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The Kiteflier, Issue 167
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## Front Cover

Portsmouth 2019-no social distancing required! Will 2021 look the same?

Photo: Gill Bloom


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Well, it is starting to look like kite festivals will start to happen again from June onwards, if all goes to plan-in the U.K. anyway. Obviously if you are planning to go to an event you should make sure it is happening as things can change at the last minute.

We are pleased that Portsmouth is still going ahead with the continued support of Portsmouth City Council-and we are planning on that basis but are aware that things can change. Final confirmation is due after 21st June.

There are still casualties for this year-Bill Souten (MKF Chair bill.souten@mkf.org.uk) writes:

After careful consideration, it is with great regret to inform you that both Broad Haven and Berrington Hall Festivals are cancelled due to the ongoing concerns relating to the Coronavirus pandemic. We are deeply saddened that our annual gatherings of kite fliers and friends will not take place this year. We have held off in the hope that there would be more positive news. While the initial roll out of vaccines is encouraging, it is still a time of great uncertainty and our primary concern is for the safety of visitors, who join us from all over the country. It is our view that cancelling the event is the responsible thing to do. Having reviewed the situation in detail we do not feel we can deliver a socially distanced physical event that will capture the spirit of the Midlands Kite Fliers. So many of you join us to make friends in large and small groups, be spontaneous, not to mention fly kites. Hopefully life will be back to something like normal in the coming months and we look forward to seeing everyone when it is safe to do so.

We wish everyone good winds and hope to see you on the field somewhere in 2021.

Keep safe
Gill and Jon

| Membership Type | Fee |
| :--- | :--- |
| Electronic Subscription (Individual or Family) | $£ 5.00$ |
| Household (I ndividual, Family, Senior) | $£ 15.00$ |
| Overseas (Europe) | $£ 25.00$ |
| Overseas (Rest of World Airmail) | $£ 30.00$ |

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## Pothecary Corner-Allan Pothecary

## The Evolution of Kiteworld

I (and others have said the same) really enjoyed reading Tony Dane's account of how he got in to the world of kites.

Not being Captain Hindsight here but I have been thinking for some time that I ought to be telling the story of Stephen and Michael Howard aka Kiteworld.

## Made acquaintance

Marilyn and I first got to know Michael and wife, Linda back in the early nineties little knowing that we would become good friends and travel to some odd corners of the world together.

They've only stayed at ours once, Michael is a big lad and we don't have a bed long enough for him!

Marilyn and I were thinking about getting into competition and were asking the traders if there were any chance of sponsorship. I am afraid to say that some of them even laughed as they turned us down, they not being able to see what could be accomplished.


Sorry to say also that some of those later stopped trading.

Michael, however, was different; he was interested to know how we could work together and how he might help.

We were not after freebies but maybe some good discounts as we built our collection of sport and show kites.

We already travelled around a lot and were beginning to build relationships with the major importers and, also, manufacturers home and abroad and were, therefore, able to exhibit and have ready for 'try before you buy' many of the latest kites to hit the shops.

More on that later but how did Stephen and younger brother Michael find their way in to kites?

The Early Years
Let's start way back in the late 80's
Michael and Stephen Howard spent many great holidays at the world renowned surfing location Fistral Beach in Cornwall. As keen surfers they would spend many a week here during the
summer months, like most surfers do, looking for the ultimate wave.
It was at a major surf event, the Fosters Euro Pro in 1989 that things took a dramatic twist.

They noticed a group of four people on the beach flying kites. These were no ordinary kites, they were being steered around the sky in an amazing way. The four people seemed to be flying as a team. The kites would perform manoeuvres like never seen before, it was almost like a Red Arrows display.

Like many kids of the 70's they had been given a Peter Powell stunt kite as a Christmas gift, but these kites seemed different. They were precise in their turns and fast - the Brothers had to find out more!.

## Kiters Are Friendly

On approaching the flyers they found them very talkative and willing to share their knowledge. It turned out that one of the flyers owned a kite shop further along the coast on the cliff top at Trebetherick.

Next day the brothers set off to find the store.
Store located, they entered what was a converted garage on the side of a cliff top property and were immediately confronted with an array of amazing shapes, sizes and designs of kite, Wow! Just WOW! Can you imagine the excitement?

This is it!
After much thought and many questions, decisions were made.

Michael opted for a Top Of The Line Hawaiian Team Kite, which was the same as the group on the beach were flying. Stephen chose a Flexifoil Super 10 Power Kite, lot's of pull and a real challenge.

Holidays over the Brothers returned home and back to the 9-5 jobs.

At weekends they would take their kites to the local cliff top in Clacton On Sea to fly. People started taking an interest in these amazing new kites that were so fast and precise.

It wasn't long before they were getting enquiries as to "Where can I buy a kite like this?" The Brothers were aware that the supplier of the kites was a company in Bath.

I had been there, it was a pokey little place unbefitting of it's title but was lucrative enough for its owner to have given up his job in the city and keep several employees very busy.

## Pothecary Corner-Allan Pothecary

The company later moved to a disused aircraft Hanger in Keynsham which was great for me being nearer and, they had a car park!
Ben was my main contact there before he left to set up his own bespoke jewellery making business.

The only phones were Iandline
I am skipping back and forth across a few years now but you have to remember, at the end of the eighties we didn't have the road systems we have now, there were no mobile phones and certainly no-one had even imagined the internet.


Forging a new business was something that had to be done by word of mouth and physical presence.

Catalogues were typed with hand drawn pictures of kites and the brothers joined with others to make up four man teams out every single night practicing and gaining more interest from others as they did so.

They began attending steam fairs with exhibitions doing spectacular, dangerous, things like using power kites to jump over hedges.

They were the only people on the eastern side of the country selling kites and with no internet, remember, setting up a shop was the obvious thing to do and a shop in Clacton was born under the name of Force Nine Kites.

This was an extremely busy and exciting time; weekends were taken up with festivals (Old Warden with a make-shift market stall being among the first) and steam fairs with Michael still driving heavy goods vehicles for the Coop Dairy and Stephen dividing his time between shop, events and his own job when, fortuitously or not, his position was made redundant and the decision made for him to go full time in to the business.

## Expansion

Soon they were about to open two more shops, one in Colchester and another in Ipswich where people travelled from far and wide to join in the fun and the acquaintance of Brian and Carl Wright (Team Spectrum) was made.

Michael was beginning to find it difficult to juggle the long weekends with the hours his job demanded but, as a family man with children, agonised long and hard before taking the plunge and joining his brother full time.

Michael, ably assisted by wife Linda did the bulk of the events whilst Stephen looked after the shops.

Back then some will have memories (and smile) of a large, converted mobile library that travelled the country as the event shop


A large marquee was purchased but then even larger ones were rented on the sites to accommodate rows of tables set out almost like walking up and down in a supermarket.

The bigger areas meant more ground rent to pay to the event organiser but this was the place to treat yourself.


Michael was a natural at this, mainly because he was good with people, he understood what they wanted, he could offer products at a good price and, being a kite flyer himself was able to offer the best advice.

Doing this on such a large scale was not easy though.

From the customer's side, the stall is there, you walk in, perhaps ask a few questions then maybe buy a kite and off you go - simples!

## Pothecary Corner-Allan Pothecary

For sure, they hadn't thought that two vans needed to be hired and goods had to be checked, individually priced, packed, loaded and added to the inventory along with racks, tables stands, POS and all manner of other things that dared not be forgotten.

This had to be done on a Wednesday because they had to be on site on the Friday with the marquees erected and stocked ready for the Saturday morning.

Michael often slept or stayed awake all night in the tent as security was essential. Obviously two or three day events were the best but that meant staff who just helped out at weekends had to be depended on.

Help needed
Often good friends like Martin Corrie (sadly no longer with us) would travel with FNK either taking their own mobile homes or driving the other van - and that meant food and accommodation had to be arranged and paid for.

Many times other kite flyers would rally forth and enjoy helping out with the sales but mostly the joy of being able to share their knowledge of kites with enquiring minds.

Another side to the talents of the Howard family was Linda's ability to lay on mass catering for the evening events at venues like Portsmouth, a feat in itself a master class in logistics and organisation but impossible without the extra willing helpers who volunteered to help.

This could involve catering for up to a hundred or more of invited flyers, guests, organisers and attendees of the events who stayed on overnight.

Talk about the good old days!!!


Keeping up
Prestige kites in those days were Rare Air, makers of the Spectrum, our first, full size kite which helper, Paul Redhead still remembers he sold me but there was more to be seen and flown with an ever eager customer base.

These two guys were not people who sat back and waited for things to happen.

They didn't want to be reliant on the couple of importers in this country, they were impatient to learn what was new and keen to be the first to have the very latest and the very best always to offer their customers, a mantra held to this day.

Travel abroad was necessary to meet the kite makers, manufacturers, wholesalers and legends we could only hear about third party or read in magazines months beyond publishing.

## Networking

There were trips to the KTAI (U.S. trade shows) taking in several states and cities in America establishing great friends and associations with the likes of Prism, Premier Kites, Revolution, Sky Dog Kites, Gomberg and others in Europe such as Colours In Motion and Eolo Gayla.

