Welcome to your March Newsletter. This month on paper appears to have nothing to offer as there appears to be little or nothing going on. However, we have had a number of small items on Facebook to keep us interested in our world of hopping.

So for your Pleasure we have:

- First instalment in building my record breaking Hopper.
- The Solo Record Flight progress
- New Balloons / Second hand Sales updated.
- Homebuilding – Barry Newman inflates G-CJSY.
- Chris Dunkley gets all fluffy.
- A nice Cameron Stock O-31 For Sale.

With everyone looking ahead towards the clocks going forward and the official start of the flying season, thoughts always turn to the first flying events and for me that means a return to the Black Horse Balloon Club’s All Fools Meet. Once a big draw for cloudboppers, this meet will no doubt feature the odd example and whilst not in our genre, there is also a big 100 balloon event with crossing the English Channel in mind. Some years ago, one intrepid pilot literally took his life in his hands and flew the channel in Cameron H-34 G-EROS. Facebook featured a video with the pilot landing on a beach, no doubt just happy to be back over dry land. Big respect to him for the efforts.

Please send to me your items for inclusion in future editions of the newsletter to the email address below. Without any more pre-ambling, let’s get into the newsletter.

Steve Roake- Editor. Steve.roake33@gmail.com
1. Ed Speak- Two things on my mind.

With the months rolling on, my mind set is definitely becoming more focussed on the Cameron Balloons Solo Record Flight in Chambley in the Grand Est Region of France. The first thing that I couldn’t understand is that whilst I have over 40 odd entrants who have indicated that they are attending the Record flight, Sarah Laurent at Mondial Air Balloons communicated to me recently that she had only received the paperwork from 12 entrants by mid March. This situation must change for you the entrants to be able to take part and I would advocate that you act earlier rather than later to avoid being disappointed. Secondly, we have gone about three weeks before we have had another confirmation of entry. The question is simply this. Are we at saturation point or are there still some of you who just haven’t declared your interest?

I do want this to be the most memorable World record flight that Cloudhoppers have ever been involved in and so that is why as the organiser I am banging on about it all the time. If you have intentions to join the party, please let me and Sarah know asap.

The other thing that I cannot understand whilst talking hoppers, is how come no one has as yet snapped up the stock hopper offered in this Newsletter from Cameron Balloons. The not insignificant saving on the price of a regular offering (I would have thought), coupled to a pleasant design styling remains as yet unsold. The price of the dollar verses the pound would have made the offering even more of a bargain in my mind but is it just that people aren’t buying? The continued registration of new Hoppers appears to not support this view, and as you’ll see later in this magazine, the latest registered example G-CJYJ, a Cameron O-31 for Paul Spellward has been spotted on its test inflation.

I’m sure it wont be available for ever and weighing in at 30 kilos it remains as lightweight as anything currently available from the manufacturers.

Steve Roake.
2. Essential Extras – special prices from Memory Maps

Whilst I in no way consider myself as a computer expert, I recently had a visit from James McDonald who agreed to visit me from Kent to assist me in updating my I-pad software with the latest S/A information before the flying season starts in earnest. Now as a staunch Map fan, some of this new fangled electronic stuff bugs me rotten when it comes to technology but even I can see the merits of having everything displayed electronically for you with a view of helping flight manage your experiences and get the best perspective of what will appear downwind on your intended routing and also help you decide where and when to land before you even reach that point. The Medium we used on my I pad mini is a program called Memory Maps, and whilst I do know there are other versions available, some of you may not be aware that Memory Maps do periodically reduce the price of the maps as I recently found out. To cover the whole of the UK you need to either purchase a DVD or download the maps to your product of choice. The list price we came across for the whole set was normally £80-00 for the 1:50,000 ordinance survey style map format, but when I last looked at www.memory-map.co.uk this had been reduced to £50-00. When was the last time you gained a saving of around 60%?

This reason alone is why, for March, the essential extra has to be Memory Maps software for your tablet or phone.

Ready to go –Thanks to James McDonald.
Building a Record Breaker Balloon

As part of the lead up to the Solo Record Flight in Chambley in July I asked Cameron Balloons to provide more details on how they build my new Hopper G-CJWY. Now you will all be aware that the balloon is in Cameron House colours but when we look into build times it is always from the perspective of Homebuilders so I've tried to get the information from the Professionals and will as far as is possible write about the experience here for all of you. Many thanks in advance to all concerned at Cameron Balloons Ltd in helping me with this, and in particular to Craig Morre who is collating the information and photos for me.

