



Newsletter

No7 2020 July

Coronavirus.

You are all still reminded that due to the Coronavirus pandemic, distancing is still in force and the club house is closed.

Mower fund target £6000

The mower fund is still ongoing and stands at £497.51 Any committee member would be happy to take your donation. You can make a donation through [gofundme.com](https://www.gofundme.com) at

https://www.gofundme.com/f/KRMFC-raising-funds-for-a-new-grass-mower?sharetype=teams&member=2955562&utm_medium=social&utm_source=whatsapp&utm_campaign=pna

Please let Alan know of anything you think should be included in the Newsletter, things you like or dislike. Any feedback would be much appreciated. Now that lockdown is over and the editors have other things to do, the Newsletter will be published monthly around 1st of each month.

Sales

Spektrum DXe Transmitter. Excellent condition 12 months old. £30. Email Neil at neilgrayson@sky.com if interested.

Last Month at the Field

KRMFC club officially opened up again after lockdown on Friday 29th May. The weather was glorious with perfect flying conditions. Even then, members were cautious and it took a few days for numbers to increase down the field.



First day back. Enjoying the sun (Socially distant)



Work has started on renovations. All but one of the model stands have been painted and almost all of the pilot boxes. The clubhouse has also been painted thanks to Billy and Mike. Billy, Mike and Tom have done a great job with the grass and the runway is looking very smooth. Hopefully they can keep the lawn mower running until the end of the summer.

14th June saw a busy day with a number of members flying various models. Neil Gourley was at the field with a very impressive 38cc Zenoach. He didn't fly it but continued running in the engine which had an impressive sound. Let's hope he gets round to flying it soon.

15th June: Neil Grayson flew his Tutor II without breaking the nose wheel off. It has always been his ambition to fly an IC radio model plane since his days flying control line aircraft in the mid '70s. He has now flown it 4 times and landed safely.

27th June saw a lot of activity with helicopters, an autogyro and electric Vulcan. It was an early start with the first members arriving at 07:45 due to the forecast of rain later in the day. Tom gave an



impressive display of Helicopter acrobatics which Billy filmed in slow motion and is available to watch on Facebook.

Charles, a new member arrived and flew his autogyro which was impressive to see in the air, very slow and floaty with perfect landings. See Facebook for the video. His double electric motor Vulcan is hand launched which can be risky as the props are pushers and located at the back. Luckily he managed to launch it without mangling his hand. It flew beautifully until it came down in the cornfield opposite and took some time to find. Luckily only the 2 props were damaged so it will fly again soon.

Billy Dunn had some excellent flights with his large and impressive Sbach. I am sure he has a problem with the throttle though – is it stuck on full? Neil Grayson flew his Tutor II and is gaining confidence and did his first inverted flight with his Apprentice.

Somehow Alan managed to crash his pride and joy, the Beaver, into a pilot box removing the starboard wing. Hopefully he can fix it.



With the rain starting just before noon, we all beat a hasty retreat. Hopefully the weather should improve soon and we can all get back to the field before the grass grows again.

It was due to be the KRMFC fly-in this last weekend 27th – 28th but unfortunately it had to be cancelled due to Coronavirus lockdown. Looking at the weather though only Saturday morning would have been flyable as the rest of the weekend was a washout!

Lets hope next years event goes off well with glorious weather both days.

Committee Profile *Alan Veitch*

Way back in the early 60s my interest in aviation began. I was one of those plane spotters. I could be found at Newcastle Airport every weekend with my civil aircraft markings booklet in hand taking the registrations of all of the aircraft. Back in those days it was mainly prop aircraft with the odd jet involved. Most of the aircraft were of British manufacture such as Bristol Britannia's, Vickers Viscounts, Handley Page Herald, Airspeed Ambassadors, some BAC 111s, Comets, Tridents, the occasional VC10.

Those were the times when you could walk around the hangers quite freely even climbing on board the aircraft and having a look, simply by asking the chaps there. I even persuaded a captain to allow me on board a DH Comet doing circuits and bumps to test out the newly fitted auto land ground systems. I attended lots of air displays all over the country, and later dragged my family with me.

When my son was 11, he wanted to fly RC planes, so I built him a Piper Cub on which he learnt to fly.