We found that whenever we talked to people like Scott Dyer, The Hadzicki brothers, Ramiel Tien from L'Telier, Dodd Gross, Dave Maddox, Brookites, Peter Taylor, Carl Robertshaw and many more, they all seemed to know and possibly have worked with the Howards.

Even Ray Bethel would stop flying and make be sure to visit their tent at some point during the day, he even visited them at their shop in Clacton.

Having such numerous contacts meant they were always being asked to take on other products to smooth out the ups and downs of the seasons.

Juggling equipment and roller skates was a part of their range and when the YoYo craze hit, of course FNK was the place to go.

At one time there were queues down the street outside of the Colchester shop because others did not have the same foresight or wanted to risk holding the stock.

No mean YoYo-ist himself Michael went along with Stephen to schools where "Tricknology" events were held with as many as 120 kids turning up to show they had learned the next trick from the book of YoYo tricks and get a star to put on their achievements record card.

## Pothecary Corner-Allan Pothecary

The brothers also successfully campaigned for a skate park to be built in Clacton.

This is typical of the involvement and sponsorship I spoke of earlier and done because they were appreciative of the things that helped to get them where they were and a belief that they should pay back into the communities in which they worked.

I don't believe it is widely known how much was and, still is donated to organisations and events with this sometimes being the saving grace for their very continuity.

We were grateful for our partnership and would sometimes receive help in getting to venues but were always on hand whatever.

Try it and buy it
We were usually given a couple of kites to show off for the day and prospective buyers would be sent over to try them out under our supervision. Michaels selling technique was bold but it worked.


Our strict instructions, especially for the Revolutions, was to get them to a stage where they could launch, hold and bring back down again and then take the kite away from them. By this time they were hooked and the only way they were going to satisfy the craving they now had was to buy one!

Sorry if you were a victim of this ploy but I'd bet you were pleased with your purchase?
Sometimes, I would start people with an unbreakable two line sport kite then, when they were more capable, move them on to a bigger, more controllable one.

Often they said they would like the bigger one but would buy the smaller one. Often they would have another fly of it just to make sure then realised there is a difference after all between one kite and the next.

These days we produce videos that do mostly the same job but please see previous warnings about buying a kite after only seeing it on screen. Ask us or ask any reputable trader and you will get an honest answer. A video may have taken hours to get the few good bits you see.


Time for a change
It was the coming of the Internet that brought the change of name to Kiteworld mainly because it was a name that, at that time was more easily picked up by search engines but also had a more encompassing name of the products sold - they weren't just into big, powerful kites as the original name implied.

However if you type in kiteworld.co.uk you'll also find a number of other goods too such as toys, YoYo's and juggling equipment, all enterprising products that help keep the company moving through the times, bad and good.

The year 2010 saw that last of the weekend trips to events.

The internet was now the place to buy kites and decisions had to be made where the time was best spent.

## Pothecary Corner-Allan Pothecary

Talking to Michael recently he said how much they missed the interaction with the flyers and prospective pilots and the adventures that went with it but as we have seen with the high streets today it was another right decision made at the right time.

Selling continues at a pace from the base in Clacton.

Not from the shop, that was sold way back because it didn't have enough visitors and was becoming an expensive place to run an internet warehouse from. However, the business is strong and help and advice is freely given with always the best that can be offered in sales and customer service. Ever wanting to help the message is that if you don't see it listed then ask and the best effort will be made to fulfil your dreams.

From a personal standpoint I think these guys, with the support of their long suffering wives, have done an incredible job over the years.

## Thank you

They have made a heckofalot of friends and upset the odd one or two along the way as well, but those in the know will acknowledge that they have played a massive part in keeping this passion of ours going so much better than it would have done without them.

I feel it is safe to say that there are more than little me that would agree they are owed a huge vote of thanks - Keep it going guys, please.

## What are the rules?

I am writing this at the beginning of March so rules/guidance/common sense may have found new boundaries by the time you read this.

For our own part, Marilyn and I have pulled up the drawbridge and stayed out of everyone's way and it's either been too cold or too gusty to attempt flying from the back garden.

From looking on Facebook I note that most people have decided the better thing would be to stay indoors keeping themselves (and people they might well come in to contact with) safe whilst not attracting unnecessary overload from enthusiastic policemen who have varying opinions on whether kite flying is deemed as 'normal' exercise.

The definitive word has to be "essential" I suppose and, although us afflicted, addicted persons believe that it is something that MUST be done the rules are not on our side.

There are various anecdotes.

A Kent kite flyer told me that a policeman told him that it was OK to fly kites as long as he didn't drive to the site whilst a kite buddy in the Bournemouth area was told in no uncertain terms during the first lockdown that kite flying (he was flying sport kites at the time) was definitely not an acceptable form of exercise.

Not being the type of guy who takes things lying down, he wrote and complained only to receive the confirmation below.
vear mr
Thank you for your email.
Going outside to fly kites unfortunately would not be regarded as being within the spirit of the On-
rules in relation to exercising.
Other individual sports such as angling, canoeing and surfing are also disallowed. Likewise
going outside in public, simply to sit or enjoy some fresh air is neither considered as being in the
the spirit of the rules.
The exercise rules are designed to cover a run, walk or bike ride where people are moving and
not staying in one place. I appreciate your frustration but we must not lose sight around why
we are being asked to do this. These actions are helping to limit the spread of COVID-19
(coronavirus), reduce the burden on the NHS, and ultimately will save lives.
Kind Regards
Jo
Sergeant 2
Staff officer to the Assistant Chief Constable (Operations)

+ Staff Office, Dorset Police Headquarters, Winfrith, Dorset, DT2 8DZ
( 7003473 (Internal) 01202223473 (External)

Kent policeman, who appeared to be thinking on his feet, had let all his colleagues know eh?

I commented to Andrew Beattie of tug.com that I would like to see how the boys in blue reacted when he told them that test flying kites was part of his job and he was allowed to do that!

He told me that he had a speech prepared!

## I ndoor flying with no travel

This lockdown has been too cold for us to get out in the back garden and fly. I posted a photo of us doing that last year and it looked a lot warmer and the wind was in the right direction. I know a kiting friend of ours, Brian Archer was getting around this by flying small kite in his lounge and that inspired me to make this drawing.


I don't do fiddly and I don't do drawings either but somebody has to fill these pages!

## OK I 'Il stop after this!

I hope this will now be the final chapter in my ongoing saga of trying to purchase my latest kites from China.

# Pothecary Corner-Allan Pothecary 

I get lots of people from all over the world asking me where to buy kites, which ones are best, what lines to use, how do they anchor the kites etc etc.

I worry that people will buy some of these massive kites and go off out with no knowledge whatsoever!!! I tell them that if they don't know the basics then to go along to an event or actually talk to that person they saw flying and try to gain some experience before going solo.

Of course I get experienced flyers too asking for my opinion on the integrity of the supplier, the build quality and what sort of after sales to expect once they seller has their money.

## Bad times

I think my experiences with certain eastern manufacturers has been well documented overpricing, exorbitant shipping charges when others do it free, ripping off designs - I won't bore you with all that again but you may remember my awaiting some more kites in the last issue of this magazine?

Well I never received them.
I was dealing with Mr Snow who runs at least two kite selling sites via Ali Express. 'One is 'iKite Store and the other is a company called 'Yongjian'.

I have been made so many promises that have not been fulfilled such as that my parcel has shipped and I will receive it soon when the following week I am told that there is a hold up in production and it has not yet been made!?

He claimed that he sent some other kites free to test the shipping because he was told our country was closed and not taking imports.

Guess what? - I never saw them either!
Thank goodness for AE
The continual refusal to answer my messages led to my raising a dispute with Ali Express which, surprise surprise, was answered within 24 hours!

More confirmations followed that the goods had been sent but I eventually cancelled the order. I lost a few dollars on each kite due to the exchange rate but it was worth it just to end all the hassle.

Mr Snow still claimed the kites were in transit and I agreed to pay him for them when they arrived.

I am still waiting and | think I have more chance of winning Wimbledon this year than flying those pieces of ripstop.

## Therefore!

I know there are many of you guys that don't mind paying the extra third or so and there are some companies OK to deal with.

I have lots of kites from the far east that I think look fantastic and, they give me, Marilyn and countless others a great deal of enjoyment. I am sorely tempted by some of the new designs I see but I have a conscience to wrestle with now.

It's a personal thing but if anyone seeks my opinion then that's all it is, whether others agree or not. They don't have to ask after all there are flyers more qualified than me to turn to.

Here goes...
We have good manufactures and sellers of all types of kites here in Britain or easily reachable in Europe and even the USA.

Yes I know that the majority will still have been manufactured far away but I much prefer to deal with someone who cares enough to make sure I will be happy with my purchase.

Someone who I can reach for advice if things go wrong, someone who likes to contribute to the continuation of our passion and someone who can assure me that my purchase will have been thoroughly tested, quality checked and is good value for money.

Already reader, you are thinking of several names befitting of that summarisation and I am sure most of you will have supported them over the years?

## Book

I was given a book by my "kite flying, special sister's" husband, David. I am not a book reader - Yeah, I know shame on me and all that - in fact, in my entire life, I have only ever completed three books and all of those were written by Spike Milligan.

