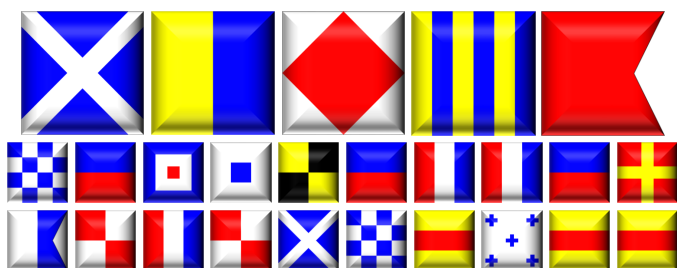




NEWSLETTER OF THE MIDLANDS KITE FLIERS OF GREAT BRITAIN
AUTUMN 2022



BERRINGTON HALL 2022



NEWSLETTER OF THE MIDLANDS KITE FLIERS AUTUMN 2022

GENERAL 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 card may help you obtain discounts for purchases from 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 with the exception of the United States of America and Canada. 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-to-Member 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.

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.

YOUR CLUB OFFICERS

CHAIRMAN - NEWSLETTER EDITOR

Bill Souten

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*I am sorry but I don't do 'Facebook',
If you want me either email or phone I'll always get back to you.*

SECRETARY

Dave Hardwick

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Oakamoor,
Stoke on Trent
Staffordshire, ST10 3AF
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PHOTOGRAPH
TO FOLLOW

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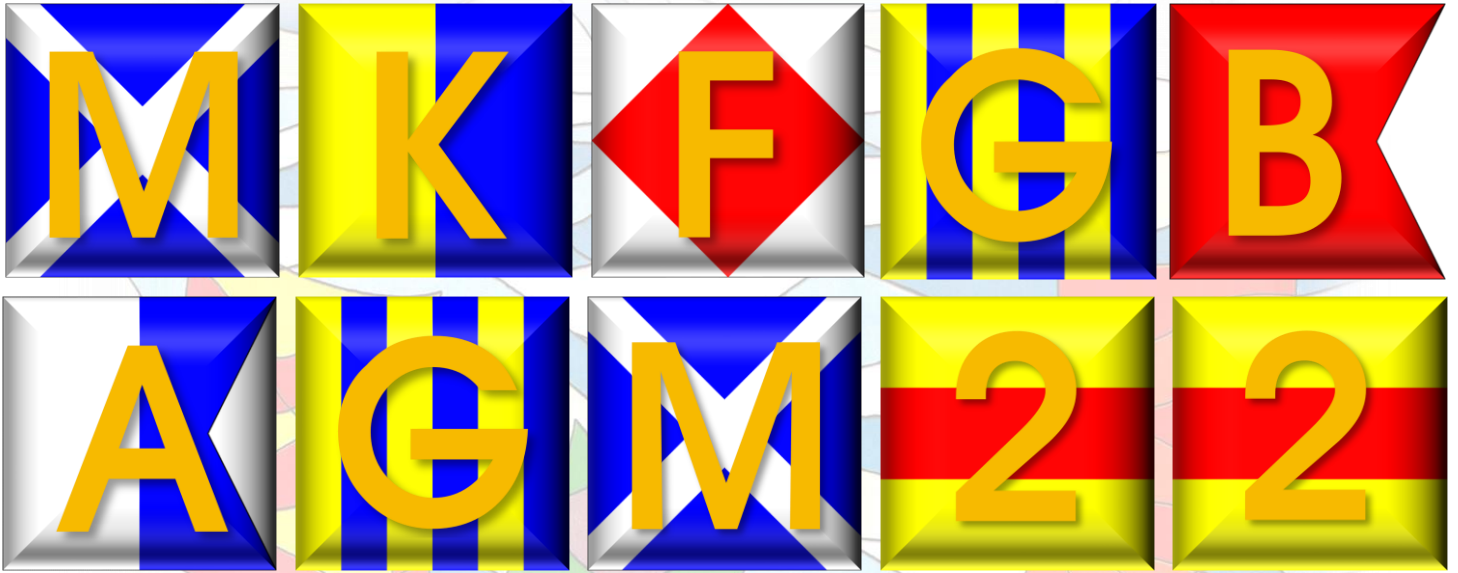
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PHOTOGRAPH
TO FOLLOW

'MKFNEWS' DEADLINES FOR 2022+

MKFNEWS B. SOUTEN - EDITOR	'COPY' DEADLINE	PUBLISHING DATE
42	25 th December 2022	Mid January 2023
43	25 th March 2023	Mid April 2023
44	25 th June 2023	Mid July 2023
45	25 th September 2023	Mid October 2023



SUNDAY 27th NOVEMBER 2022. From 10.30am
APEDALE COUNTRY PARK CENTRE
Blackbank Road, Knutton, Newcastle Under Lyme, Staffordshire, ST5 6AX

**COMPLIMENTARY
REFRESHMENTS
at the
Chairman's
Pleasure**

**MKFGB
AUCTION**
MIDLANDS KITE FLIERS OF GREAT BRITAIN
YOUR REMINDER
WE SHALL BE AUCTIONING THE 'CLUB KITES'
AT THIS YEAR'S AGM. This will include
the 'George Peters Kite Collection'



CAP 393
Air Navigation: The Order
and the Regulations
-
TODAY'S HEIGHT
LIMIT WILL BE
500 feet
MIDLANDS KITE FLIERS

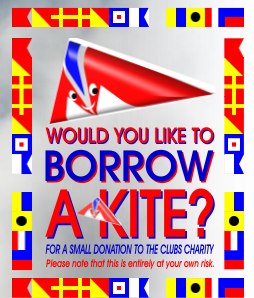


MIDLANDS KITE FLIERS OF GREAT BRITAIN
c/o 52 Shepherd's Court, Droitwich Spa, Worcestershire, WR9 9DF.
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SUNDAY 9th OCTOBER
WILL BE THE PUBLIC FLY-IN
Supporting Local Charitty



MIDLANDS KITE FLIERS OF GREAT BRITAIN

c/o 52 Shepherd's Court, Droitwich Spa, Worcestershire, WR9 9DF.

Email: billy.souten@btinternet.com - 07840800830



In the event of poor weather conditions the fly-in will be cancelled.
 It is always advisable to check that the event is happening before travelling any distance
 All our 'fly-ins' are Civil Aviation Authority and Site Owner approved.

Could High-Flying Kites Power Your Home? Nearly a dozen companies are betting on computer-controlled, airborne wind energy to electrify the future

PLANET POSITIVEA *Smithsonian* magazine special report

Steered by a computer to loop in the wind, this kite converts wind energy into electricity via a tether attached to a generator on the ground. Currently, such kites can generate enough electricity to power 60 average US households. Axel Heimken/picture alliance via Getty Images

Kurt Kleiner,

Any kid who's ever flown a kite has learned the lesson: Once you can get the kite off the ground and high into the air, you're more likely to find a steady breeze to keep it aloft.

A fledgling wind power industry is taking that lesson to heart. Flying massive kites 200 meters or more above the ground, companies are using the wind they find there to generate electricity.

At least 10 firms in Europe and the United States are developing variations of this kind of kite power. If they succeed, kites could make it possible to build wind farms on land that isn't windy enough for conventional wind turbine towers. Kites might also be a better choice for offshore wind power, and one day could even replace at least some anchored towers now in use.

"It's cheaper to manufacture, cheaper to transport and also has higher efficiency," says Florian Bauer, co-CEO and chief technology officer of Kitekraft, a Munich-based company developing a kite power system. The carbon footprint is also much smaller, he says. "If you have all those advantages, why would anyone build a conventional wind turbine?"

But to become a widespread source of electricity, airborne wind energy, as it's also called, needs to overcome a number of technological and commercial hurdles, as Bauer and colleagues describe in an upcoming paper in the *2022 Annual Review of Control, Robotics and Autonomous Systems*. And it will need to demonstrate that it is safe, won't harm wildlife and won't create intolerable noise and visual disturbances for neighbors.

At the moment, kite power is in its infancy. Most companies are working on relatively small pilot projects, and none have scaled up their technology to the megawatt range that would make them comparable to conventional wind turbines. But small versions are already on the market.





In 2021, Hamburg-based SkySails Power became the first company to offer a commercial product. Its production model consists of a soft, steerable kite up to 180 square meters in area. The kite is attached by an 800-meter tether to a ground station contained in a shipping container.

In operation, the kite makes large, graceful figure eights in the sky and powers a ground-based generator capable of an average output of 80 kilowatts — enough to supply electricity to about 60 average US households. That's small compared with a typical 2.75-megawatt wind turbine but is similar in scale to many portable industrial diesel generators. The unit is designed for use in remote locations away from the power grid.

Eventually, companies want to build larger kites capable of generating megawatts of power. They envision hundreds of kites grouped together on wind farms, providing electricity to the grid.

Kite power in context

Relative power output of a single existing kite, wind turbine, proposed future large-scale kite and small nuclear reactor.*

	SOURCE	MAXIMUM POWER	NUMBER OF HOMES THAT CAN BE POWERED
	Existing SkySails PN-14	80 kW	60
	Typical wind turbine	2.75 MW	2,160
	Proposed commercial kite	3.5 MW	2,800
	Small nuclear reactor	582 MW	465,600

*In fact, sources do not operate constantly at maximum power. Wind turbines on average achieve 42 percent of their maximum capacity over time, while nuclear plants achieve 92 percent. One of the questions for wind-power kites is how much up-time they will have.

SOURCE: REPORTING BY K. KLEINER

KNOWABLE MAGAZINE

Harnessing speedy winds

Wind close to the ground tends to be slowed down by friction with trees, buildings and hills, and the ground itself. So the higher you go, the faster the wind can travel — at 500 meters, the breeze moves between 3 to 7 kilometers per hour faster, on average, than it does at 100 meters. Over the last few decades, there have been a number of proposals for taking advantage of these speedier, elevated winds, including sending turbines up on lighter-than-air craft, or suspending them from stationary kites. But most companies, like SkySails, are pursuing an approach that makes use of steerable, computer-controlled kites that fly patterns in the air to harvest more energy.

Airborne wind energy systems use two basic ways to generate electricity. Ground-based approaches, like SkySails, use “pumping power” to run a generator on the ground. The ground-based end of the tether is wound around a winch, and as the kite flies across the wind it pulls against the tether and unwinds the winch, driving a generator that produces electricity. Then the kite is allowed to float while it is reeled back in, and the cycle starts again.