It wasn't long before he advanced on to faster planes with bigger engines. I was cutting the foam wings with an old guitar string wired to a train transformer, moulding canopies with

acetate in the gas grill, using the wife's Hoover for vacuum forming, and her iron to shrink the Solarfilm to the plane.

But they usually all ended up being firewood after a great deal of fun had been extracted.



When I retired and moved to Scotland John insisted I learn how to fly and sent me a foamie Wot4 which he was flying the day he gave it to me. I brought it north, contacted the club and apart from putting my receiver in hadn't touched it, no one at the club could fly it as miraculously it now needed 100g of lead made into a cowl to balance it out. I suspected that one of the grandsons had put a toy car down the tail, but that myth was quickly dispelled when I crashed it and could see inside the foam. After that I removed the lead and moved the firewall 120mm forward using the wood from an old wardrobe.



I then took the advice of many at the club and procured an Arising Star IC trainer which served me well until a mid-air collision with Foxy from the Dundee club during our last ribbon chase. With poor eyesight, bad judgement and a complete lack of skill, I can fly, and will continue to do so for as long as possible. I am pleased that of all the clubs I approached when I came to Scotland, KRMFC, and Billy in particular, was the only one to offer me any encouragement to take up the sport. He may however now regret that action. Oh, look I nearly hit the runway.

Well at least it's the same colour. **GREEN.**



A Foray into the Ups and Downs of Full-Scale Gliding *by Douglas Fulton*

About two years ago my sons gave me a Scottish Gliding Centre Introduction to Gliding package for my birthday.

And before you ask - yes old guys can fly full size!

The package consisted of three months club membership and £250 worth of flying. Membership starts when you take your first flight and is valid for a year which allows you to pick the best weather window to maximise your time in the air. If you wish to continue after the three months the club offers a discount on full membership.

Flights can be any mixture you care to choose including cable launches, tug launches, short flights, longer flights, repeated take offs and landing etc. This allows you to either just enjoy the flying or work towards going solo.

Gliding is mooted as 'relatively' inexpensive compared to powered flight. At the time of my course a cable launch was around £9, a tug launch £15. Once in the air about 45p per minute. So for a full hour with one launch around £36. In essence you can mix and match your flights and the costs are deducted from your £250 (you can add to your fund at any time). The gliders are fitted with FLARM technology which tracks and records every flight.

NB : Costs are without instructor fees, but on the course the instructors are volunteers who do it simply for the free flying hours.

Gliders can be tracked on the following website. If you pull out and look at Europe you might be surprised about how active the air space is (at normal times).

<https://live.glidernet.org/#c=50.95793,6.62916&z=5&s=1>

The Flying

I opted for the summer evening flying group which starts flying around 17:00 hrs and ends at sundown. On the first night, the group as you might expect, were given a detailed safety briefing before being allowed onto the grass, including "the piss pots are at the back of the kitchen - there's no lay-bys up there and we can't just power back if your legs are crossed".

The group of around 15 eager apprentices included a First Officer, a Senior Captain, a Hollywood film guy and a photographer amongst others. Wide age range including two young ladies circa 15 years old with one planning to solo before her 16th birthday! Very enjoyable group with plenty of support and banter. Fortunately not a bin-bag in sight.

The general set up was three gliders and instructors with 30 minute flights being the target so that everybody had at least one flight. As the weeks progressed the number of attendees on any one night tended to dip allowing more flights.

Off to the Planes

After another briefing on the radio and light signalling system for the winch guy (mega important) we were at last introduced to the standard ASK 21 trainer. After a quick walk round, time to sit in the beast, but first the parachute, if you are light enough. There is a weight limit for the occupants due to C of G requirements so anyone with the nickname 'beefy' didn't get a chute. Apparently fat people are not worth saving. On the other side of the equation skinny types were given a lump of lead, think horse racing.

Back to the parachute. First rule - don't go for a piss with it on. Second rule - the harness is only tight enough when your voice jumps up two octaves and your nuts become peanuts. I foolishly asked about the exit protocol if it was time to leave an ailing plane.

- "Well, move the big red lever in front of you all the way right and hopefully the canopy will fly away over your head or with your head."
- "Undo the harness, pull yourself up out of the seat as in exiting a canoe, swing your legs over the side and jump".
- Seems very straightforward but a glider is very narrow and could be in a dive, or worse, even upside down during your attempts to escape. It is also likely that you will only be at around 1,500 feet at best and even if you escape you are likely to land in Loch Leven (average depth just over 4 metres). If you are really unlucky you will have an unforgettable freefall before entering the water at terminal velocity.
- Hence next answer to my, OK stupid question, "do you count to three before pulling the release?" "em err nope, just pull the f***er as you jump".