This tome may not be a new innovation to some but it has passed me by so I thought I might share it here and supply the synopsis I found online rather than pretend I read more than the odd page as I flicked through it.

## Try this

If the dear reader has spent any amount of time in Southeast Asia, or read about the cultures existing there, they will be aware of the prayer flag. If one has been even luckier and able to travel to the Tibetan Himalayas, they will have wonderful memories of the strings and strings of colourful flags stretched across valleys, hanging from bridges, and flapping in the wind atop mountains.

## Pothecary Corner-Allan Pothecary



Prayers inscribed on each flag, they believe the words of mankind are blown to the heavens for blessings and protection from the gods.

Employing a similar scenario in in his 1985 Kiteworld, Keith Roberts extends the Christian church steeple into the sky: manned kites fly above an England rebuilding in the aftermath of destruction.

The perspective downward rather than upward, however, the colourful objects sent aloft are for watching over the land rather than bringing humanity closer to the heavens.

The land ravaged, and civilised society only beginning to rebuild itself, the setting of Kiteworld is a futuristic, post-nuclear war England wherein the Church has absolute power.

Though berms and walls are established that separate normal society from the wilds, it is not enough; protection is also needed against the demons that roam the badlands and traverse the skies.

Establishing bases along mountain ranges and the coastlines which form natural boundaries, massive manned kites are kept flying continually aloft, watching for invaders and shooting them, as necessary.

Aristocracy getting permission from the Church to fly kites from their own palaces and mansions, colourful streamers can also be seen amongst the towns, villages, and cities and the kite-men, no matter working in the private sector or directly for the church, are given exclusivity and absolute respect by the populace. Like soldiers, they are considered guardians of the land, and due to the uncertainty of their lives, awarded with admiration, even hero status.

Tossed on the currents of wind and facing evil demons, indeed many meet an untimely end.

Law, taxes, civil government, and other aspects of civilisation slowly settling back into place as the Kite-men guard over the land, Kiteworld tells the stories of a handful of the men and women living the uncertain reality of post-war times"

Ouch!
Well good luck with that if you want to track it down and buy it, I will put my copy in a kite auction somewhere if/when we ever get back close to normality.

In the next issue I hope to have more new and some updated kites to talk about so I hope you'll join me for that and if I have rattled any cages then please write here, in time to put me in my place.

## Allan Pothecary

kitedisplays.co.uk
Editor Note: The cover shown above is the classic one of Cody like kites. If you read the book the description of the mechanism for launching, flying and retrieval of the kites is very much like the system used by Cody in the early 1900's.

The newer covers do not depict the same type of kite. These are more Rogallo style kites and do not align with the provided description.

There is also a version of the cover with a hang glider!

## How to Calculate the String Angle of a Kite vs. a Balloon

From Wired.com by Rhett Allain
It's a beautiful day to go outside with a kite or a balloon, and compute how wind speed alters their flight.

I'm reading Randall Munroe's book How To: Absurd Scientific Advice for Common Real-World Problems. I probably don't have to tell you this, but it's awesome (as is everything from Randall Munroe, the creator of xkcd comics). The whole idea of the book is to go use some crazy ideas to solve mostly common problems. One chapter focuses on how to cross a river. He gives you lots of options. You could change the course of the river or even evaporate all the water in the river (both ideas are silly and fun). Another option is to use a kite to get across the river. And here is the fun part-Munroe states that both a kite AND a balloon could extend over a river. As the wind speed increases, a kite gets higher in the sky. However a balloon gets lower as the wind increases.

So, at some value of wind speed the kite and the balloon would have a string at the same angle. Oh! I want to calculate this. That will be fun.

Let's start with a balloon. If you have a heliumfilled balloon and there is no wind, it will float in the sky and the string will be completely vertical. There are just three forces acting on the balloon. There is the downward-pulling gravitational force that depends on both the mass of the object ( m ) and the gravitational field ( $\mathrm{g}=$ $9.8 \mathrm{~N} / \mathrm{kg}$ ). Since the balloon displaces air, it has a buoyancy force that is equal to the weight of the air displaced (Archimedes' principle). If the balloon only had these two forces, the net force would most likely be upward and the balloon would accelerate away. Bye-bye balloon.

Of course you might want to keep that balloon. That's why you tie a string to it. This string exerts a downward tension force ( $T$ ) with a magnitude to make the net force equal to zero. With a zero net force, the balloon is in equilibrium and stays at rest so that you can enjoy looking at your gravity-defying balloon. Here is a diagram representing these forces.


Adding up just the vertical components (let's let the vertical be the $y$-direction) of these forces, I can write it as the following sum.

$$
F_{\text {net }-\mathrm{y}}=F_{B}-m g-T=0
$$

We already have an expression for the gravitational force $(\mathrm{m} * \mathrm{~g})$, and the tension will be whatever value it needs to be in order to make the total force zero (it's a force of constraint).

So, if we have an expression for the force from the air (the buoyancy force), then we can get some stuff together. Since this buoyancy force is the weight of the air displaced, I need the volume of the balloon ( V ) and the density of air ( $\rho$ ). Assuming the balloon is a sphere with a radius R , then the buoyancy force would be:

$$
F_{B}=\rho g\left(\frac{4}{3} \pi R^{3}\right)
$$

OK, now let's add some wind. Suppose the wind is blowing horizontally with some velocity (v). This means there will be another force on the balloon, an air drag force.

We can model this air drag as a force in the same direction as the wind with a magnitude that depends on the wind speed, the crosssectional area of the balloon (A), the shape of the balloon ( C ), and the density of air ( $\rho$ ). If you are the wind (yes, YOU are the wind), the cross section of the balloon looks like a circle with a radius $R$. That makes the area equal to $\pi R^{2}$ (the area of a circle).

$$
F_{D}=\frac{1}{2} \rho A C v^{2}
$$

But now we have a problem. Since there is a horizontal force from the wind, there has to be some other horizontal force so that the net force in that direction is zero.

Yes, this extra horizontal force comes from the string as it pulls at an angle. Here is a new diagram. It's a little bit more complicated.

## How to Calculate the String Angle of a Kite vs. a Balloon



Notice that I added the wind-just for a fun visual effect. I labelled the string angle with the variable $\theta$. If the balloon is still in equilibrium, the net force must be zero in the both the horizontal (x) AND vertical (y) directions.

The tension in the string has a component of force in both the $x$ and $y$ directions such that the following two equations would be true.

$$
\begin{aligned}
& F_{\text {net-x }}=F_{D}-T \cos \theta=0 \\
& F_{\text {net-y }}=F_{B}-m g-T \sin \theta=0
\end{aligned}
$$

Since the tension is a constraint force, there's no direct way to calculate it. That's fine. I can just solve for $T$ in the $y$-forces equation and substitute into the $x$-forces equation. Problem solved.

Now I can get an expression for the lean angle of the balloon. Remember that the drag force depends on both the radius of the balloon and the velocity of the wind, but the buoyancy force also depends the radius (because of the volume). Putting all of this stuff in, I get this crazy -looking expression (but it's not as bad as it looks).

$$
\tan \theta=\frac{\frac{4}{3} \pi R^{3} \rho g-m g}{\frac{1}{2} \rho \pi R^{2} C v^{2}}
$$

Don't worry, I'm going to plot the leaning angle of a balloon for different wind speeds, but first let's look at kites.

A kite isn't a balloon-just to be clear. However, it can still fly in the air AND it has a string. Just like the balloon, the kite also interacts with the moving air (also called "wind"). However, for the kite, the air pushes back (drag) and also up (lift).

One way to model both the lift and drag force for a kite is to use the lift-to-drag ratio (it's a real thing).

It's not mysterious. The lift-to-drag ratio is literally just the lift force divided by the drag force. Every flying object that produces lift also produces drag. They are both due to the same interaction with the air. So if you fly faster (or have faster wind over a stationary kite), both the lift AND the drag will increase.

Yes, this lift-to-drag ratio depends on the shape and size of the flying object as well as orientation with respect to the motion of the air (called the angle of attack). But for this kite, I'm just going to calculate the drag and then multiply by CL (lift coefficient) to get the lift force.

I think we are ready for a diagram. Here is my kite with forces.


What? This looks just like the forces for the balIoon? OK, it does look similar-but there is a big difference. For the balloon, there is that upward -pushing buoyancy force, and it's just one value. It doesn't change when the wind speed increases.

For the kite, the upward pushing force is the lift, and it DOES depend on the wind speed. So it's not the same. Just consider the case when there is zero wind. The drag force will be zero, which means the lift is zero.

The kite won't fly-it just falls down and it's sad.

Again, I get two force equations that I can use to eliminate the unknown value of T . With that, I get the following expression for the angle of the kite $\left(\theta_{k}\right)$. Actually, I put a subscript $k$ on a bunch of stuff so you could see it's different than the values for the balloon. Oh, air still has the same density for both objects.

$$
\tan \theta_{k}=C_{L}-\frac{m_{k} g}{\frac{1}{2} \rho A_{k} C_{k} \nu^{2}}
$$

# How to Calculate the String Angle of a Kite vs. a Balloon 

OK, I'm about to make a plot of the flying angle for both the balloon and a kite at different wind speeds.

