from inland mountains to the southern and western coasts of Namibia and South Africa.
These winds blow during the winter season and create unseasonably warm temperatures.

## Bora



Location
The Adriatic regions of Italy, Slovenia, and Croatia
Etymology
From the Greek boreas meaning 'north-wind' Description
A cold wind blowing on the north Adriatic coast and north Italian plains predominantly in winter and spring.

## Chinook



Location
Rocky Mountains, Canada \& USA
Etymology
Named after Native American tribe Description
A warm and dry west wind (a type of foehn) which occurs on the eastern side of the Rocky Mountains. Its arrival is usually sudden, with a consequent large temperature rise and rapid melting of snow.

## Etesian



Location
Aegean Sea and Eastern Mediterranean Etymology
From the Greek etos, meaning 'yearly' Description
A Greek term for the winds which blow at times in summer (May to September) from a direction between north-east and north-west in the eastern Mediterranean, more especially in the

Aegean Sea. The winds are termed 'meltemi' in Turkey.

## Foehn effect



Location
European Alps
Etymology
Derived from Latin favonius meaning spring breezes
Description
A warm dry wind that occurs to leeward of a range of mountains. While the name originated in the European Alps it is now used as a more general term for this type of wind worldwide.

## Haboob



Location
Sudan
Etymology
From the Arabic habub meaning 'blasting' Description
The name applies to a duststorm in the Sudan north of about $13^{\circ} \mathrm{N}$. They occur from about May to September and are most frequent in the afternoon and evening.

Harmattan


Location
West Africa
Etymology
Possibly from haram meaning 'forbidden thing' Description
A dry wind blowing from a north-east / easterly direction over north-west Africa. Being both dry and relatively cool, it forms a welcome relief from the steady damp heat of the tropics, and from its health-giving powers it is known locally as 'the doctor'.
It carries with it from the desert great quantities of dust often in sufficient quantity to form a thick haze, which impedes navigation on the rivers.

## Khamsin



Location
Egypt and the Red Sea
Etymology
From the Arabic khamsin meaning 'fifty' Description
A southerly wind blowing over Egypt in front of depressions passing eastwards along the Mediterranean or north Africa, while pressure is high to the east of the Nile.
Because this wind blows from the interior of the continent it is hot and dry, and often carries much dust. It is named referring to the fifty days it was said to blow, most frequently from April to June.

## Levant



Location
Spain, South France and Gibraltar Etymology
From the French levant meaning 'rising'
Description
A humid easterly wind which passes through the Strait of Gibraltar. It is most frequent from June to October, but may occur in any month.

## Leveche



## Location

South east Spain
Etymology
Unknown
Description
A hot, dry, southerly wind which blows on the south-east coast of Spain in front of an advancing depression. It frequently carries much dust and sand, and its approach is indicated by a strip of brownish cloud on the southern horizon.

## Mistral



Location
Southern France
Etymology
From the latin magistralis meaning 'master wind'
Description
A north-westerly or northerly wind which blows offshore along the north coast of the Mediterranean from the Delta del Ebro to Genoa. In the region of its chief development its characteristics are its frequency, its strength and its dry coldness.
It is most intense on the coasts of Languedoc and Provence, especially in and off the Rhône delta.

## Scirocco



Location
North Africa and Mediterranean
Etymology
From the Greek name Sirokos meaning 'east' Description
A warm, southerly wind in the Mediterranean region. Near the north coast of Africa the wind is hot and dry and often carries much dust. After crossing the Mediterranean, the scirocco reaches the European coast as a moist wind and is often associated with low Stratus clouds. It is a blanket terms that encompasses many local winds including Ghibli (Libya), Chili (Tunisia) and Khamsin (Egypt).

## Working on Historical Kites

US Patent 886.159, April 28, 1908 [1]

(Fig. 1)

## "Aerial Apparatus"

Working on historical kites with, most of the time, a minimum of information is quite a job of guessing, trying to get a touch of feeling or understanding of the original inventor's thoughts about construction, design, and his aeronautical knowledge.