So here she is, standard Lightweight O-31 with one exception, as a safety feature I specifically asked for clear view Panels in the parachute area.

Whilst a pile of material in a trolley doesn't look very appealing, the preparation stage of a build is very important. Some 450 linear meters of material was hand cut in 11 hours to start the process. This is in the three traditional Cameron Colours of Red White and Blue, and is allocated with its own production card to the build team. This process was achieved with help from two Cameron
Balloons Limited staff, here in the first photograph is Ian Lewis who is the Cutting and Artwork Manager, and helping him out below cutting the red cloth is Jon Porter, who is checking the fabric’s quality as he selects the cuts.

Next Installment soon …
Chris Dunkley talks about Fluffy White Clouds and Thermals.

Little Fluffy Clouds – The Ups and Downs of Thermals

Weather is a strange science, there is no denying that. There are so many variables that it is a wonder that forecasting is as accurate as it is, well, at ground level anyway. You can, in the main, see weather but what you can’t see are thermals. Well, you can sometimes see their effects but ‘seeing’ thermals is tricky. Understanding them and how they work is also a pretty inexact science. Its fair to say that, for many, a thermal is envisaged as a column of rising air created by surface warming. Well it sort of is, or may be. As my dad was heavily into gliding I was told about them before I was really paying any attention to anything very much, let alone the weather. By age eight I was looking at little puffy clouds with glee and Cu-nimbs with despair that a downpour was imminent, brushed with the excitement of an impending thunderstorm. We’d build model gliders and were soon losing a few as we got the hang of launching into them (thermals not cu-nimbs!). Fortunately, we discovered de-thermalizing fuses for the gliders so lost fewer to thermic activity but more to in-flight fires. Rustling trees and bushes, little miniature dust devils and soaring birds, whirling dervishes moving across the top of a crop or a change of temperature as you pedalled down the road, we even had a streamer on a stick and I soon learnt all these things pointed to the existence of thermals in one form or another. Books and papers galore have been written on thermals and their properties. Some are pretty simple, others amazingly complicated. In gliding we love them, in ballooning we avoid them, or rather we should! Basic training tells you that a hot air balloon is a thermal in a bag. If that ‘bag’, trundling along straight and level, runs into a pocket of warmer air it will sink as the temperature difference will narrow. If it hits colder air it will climb. If it runs into a strong enough thermal, it may well be carried upwards. Now you have a ‘heavy’ balloon going up which will soon be coming down again. You are now in a dilemma as you don’t want to go up but you don’t want to appear out of it in a well-cold balloon. Thermals can also produce quite exciting turbulence both at ground level and all the way up so you’ll probably have a seriously distorted envelope into the bargain.
Pretty quickly you will understand why balloons don’t go thermaling and if you trouble to read the Flight Manual it will basically tell you, ‘Don’t do it!’ Basic rule is that balloons fly when gliders don’t. The history of modern hot air ballooning tells a different story. In the beginning the thermal versus unstable air equations were, if not fully understood, largely ignored. It didn’t take long though before it was realised that flying before things warmed up and after they’d cooled down was a good idea. A question on thermals appeared in the first exam papers. ‘What time do thermals start?’ the answer taught being, ‘10 o’clock’. Well that may be the stock answer but the truth can be very different, especially in warmer countries. In reality thermal development depends very much on the overnight temperature and the predicted temperature of the day. In these days of global warming the season might run from mid April until September and it is not uncommon, in this country, for them to start kicking off by nine o’clock when conditions are right. What many don’t appreciate is that the development and the movement of thermals it is also dependent on wind. Therefore, they may be long and thin and form ‘streets’, sometimes visible as a long cumulus cloud parallel to the wind direction, highly prized by glider pilots, moving downwind, or isolated circular pockets under a little fluffy cloud, so you can find yourself on the edge of one which, in some instances, can be worse than actually being in the thing as the air is much more unstable in this area. What they all relate to is the heat source feeding them and the terrain. Most meteorological books, apart from those aimed at glider pilots, don’t go into much detail about thermals but all aviation is affected by them in one way or another. There is much debate about the shape of thermals. Some say they are columns of rising air, others that they are doughnut shaped bubbles of rising air or they are large bubbles of hot air that break away from the ground. How they are produced is also up for discussion but basically the darker the surface the better the thermal production will be. This includes everything from woodland to roads but also includes areas inclined to the sun’s rays and which are more likely to be heated, such as hillsides. What is not in doubt is that they can produce very strong up-currents, equally strong down-currents and localised areas of serious instability. My dad always favoured the ‘heated air breaking away from the surface’ theory and to me it makes perfect sense.
James Cooper, an Australian glider pilot, very courageously put pen to laptop and has written a rather good descriptive resume of thermals that explains them pretty well, in my opinion.