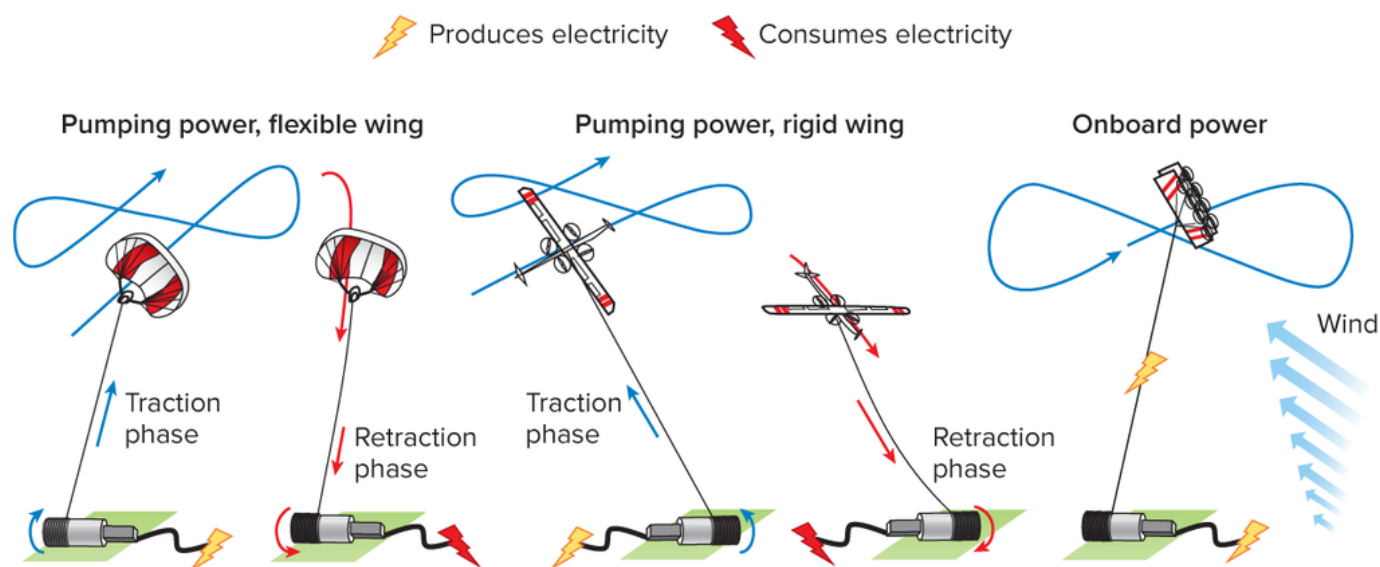
Report ad

The other approach is to generate the electricity onboard the kite. Onboard generation uses a rigid kite, similar to an airplane wing, which supports small wind turbines. When the kite flies, the wind runs the turbines and electricity generated by the craft is sent down the tether to the ground station. Kitekraft, Bauer’s company, uses the onboard method, which allows it to make dual use of the turbine blades. During launch and landing, the blades are powered by a motor and become propellers that allow the kite to fly and hover like an airborne drone. Once the kite is at the proper height, the turbines switch to generating energy from the wind.

Airborne wind energy kites generate electricity in two basic ways. “Pumping power” uses the kite’s pulling motion to spin a rotating drum on the ground, which powers a generator (producing electricity, yellow); when it reaches the end of the tether, the kite is retracted and starts again (using

up a small amount of electricity, red). “Onboard power” is generated by turbines mounted on the kite itself. Onboard generation requires a rigid kite design.

Generating electricity with kites



SOURCE: ADAPTED FROM L. FAGIANO ET AL / AR CONTROL, ROBOTICS, AND AUTONOMOUS SYSTEMS 2022

KNOWABLE MAGAZINE

Kites offer a potential advantage over today’s wind towers in terms of material used. Wind turbine towers require concrete foundations and steel structures just to keep the turbines at the right height. In kite-based systems, the structures are replaced by a relatively small ground station and a lightweight tether. A study by Airborne Wind Europe, a trade association, found that a 50-megawatt kite farm would use 913 metric tons of material over a 20-year lifespan, compared with 2,868 metric tons for a typical wind tower farm. Using less material could make kite-based systems both greener and cheaper to build.

Kites may also prove useful for deep-water offshore wind generation. Today, when the water is too deep to build a foundation, wind turbines instead float on massive, barge-like structures that must be able to bear the turbines’ weight and keep them stable. Because kites are less massive, they could use lighter and cheaper barges.

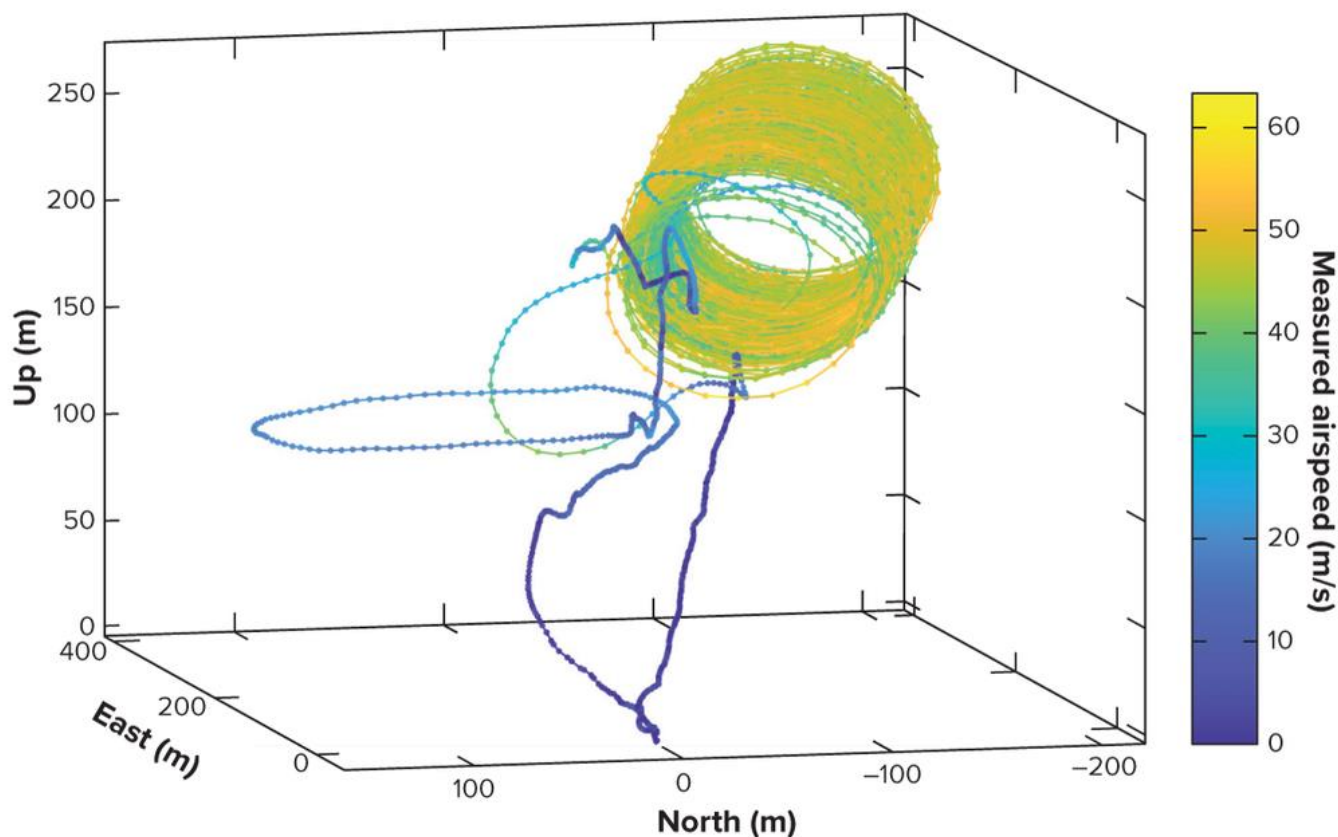
But these advantages come at the cost of complexity. For kites to make sense economically, they need to operate for long periods and with little or no human supervision. That presents a tough computerized control problem, says Chris Vermillion, director of the Control and Optimization for Renewables and Energy Efficiency Lab at North Carolina State University and an adviser to Windliff, a kite-power technology company.

The kites aren’t simply floating passively in the air. Instead, they use the aerodynamics of the kite to fly “crosswind” patterns, a bit like a boat tacking back and forth across the wind. Flying perpendicular to the direction of the wind, their wings generate lift and pull even harder against the tether. This extra lift translates into extra speed, which can either pull the tether with more force for ground-based generation or be turned into greater airspeed to drive onboard turbines faster. Either way, the power available increases by at least an order of magnitude compared to flying without the crosswind motion.

Flying crosswind boosts speed, and thus the potential energy a kite can harvest from the wind. Shown here are experimental results for Kitemill’s KM1 prototype that show this boost. The blue lines

show the kite's low airspeeds during take-off and landing. The yellow lines show the much higher airspeeds the kite reaches while flying at higher altitudes in crosswind loops.

Crosswind power



SOURCE: ADAPTED FROM L. FAGIANO ET AL /
AR CONTROL, ROBOTICS, AND AUTONOMOUS SYSTEMS 2022

KNOWABLE MAGAZINE

But such tricky maneuvers require constant adjustment and control of the kites, by either a pilot or a computer. Rigid kites are controlled by adjusting steering components such as flaps and rudders in the same way that airplanes are flown. Soft kites are controlled by adjusting the lengths of steering lines, similar to the way a parachute is guided.

The most advanced kite systems today are capable of flying under computer control for hours or days at a time, using either onboard and on-ground computers to make constant corrections in the steering. They tend to work very well while the wind remains steady, Vermillion says.

But to go mainstream, the kites will have to be able to deal dependably with sudden and unpredictable changes such as strong wind gusts. They will also need to be able to take off and land automatically, so that they can come down during bad weather and go up when the wind is right.

“More work needs to be done to bring the technology to the level where the operational lifespans of the devices are on the order of years and decades, as opposed to demonstrations that last days and weeks,” Vermillion says.

There's also the problem of scale. Smaller kites are cheaper to make and easier to develop. But because the weight and drag of the tether increases with height, small kites don't operate as well at 300 meters or higher, where the wind tends to be strongest. Companies want to scale up to

larger, more efficient kites that can fly higher and produce megawatts of power. But that comes with expense and risk.

Scaling up — and striking out

The fate of a company called Makani is a cautionary tale. The California-based company had the backing of Google's parent company Alphabet and was working toward generating megawatt-scale power. But in 2020, Alphabet withdrew funding, and the company closed.

Makani was a pioneer in the technology, but faced a number of problems, including difficulty controlling the kites and several crashes. In a public report, Makani CEO Fort Felker said the company intentionally pushed ahead quickly, increasing the size of its kites in large steps, often without solving previous technological problems.

Bauer says that by scaling up so quickly without solving technical challenges along the way, the company ended up with a design that was too difficult and expensive to modify. On the other hand, he's sympathetic. Companies that take too long to scale up to a marketable size may lose the support of their investors.

A final hurdle will be to ensure that the technology has acceptable social and environmental costs. Conventional wind farms often face opposition from nearby residents who are worried about the noise, visual distraction and aesthetics of wind turbines. Advocates of kite farms expect they will have less visual and noise impact than conventional wind towers. But according to an analysis of published studies, there is no empirical evidence that that is true. Although the kites are less massive than towers, their swooping motions and the noise they make might still cause as much or more disruption than conventional towers, according to the authors.