But before I do that, let's think about the minimum speed to fly this kite. In order to lift off the ground, the lift force must be at least equal to the weight of the kite. I can then solve this for the wind speed. Anything lower than this and you won't have a flying kite.

## $v_{\min }=\sqrt{\frac{2 m g}{C_{L} \rho A C}}$

Now I can pick some values for all the parameters for both the kite and the balloon. From that, I will calculate the minimum velocity and plot the string angle for both the balloon and kite.

Then I just increase the velocity and look at the pretty graph. I'm just going to make some rough guesses for stuff like the mass of a kite and the lift-to-drag ratio. But don't worry. If you don't like my choices, you can change the values in the code below. Here is what you get.


Yes, the above is created by actual Python code. (See below).

But you should notice some important features for these two curves (the kite and the balloon).

As the wind speed increases, the kite's angle gets larger and the balloon's gets smaller.

That's what we expect.

For some value of wind speed, the kite and the balloon are flying at the same angle (for my values, it's at about $2.19 \mathrm{~m} / \mathrm{s}$ ).
This kite will never be straight overhead (angle of 90 degrees). Instead, it gets to a maximum angle of about 61 degrees.

If you change all the values (mass and drag coefficients for the balloon and kite), you will get a different wind speed at which they have the same angle.

Oh, and one last thing.
It's true there was quite a bit of maths in this post. But it could have been much worse. In all of these calculations, I assumed the strings had no mass. Just imagine how fun this problem would be with more realistic strings.

I'll leave that for you as a homework assignment.

## GlowScript 3.0 VPython

\#balloon stuff

| $\mathrm{mb}=0.01$ | $\# \mathrm{~kg}$ |
| :--- | :--- |
| $\mathrm{R}=0.1$ | $\# \mathrm{~m}$ |
| $\mathrm{rho}=1.2$ | $\# \mathrm{~kg} / \mathrm{m} \wedge 3$ |
| $\mathrm{~g}=9.8$ | $\# \mathrm{~N} / \mathrm{kg}$ |
| $\mathrm{C}=.47$ |  |

$\mathrm{dv}=0.01$
\#kite stuff

| $\mathrm{mk}=0.02$ | $\# \mathrm{~kg}$ |
| :--- | :--- |
| $\mathrm{Ak}=.2^{*} .4$ | $\# \mathrm{~m}^{\wedge} 2$ |
| $\mathrm{Ck}=1$ |  |
| $\mathrm{CL}=2$ |  |

\#calc min velocity
$\mathrm{v}=\mathrm{sqrt}\left(2 * \mathrm{mk} * \mathrm{~g} /\left(\mathrm{CL} * \mathrm{rho}^{*} \mathrm{Ak}^{*} \mathrm{Ck}\right)\right)$
tgraph $=$ graph (xtitle="Wind speed [m/s]", ytitle="Lean Angle [deg]",width=500, height=350)
f1=gcurve(color=color.blue, label="Balloon")
f2 = gcurve(color=color.red, label="Kite")
while $\mathrm{v}<5$ :
theta $=\operatorname{atan}(((4 / 3) *$ rho*g*pi*R**3-mb*g)/
(.5*rho*pi*R**2*C* ${ }^{* *} 2$ ) ) ${ }^{* 180 / p i ~}$
f1.plot( v ,-theta)
thetak $=\operatorname{atan}\left(\mathrm{CL}-\mathrm{mk}^{*} \mathrm{~g} /\left(.5^{*} \mathrm{rho}^{*} \mathrm{Ak}^{*} \mathrm{Ck}^{*}{ }^{*}{ }^{* *} 2\right)\right)$
*180/pi
f2.plot(v,thetak)
$v=v+d v$

# More Inane Ramblings from a Frustrated Flyer-Hugh Blowers 

Looking through the fantastic resource that is the online collection of past Kitefliers gives cause to reflect on the enormous changes that have taken place in the hobby that we so enjoy. Even there it is something of a dilemma, is it a hobby, pastime, sport, way of life or a true obsession, and probably each of us looks upon it in a different way.

What is certain is that an entire season without a festival of any sort is exceedingly frustrating. Of course, this leaves me with little to write about, cries of hooray from some quarters no doubt, but pages to be filled and pleas from Gill and Jon cannot be ignored.

In other magazines and websites that I contribute to I do so having knowledge of the subject, with kites it is experience and observation that are foremost, and in the last thirty or so years there have been plenty of each, some magical, even emotional at times-what me! surely not-many thoroughly enjoyable, others less so and some damnably frustrating or even annoying.

Along the way we have met some amazingly talented and interesting people, but equally so, also missed others, which is a source of some regret but brings me back to a previous theme, the 'who's that' syndrome.

Doug Hagaman and The Mayor of Marina Green, George Ham, maker of the best damn parafoils in the world, his words not mine, Doug H amongst others would almost certainly dispute that. Nick Morse, maker of the most exquisite Cody kites, Peter Malinski and his amazing cellular creations, now happily being introduced to a whole new audience, thanks to the Decorators.

There is though a total contrast in ease of flying between these two genres of kites-the parafoil; one small bag, a line and flying in a matter of seconds, cellular kites; a mass of sticks, often not easily identifiable, hours of harmless fun, especially if it has not been put together for a while or it is new to you, and like most from that period, little indication of what goes where.

So a little aside, no names to protect the far from innocent. Knowing that we were au fait with the work of this particular builder we were asked if we could help 'sort out a little problem'? The little problem was that two very large and complex, but entirely different cellular kites had been taken apart and all the spars put in one heap by the supposedly knowledgeable owner. He had built two kites from the assorted parts, but they did look a bit funny and it was only by knowing what they should have looked like that we could chop and change spars until they were back the way the maker had intended.

Would they stay that way though, doubtful knowing the person concerned.

Most of you will be aware of my introduction to kite flying, firstly through a genuine Gibson Girl, boring, a Wycombe Widespan having seen one flying at night with illuminated foil up the line and a Dunford Flying machine, wonderful concept but frustrating as the centre tube had to be in exactly the right place to prevent it nosing over and crashing. Of course, there was no way of keeping it there, as it was just a piece of PVC tube sliding on a dowel and slide it did. Of course, with a bit of knowledge it would have been possible to find the correct position and then secure it with some tubing, but the knowledge came much later, so the frustration was predominant.

I wonder how many people are put off kite flying by kites that don't (won't) fly or require fiendish adjustment to get them into the air. We accept this concept of winding bridles back and forth and sometimes have a rough idea of what we are doing, but that comes with experience, after all why should one design have a bridle range of 3 mm between not flying and over flying and another needs a handful at a time? Add to this the use of multiple bridles or tensioners and bracing lines and there is a recipe for a kite that does not fly. The Cody is a prime example as the adjustment of the wing bracing lines is absolutely vital to give the sail its shape, aerodynamic properties, correct wash-in and above all, be equal on both sides for stability. It is also well known that an imp inhabits every Cody bag that will loosen and move every line whilst the kite is in storage.

Another spectacular personal failure in this respect was a kite I had lusted after for ages, a Stan Swanson Condor. In many ways, this was the Cody problem all over again. Multiple bracing lines to each wing that had to be adjusted correctly but also equally on each wing and the only way there was any indication whether it was right or not was whether it flew or crashed and that does not sit well with me so eventually that went into the sale bin.
'Herself' has 'Wolves', a beautiful Gibbian inspired design, made at a workshop in the US and then 'finessed' from its maker at Berck that suffers from the same problem but with the added complication that as tension is changed on the rigging lines, so the spine is moved one way or the other and unless it is right, it is a crasher, but such superb workmanship that it is worth the anguish, just.

These adjustment difficulties are not helped by the 'slippy' line that some builders insist on using that can defy all attempts to keep it in place. Indeed, one well-known maker used a line that would not even hold a knot, even with

# More Inane Ramblings from a Frustrated Flyer-Hugh Blowers 

the most sophisticated and convoluted extract from the Boy Scouts Book of Knots. One of my favourite 'go to' kites has a double larks head round the bridle clip that is then extended down to a so called self tightening Tarbuck knot and still the bridle will slip in flight until the kite descends gently to the ground. Short of replacing the entire bridle, I will have to live with it because of the provenance of the kite and the person who built it.

So, from quite early on my kite reasoning developed along three distinct lines. Is the design or artwork attractive to me? Can I get it flying relatively easily, not necessarily quickly, as some I have do take a bit of assembling. Lastly, and most importantly, is it a reliable flyer, as an unreliable kite has no place at a festival. Having said that, some are so iconic that it was worth the effort to turn them into 'reliable kites', whilst others I now know where their limitations are and select accordingly.

There is a final distinction between kites that have to be flown constantly and those that can be safely pegged down and observed and we have a few of them as well. Mind you, in a perfect onshore wind at Berck, we did peg down a couple of Steve Brockett's dragons, to which he remarked, 'you were brave'.