Last week, for instance, I received a picture from France of a giant kite which was launched from a marine vessel. Although it is a very clear picture of a flying kite, it doesn't give you any information about the technical construction of the frame. bamboo or wooden rods, metal fasteners or not: many questions to answer or to guess to my best knowledge. The only thing that is sure is that this kite has to be built because of its mathematical beauty.

So if I have finished this kite and it would be possible to meet the designer, he would immediately recognize his own design, and this would start a most interesting and exciting discussion about the difference of the construction solutions I chose and the ones he made let's say one hundred years ago.

(Fig. 2)
Looking back on the Sellers project, there was just this kind of moment. Halfway through the project, after choosing the size of the kite and puzzling all the sizes of the kite together fitting to scale, I got copies of some pages of the technical diaries of Matthew Sellers himself. The really exciting moment was reading about his daily experiments and building activities, page after page getting the feeling that I was looking from his shoulders at his work, recognizing the same interest and fascination about the work from Woglom (and that he had Woglom's book Parakites [2], which is very high on my should have list).

Reading all this, I got the feeling that this time the job was done quite well. Only the measurement of the kite was somewhat bigger then Sellers was used to. But he did make one bigger kite of the size I was working on. So I allowed myself to continue with the work that was done and didn't have to do it all over.

In the mean time, the assembled parts of the kite didn't easily fit anymore in my working room. This was not so pretty because all the parts were ready and the adjusting of all the parts together had to be done. But as always, everything worked out.

(Fig. 3)

## An almost true copy

With the well described patent and the technical diary, it was not difficult to get very close to the original kite. The so-called Aerial Apparatus from the patent was noted down as Bird Kite II in the diary, while new Johan call this model no. 2, as Sellers wrote February 10 , 1904. With his precise descriptions he made it very easy to reconstruct his kite even in the smallest details.

On figure 3 for instance, you can see the wing adjustment hook on the patent. This hook is placed in the cylindrical tail as shown in figure 4, a close up of the rebuilt kite.

(Fig. 4)
Sellers, who seems to be particularly proud of the coupling rods (see figure 4) on his Bird Kite, wrote in his patent: In this construction the coupling bar 2 is bent between its ends to form an eye 3 and line wire 1 passes along the shank 4, through the eye 3 and is given one or more turns about the eye and then several turns around the shank, then one or more turns at 5 around the line wire, then several turns around the shank back to the eye, then one or more turns at 6 in the eye.

So it was very clear how this kite had to be built. On the other hand, when there is only one picture that shows the shape of the kite, and it only gives you an idea about the dimensions and nothing more such as the picture from France I got last week, such a project gives you lots of freedom. Everything you do fitting within the time period the kite has been photographed is okay. You are not making a replica, just a sketch.

But what to do with another project waiting on my desk, which is well described with a clear set of drawings, but from which half the drawing is missing? Go on with the search for the missing drawings or start building the kite with what there is, so that half the kite is a replica and the other half the best guess you could make?

Sometimes you get the information you need just after finishing your kite. You finish it, go to your kiting field, make some photographs, publish your enthusiastic stories, and just after that you get an email with something like: You did a good job, but it is a pity you placed the sticks in the middle. I have some old photographs with the stick one third from Then you are both happy and a little sad. Sad because you apparently did something quite wrong, happy you got some desperately wanted information.

## Hunting for the right materials

Almost as exciting is the search for the right materials: cotton, toile d Alsac as the French call it, maco or nanzuk for the German and cambric, nainsook or Egyptian cotton for the British and American people. All are, in the right specification, not so easy to obtain these days. Research, experimental building, and test flying is great fun. Exciting enough to keep spending hours reading old books or sanding spruce sticks and writing a little about it. Keep in touch at www.firstkites.nl.