It's also unclear what impact the kites will have on birds, the report says. Again, advocates think they will likely be safer for birds than wind turbines, since the kites fly higher than birds typically do. However, the tethers themselves move quickly and are hard to see, and birds might have a hard time avoiding them.

It remains unclear how widely used kite-based wind power will become. Advocates like Bauer are confident that they can solve the engineering and computing problems to make the kites cost-effective.

But a 2021 US Department of Energy report to Congress sounded a cautionary note, calling kite power "an immature and unproven technology that requires significant further development before it could be deployed at meaningful scales at the national level." The cost of electricity created by conventional wind turbines has also continued to fall, making it that much harder for kite power systems to show that they have an advantage, the report said.

Report ad

"I do not see airborne wind energy systems as a replacement for most existing conventional turbines that are installed on land," agrees Vermillion. But he does think that they will find a niche over the next decade in military and off-grid uses, potential applications the company he consults with lists as among their targets for kite power. And he thinks that at some point they could be the preferred technology for deep-water wind farms, where their light weight will give them a big advantage over tower-based turbines.

AERIAL WIND FARMS

Could high-flying kites power your home?

Companies are betting on computer-controlled, airborne wind energy for future power.

KURT KLEINER, KNOWABLE MAGAZINE - 4/9/2022.



Kites could make it possible to build wind farms on land that isn't windy enough for conventional wind turbine towers.

Any kid who's ever flown a kite has learned the lesson: Once you can get the kite off the ground and high into the air, you're more likely to find a steady breeze to keep it aloft.

A fledgling wind power industry is taking that lesson to heart. Flying massive kites 200 meters or more above the ground, companies are using the wind they find there to generate electricity.

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ARS VIDEO

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By sending a set of tiny, mobile windmills high in the sky, the airborne wind energy company Kitekraft generates electricity onboard a rigid aircraft. The kite also powers its own take-off and landing. Still in a prototype phase, such kites could make it possible to build wind farms in more places or to power remote outposts.

This story originally appeared in Knowable Magazine.

SKYLIFTER®

SkyLifter: environment-friendly heavy-lifting, anywhere

SkyLifters are solar-electric air-cranes designed to lower the costs of building big infrastructure projects by overcoming the limitations of land-crane access and helicopter payload weights.



Very heavy payloads

SkyLifter air cranes are designed to vertically lift payloads that are beyond the technical limits of the largest helicopters.

The payload hook position is controlled using a combination of the winches and thrusting propulsion.



Hook height

The SkyLifter hook is supported from above, not below as with land-cranes. The design of the system allows us to achieve hook heights of over 300 metres.

Hook reach

As the hook moves horizontally, the vertical support remains constant. Therefore the maximum payload can be carried across the hook's entire reach.

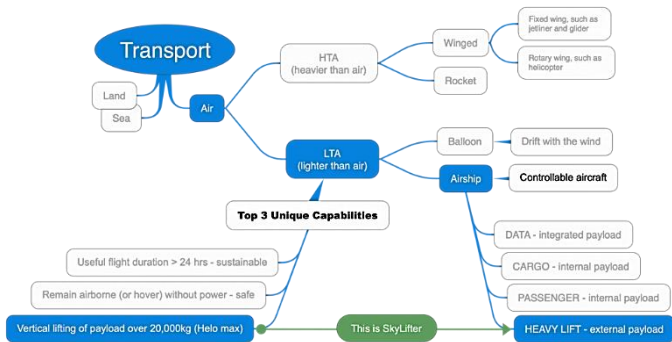


Anywhere, faster

SkyLifters fly from job to job, so they can do work in locations that would be challenging for land cranes.

Plus this avoids potential disruption and environmental impact on the land access routes.

Unique Capability



2 tonnes



25 tonnes



250 tonnes



SkyLifter: indicative specifications

Payloads

2/25/250 tonnes (550,000 lbs)

Range

over 2,000 km (1,200 miles)

Endurance

endless, no-cost floating

Speed

about 45 knots (80 kmph/50 mph)

Altitude

under 3,000m (10,000 ft)

Crew

1 pilot (on/offboard)

Power

solar/electric (bio-fuel backup)

Noise

silent to low whirr

Giant Kites That Drag Cargo Ships Across Oceans Go on Trial

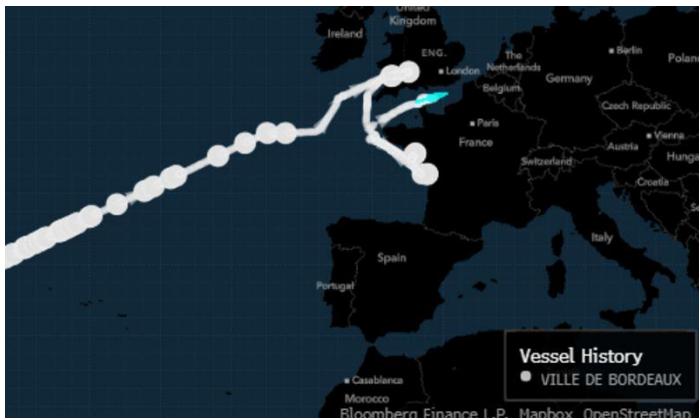


An artist impression of a Seawing sail for merchant ships. Source: Airseas
By Jack Wittels 16 December 2021

Add ships being dragged along by giant kites to the list of things the industry is exploring in its quest to decarbonize.

At the start of next year, the *Ville de Bordeaux*, a 154-meter-long ship that moves aircraft components for Airbus SE, will unfurl a 500 square meter kite on journeys across the Atlantic Ocean. It will undergo six months of trials and tests before full deployment.

While the industry has come up with multiple decarbonization initiatives, it is struggling to keep pace with goals set out under the Paris Agreement on climate. There's also pressure on shipping lines from large customers who are pressing to make their own supply chains less polluting.



Ville de Bordeaux, a so-called ro-ro ship, will trial a new giant kite from January 2022

The kite is called Seawing. Its developer, Airseas, estimates that an even larger 1,000 square-meter parafoil, flying at an altitude of 300 meters, will cut fuel consumption and emissions from vessels by about 20%. Shipping carries more than 80% of all goods traded globally but also accounts for almost 3% of man-made carbon dioxide emissions. Airseas says its technology is automated and can be installed on any ship -- regardless of size -- in a few days.

SeaWing: the giant kite that propels vessels across the ocean

DECEMBER 28, 2021 | KITEBOARDING



AirSeas announced the installation of the first automated kite propulsion system on a commercial vessel.

The cargo ship named "*Ville de Bordeaux*" was built in 2004, sails under the French flag, and is owned and operated by Louis Dreyfus Armateurs.

The ro-ro ship, the designation given to vessels designed to transport wheeled cargo such as cars, buses, trucks, and railroad vehicles, is expected to deploy the 1,000-square-meter SeaWing kite in January 2022.

AirSeas is a spin-off of the European multinational aerospace company Airbus founded by Vincent Bernatets and Benoît Gagnaire.

"*Ville de Bordeaux*" will initiate its monthly transatlantic journey carrying major aircraft components between France and the United States.

The cargo ship will test and conduct sea trials of the wind-assisted technology ahead of its regular operation.

The SeaWing will save tons of bunker fuel and simultaneously reduce emissions from shipping.

The hardware consists of three main components:

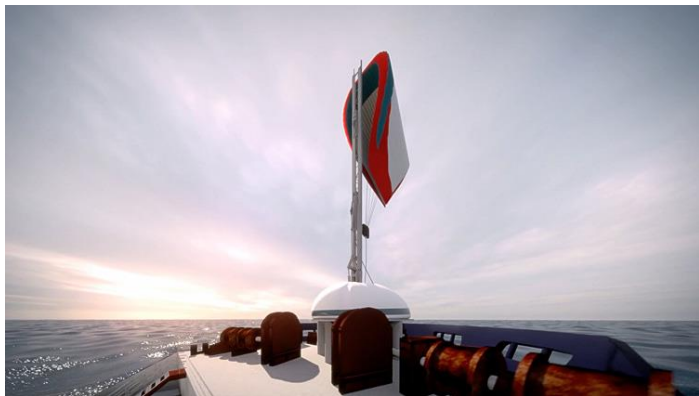
The bridge equipment monitors and oversees the operation of the SeaWing.

The deck equipment manages the automated take-off and landing of the sailing wing.

In addition, it features storage space, a mast, trolleys, and winches. After being pulled out, the kite inflates at the top of the mast for take-off.

The flying equipment features the parafoil wing, a flight control pod, and a cable and controls the automated and **optimal flight of the kite**.

While up in the air, the pod steers the sail to ensure safety and maximize the wind-powered system's efficiency.



Press "On" to Deploy the Kite

But how does the kite-propelled system work on a large and heavy ship? It's relatively simple, thanks to its automated flight control system.

Whenever the ideal wind speed and direction conditions are aligned, the vessel's captain will see the message "SeaWing Launch Recommended" popping up on his control screen.

Then, all he has to do is press "on," and the giant kite will unfold from the bridge window and rise to the sky.

The automated kite powered by AirSeas is based on parafoil technology used to tow commercial ships.

It serves as an auxiliary and backup propulsion system to the traditional ship engines and adds up to 100 tons of traction.

By simply pressing the "on" or "off" switches, the SeaWing will unfold, launch, operate or refold and recover autonomously.

The technology collects and analyzes nearby meteorological and oceanic data in real-time to optimize the ship's energy consumption levels.

The software also allows the captain to plan the route according to the weather variables and advise when to deploy the kite and still reach the destination on schedule.

According to AirSeas, SeaWing will save 20 percent fuel and reduce gas emissions by 20 percent.

Margins are a critical variable in the shipping business, and costs with fuel represent as much as 50 to 60 percent of any ship's total operating costs.

Moreover, to meet The Paris Agreement's goals, the International Maritime Organization (IMO) agreed on cutting CO2 emissions by 40 percent in 2030 to meet The Paris Agreement's goals.

Wind Power: The Future of Shipping

SeaWing's safety standards have been assessed and validated by Airbus.

"Our industrial facility will be able to produce up to 1,000 SeaWing units per year," the company stated.

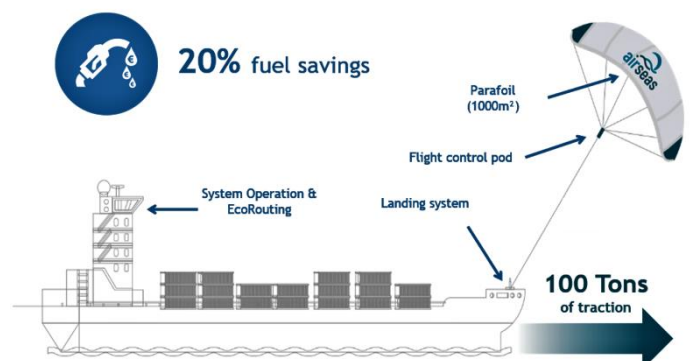
"The goal is to have 15 percent of the world's fleet equipped with the kite-propulsion system. It's a clean, safe, compact, and reliable that can be installed on any commercial ship."

Recently, AirSeas announced a 20-year agreement deal with Japanese transportation company "K" Line to install SeaWing systems on 50 of its 448 vessels.