Back to ballooning then. We need to know how to know when thermic activity is starting or, come to that, decaying. Thermals are affected by the wind but will not necessarily move at the same speed as the wind, so balloons can encounter them and fly through them. Where you are in the thermal is also important, especially for gliders. When gliding its no good trying to chase a thermal and arrive at the bottom of an ascending one.

Rule of thumb says that the air at the bottom of a thermal is rough and on the top smooth. If the air is rough, then unless you are very experienced and know how to out-climb a thermal, then its best to move on and look for another one. As the day warms up the thermals develop and the bubbles get joined together and they become much more like columns, which makes it easier. The science is complicated but both thermals, and the clouds that form above them, can become self feeding which is why we balloonists should be on the deck before they get going. So we are talking early doors thermals and, as such, they won’t, or shouldn’t, be developed. This means we can usually see or feel their effects. We need to learn when to land. When thermals break away and rise then an area of relatively low pressure is formed below that is filled by the surrounding air being drawn in. This manifests itself early in the day as eddying winds, so very localised changes in wind direction is the most likely effect on us making landing ‘late’ a bit tricky. Trees and bushes, as they warm up, are good pointers. You may notice the treetops on the downwind side of the trees starting to twinkle and rustle. This could the start of warm air building up and it will eventually form an unstable bubble and break away. Check crops, especially wheat, which is much darker, for squirrelly patterns running across the field or flags fluttering somewhat randomly. Flying into cooler or warmer air pockets is also a bit of a heads up. Now is the time to be thinking about landing.

If you find yourself landing late choose the biggest area you can and make a steep positive landing. If you come down and find yourself in calm, and especially, warm air avoid the temptation to remain airborne and ‘steer’ for a better spot. Get the thing on the deck. Once down deflate the envelope as quickly as possible and stay put until everything has stopped and the envelope is all but
flat. It may all seem a rather dramatic and unnecessarily type of landing but there is many a time when, a few moments later, a mighty gust comes through and you will be very happy to have a deflated envelope. A strong thermal will pick you up and drag you given half a chance. Conversely, in the afternoon, when thermic activity is dying out, you can usually tell the strength of the thermals by the periods between the gusts. Sit it out. For inflation and launch there will be a period of calm followed by gusting followed by another calm which will be much longer. Its the long period of calm you want to find. If you are daft enough to go flying into the heat of the day, then you need altitude until you find somewhere big and open to land. Near the deck you may need to prevent climbing by playing the parachute against the burner but don’t let the balloon get cold. Make sure the pilot lights are out and your passengers are well briefed. Your landing should be ‘an arrival’ on terra-firma and, just before you hit, get the parachute or deflation system going and be prepared to get dragged left and right.