The only difficulty with all of this is that you do not have a clue as to how each and every kite will perform until you have tried it, usually after shelling out the hard earned, and as I have related in past articles, there are sadly, some kites that through design faults will never fly properly

So where did that leave us.
Well, with cupboards that gradually became more stuffed, especially with the arrival of numerous inflatables and unfortunately, a diminishing number of opportunities to fly. In the course of the lockdown a mass tidy up of our workroom took place revealing a whole box of DVDs that had been re-recorded from videotapes. Wonderful time going through these again, try to put names to people and reliving past festivals.

Mid way through one of them was the $20^{\text {th }}$ anniversary, Portsmouth festival, which included a long interview with Jon Bloom who explained how the Society came into being during a pub stop after a visit to an Essex Kite Group fly-in.

Looking back a further 20 years to what he said was quite illuminating. Andy King asked him how kite flying had changed during the existence of the Kite Society and Jon came up with three areas. The most obvious was the growth of sports kite and competitive flying, secondly the arrival of the inflatable and thirdly the development of kite traction and power kiting. As
we now know the range, size and impact of the inflatable kite grew almost exponentially, effectively marginalizing the sparred and art kites, certainly as far as the larger festivals are concerned.

Along with the popularity of the large inflatables came the associated friends and teams that formed purely to fly these kites at festivals, no doubt influenced to a greater or lesser extent by the increasing amounts of hospitality and payments to flyers. Almost by default we found ourselves headed the same way as many festival organisers began to specify what sort of kites they wanted, which in most cases was specified as 'the big stuff'.

One such said to the four of us, 'all I want you to do is put up as many big kites as possible to act as a background for the festival'. We managed to keep some sort of perspective, but the arrival of the dedicated kite van and trailer and the associated huge investment for what was inside brought us to the stark realisation that this was not a route we intended to pursue to any great degree.

Jon was finally asked what he considered was likely to be the growth area in the next 20 years, to which he answered 'kite surfing', and as we now know, power and traction kiting became a huge commercial success and with the immense popularity of kite surfing, divorced from mainstream kite flying entirely.

What is not commonly known though is that land boarding and kite buggying was being explored in Suffolk in the late 1950s, long before anyone in New Zealand came up with the idea.

That it involved a standard pram, a garden hoe and a bed sheet might not come as a surprise, yet it was surprisingly successful, if somewhat dangerous as the centre of gravity when sitting in the pram body was a bit high. In another world, the body would have gone to utilise the chassis alone, closer to a buggy and the ground and with some steering capability, but for some unfathomable reason, mother wanted to keep the pram as was, 'just in case'. The downside of the otherwise fun contraption was that most of the activity was downwind, but as Tony's later videos revealed, even Peter Lynn in the 80s could still only manage downwind runs with his boat. It has all moved on incredibly since then and who could ever have imagined a foiling, kite powered surfboard and the amazing speeds being reached or towing a massive gas tanker with kites?

If the popularity of the inflatable knew no bounds it was not such a happy future for competitive sports kite flying, and in this case we were lucky in seeing the best in action and saddened at the subsequent decline in popularity, although the Rev and the display teams that

## More Inane Ramblings from a Frustrated Flyer-Hugh Blowers

they engendered did fill the gap to an extent, especially for festival organisers.

Another aspect of the kite world that expanded enormously and then imploded in an equally rapid fashion was that of the kite trader. The reasons are many and varied but from a few small traders at a festival in the early days the line up of trade stalls grew and grew, reaching an all time high at Bristol when we counted twenty nine established kite traders. If the expansion was meteoric, the decline was almost as rapid to the extent that just a few years later, some of the festivals we were going to had just Marie and Tony of Go Kites! representing the trade.

Remember when the Society used to publish a county-by-county list that ran into hundred of entries from long and well-established shops and businesses to those pursuing it as an 'add on' hobby from a garage at home and a gazebo at a festival. Kiteabilty became a go to for almost everything and remained so until Pat and Ron called it a day and yet few remember that one of the major players and competitors started with a small card table and a few hand made bits at Old Warden?

Looking back at the 1999 video reminded us of just how many kites we put together and handed round for the celebration fly and what memories they invoked of long gone designers, manufacturers and kite makers.

Not necessarily gone as in no longer with us, although sadly some come into this category, but more those for whom the changes overtook them, their designs and products, and the resulting disappearance from the kite scene.

Some names remain synonymous with a particular design, the Clarke's crystal, Waldorf box and even a Russell Hall that was flying on the day, now that's one for the historians, Vertical Visuals, a whole raft of Monday Lunch designs and a multitude of Round Pond derivations. I was fascinated by the assorted 'Round Pond' kites, managing to obtain a couple of originals and making several copies from original patterns but again, a regret that we missed out on the personalities from the group, that is with the exception of Henry. He used to turn up at Blackheath with a bag of treasures and was obviously well known, but as newbies was a bit of an intimidating character to us, especially as the traces of numerous past meals were evident down the front of his clothes.

A missed opportunity but thanks to subsequent meetings with Dan Leigh, Julian Smith and an unknown flier at Old Warden I did get some way along the route of discovery. What I never did get though was the desire to let out thousands of feet of line and then wind it all in again. Only ever did it once and that was with a

Martyn Lawrence bird on cotton at Tewkesbury that stayed up in the night sky, unseen apart from the odd reflection of the street lights as it moved about. Since then all my handles have had just 500 ft of line and even that can be an embarrassment when one of Karl's Angels falls out of the sky depositing all of it in a heap on the beach, at night. Whatever system is used, line can always be let out a great deal faster than it can be retrieved.

Over the years we have rationalised our collection somewhat, filling the cupboards of others as ours has emptied (a bit). All the historic items were passed on, the sought after kites that proved a disappointment (for us) have also gone as have several that proved too time consuming or unreliable to fly with any degree of pleasure.

It was always an empty statement to say that 'we don't need any more kites' as that state was reached very early on, and despite the very best of intentions, there always seems to be one that appears in the bag, but based on fairly rational criteria, rather than just, 'that's nice'.

Such an addition were the Karl Longbottom Phoenix, a once in a lifetime anytime, anywhere kite, as amongst all our sparred kites they will fly in anything from nothing to a gale, hence getting probably more air time than any others from the cupboard. Does not happen very often though. Still more in the cupboard than we can ever possibly need though, but it becomes more and more difficult to come to any decisions about culling.

In one of our alternative activities a fellow enthusiast was berating the cult of the 'collector' and how he despised them for what they were doing to the hobby. A very good friend of his pointed out that not only did he have two examples of the same thing, but also he was never going to use either so he was himself a 'collector'.

In a sense, we all fall into that category and easily seduced by the new but there are some wonderful kites in cupboards that probably haven't seen the light of day in years, might even have a look in ours in the hope that Portsmouth will happen and that we can see a selection of kites that are now over forty years old?

As I pen this, despite the 'roadmap to recovery', many festivals have already received the red pencil treatment and given the current situation in Europe, any festivals there must still carry a very large question mark so probably more 'mindless meanderings' before the season is over, sorry.

## Single Line flying Flexifoil Super 10's and ProTeam 8's- Tony Collins

Two of my past articles in the Kiteflier - "Repurposing Flexifoil Stackers for displays" (Kiteflier Issue 158) and "Single Line Flying Flexifoil Stackers" (Kiteflier Issue 160) showed great ways of re-purposing the original Flexifoil spared kites for making great static tethered displays and Single Line Flying Flexifoil 6 ft Stackers.


The whole premise of adapting these great kites to new use being that quite a few of us probably have unused or neglected original Flexifoils in our kite bags or lofts - unused and neglected because newer quad line designs are superior for power kiting and like me you may be getting that little bit older and no longer into Skudding or Jumping !

Although discontinued by Flexifoil these kites Stacker 6, Pro Team 8 and Super10, do come up regularly on eBay and so even if you didn't previously own one they are fairly readily accessible.

In the second article (Issue 160) concentrating on trying to fly these kites on single lines I was only able to achieve success with Flexifoil Stacker 6 kites. The method being to replace the original 8 mm heavy Fibre Glass spar with a
much lighter 4mm Carbon fibre spar and using a " $V$ " shaped bridle with each leg of the bridle being 6 metres in length.

When I tried this approach with both Flexifoil Super 10's and Pro-Team 8's the kites did not stabilise and kept veering right or left after reaching the zenith and arcing to the ground.

What I observed was that the Stacker 6 kites with the 4 mm spar once stabilised had a fairly flat profile compared to the larger Super 10 and Pro Team 8 kites that did not stabilise and because of their length put quite a curve in the 4 mm spars.

So in this article I am covering what I did to take this single line flying idea forward for the Super 10 and Pro-Team 8 kites.

Here I first tried straight extruded 8 mm carbon fibre spars that were considerably lighter than Flexifoils original 8 mm spars and considerably stiffer than the new 4 mm spars that worked ok on the smaller Stacker 6 kites.

The result was some improvement of stability and slower arcing of the kites left or right down to the ground, but additionally I found after a couple of launches that I managed to snap the carbon fibre spars on launch or on heavy landings.

Next up I used more expensive branded Excel 8 mm spars and unfortunately they broke just as easily. Costs were starting to mount up !!