SeaWing is a wind-assisted kite propulsion system powered by Airbus that allows cargo ships to save fuel and reduce gas emissions.

To harness the full power of the breeze, SeaWing flies at over 200 meters (656 feet) to capture stronger and steadier winds.

The wing performs dynamically on a figure-of-8 trajectory at over 100 kilometers per hour (62 miles per hour), generating ten times more traction power than a static sail or kite.

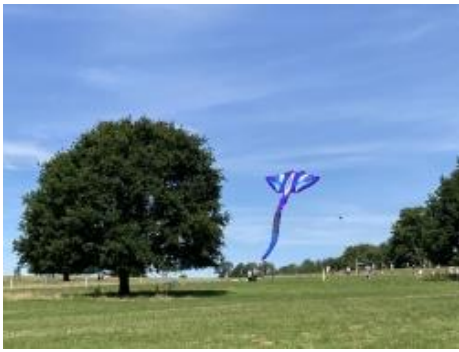


<http://www.peterbindon.com/festival-reports/2022-festivals/leominster-2022>

Leominster 2022

The Leominster and Hereford Kite Festival took place at Berrington Hall on 9th/10th July 2022. Organised by Bill Souten on behalf of the Midlands Kite Fliers, the event is more of a fly-in than a festival and we found that the atmosphere was one of the most relaxed and friendly kite events that we've been to. Unfortunately, we had a lack of wind all weekend, slightly returning to more on the Saturday but Sunday was definitely only for flying ultra-light kites. Bill does a fantastic job and even organises a curry for the Saturday evening which tasted superb. Following the food there was even an auction. Something we haven't seen at an event for quite a while. There were a number of Dan Leigh deltas to bid for and we came away with one of his Classic '88 models. Overall a superb weekend and one we'll certainly be









Put the dates in your diary!!



The Hatchling

Photography by
Dom Moore

Imagine taking your dog out for a Friday morning walk and finding a 23-foot long “egg” at your local park. There’s no sign, no explanation—just the egg. On Saturday, the egg hatches into a dragon that moves gently around your city. By Sunday, the dragon has grown to the size of a double-decker bus with a wingspan 65 feet; shortly after sunset, it flies off into the distance and disappears. What would you think?

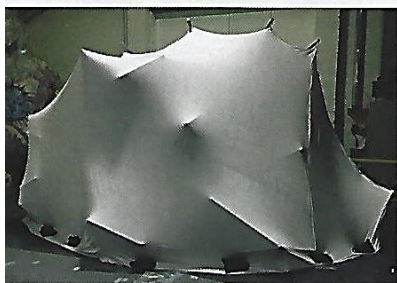
On August 27-29, 2021, that’s exactly what happened to the citizens of Plymouth, England, except the dragon was a huge puppet that transformed into a vanishing kite in front of 30,000 spectators. Not only has there never been a kite like this, the puppet was one of the largest human-powered puppets in the world and the citywide theatrics were on a scale rarely seen. The dragon was named the “Hatchling” and one of its principal designers was Carl Robertshaw, a well-known kitemaker, flier, World Cup Champion, writer, and designer. On April 26, 2022, we had a chance to ask Carl about his experience with the Hatchling.

How were you introduced to the project?

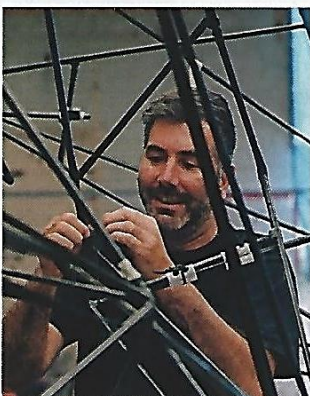
Carl Robertshaw: In 2015, Andrew Beattie was contacted by Angie Bual and Mervyn Millar about making a dragon kite and he suggested they contact me. I met with them in London, and we hit it off straight away. Angie has a background in theater production, and Mervyn has worked as a director and with puppets. Originally, the idea was to make an inflatable dragon that would fly over London and disappear.

No egg?

CR: Originally there wasn’t an egg or a juvenile, there was just a dragon that would appear and fly away. Over a period of a couple of years, we started to grow the idea in ambition and scale. We developed a storyline that started with an egg, and thought about how we could make it grow from a small creature into a large creature and make it fly. There were all the sorts of questions in the mix. With Mervyn’s expertise in puppets, the project was rooted in being



CARL ROBERTSHAW



The Hatchling started as an egg (middle) and transformed into a huge dragon (top). Carl Robertshaw working on the framing.

non-mechanical and hand-operated by people. That way you get breath, movement, and life into a structure. That's really important to the whole storyline. That leads to thinking about this as a lightweight structure, which also leads into the kitemworld.

How did the project move from a great idea to something tangible?

CR: This is where the brilliance of Angie came in. She has a talent for presenting what would seem like a crazy idea to funders and organizers who could support such an audacious idea. She was the creative director on the project but in her role as producer she found small grants so we could begin the research. We had a workshop in 2016 and another one in 2017 when we were able to build a full-size mockup that we could practice with. That needed a team of 15 puppeteers.

With Russel Beck as the fabricator, we built a prototype that we presented to a collection of select people who were potential funders or who could help realize the project in its full vision. That happened in a warehouse where we had a walking glass fibre-framed puppet and a large inflatable that was a flying puppet filled with helium. It worked really well indoors and fairly well outdoors but it didn't quite read as the same creature. Still, there were tears of joy and it was very emotional for all the people watching. Then there was quite a break while Angie was searching for funders to put up the money and to provide the location and occasion for us to work the design in its fully realized form and put on the event. That took about 2.5 years.

At the start of 2019, the Arts Council of England and the city of Plymouth agreed to put up the money and host the Hatchling. That's when we started the proper design with a view to it becoming real.

Can you help us understand the scale of designing the project?

CR: Bronia Housman, a theatrical designer, did some of the technical drawing for the Hatchling. I added to those, and I think we ended up with over 3,500 technical drawings in total.

How did the kite aspect of this project come together?

CR: Angie was the creative director and producer, Mervyn was the director, and I was the production designer. The kite aspect was in there from the very start for me. This was always a project envisioned to elevate puppetry and kiting. It was quite ambitious in that respect. It's rare that you get a large group of puppeteers working together and there were 36 puppeteers on the team.

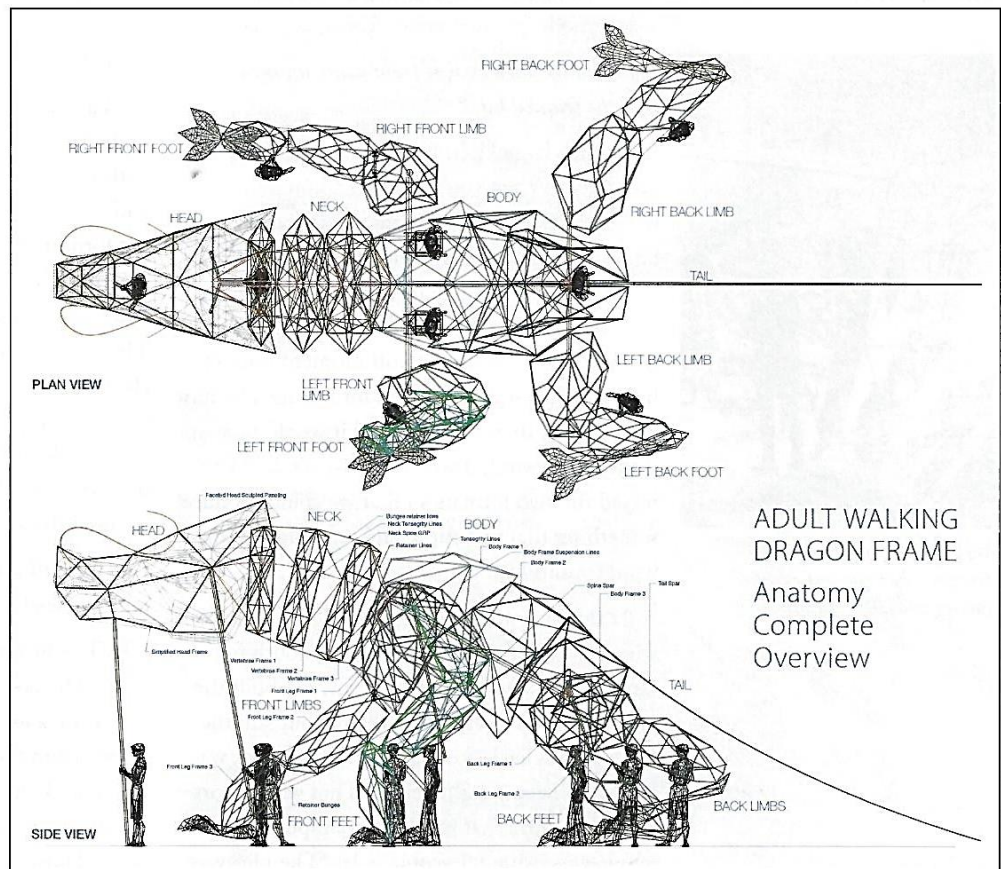
The kite aspect of the project was close to my heart because it brought together live events and kiting in a multidisciplinary way to an audience that might not know anything about kites in the



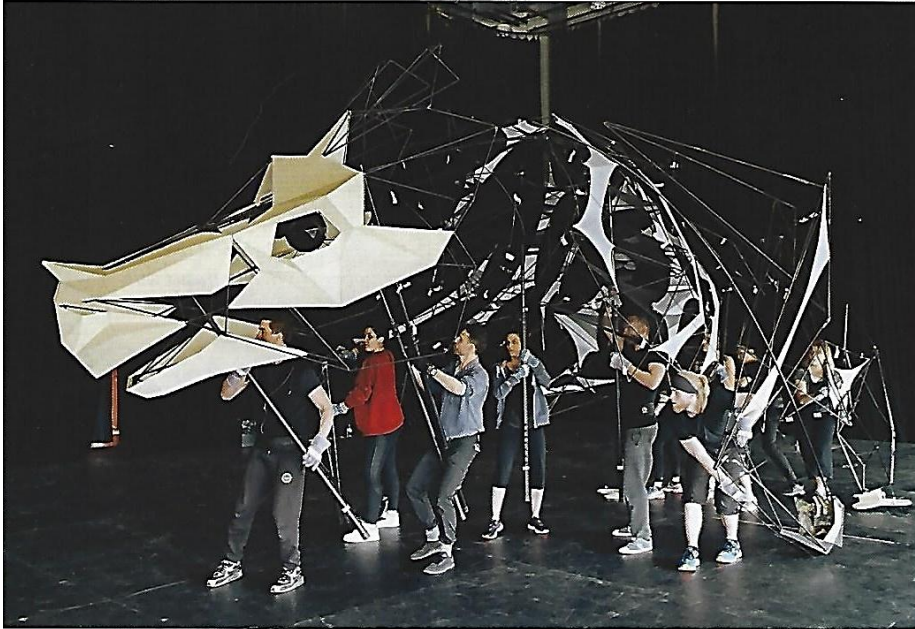
CARI ROBERTSHAW

Russell and Pat Beck spent three weeks fabricating carbon fibre frames with glass fibre and resin.