Now for two tales of daftness. Many years ago Lenny Vaughan asked what it was like flying in thermals. We were at the Surrey Show in Guildford. We’d had a very pleasant uneventful morning flight. It was about half eleven and the day warming nicely. There was broken cloud and little or no wind. “Come on then we can probably get a short flight in and find an early thermal”. I stupidly said. Well it was pretty stable low down and things went well for the first fifteen minutes, albeit on a slightly curvy erratic trajectory. Eventually we found ourselves over a large wheat field. I’d told Len about watching for swirls in the crop earlier and suddenly he pointed at the far corner of the field and made a most appropriate remark. Coming towards us was a huge revolving squirly disturbance. In front was a large paddock. “We’re going in there. Hold tight.” We were down to about a hundred foot when we started to climb. Out came the top, on went the burner. We arrived in a heap then the squirliness caught us up and we got dragged in a circle with little or no air in the envelope. “Won’t be doing that again then!” I said with effect. Len agreed. Of course I did, in the misconception that I had an understanding of them and could always dump the plot on the ground should things get dramatic. Probably the balloon I met thermals in the most was the White Label hopper so, the next tale concerns the picture that accompanies
this. As a result, I very nearly knocked ballooning on the head or, rather, my future in ballooning very nearly got knocked on the head. The flight was from Cardiff Castle and I did everything wrong. We make light of it now, but at the time it was pretty hairy. We’d already had a morning flight and came back for another in the hopper. It was a short hop into some playing fields but I did fly around a rugby pitch before landing so that should have told me something. We got back, refuelled and decided another hop was possible. The sun was out and it was getting near lunchtime. Cloud was forecast later. There was a parachute display due in half an hour. I reckoned I could repeat the hop, cheer up the spectators and we could head off for lunch. The moment I lifted off I started a low level circular tour of the castle then over the adjacent wooded park and tennis courts, chatting merrily to those below, ready to land at the first opportunity, stopped, and then hurtled back to the castle. Stop dead again. Next minute I’m off again. I looked up and saw that the sky had gone all sort of slacky blue grey and the clouds causing it were very high. Concerned about being over the castle with a parachute drop imminent I reckoned the best thing to do was to climb and find a wind to take me away. Next second though I was really climbing, but through no effort on my part. Then I was looking at the envelope without looking up. That was wrong. I let it cool and started down and burnt every time the mouth was sort of above me, no gimballing in a cloudhopper! Eventually things sorted themselves out and I was down to roof height but starting to go in a circle again towards the main Cardiff railway line. There were rows of terraced houses and, amazingly, just before the road bounding the railway, a courtyard of gardens formed by houses. That would do. I landed on a kitchen extension followed by the envelope. Long and short was that I managed to get off the roof. The neighbours sausaged up the envelope and took it through a house, popping it behind the front garden wall along with the bottom end. I walked down to the corner shop, borrowed their phone and called Greg who had a mobile. I cannot say what he said having witnessed the event from the ground. As I sat on the wall awaiting his arrival I watched fire-engines, ambulances and police cars rushing up and down the road. When we got back home we stood the little darling up to check the damage. It wasn’t good, having lost a couple of flying wires and a serious split had started to develop. I wasn’t sure whether I had been extremely lucky or
very foolhardy. Both, I decided. What advice would I give about flying in thermals today? Don’t. What advice would I give if you find yourself in one after ten o’clock? You shouldn’t be there.

Bit of a mess …after the flight inspection

**What the Manufacturers say:**

**Cameron Balloons** - The balloon must not be flown if there is extensive thermal activity, any cumulonimbus (thunderstorm) activity in the vicinity of the flight path, or any turbulence which is giving rise to gusts of 10 knots (5.1m/sec) above mean wind speed’.

**Lindstrand Balloons** - The balloon should not be flown in meteorological conditions that give rise to erratic and gusty winds, which could cause an increase of 10 knots above the mean wind speed. The maximum surface wind speed for take off and landing is 15 knots.
Ultragamic - The surface wind speed must not exceed 7.5 m/s (27 km/h or 15 kts). There should be no, or only very weak thermal activity. There should be no sign of storms, either active or building.

Kubicek - Balloons must not be flown or tethered if there is thunderstorm or extensive thermic activity, turbulences or another meteorological conditions (e.g. wind shear) that give raise to erratic or gusty wind in the vicinity of flight path.

LTL - The maximum surface wind speed for take-off and landing is 15 knots. The balloon must not be flown in unstable atmospheric conditions i.e. thunderstorms. A full meteorological assessment should be carried out before every flight (tether or free flight). The pilot must satisfy himself that the weather conditions are safe and within the limitations of the flight manual for the entire flying period.

- James Cooper's very informative missive.

http://f4bscale.worldonline.co.uk/Thermals.htm - Interesting info for model glider flying containing some good tips for us balloonists.

Chris Dunkley.
Fly Light with Cameron Superlight

Envelopes starting from 30kg
www.cameronballoons.co.uk
sales@cameronballoons.co.uk
+44 (0) 117 963 7216

© Cameron Balloons Ltd - Celebrating 46 years of UK manufacturing
#excellence #quality #over12000balloonsworldwide
Solo Record Flight – Progress report Number 3 by Steve Roake.