Thinking there needed to be a bit of reengineering I made 2 key changes:

- Increased the length of the "V" shaped bridle to 15 metres each leg i.e. more than double that used on Flexifoil stacker 6's in a bid to reduce the pressure on the spar during launch
- I completely changed the 8 mm spars from extruded carbon fibre to Sky Shark wrapped spars. The spar for each kite was made up of 2 centre sections of P400 82.5 cm and 2 end pieces of 5 pt tapered Sky Shark - again 82.5 mm . All spars were used as supplied un-cut from SkyShark. These new spars could I hope be expected to be considerably stronger and additionally they were lighter. The Sky Shark spars were jointed using 10 cm Sky Shark internal joiners and taking a belt and braces approach I also added an 8 mm external aluminium sleeve to each of the 3 joints (see photo). As the assembled spars were about 20 cm longer than the kite at each end I added a stopper clip on each side to attach the bridles to (see photo).


## Single Line flying Flexifoil Super 10's and ProTeam 8's— Tony Collins



## Assembly and Launch method

The spars were assembled using electric tape, then inserting in the kite sleeve and attaching the bridle using the standard Larks Head Knot.

After anchoring the main line, you stand inside the "V" bridle, facing away from the wind, and holding the kite level at head height and into the wind with the lines taught. You then ensure the kite fully inflates before letting it launch out of your hands.

The kite should then rocket up to its zenith and stabilise. And that's exactly what happens with this configuration - the new Sky Shark spars and longer " V " bridle set up works a treat for either Super 10's or Pro-Team 8 kites !!
So job done - whether you use the 2 lines tethered method or single line " $V$ " bridle method it is clear you can re-purpose any of your old Flexifoil 6, 8 or 10 kites to make a really great display and considerably more relaxing than using them as power kites.

One additional thing is that these kites can cope with high and gusty wind speeds and fly very successfully in 15-35+ mph range with no problem at all in either configuration, tethered or single line.


Flexifoil Super 10 happily flying on a single line

Lastly I wanted to make a shout out to anyone who may have a spare or redundant Flexifoil Hyper 12, 16 or 20 kite as they seem pretty rare and I have only ever seen one on eBay and I would love to try single line flying one of them. Perhaps you could contact me through the Kite Flier.

I have now created a dedicated Facebook page for others also interested in Single line or Tethered flying of flexifoils:
"Flexifoil Single Line and Tethered Fliers"

## Tony Collins

## My First Kite (The Dalek Kite!) - Tony Collins

Just before Lockdown No. 1 when I was flying kites at my local beach, and trying out a new Szalsky Ciquare kite, a lady dog walker came up to me and said the square kite reminded her of the kite she always flew with her dad when she was a child. Turns out on discussion that it was a Dalek kite and that was also the first kite I had bought.

A few weeks later when the lockdown kicked in I started doing some research as I couldn't quite remember exactly what the kite was and it had long gone - no sign of it even in old attic storage boxes - an internet search soon turned up
 lots of details. I found an old pink Sales Flier showing the kite was made by Bowman Jenkins and cost Four shillings and six pence in old money - about 45p today and it was sold from 1965 when the Daleks were terrorising Dr Who (and me!) on the BBC.

Amazingly I also found my old Diary from 1968 which had a lot of entries each week saying "flew kites all afternoon" or "flew kites all day ". So probably I bought it in 1967/68 and I do remember I got it from our village general store and flew it on several balls of parcel string.

At that time my pocket money was only 15 p a week so probably I bought it with some birthday money - it was common at that time to get a 10 shilling note (50p) in a birthday card from an Aunt or Uncle if you were lucky.

After a bit more research I manage to find some photo's of the Dalek kite and also there was a note in the Kiteflier in July 2017 Issue 152 about the sale of a Dalek kite on eBay for a staggering $£ 485$ !

From the sales flier and photo you can easily see that the kite was actually a Della Porta just like the Szalsky kite but with a streamer tail.

The kite was 17 inches square $(43 \mathrm{~cm})$ and made of polythene with wooden struts and the tail was stitched blue polythene which I guess gave more drag than a straight streamer.


I remember enjoying flying the kite so much and as my 1968 diary stated I flew it most days that year!

Being quite a fan of Della Porta kites and not being keen to spend near $£ 500$ on eBay, even assuming another came up for sale, I thought making a replica in homage to my first kite would be a great lockdown project.

Not being a very capable sewer I decided to make a replica in Tyvek and I bought some Dalek and Tardis stencils from Amazon to replicate the design on the kite.

## Materials:

- Tyvek 70 cm squares - 45 gram material
- $\quad 2 \times 1$ metre long 4 mm carbon fibre rods for the cross spars
- 2 blank rod ends for the top of the spars
- 2 knock ends for the bottom of the spars
- Spinnaker nylon repair tape to make pockets and re-enforce the corners
- 2 mm bungee rubber for the bottom corner tensioners
- Kite tails - 13 metre Acro plastic tube tails
- Darlek and Tardis stencils from Amazon
- Humbrol Acrylic spray paints
- Black felt tip pen to outline the Dalek and Tardis images


## My First Kite (The Dalek Kite!) - Tony Collins

After cutting out the Tyvek squares I added re -enforced top corner pockets to insert the spars and re-enforced bottom corners to attach the bungee rubber tensioners.

The Dalek and Tardis images were spayed onto the kites and once dry outlined with permanent black felt pen to make the images sharper.

The 3 bridle legs were approximately 75 cm long and the tail bridle about 50 cm each leg.

As well a replicating the original kite with the Tardis and 2 threatening Daleks I also created 2 other designs shown below.


Once lockdown was eased it was great to get out to the beach again and try out the kites.

They all flew as well as I remember the original and I really love the high angle Della Porta's
fly at.
Perhaps you may have a story to tell about your first kite - that may be a great way to help fill the pages of the Kiteflier !!


## Make, Do and Mend—Bob Cruikshanks

A slight adaption of the WW2 slogan of Make Do and Mend that came about when clothes rationing was introduced. The then Ministry of Information published a pamphlet encouraging people to make do with whatever they could to extend the life of their clothes, from darning socks to washing nylons more carefully.

Given the enforced hibernation that we are have been enduring I feel it is an ideal time to make something, mend that kite, banner or winder but basically do anything to while away your time until we can step into the wind in a collective fashion ie, a festival.

Make: Whether you have made anything before i.e., kite, banner or piece of ground decoration, there are plenty of plans and ideas particularly on the interweb. If you do not have any books like many string pullers your first port of call could be the Kite Society at shorturl.at/hiGW3. Maybe try Kite Plan Base, supposedly the 'World's largest kite plan archive' at www.kiteplans.org. Simply search for 'kite plans' and you will be presented with a raft of options.

Workshops, where you are generally provided with all the bits and instructions, used to be an ideal option to make a kite or banner under the
guidance of a string pulling Guru but because of restrictions this has been limited of late. That said, some people over the pandemic period have made kites 'virtually' and the largest project to date was coordinated by Andrew Beattie, which involved making a 10 ft Blue Whale where a kit was provided by Peter Lynn Kites (PLK).

With over 600 hundred kits being distributed worldwide the customisation and colour combinations of people's whale was limitless. Skill levels varied but with global assistance via social media there was generally someone available to answer questions or provide assistance over and above the instruction manual and YouTube video from Simon Chisnall at PLK.

Material i.e., Ripstop, and components, generally for kites and banners are available from a few kite makers/traders ie, Karl Longbottom, Andrew Beattie and Kites Up, to name a few here within the UK.

Never made anything before, cannot sew or don't have access to a sewing machine, not a problem.

# Make, Do and Mend—Bob Cruikshanks 

Even if you have no plans or desire to use the usual materials have you considered paper or plastic?

When I was fortunate to go to festivals in India circa 2005 many Indian fliers at that time did not have access to ripstop etc. Yes, their traditional kites are made of paper and bamboo but they were made, and some still are, using plastic stuck with sticky tape and some even heatsealed.

The sight of a 10 metre plastic Bol being dragged around the field is something to see and, to this day, it is still being used albeit with a few repairs. I also saw cellular Crystal kite made with plastic; not a pretty sight up close but at 50 feet or more it looked great and you could not tell that it was made from plastic.

You don't have to be perfect at whatever you create and my advice is always the same, "use the 50ft rule"; it's amazing how mistakes disappear to the human eye. Even with 2020 vision you'd be hard pressed to find faults unless you're talking about the current 2020 handling of the Corona pandemic ;-)

Even the lack of regular spars, glass fibre or carbon, shouldn't stop you. Bamboo from a garden centre or wooden dowel from a DIY or model/craft shop. Even kebab sticks or straws can prove just as versatile replacements, especially if your creation is paper based.

What about making something spinney or flappy for the garden or your own little wind garden. How about a spinning plastic bottle? Yes, there are also plans for these if you search about or just take inspiration from pictures.

The best part for this project is drinking the tonic/coke from the bottle before you start, especially if used as a mixer for gin/whiskey, and if it goes wrong during creation you just have to empty another bottle. Please drink responsibly and not before any cutting or drawing activities, hic!

For ease make something from a plan if making a kite and as for a design, if you what to go that far, use simple colours or copy a drawing. However, if you want to go left field/off piste and be unique just adapt a kite shape and/or a design, make it yours!