Robertshaw's 2017 technical drawing of an early prototype. Over 3500 technical drawings were produced over six years.



modern sense. It meshed together the disciplines so what we got was an artistic expression that lights people's imagination. It's spectacle, it's poetry, and all those things we know in the



Puppeteers start rehearsing with juvenile dragon in 2019.



Working on details of the flying structure which required modified framing and sail materials, 2019.

kiteworld, but it's done in a way that's inclusive, so everybody gets to experience it close up and live.

How did the idea evolve from using an inflatable into the framed kite?

CR: With large kites, if there's no wind, you're grounded. When you're talking about a live show in front of 30,000 people, many of whom have booked hotels and made plans to come see your show, you want to guarantee that they've got something to see. You don't want to give them half a show where the lift-off moment doesn't happen. This was the reason for having a helium inflatable: if there was no wind it would float and if there was wind, it would fly like a kite. We mixed the two formats so that we could produce something that was successful regardless of the wind conditions.

At the start of the build, Russel Beck moved with his team from London to Plymouth for nine months to build the dragons. He built the juvenile first. It was the small one, but still the size of a single-decker bus. The framework was carbon to keep it lightweight. That was important as a puppet that would be manipulated by puppeteers using telescopic poles. The idea was

that the fabric would let the air through, to reduce the wind load. The "walking" fabric on the outside had to move and stretch over the frame that was fused with glass fibre tape and resin. That provided a strong geodesic structure. It was amazing how robust the structure was.

Standing with it in the wind in Plymouth, I had the thought: why don't we just make the adult dragon fly as a box kite? The framework was strong enough. It was going to be enormous, but it was the perfect structure for this type of environment, because if we have high winds, an inflatable wouldn't do too well but a box kite would. As kitefliers know, you can fly a box kite in pretty high winds and it'll behave. So the question was, what to do if there's no wind? In that case, we could still use a helium balloon and effectively we do a dead lift like a crane. Later that day, we had had some serious conversations with Angie, Mervyn, production managers, and kitemakers Paul and Helene Morgan, Karl Longbottom, Stephen Hoath, and Andrew Beattie. After much discussion, we did a complete 180 degrees and decided not to do an inflatable but instead to make this giant walking puppet fly.

That was in April and Russel was still working on building the adult. We did another meeting with stakeholders in Plymouth in August. We had a framed adult dragon in walking puppet form that was 6.5 meters (21 feet) tall, 40 meters (131 feet) long. We did the presentation and told everybody that this was going to fly. The look on their faces was sheer amazement. [laughter] It sounded totally crazy, but we'd been working on it and were confident that we could make it fly and it does. It flies by itself. It doesn't need a lifter or pilot kite. For the show we used those as our insurance.

Can you talk about the kite aspect of the construction?

CR: The head will fly itself, separate from the body. The body is a little bit like a Cody kite. There are a lot of panels that go through the middle, and they're all aligned on one plane if you're looking down the nose of the structure. And there are two large wings strapped on the sides. Those wings are something else.

Are the wings lifting surfaces as well?

CR: The materials we used for the flying adult were white ripstop and mylar that was holographic. The wings are 10 meters (33 feet) each. There is no battening because this is true to how pterosaur's wings are structured which is different to a bat or a bird anatomy. Having the wings provide lift was a real challenge. We did several test flights and had to adjust the angle of the wings. That was no small job. We all know what it's like to fix a large kite in a hotel room at 8 AM with three people over a sewing machine. It was that kind of scenario, then dashing out to the runway and strapping on the newly configured wings. The wing spars are windsurf masts. Each wing weighs quite a bit itself. But yes, the wings provide lift.

How many bridle lines?

CR: Three off each wing. This was Karl Longbottom's expertise. Paul and Helene were instrumental in bridling. There were three bridles off the body and one off the chin. That's it.

Can you describe the event itself?

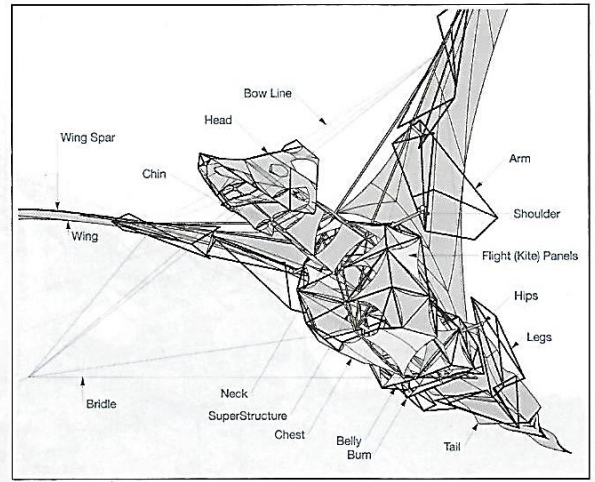
CR: We had a month of rehearsal in Plymouth and on the second to last day there was a shooting not far from where we were rehearsing. Several people were killed, and we decided to postpone the show for two weeks. That was a very important moment for us and the community. The amount of work that Angie and her team had to do to re-contract over 100 people and to find the funding to put the show on two weeks later was some task, but they did it!

So, two weeks after our original date on Friday morning, in the shadow of the shootings, an "egg" appeared in the center of town. It is a soft-shell structure, three meters (10 feet) tall and about seven meters (23 feet) long. There are some lights and smoke but there's no sign. Nobody knows what it is. You have this painted, soft-spiky structure that's a bit like a Brazilian Cucumber and that's Friday. Overnight sound starts to creep in and there's internal lighting which is kind of like the heart of ET [chuckle] so you can see inside a little bit.

On Saturday morning there are a few strange people milling around, all dressed in black. They

look like blacksmiths mixed with punk. They've got aprons on and weightlifters' belts, black boots, gloves, and holographic visors.

They look quite mean, sort of ninja like. And they start to help the creature out of the egg. The egg cracks and there's a soundtrack of the cracking. The head appears first and then a back leg kicks out. It takes about an hour-and-a-half for the juvenile to hatch. By then, there's quite a large crowd and people watch as it finds its feet. The people in black

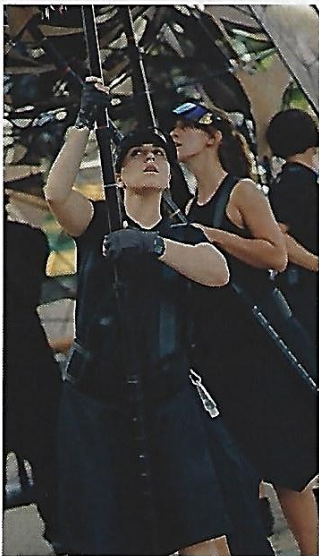


For all the technical skill required to make a flying dragon, the public was engaged with a theatrical experience; seeing the puppeteers sleeping with the juvenile dragon on Saturday night, and arising Sunday to an adult dragon roaming their streets.





After strolling around town, the adult dragon arrives at Plymouth Hoe where it transforms from a walking alien to a flying dragon.



There were up to 36 puppeteers working together to give the dragon its lifelike motion.

become the puppeteers moving the juvenile with extended poles. The idea is that this is a baby, and it doesn't know what its surroundings are, so it starts exploring the streets. It goes for a walk following smells and people. There are some interactions that have been pre-organized by some of the theatrical groups. As it explores the town it puts its head into shops, drinks from the fountain, and looks around. It's not a procession, but more of a discovery, sometimes moving one way then changing its mind and direction or stopping to rest. In the evening it finds a nesting place. There's a choir that sings it to sleep. There's an online civic debate about this alien that's appeared in our city, talking about it, and what to do with it. What are our feelings towards this alien? Meanwhile, there are still puppeteers inside of it making it breathe or raise its head. It slowly drifts off to sleep.

Sunday morning is an early start for all of us behind the scenes to swap the juvenile out for the adult. We had to bring in a large lorry with the adult dragon parts in it, build it, and swap out the two dragons before people arrived. The adult dragon is bolder, stronger, and is more brave. It moves into the city during the day. It goes to landmarks, interacts with people, stops traffic, and checks out people on the bus while it explores. Eventually it moves back to its home-base at the Hoe [a waterfront park] where it discovers another egg.

At the Hoe, the dragon starts to feel the wind and hear the music; by dusk the setting becomes more theatrical. The second egg hatches and out of it flies a "pearl." There's a dramatic sequence of the dragon interacting with the pearl kite and that begins its transformation in gaining its wings. It tries to launch itself but, like a baby albatross, it doesn't quite make it

on the first attempts, and this builds up dramatic momentum with the crowd. On the third attempt, it gets up to kind of a hover over the field. With the show lighting, it starts to have a very evocative presence, then it starts to follow the pearl kite that is flying off in the distance. The dragon does the same. The dragon disappears into the darkness and then the audience is left with itself, in the moment.

The transformation is when the puppet becomes a kite?

CR: On the grass in front of everybody the kite-fliers gradually take responsibility for the dragon from the puppeteers. The walking fabric comes off and the flying fabric goes on. The cross spars go in along with a big triangular "A" frame which stiffens the whole structure. The head and wings get mounted, and it turns into a kite.

How did it fly?

CR: The fliers moved the flying rig through a pulley system, down a 300-foot cliff to waiting boats. The ferry company anchored the line to take the dragon flying across the water. There was a flotilla of boats with lighting and for safety. We were in a live shipping lane so the coordination with the harbor master was needed. The dragon flew across the water, and after the lights were off, it landed on a beach that was out of sight. There were a few select members of the kite team who had the job to bring the kite

down with a set of pulleys. Then they dismantled it and put in a truck. That's the bit that nobody sees. Actually, it got packed up with no breakages. It only took about an hour and then the fliers came back on small boats to the Hoe where everyone was waiting.

There were no major incidents. Obviously, we were prepared for all sorts of things like ditching, wind in the wrong direction, or wind too strong. All those possibilities were factored in. The risks were there so it was a very ambitious thing to pull off. With the 27 kitefliers, I think we had over 1,000 years of kite experience! We had sport kite team fliers, fliers used to flying large inflatables, local fliers, art kitefliers, young and old. It was great to bring this group of experienced fliers together in one place working together as a team. I think they found it a good experience because we wouldn't normally mix like that on a kite field.

How many people were involved in putting on the event?

CR: For the event itself, over 250 people were directly involved in putting on the show. I think there were 20-30 community groups. There was a whole set of businesses and industries supporting it. The city of Plymouth was very supportive.

What happens with the kites now?

CR: The aim is that it's not a one-time show. It's not something that will happen over and over, but it will happen. The dragons are in storage. The adult dragon is coming out of storage to lead the procession on the Queen's Platinum Jubilee on June 5. Everyone will get to see it as it goes to Buckingham Palace, and it meets the royal family. The idea is that the dragon is a metaphor for people all around the world. The project, as a whole, can apply to many different scenarios and communities. The idea is that it can go to different places and the story can be reconfigured as well. It can fly, it can walk, and it is transportable. It all breaks down into smaller parts. The adult fits into one-and-a-half storage containers.