## Jan Westerink

Copyright by Jan Westerink - 01-01-2010
In the last issue of Discourse, author Ben Ruhe introduced us to Jan Westerinks work to build a Matthew Sellers kite replica. See Spotlight on an American Flight Pioneer: Enthusiast Brings Old Kite Back to Life in our August 2008 issue.
[1] The patent sheets are free at: www.espacenet.com
[2] Woglom, Gilbert Totten. 仓Parakites, a treatise on the making and flying of tailless kites for scientific purposes and for recreation, NY, G.P. Putnames Sons, 1896.

Published before in the on-line magazine:
Discourse, Dec 2008, Volume 1, Number 3
See for more building info and pictures from April 2008 and before weblog:
Projects in Progress,Weblog, Jan Westerink

THE PLATONIC SWEETHEART
A Talliess Cardioid Kite by Hornbeant Thatch


Figure 1: Allipse Halves Make s Heayt Shape THE LAYOUT
HEART-SHAPE GEOMETRY for a Valentine's Day kite is a bit of a stumperi there appear's to be no international standard for that gymbol of affection. The cardioid eurve of geomsters, $r=a(1+c o s \theta)$, yields a fubsy glob that lacks finesse; and even paired apiralslogarithmic, hyperbolic, or Archimedien-do not haye the nesthetic appeal of the freehand sidewalk chalking of a smitten 5th-grader.

The paired dam-ellipses in Figure 1 maka a tolerably pleasant shape that can be laid out in Captegian coordinates; the area, too, can be calowlated exactly. Here are layout ways:

In Refar to Figure 2, which shows how the Cartesian x-y coordinates Ilsted in Table lare used to plot a series of pointa that will define an accurate one-quarter of an ellipse. Make a pattern of carfboazd or stiff psper that can be conveniently laid and tracsd upon a plece of covering material.
Area of the Heart Shape: $\lambda=\pi a b=\pi \times 30^{n} \times 18^{n}$ $A=1,696 \mathrm{in}^{2}=11,78 \mathrm{ft}^{2}$

Figure 2: Quarter Lebyout


TABLE 1

| $X$ | $Y$ | $X$ | $Y$ | $X$ | $Y$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0.00 | 18.00 | 15.00 | 15.59 | 27.00 | $Y .85$ |
| 3.00 | 17.91 | 18.00 | 14.40 | 28.00 | 6.45 |
| 6.00 | 17.64 | 21.00 | 12.86 | 29.00 | 4.61 |
| 9.00 | 17.17 | 24.00 | 10.80 | 29.50 | 3.27 |
| 12.00 | 16.50 | 26.00 | 8.98 | 30.00 | 0.00 |

2. Use the string-and-foel trick (DL \& 13),


Figure 3. Arranging Aattens, Keel, and Spar

## CONSTRUCTION AND BRIDLINC

1. Use the pattern end cut out the heart= shaped canopy fin a covering material of your preference. Allow extre margin if you intand to hem the kite perimeter.
2. Eefer to Ftrure 3, backside of the inite, and glue, tape, or sleeve-on $4^{11}$ centers-six longitudinal battens on each side of the keel. Use $1 / 8^{\prime \prime}$ dia. birch dowels or $1 / 8^{\prime \prime}$ sq. Sitha spruce for the battens. Note that the short batten, 5a, is placed halfway between is it 6 . Make the keel batten of $1 / 4^{n}$ square sprice.
3. Use spruce $1 / 4^{\prime \prime}$ sq. $x 48^{\prime \prime}$ long for the bow-spar; if its pocketed or sleeved, it can be removed and the canopy rolled up for easy transportation.