Skipping Do until the end we come to Mend: If you are a flier or have purchased some secondhand kites there may inevitable be a breakage or three. Many of us put them to one side for the 'winter' break but we never say which winter so the pile gets bigger!

Well given this enforced period of hibernation what better time to reduce that pile. It may be a broken spar, a spar pocket, bridle line or possible a hole or stitching that has come adrift.

As mentioned above, sources for bits are there, especially if you want to replace like-for-like. But, pockets can be replaced by a piece ribbon, multi-layer ripstop or whatever may be to hand. A sewing machine would be ideal but, again, not essential; hand stitching was invented before the Roman Empire.

Spar/s broken; again like-for-like would be ideal especially for a performance kite or one that has multiple spars and symmetry/balance is needed to be maintained. But generally until you can get supplies from a kite trader, possibly at a festival given that postal deliveries can be difficult and/or expensive, consider using wooden dowel maybe. To achieve balance to the kite if the spar is one of two replace both the spars with the same material. I have also found that my local model shop has stock of short carbon/ glass rods i.e.' less than 1 metre.

Do: Think of the above as a replacement for the word 'Kill'. Before your partner kills you, you kill the kids or the TV for showing another repeat, this is really just about killing time and maybe testing your creative juices.

Remember whatever you produce it is unlikely to be used to transport life forms, it may draw comments from others and/or family but above all, nobody is going to die. You may die from embarrassment but you may also get a lot of satisfaction from watching it soar or if a banner etc, provide some colour to your collection.

Bottom line, you or the family who can also get involved have produced something, even if it's just a repair.

If you get stuck, like Who wants to be a Millionaire you can always phone a friend, ask the audience via social media however, you may have to filter the responses. I would draw a line at asking Jeremy Clarkson as I don't think he knows sh** all useful and especially kite related.

So, if this has struck a cord with you.
Wow, hang on a minute there's a thought. Maybe you need to sort out your collection of flying lines, remove those knots or just replace a broken Halo reel or winder. Whatever you decide to Do, large, small or maybe just read this to kill time may I say that you are not the only one praying for the light at the end of the Corona tunnel to become bright and allow us to get back to some sociable kite flying.

If you did great job, if you thought about it that's also good but if you were not able for whatever reason I also say that's okay because you've killed a few minutes reading this.

Stay safe and see you on the field.

## Bits \& Pieces

## Auctions-I nvaluable.com

Chinese Kites Bronze Plaque
Philip LaVerne (American, 1907-1987) and Kelvin LaVerne (American, born 1937) patinated bronze wall plaque. Etched and raised polychrome finish surface with Asian style scene of human figures flying auspicious bat shaped kites. Signed on front with "Chinese Kite Flyers" label on verso.


A wide estimate of $\$ 100-\$ 1000$.
Original Boy with Kite Bronze Sculpture Curtis Jere original boy with kite bronze sculpture depicting a young boy with his dog getting his kite stuck on a telephone pole. The bronzes rest atop a stone base. Sticker on underside.

Curre


A Chinese Reverse Glass Painting.
Early 20th Century, painted with three young ladies flying a butterfly-shaped kite, the wood frame set with an angular ruyi-head loop, 40 x 29 cm


Estimate: $£ 100-£ 200$

## I consiam Summer Kite Playground <br> From the Bangkok Post



ICONSIAM has announced a new experience set to send observers excitement levels sky high, with the launch of ICONSIAM SUMMER KITE PLAYGROUND, within the grounds of the shopping centre's River Park location.

As of now, until April 18, 2021, on Fridays through Sundays from 4 pm to 8 pm , attendees will be able to see amazing performances from the THAITAN team, the professional kite flying outfit who dazzled judges at the 5th Korea Uiseong Sports-kite World Championship, where they beat out rivals in the Dual-Line competition, to clinch first place.

## Bits \& Pieces

The THAITAN team will also demonstrate how best to control a kite, with insider tips on launching and steering the famously tricky playthings.

In addition to flying kites, there is also a kite exhibition, set against the backdrop of the Chao Phraya River, featuring an array of different models, such as the Inflatable Kite, the Stack Kite and, both, the Quad Line and Dual Line Stunt Kites - the pinnacle of kite athleticism which require intensive training and high a degree of skill to show off its full capabilities.


THAITAN comprises team leader Pairot Kwansong, an expert in Dual Line Stunt Kite as well as the leading kite-making master in Thailand for over 40 years; Teera Petkaew, from Songkhla province, an expert in Quad Line and Dual Line Stunt Kites. Noppadon Kongsuwan, from Yala province and Chalermphon Suksawat from Surat Thani province, are highly skilled professional stunt kite performers. The team is completed by Krittayod Yoiyat a professional kite flyer and a motocross rider.

A variety of kites will also be available to buy, including the octopus kite made from highquality ripstop nylon imported from New Zealand, paper kites, animal themed kites, rotating kites, and the traditional Thai kite

Customers who spend THB300 at ICONSIAM will get a chance to participate in a workshop on how to design their own kites. The ICONSIAM SUMMER KITE PLAYGROUND is held on Fridays through Sundays during 4pm to 8pm until April 18, 2021 at River Park of ICONSIAM on Charoen Nakhon Road. ICONSIAM can be easily accessed via the new Gold Line of BTS.

## Hermes Fashion Kite

Fashion design house Hermès has introduced this US $\$ 10,000$ kite for its Spring Summer 2021 Collection, featuring cloth bag with leather accents.

Compare with Louis Vuitton’s kites from 2020.

The Hermes is in carbon shell gilded with gold leaf. The stunt kite is in Hermes squares. The delta is in leather and crocodile skin with Hermes square tails


The Hatchling
An uplifting symbol of freedom
The Hatchling: world premiere, 14 \& 15 August 2021

A spectacular dragon will hatch in Plymouth City Centre this summer, and grow to the size of a double-decker bus.

Where will her journey take her? Will she find herself a new home? And ultimately, will she FLY?

The Hatchling is a ground-breaking outdoor theatrical performance that will unfold over a weekend of events and reach an extraordinary finale over the coast of Plymouth. Our beautiful visitor will hatch in the city, build herself a nest and then attempt to take to the skies in a bid for her freedom. Along the way, she'll explore the city, and as she roams, she'll encounter a series of events from intimate interactions to city-wide performances, prepared especially for her majestic visit.

At the end of her journey our hatchling will undergo an incredible metamorphosis, unfurl her wings, and attempt to soar over the sea at sunset! With a wingspan of over 20 metres, our hatchling is the world's largest human-operated puppet to attempt flight.

Join us this summer for a spectacular adventure never to be forgotten.

Created by a leading design team specialising in puppetry, kites and immersive theatre, this is

## Bits \& Pieces

an unforgettable world premiere taking place in Plymouth this summer. The Hatchling will bring together artists, community groups and city partners to create a public artwork of groundbreaking ambition - a cultural icon that will unite people from all walks of life.


Designed by Carl Robertshaw, Skybums and Andrew Beattie have also been involved.

## Suspended Observations: NASA Aeropods Win I ndustry Recognition

Aerodynamically stable and designed to hang from a kite string, Aeropods offer a low-cost, low-risk, opportunity for scientists and students to gather imagery and atmospheric data from an aerial perspective.


Aeropods consist of a tail boom and fin that steady data -collecting instruments, providing a stable platform from high in the sky. Instruments including cameras, spectrometers, and other kinds of sensors attach to the Aeropod, and once aloft, they can gather data while flying attached to a kite

Geoff Bland, Research Engineer at NASA's Wallops Flight Facility, Wallops Island, Va. and his
team won the Educational Institution and Federal Laboratory Partnership award in 2020 from the Federal Laboratory Consortium for their Aeropod technology.

Aeropods can be fitted with sensors for aerial imaging, including color, multispectral, and thermal imagery, and in-situ measurements which require that the instrumentation be located directly at the point of interest and in contact with the subject of interest, such as temperature, humidity, wind speed, and wind direction. "We look at the Earth from space and from aircraft," Bland said. "As we get closer and closer to the surface, we get higher-resolution data. In order to both get that resolution and capture the big picture, we need many measurements at many locations."

## New 'Banksy' mural?



Seen at Winchester. Although it is the style of Banksy, the artist has not confirmed it is one of his. There also appears to be another tag nearby.

## Venezuela's largest impoverished district marks 400th anniversary with kite festival

 From ReutersIn Venezuela's sprawling impoverished Petare neighborhood on the east end of Caracas, dozens of children and residents flew kites to celebrate the 400th anniversary of the founding of what was once a small village outside the capital.

Petare was founded in 1621 by Spanish settlers who took advantage of the lush mountain surroundings to grow crops including coffee, cocoa and sugar cane, according to Venezuelan historians.

During the 20th century, the area was settled by migrants who moved to cities as the country's oil industry took off and is now home to more than 1 million people who range from the extremely poor to middle class professionals. The area now suffers from gang violence and chronic problems with power and water, but its

## Bits \& Pieces

residents have cultivated a sense of pride at facing adversity with a smile.
"Given the situation of the country, this is the best thing that has happened" in Petare, said Omaira Montiel, 47, a homemaker who has lived half her life in Petare. "I'm happy."