Any follow up response from the community?

CR: A lot of people posted comments but one of the phrases I remember was, "It feels

like Plymouth has got its heart back again."

The feeling in the community had been that the heart had been ripped out from the recent shootings. The poignancy of this was really strong. I think the dragon was a light in the darkness. It was a way for people to feel closure in some sense. As we all know with kites, one of the psychological benefits is that you're looking up. It was a moment for people to look up at something amazing.

Carl Robertshaw was interviewed by Daniel Prentice, April 26, 2022.

During the metamorphosis, kitefliers take responsibility from the puppeteers and modify the frame, fabric, and bridling in preparation of flight. Meanwhile the storyline for the public included the highlighted "pearl" that flies gently overhead inviting the dragon to follow it into the sky.



To see the Hatchling in motion, go to:

<https://www.youtube.com/watch?v=B3LofQOnjqA>

The Hatchling Project was the work of hundreds of people.
Here are some of those who deserve recognition:

Angie Bual, Artistic Director and Producer

Mervyn Millar, Director

Carl Robertshaw, Designer

Stephen Hoath, Flight Director

Andrew Beattie, Large kite specialist

Paul and Helene Morgan, Kite specialist fabricators

Karl Longbottom, Kite consultant

Russell Beck Studios, Fabricator

Alan Pinnock

Amy Burton-Smith

Anthony Cartwright

Ashley Motram

Bob Cruikshanks

Bryan Beasley

Chris Acraman

Chris Goff

Craig Harby

Daniel Hoath

Chris Mattheson

Matthew Jones

Peter Bindon

Sarah Bindon

David Ellison

Helen Ribchester

Jamie Henderson

Mark Ellison

Roy Broadley

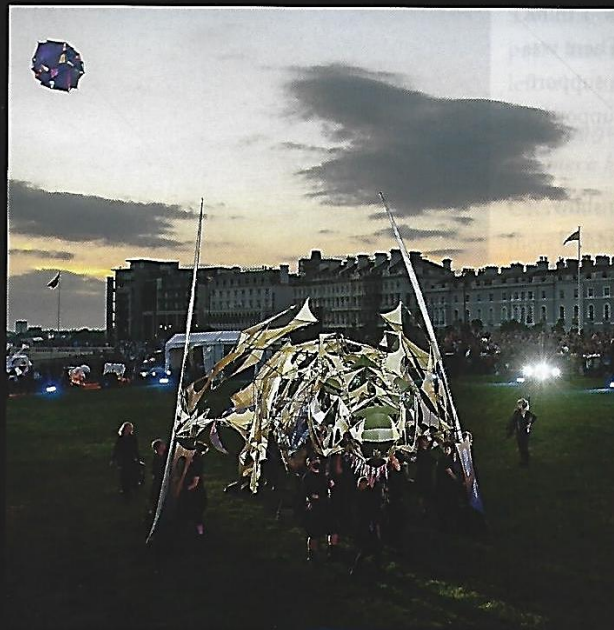
Steven Matchett

Sue Kennedy

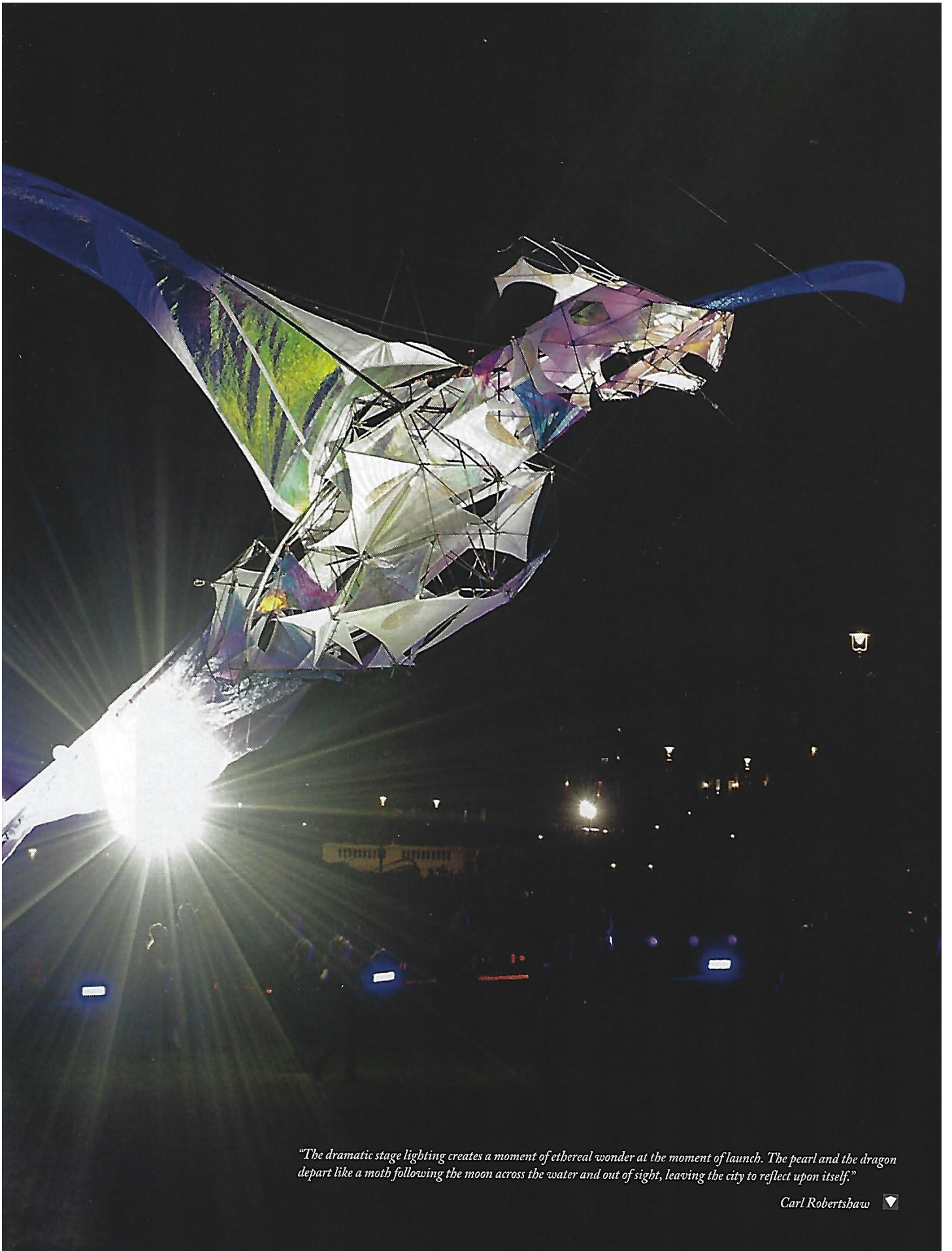
Timothy Rohn

Will Staniaszek

Guy Reynolds



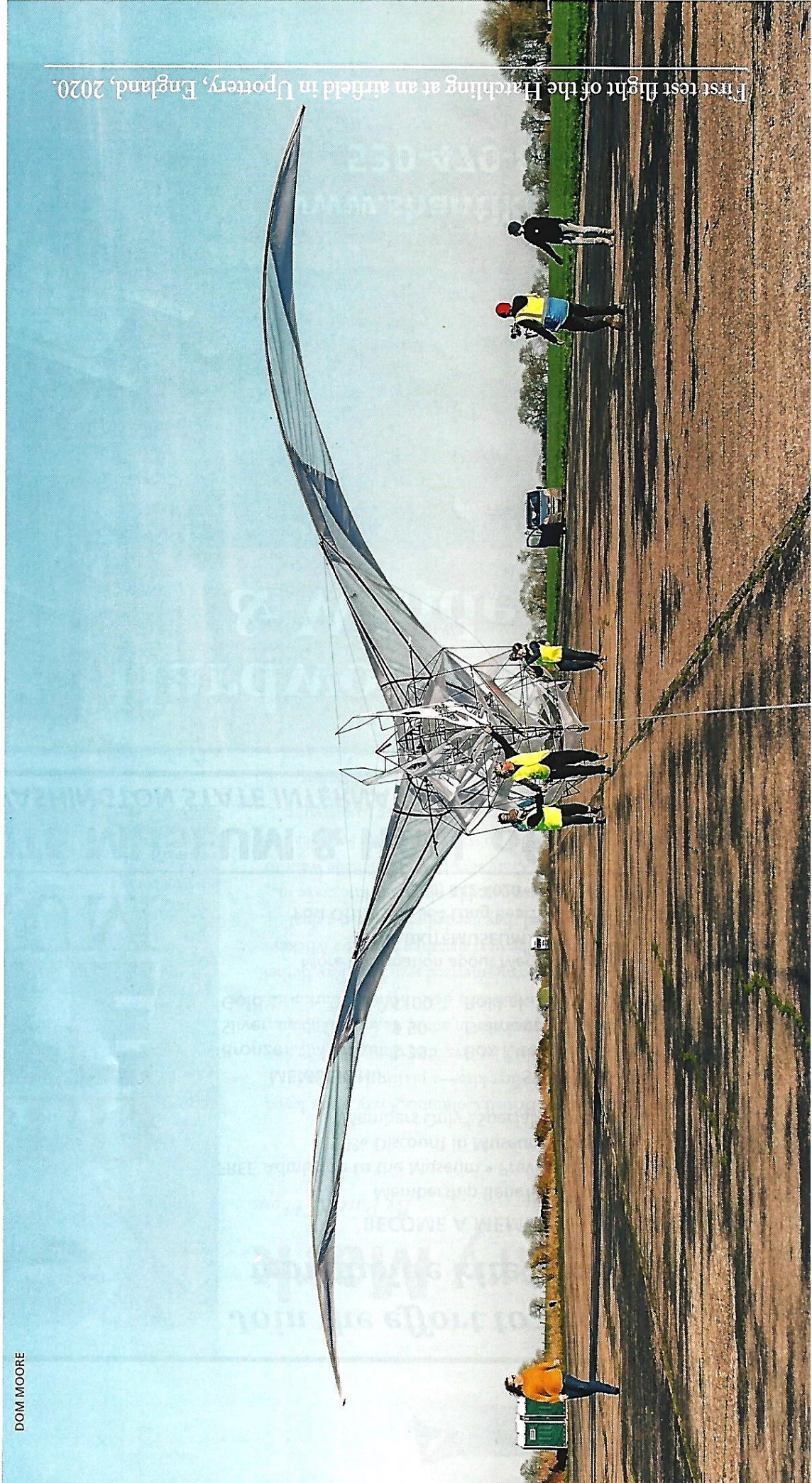
With grateful thanks borrowed from 'Kiting' – The Journal of the American Kitefliers Association
Volume 44, Issue 2 – Summer 2022



"The dramatic stage lighting creates a moment of ethereal wonder at the moment of launch. The pearl and the dragon depart like a moth following the moon across the water and out of sight, leaving the city to reflect upon itself."