Update number three of the Cameron Balloons Sponsored Solo Record flight and whilst it seems interest is subsiding in the record flight, some 40 odd of you are now signed up including the latest recruit Thomas Gleixner from St Gallen in Switzerland who is bringing HB-QAB a Lindstrand Demo coloured 31A.

The most important point this month is that Sarah Laurent at Mondial Air Balloons hasn’t received all the entries from those who have indicated that they will be taking part, so if you are one of those who has yet to do the paperwork and submit your forms, please do so asap to ensure your participation.

5. Homebuilding Section

The continued success of home building appears to have no end in sight. Just as Barry Newman flies his BM34 hopper project, so Tim Wilkinson from Sackville Airfield announces that he is building one
too. Seen in the photograph below, G-CJSY is a great credit to Barry and upon its first proper inflation, Barry expressed his joy at only finding one small flaw in his own workmanship.

G-CJSY flies at last. Photo credit Barry Newman.

The only thing wrong was that one velcro tab was positioned smooth side up instead of hook side up, hardly a problem and easily rectified. The version being manufactured by Tim is a lightweight example. This appears to be Tim’s eighth home building project and will utilise the colours as shown below. For me it is interesting how
the designs are driven by availability

of materials rather than specifically desired colours, I guess it is a cost thing primarily but interesting none the less. More on Tim’s project when supplied soon.

5. Interesting Photos.

Kerry McGrath posted this shot on Facebook taken at Perris, California on 16th March at a SCBA club flight which featured a couple of hoppers.
Seen at Llangollen Model Balloon weekend, two Sackville designed and produced Hoppers, G-CISD an Airtour based design and G-CJSY the BM34. Photo by Brian Mead.

6. New Allocations This Month / Changes of Ownership

This month’s New allocations include a unique hopper special shape for France. Also whilst subject to some hostility from the manufacturers, seen recently in a public park in Bristol on its test inflation was G-CJYJ the Cameron O-31 for Paul Spellward in his signature colour scheme. This balloon is so new that the c/n is still currently unknown.
It also appears to be awaiting its scoop. Hopefully Paul will be bringing G-CJYJ to Chambley for the Solo Record Flight in July. The second new hopper of the month also went viral via Facebook from Cameron Balloons France and features F-HSBJ a 42 special shaped Wallaby. c/n 12006 is unusual and fairly heavy at 137 kilos.
Second Hand Movements

G-CDUJ has now found a new home with Ron Griffin in Berkshire not Wales as said last month, so apologies on my part for getting that wrong. In an effort to ensure that it is soon sold, G-UHOP My UM H31B has now got a new C of A and more importantly an ARC which is a useful addition when trying to sell to abroad. I have interest in it but am working on the basis that first person who stumps up the right money can have it so if you have £4275 burning a hole in your pocket, please get in touch as she is a real bargain with a temp flag that reads only 88 degrees.

7. Gallery Pages –

Your Editor’s choice of new and interesting hoppers and duo’s active in the world of ballooning or good themed photos.

Posted on Facebook, only 34 years young and still looking good is Cameron Viva 42 c/n 887 which is ex G-BKNB which went to Australia in 2005 as VH-YPO built in 1983.
Pretty stock hopper from Cameron’s

Still currently on a special offer deal from Cameron Balloons is this Lovely stock hopper which is on a special price of £7800 using the discount code “Facebook Deal 01”. Contact Cameron Balloons in Bristol to secure this beautiful beast and enjoy the saving over list price.
8. Manufacturer / Event News/ Industry News

Just a small announcement to say that the membership continues to rise towards our judge declared goal of 1000 members. As of the end of March we stand at 984 just 16 shy of the target. I have every faith that in 2017 we will achieve this milestone of a number.

Chris Dobson has launched his initiative with the new Beat Eating disorder sponsored Cloudhopper G-ISOB. Launched at their home city of Norwich. Chris recently tethered the Cameron O-31 hopper by the cathedral and you can catch up with it using this useful link below.

https://youtu.be/EEoxJzcJk8M

And so that was the March Newsletter, hope you all enjoyed it.

All articles for inclusion in future issues will be gratefully received by your Editor. Please forward them to steve.roake33@gmail.com and feedback good, bad or indifferent is always welcome. Views aired by contributors may not be those of the Editor.

Looking forward to the season, fly safe … Steve Roake.

For all previous newsletters visit www.cloudhoppers.org/Newsletters.