Children and adolescents spent hours flying kites from a hilltop with majestic views of Caracas as a singers performed and a symphonic

orchestra of youth musicians played in the background.
The activity helps ensure that "traditions are not lost," said Marisela Moreno, 55, another Petare resident.
"Petare means a feeling of commitment and dedication", said opposition leader and former mayor, Carlos Ocariz. "Politics is about spending time with the community."

From Ebay
Collection Kite Flying Enamel Lapel Badges £6.00 plus postage.


Original unframed painting "YOUNG GIRL WITH KITE" by the renowned Irish artist Michelle Carlin

This painting which measures 7 " $\times 5$ " is painted on board and has been signed by the artist on the bottom right.


Price $£ 95$. Also available as a Boy.
The Ching-Yaong Or Kite Flying Festival ~ Antique Engraved Print


An Engraved Print From Time Gone By
Recovered from The Boys Own Paper published In 1879 and is over 140 years old. An original print from the above publication and not a modern copy.
"A One Off For Your Collection". Please note size: 9 Inches x 6.5 Inches approx.

Priced at $£ 18$ with free postage.

## Portsmouth 2021

## Portsmouth International Kite Festival 7th \& 8th August

Recent discussions with Portsmouth City Council have been held and, subject to any restrictions being imposed/extended the event is going ahead as planned. Final confirmation will not be available until the end of June.

Portsmouth City Council continues to support the kite festival. For which we thank them.

This year celebrates 30 years of the Portsmouth International Kite Festival and we are bringing many new kite fliers and their kites to the festival.

It is important to request both parking and camping as early as possible, so please do not delay even though circumstances may change.

Free parking is available for KSGB members on request from us IN ADVANCE. No passes will be available during the weekend. Please send an SAE or (preferably) an email to us with your name and car registration number.

Please note that each pass will be specific to your vehicle and NOT transferable to another vehicle without a new pass being issued. Your name and registration number will be printed on the pass. Also note that if you do not supply the registration number you will not get a pass.

Finally a CAR pass does not equal a CAMPING pass-a separate pass is required for CAMPING.

Camping is not officially permitted on site by the council. On request of the council we are keeping the number of camping spots static to avoid complaints from local residents.

Some passes will be available to non guest kitefliers. Please note the following if you intend to apply for one of these.

Camping is only open to Kite Society members or affiliated club members.

A ballot will be used to allocate any spare passes. Therefore anyone who wishes to enter the ballot MUST request a pass from us together with the vehicle registration number.

All requests for camping must be with us by 31st May. We will notify both successful and unsuccessful people by the 8th June.

It is important to note that this concession is only between Friday 6th August 10am until Monday 9th August noon.

You will be moved if you arrive earlier or stay later. Please do not abuse this concession.

Please park considerately and as close to your neighbour as practical for the vehicle/unit you are using (there has been a creeping tendency to spread out more over the years).

Send requests to:
portsmouth@thekitesociety.org.uk.
Note requests for camping will NOT be acknowl-edged-we have better things to do! - unless you ask for a read request via your email system.

## Events List

|  | July |  |
| :---: | :---: | :---: |
| 3-4 | Barmouth Kite Festival, on the beach opposite the Lifeboat Station, Barmouth, Mid Wales | kitesbarmouth@gmail.com |
| 10-11 | Rossendale Kite Festival, Haslington Sports Centre, Haslington, Lancashire BB4-4DN-Cancelled | www.nkg.org.uk |
| 17-18 | Shropshire Kite Festival, Lacon Childe School, Love Lane, Cleobury Mortimer, Shropshire DY14 8PE | kites@skybums.com |
|  | August |  |
| 7-8 | Portsmouth International Kite Festival, Southsea Common, Portsmouth | www. portsmouthkitefestival.org.uk |
| 14-15 | Newbiggin Kite Festival, The beach, Newbiggin by the Sea, Northumberland, NE64 6DB | www.nkg.org.uk |
| 28-30 | 6th Bognor Regis Kite Festival, King George V Playing Fields, Felpham, Bognor Regis, West Sussex PO22 8QS | www.brkf.org/kite-festival.html |
|  | September |  |
| 11-12 | Bridlington Kite Festival, Sewerby Fields, Bridlington, North Yorkshire YO15 1ER New Date | www.nkg.org.uk |
| 11-19 | Dieppe International Kite Festival, Dieppe, France | www. dieppe-cerf-volant.org |

## A History of Kite Flying in India

Be it the festival of Makar Sankranti or Uttarayan or a celebration of Indian independence, both are synonymous with kite flying. Even though there is no historical evidence or written account of the kite's association with the festival or the occasion, it is an age-old tradition. Here, we trace the history of the kite in the Indian subcontinent and shed light on how a Chinese invention became pivotal to various festivals across the nation.

Most of us have experienced the joy of watching vibrant kites soaring in the sky, if not flying one. Come spring, the Indian sky is often dotted with colourful kites of all shapes and sizes, and one can occasionally find a kite runner or two dangerously dashing through the gullies collecting the ones cut. While, over the years, this popular pastime and sport might have lost mass popularity, on occasions such as Makar Sankranti, Baisakhi and Independence Day, kids and adults continue to indulge in it with fervour and passion.

While the kite has a simple structure, its history in the Indian subcontinent is rather knotted. The origin of the kite is still disputed. Some historical sources suggest that the kites could have origins in Melanesia, Micronesia and Polynesia, but it is widely believed to have been invented in China. The earliest written account of kite flying, from 206 BC, mentions that Heuin Tsang had flown a kite to overawe the army of Liu Pang. Various sources suggest that by 169 BC , kite flying was in place under the Han dynasty, and that the Chinese general Han Hsin had 'a kite flown above a besieged town to calculate the distance his army would have to tunnel to reach under the city wall.' As time passed and contact was made with other cultures, along with other commodities, kites reached the Indian subcontinent.

## Kites on Paper

Kites are believed to have come to India with Buddhist missionaries from the East through the Silk Route, following which they travelled to distant lands such as Arabia and Europe. The earliest written accounts of the kite in ancient Indian literature can be found in the poetry of the thirteenthcentury Marathi saint and poet, Namadeva. In his poems or gathas, he called it a gudi, and there is a mention that the kites were made from kaagad (paper). Written accounts of kites also exist in the songs and poems of sixteenth-century Marathi poets such as Dasopant and Ekanatha, both of whom call it vavadi. Along with poets from Western India, there are written accounts of the kite from the Awadh region in the Satsai of the Hindi poet Bihari.

In his epic poem Ramcharatramanas, the seven-teenth-century poet Tulsidas also mentioned kites and provided an anecdote of how Hanuman retrieved Rama's kite that had flown to Indralok. In the poem, he calls it a chagg. According to Nikita Desai, the author of A Different Freedom: Kite Flying in Western India, there are also mentions of kites in the Ramayana and the Vedas.

Under the Mughals, kite flying was turned into a sport, primarily among the nobility. With growing
popularity, the design was also enhanced for better aerodynamics. Mughal paintings and miniatures from the time show both men and women flying kites. It is believed that upon Jahangir's return to Delhi from a three-year exile in Allahabad in 1812, the residents of the city flew kites to celebrate his return while his mother offered a chaadar. The event is celebrated today as Phool Waalon ki Sair. There is even a mention of kite flying in Maulana Abul Halim Sharar's translated work Lucknow: The Last Phase of an Oriental Culture; he wrote that the interest in kites grew during the reign King Shah Alam I in the eighteenth century. His account reveals that tukkals, which were similar to a Chinese Iantern, were 'favoured as fighting kites in the 18th century' and that 'the word patang emerged to denote the best type of tukkals.'

Let's Go Fly A Kite
The tradition of kite flying continued even after the decline of the Mughal empire. It was a seasonal activity that was carried out during festivals such as Uttarayan or Makar Sankranti, and in the Punjab region, on Basant Panchami and Baisakhi. The modern-day kite came into being while India was under the colonial rule, and developed in form, shape and design. Some sources suggest that when the Simon Commission was put into place, people from the Indian subcontinent protested by flying hundreds of kites with the words 'Go Back, Simon'. Perhaps the association of freedom with kite flying was what initiated the tradition of kite flying on the occasion of Independence Day. On August 15, the rooftops of Shahjahanabad or Old Delhi, as it is known today, are occupied by enthusiastic children and adults flying kites.

In the western part of the nation, 'kai po che' ('I have cut the kite' in Gujarati) is heard from the rooftops. The state Gujarat has been, for long, associated with kite flying and houses the Patang Kite Museum, which was conceptualised by Bhanu Shah and is a treasure trove of historical kites. The museum has 33 panels with kites and paintings that he collected from places such as the Victoria and Albert Museum in London. It is one of the few museums of its kind in the world. In 1989, the International Kite Festival was started by the government of Gujarat, and it welcomes kite enthusiasts to fly kites and witness hundreds of tiny, colourful dots on the backdrop of the blue sky.




[^0]:    Whilst every effort is taken to get the details correct The Kite Society cannot be held responsible for any errors or omissions that occur. Opinions expressed in this magazine are not necessarily those of the Editors or The Kite Society.