Carl Robertshaw 

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First test flight of the Hatching at an airfield in Upottery, England, 2020.

DOM MOORE

Cuckoo Land

For a long time now, even living in the depths of Zummerst, I have not heard the call of the Cuckoo and certainly not in the last two years. So, when I do hear the distance call it generally means that I am either north of Spaghetti Junction or somewhere in Europe ie, over the Channel not within Great Brexit. What led to the call of Cuckoo land? Earlier in the year I received an email from **Saša Iskrić**, secretary of the KAP Jasa (kite team Slovenia) and a kite flier that I have met previously. The team were organising the first kite festival in Slovenia in the Prekmurje region. It was being held at the Murska Sobota airport and one of the supporters/sponsors was the Indian Embassy in Slovenia; just to name a couple of things that caught my attention, not to mention it could be an opportunity to give my colourful attire an airing.

Fliers attending were predominately from bordering countries namely Italy, Hungary and Austria but there were many travelling in campervans and cars from further afield and making a holiday of the time plus allowing additional kites, particularly large soffies or pudding kites. The festival was 3 days long but was due to finish on the Saturday to enable those driving to return home, if required, on the Sunday. EasyJet was my preference but one UK resident, Derek Kuhn, elected to drive the 1200 miles in his camper, albeit he did stop off to visit friends/family in Germany going outbound but had a hasty journey home, phew more him than me!

The month of May came around and trying to remember after two years of non-air travel what I usually packed was strange, not to mention routines at the airport and queues. Needless to say that I got to my departure gate with 5 minutes to spare but that's another story over a beer! Met at Ljubljana airport by **Janez Vizjak**, another member of the 3-man organising team and also a familiar face. His first question "do you want a beer or some food"? He obviously knows me well but given a two-hour drive I was conscious of my aging bladder plus being up since 2:00am, which was 9 hours ago so we cracked on.

We duly arrived at the airfield in Murska Sobota and were met by many old and new kite flier faces; now it was time for a beer and

something to eat. The airfield was a large expanse of grass, with several hangars, a control tower and a well frequented restaurant and bar. After several hours 'rest' my designated apartment roommate **Rene Maier** arrived and offered a lift to the hotel complex. Once we had checked in and found our apartment, which was also being shared with Axel Kostros, we freshened up and returned to the airfield for the evening welcome dinner. During dinner the program was outlined and the final member of the organising trio **Gregor Mramor** briefed the airfield management's concern regarding ground anchors, which was understandable and reiterated daily if not hourly.

Breakfast was taken in the hotel complex dining room where social distancing was not a consideration, well not if you wanted anything to eat/drink from the buffet. Clearly the pandemic was not something that appeared to have affected Slovenians; thank goodness for the triple vaccine!

Thursday, the first day's festival was bright and sunny; bugger I thought, forgot the sun cream! Many of the pudding fliers were trying in vain to get it up but with little success. Adopting the Bob C mantra 'It's never the wrong wind just the wrong kite' a few of us stick fliers had the correct gear in our bags and duly entertained the Cuckoos. Word obviously hadn't got around that there was a festival at the airfield but we were advised that it was early. Midday and the call for pre-lunch 'nibbles' was announced by the Italian fliers, which was rude to ignore and an opportunity to re-acquaint one's self with the kite family that I haven't met for two years or more. The rest of the day was light to nothing wind but there's always something in the Bob C bag to pull. During the day several other fliers arrived including the one Indian representative, Abdullah Maliyekkal, which brought the number of fliers to 80+.

Day two was a repeat of Thursday, albeit my red face was not from embarrassment but better late than never I scrounged some sun cream from my roommate. Again the stick fliers were working hard, some with long launches but I was having fun free-flying my low/no wind collection. My old Martin Lawrence Buzzard is always a firm favourite of mine and occasionally attracts real birds as it soars. It was whilst flying the Buzzard that I met

Katerina Bytko and her mother **Larisa Bytko** from Ukraine. Katerina, a member of the Ukrainian Kite Beauties team, was interested in the Buzzard so it was a great opportunity for me to spend time passing on some low wind flying techniques.

Jan Grutterink from the Netherlands, a master of appliqué, presented Katerina, Larisa and the Ukrainian Kite Association with a very symbolic designed kite.

During the afternoon several pudding kites were hauled aloft across the back of the airfield behind vehicles, one doing an extended 360° with a mega Octopus.

Overnight there was a prolonged downpour and more was forecast for Saturday so, sadly, the organisers felt it best to cancel the day's festival. Some took the opportunity to begin their journey home and others, including yours truly, went off in groups to do some sightseeing. With an improvement in the afternoon weather and wind **Herman Plattje** and a few others took advantage and closed the festival with a display of big stuff and the 'We ♥ Slovenia' streamer.

With the power of social media, the local radio and TV the numbers attending the festival particularly in the afternoons was a great acknowledgement for the efforts of the 3-man organising team of Saša, Gregor and Janez who had convinced the local authorities, the Indian Embassy, and several other sponsors to provide accommodation, beer and many other things required to hold Slovenia's first kite festival. Yes, there were things that may have been better but overall for a first event by a group of fliers who have only been active for circa 5 years it was a success.

Murska Sobota airport.



Jan Gutterink's symbolic kite.



38th International Kite Flyers Meeting Fanø, Denmark 🇩🇰

16th to 19th June 2022

It was so great to be back on Fanø this year for this wonderful kite festival after 2 years absence due to the pandemic. If you haven't been to the Fanø festival you have missed a treat. Fanø is a wonderful small island off the west coast of Denmark which is a 15 minute ferry ride from Esbjerg. The island is 10 miles long and 2 miles wide with a lovely wide sandy beach which runs along its western shore, with sand dunes that are dotted with summerhouses. You are allowed to drive along most parts of the beach so you can find your spot and fly from your car. It is such a lovely spot to fly, as well as being very picturesque. When the wind comes straight off the sea, which it generally does, it is a lovely smooth wind.

The Fanø festival is an annual kite flyers meeting of people from around the world rather than an organised festival put on for the public (although the beach is still open for the public to enjoy the kites). Although it is just a case of rocking up at the beach and flying your kites there is a programme of events.

We attended a welcome meeting on the Thursday evening at the riding school at Rindby where there is a welcome address by Wolfgang Schimmelpfennig who was one of the main organisers. This was a great opportunity to meet up with kite flying friends from previous meets and festivals over a beer or two. Most of the Kite flyers were from Germany and Denmark but we also met kite flyers from Holland, France and Switzerland. It was good to meet up with other flyers from the UK too, including Dave & Claire Hardwick and Derek Kuhn.

As well as various kite activities on the beach such as a Bol fest, there was a kite auction on the Saturday night which raised a lot of money for a children's charity in Columbia. They estimate that there were just over a thousand kite flyers at this year's meeting and it is an amazing sight when you are down on the beach to look up and down the beach to see literally thousands of kites in the sky.

The one slight downside to Fanø is that it isn't the easiest place to get to from the UK. Sadly, the ferry no longer runs from Harwich to Esbjerg, so for us it was the Harwich to Hoek van Holland ferry and the long 550-mile drive to Fanø through Holland and Germany. As we have the kite trailer, we are restricted to 100kmh on the motorways so it's a 10-hour drive, which you could do in a day but we preferred to break the journey just south of Hamburg. It is a long way just to go for the weekend so we rented a summerhouse on the island for the 2 weeks either side of the festival weekend and made it into a longer holiday as it is such a lovely island.

Here are some photos from the festival.

Jonathan & Frances Houseago

DATES FOR FUTURE FANO INTERNATIONAL KITE FLIERS MEETINGS

39. INT. KITE FLIERS MEETING FANØ 2023

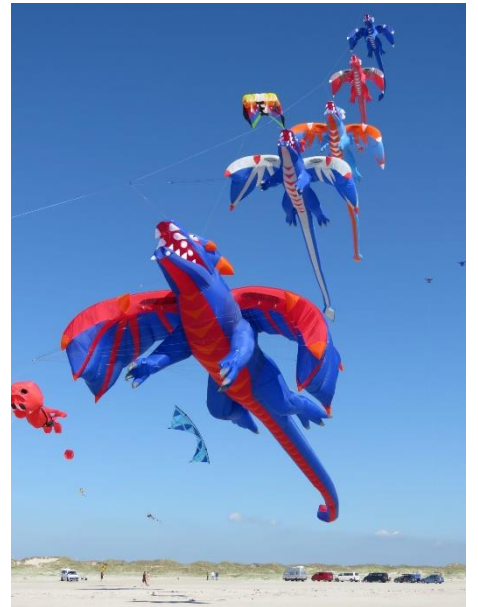
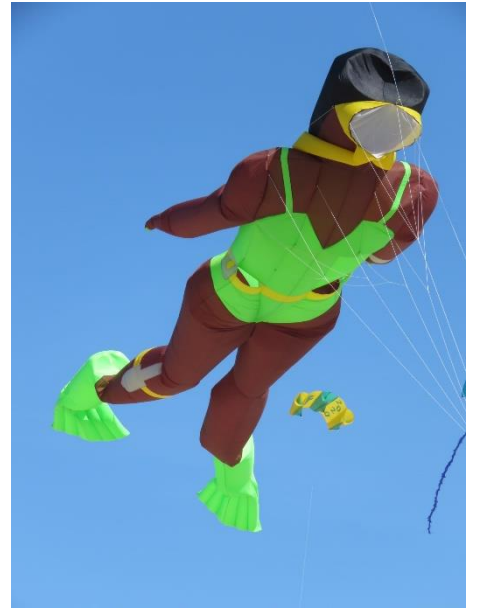
15. - 18. June 2023

40. INT. KITE FLIERS MEETING FANØ 2024

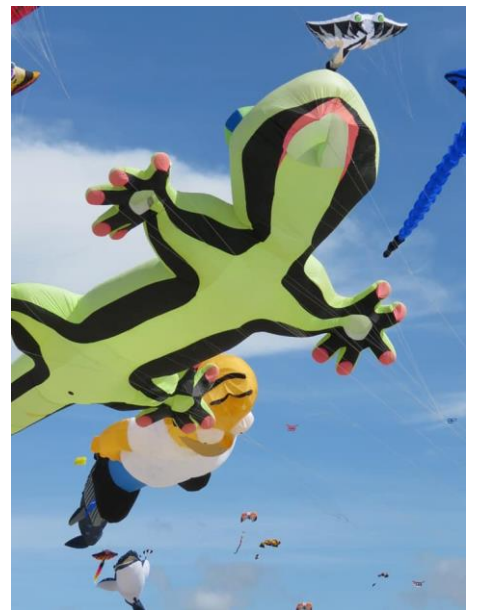
20. - 23. June 2024

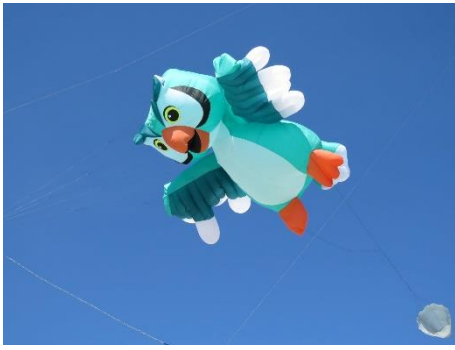
41. INT. KITE FLIERS MEETING FANØ 2025

19. - 22. June 2025



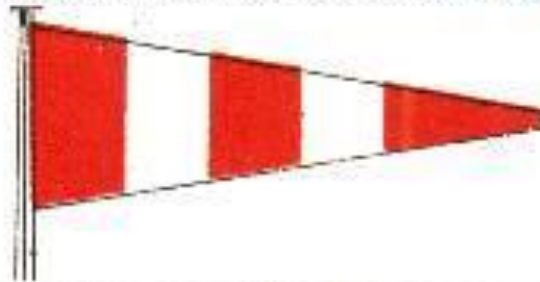






SPECIAL FLAGS OF THE INTERNATIONAL CODE

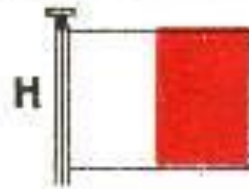
Code Flag
and
Answering Pennant.