FRONT VIEW


SLDE VIEW

Figure 4. The 3-Branched Bridle Dimengions
4. Eridle the kite to the diraensione shown in Figure 4 for a first flight trial. Yary the bridla adjustments for refining hight oharseteristics; use approved Eddy-kite tuning procedares-a little blt at a fime (see DL \#21) ,

## PORTSMOUTH INTERNATIONAL KITE FESTIVAL 2019 Here are some photographs of the Portsmouth International Kite Festival. It was certainly challenging wind conditions....






MIDLANDS KITE FLIERS ROKKAKU CHALLENGE MARKING SCHEME

| FIRST | SECOND | THIRD | COMPETED- | DISQUALIFIED- 0 |
| :---: | :---: | :---: | :---: | :---: |
| PLACE- | PLACE- | PLACE- | 2 |  |
| 10 | 6 | 4 |  |  |

In ALL situations the 'judges' decision is FINAL

| SHROPSHIRE ROKKAKU TOURNAMENT |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SATURDAY $20^{\text {th }}$ JULY 2019 FIRST DAYS TOURNAMENT |  |  |  | SUNDAY $2{ }^{\text {st }}$ JULY 2019 SECOND DAYS TOURNAMENT |  |  |  |  |
|  |  |  |  | $\begin{aligned} & m \\ & 0 \\ & 0 \\ & 0 \\ & \text { on } \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathbf{x}} \\ & \mathbf{O} \end{aligned}$ |  | $\begin{aligned} & \text { n } \\ & \text { O} \\ & \text { Òv } \end{aligned}$ | $\begin{aligned} & \text { o } \\ & \text { ¿̀ } \\ & \text { O} \\ & \text { O} \end{aligned}$ | $\begin{aligned} & \text { 『 } \\ & \text { O} \end{aligned}$ | 新 |
| 1 | PAUL MORGAN |  |  |  |  | $\begin{aligned} & 1 \\ & 0 \end{aligned}$ | $\begin{aligned} & 1 \\ & 0 \end{aligned}$ | 4 | $\begin{aligned} & 2 \\ & 4 \end{aligned}$ | 1 st |
| 2 | $\begin{aligned} & \text { ROY } \\ & \text { PAYNE } \end{aligned}$ |  |  | 1 |  | 4 | 2 | $\begin{aligned} & 1 \\ & 0 \end{aligned}$ | $\begin{aligned} & 1 \\ & 6 \end{aligned}$ | $\begin{gathered} 2 \\ \text { nd } \end{gathered}$ |
| 3 | STEVE |  |  | $\frac{8}{5}$ |  | 6 | 2 | 2 | $\begin{aligned} & 1 \\ & 0 \end{aligned}$ | 4 |
| 4 | ELAINE SHAKSPEARE |  |  | $\nabla \longdiv { \square }$ |  | 2 | 2 | 2 | 6 | 6 th |
| 5 | DAVID SHAKSPEARE |  | $\frac{1}{4}$ |  |  | 2 | - | - | 2 | 7 $\begin{array}{r}\text { th }\end{array}$ |
| $\bigcirc$ | KAREN GAMBLE |  | $\stackrel{8}{80}$ |  |  | 2 | 6 | 6 | $\begin{aligned} & 1 \\ & 4 \end{aligned}$ | 3 rd |
| 7 | RICHARD STEPHENS |  | $\nabla \pi$ |  |  | 2 | 4 | 2 | 8 | 5 |
| ${ }^{8}$ | 'SLASHER' FROM AVON |  |  |  |  | 2 | - | - | 2 | 7 |
| 9 |  |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |

## LOOK AT THE NUMBER OF CLIMBERS

 ON EVEREST AT ONE TIME!WE NEVER GET THAT NUMBER OF KITE FLIERS TOGETHER AT ONE TIME.

Perhaps we are doing something wrong. Please let us know your thoughts.... Ed.

IM sopery.
MY HOT FUSHESS


With my personal apologises to everyone at the Auction at Berrington. Ed.

## CARDIGAN BAY 2019





T EME $\sigma$
FESTiVAL DE CERFS-VOLANTS DE