Red and White
Stripes, Vertically.
Red at Mast.



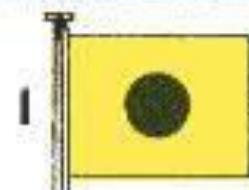
Burgee.
White and Blue,
divided vertically.
Blue half
Swallow-tailed.



Square Flag,
White and Red,
divided vertically.
White at Mast.



Burgee,
Red
Swallow-tailed.



Square Flag,
Yellow, with
Black ball
in centre.



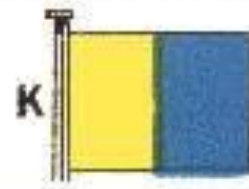
Pennant,
White,
with Red
Ball near
Mast.



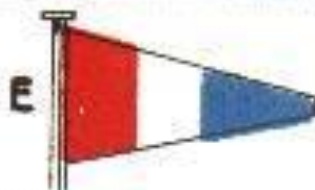
Square Flag,
Blue, White, Blue,
divided
horizontally.



Pennant,
Blue,
with
White Ball
near Mast.

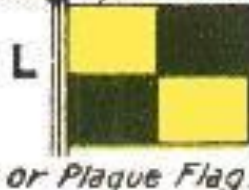


Square Flag.
Yellow and Blue,
divided vertically.
Yellow at Mast.



Pennant,
Tricolour,
Red, White, Blue,
divided vertically,
Red at Mast.

Cholera/Yellow Fever.



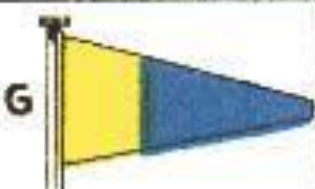
Square Flag,
Yellow and Black,
quartered.
Yellow at Mast.



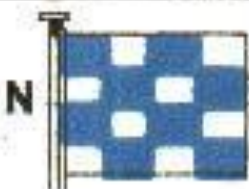
Pennant,
Red, with
White
St. George's
Cross.



Square Flag,
Blue, with White
St. Andrew's Cross.



Pennant,
Yellow and Blue,
Vertically.
Yellow at Mast.



Square Flag,
Blue and White,
Chequered.
16 Squares.
Blue at Mast.

SPECIAL FLAGS OF THE INTERNATIONAL CODE

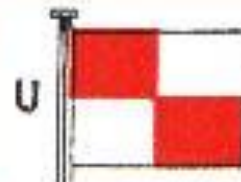
Code Flag
and
Answering Pennant.



Red and White
Stripes, Vertically,
Red at Mast.



Square Flag,
Yellow and Red,
divided Diagonally
Yellow at Mast.



Square Flag,
Red and White,
quartered.
Red at Hoist.

The Blue Peter



Square Flag,
Blue, with
White Square
in centre.



Square Flag,
White, with Red
St. Andrew's Cross.

"Am about to Sail"
Quarantine Flag foreign



Square Flag
Yellow.



Square Flag,
White, with Broad
Blue Border and Red
Square in centre.

"Am Liable to Quarantine"

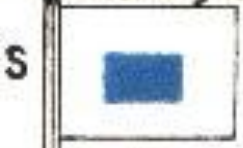


Square Flag,
Red, with Yellow
St. George's Cross.



Square Flag,
White, with Blue
St. George's Cross.

Pilot-Signal



Square Flag,
White, with
Blue Square
in centre.



Square Flag,
5 Yellow and 5 Red
Bars, Diagonally.
Yellow at Hoist.

"Want a Pilot"



Square Flag,
Tricolour,
Red, White, Blue.
Red at Mast,
Blue at Fly.



Square Flag,
Black, Yellow, Blue,
Red, quartered
Diagonally. Black at
Mast, Blue at Fly, Yellow
at top, Red at foot.

BROWN'S MORSE MODEL, with Instructions, 2/6 net.

Is what you want if you are learning to Morse.

BROWN'S SIGNAL REMINDER, all methods, 9d. net.





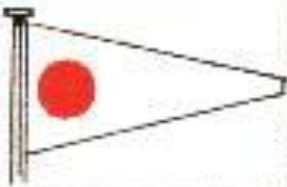












For the pocket.

THE "WYNKA" SIGNAL CARDS, 1 to 20, 1/- each.

CODE. MORSE. SEMAPHORE, BUOYS, STORM SIGNALS, ask for a pattern sheet.





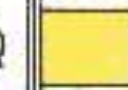





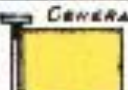













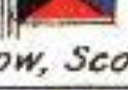



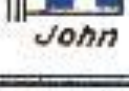



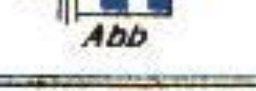
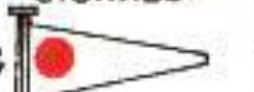


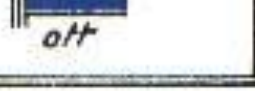



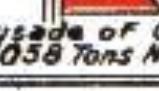
SPECIAL FLAGS OF THE INTERNATIONAL CODE

Which may be hoisted singly and which have special significances. Also Pilot Flags and Distant Signals, and Signals of Distress.

<p>A</p> 	<p>Burgess A, Flown by vessels of H.M. Navy when on Full Speed Trials in the waters of the U.K.</p>	<p>S</p> 	<p>Flag S. The International Pilot Signal, "I require a Pilot."</p>
<p>B</p> 	<p>Burgess B, Powder Flag. Is always to be hoisted by a vessel when load- ing or discharging Gun- powder or Explosives.</p>		<p>Pilot Jack. M.S. Act, 1894. The Union Jack, with a White border one-fifth the width of the Flag.</p>
<p>C</p> 	<p>Pennant C. "Yes." Affirmative.</p>	<p>D</p> 	<p>The International Code Pilotsage Signal, (Old Style), "I want a Pilot."</p>
<p>D</p> 	<p>Pennant D. "No." Negative.</p>	<p>T</p> 	
<p>L</p> 	<p>Flag L, Cholera, Yellow Fever, or Plague Flag, or "I have (or had) some dangerous infectious disease on board."</p>		<p>The Distant Signal for a Pilot, "I want a Pilot"</p>
<p>P</p> 	<p>Flag P, The Blue Peter, is the signal for all per- sons to repair on board, as the vessel hoisting it is about to sail.</p>	<p>Section 815 (3) of M.S. Act, 1894, provides, that if any Master of a vessel displays, or permits any under his authority to display, any of the Pilot Signals for any other purpose than to call a Pilot, he shall be liable to a fine not exceeding twenty pounds.</p>	
<p>Q</p> 	<p>Flag Q, Quarantine Hospital (used foreign). In British waters it signifies, "I have a clean bill of health, but am liable to Quarantine."</p>		<p>Pilot Boat Flag, in British Pilotsage waters, M.S. Act, 1894. A small flag of same colour is also shown on the rigging or about the bridge, when a Pilot is on board.</p>
<p>N</p>  <p>C</p>  <p>By International Code</p>	 <p>By Distant Signal</p>	 <p>By Distant Signal</p>	

COMMERCIAL CODE SIGNALS

EXAMPLES OF THE SEVERAL HOISTS WHICH CAN BE MADE HAVING TWO, THREE, OR FOUR FLAGS.
 When a word contains two letters of the same name, the second time of its occurrence it must begin or be in the 2nd Hoist; and on its 3rd occurrence, it must begin or be in the 3rd Hoist.

URGENT & IMPORTANT SIGNALS		COMPASS SIGNALS		3 FLAGS	
CODE FLAG OVER 1 FLAG OR 2 FLAG SIGNALS					
<p>CODE FLAG</p>  <p>P</p> <p>"I Am about to Sail"</p>	<p>A</p>  <p>C</p>  <p>"Do Not" "abandon the Vessel"</p>	<p>A</p>  <p>Q</p>  <p>E</p>  <p>N 1/2 E</p>	<p>A</p>  <p>K</p>  <p>X</p>  <p>S 57° W</p>		
LATITUDE & LONGITUDE SIGNALS			CODE FLAG OVER 2 FLAGS		
<p>CODE FLAG</p>  <p>O</p> <p>12 Latitude</p>	<p>GENERAL SIGNAL</p> <p>Q</p>  <p>OR</p> <p>H</p>  <p>North Latitude</p>	<p>CODE FLAG</p>  <p>E</p> <p>23 Longitude</p>	<p>GENERAL SIGNAL</p> <p>Q</p>  <p>OR</p> <p>Y</p>  <p>East Longitude</p>		
NUMERAL TABLE		GENERAL VOCABULARY		GEOGRAPHICAL SIGNALS ALPHABETICAL ORDER.	
CODE FLAG UNDER 2 FLAGS		3 FLAG SIGNAL		4 FLAG SIGNAL	
<p>Y</p>  <p>S</p>  <p>CODE FLAG</p>  <p>10,000</p>	<p>I</p>  <p>X</p>  <p>K</p>  <p>Tons of Coal</p>	<p>A</p>  <p>E</p>  <p>Y</p>  <p>Z</p>  <p>Glasgow, Scotland.</p>			
ALPHABETICAL SPELLING TABLE				NAMES OF VESSELS FROM CODE LIST.	
SPELLING SIGNAL		4 FLAG SIGNALS		4 FLAG SIGNAL	
<p>1, 2, 3 OR 4 FLAG SIGNALS</p> <p>J</p>  <p>O</p>  <p>H</p>  <p>N</p>  <p>John</p>	<p>C</p>  <p>B</p>  <p>D</p>  <p>N</p>  <p>Abb</p>	<p>C</p>  <p>S</p>  <p>F</p>  <p>P</p>  <p>off</p>	<p>H</p>  <p>C</p>  <p>L</p>  <p>B</p>  <p>Grusade of Glasgow 1058 Tons N° 52696</p>		

THE WIND

I SAW you toss the kites on high
And blow the birds about the sky;
And all around I heard you pass,
Like ladies' skirts across the grass—
O wind, a-blowing all day long,
O wind, that sings so loud a song!