Take Off

Pre take off checks, flying surfaces present and correct, air brakes go up and down (again mega important), no misting or cracks on dials (checked by tapping), lead weights secured (don't want to be sharing the cabin with a peripatetic weight if you do a loop), eventualities - e.g. what to do if the cable breaks before you reach a decent height, something overhead, a go around etc. In short, options to consider before you kiss your butt goodbye. Oh, nearly forgot, is the other guy in the back!

Tell the winch guy to take up slack, then just as the cable tensions give the full go signal. Giving full go before the cable is in tension is not advised as you may find yourself and the front of the glider accelerating down the runway on your own

Take off is exhilarating as you accelerate from zero to 55 knots in a few seconds. Keep wings level, pull back on the stick and enjoy the ride - the glider will rotate to an angle of around 55 degrees. As the glider is on a cable it becomes a kite and will climb with little or no pull on the stick. Just keep the wings level. However, the tricky bit is approaching fast - dumping the cable. The mechanics are inevitable if you fail to detach from the cable you complete a nice semi-circular flight as you plummet back to earth. Like all of these things it is not difficult once you start to feel the glider beneath you and how it is behaving. The trick is to unlatch the cable just before you reach TDC and level out. At this point there are three scenarios. One, you pull the lever and the cable comes off cleanly, two it sticks, so level glider, fly forward and the cable should disengage itself as it comes off the back of the hook, three it's still attached. At this point the winch operator decides you are a lost cause and will guillotine the cable whilst staying in his steel cocoon in case 1,000 feet of cable drops towards him. Cutting the cable is a pain as it's not a two-minute job to put it back together - requiring copper ferrules and a hydraulic press. The winch operator will not be amused by your incompetence!

You Have Control

As the cable fell away, I was given control so slight nose down to raise airspeed to about 55 knots. Apparently, many glider deaths are the result of pilots turning too quickly in search of lift, and without sufficient airspeed, tip stall into a spin and into mother earth. Even at 1,000 feet, normal cable release height, there is not a lot of space for a full size spin, and we know how quickly our own creations drop out of the sky.

Speed up, turn towards the Lomond Hills looking for wind lift. Thermals are few and far between in Scotland, another factor that catches out visiting pilots. As we approach the hills, I am told to keep going despite the fact that I can now count the sheep. Too bloody close I mutter, nearly there, bank left and along the ridge. This is when I discover gliders can bank up to 60 degrees without any difficulty and believe me 60 degrees seems a lot when so close to a hillside.

Next up turns, look all round, and bank using ailerons and rudder together. A lot more rudder is required than you might imagine. If you try to turn on ailerons only the glider will tend to suffer adverse yaw rather than turn, with the nose trying to go in the opposite direction. Which brings me nicely to the bit of wool stuck on the outside of the canopy. This is your yaw indicator, and somebody with more knowledge than me can explain the mechanics, apparently an instrument yaw indicator is a more complicated piece of kit on a glider, whereas the wool just works!

It is essential to understand what it means as it can tell you if you are turning too far into a turn and a potential stall or the opposite, slipping out of the turn and using up air space you made need to complete your intended manoeuvre. Pilots are often caught out when they don't realise that the wind that is giving them lift is also producing side slip e.g. forcing them into a hill so although they have turned away from the hill to resume a reverse parallel track, they suddenly find the hill and ridge too close. This may also result in sudden loss of lift and a drop into sink.

Following on from basic turns you progress to steeper turns and the simple things we are aware of with our models e.g. ballooning or losing height in a turn as we have forgotten to compensate for loss of lift etc with the nose going out of control. To be honest, with the experience of flying models, the basic flying is very easy and elegant manoeuvres are easy to master. The aim of all the training and repeats is, as we all know, to make our moves subconscious so that when the merde hits the fan we react instinctively. Granny suck eggs stuff.

After the basics, most of your flying is about getting out of a bad situation, e.g. stalls, spins, sink etc. Again, it's all very straightforward although we often fail to demonstrate our skills at the field and a bin bag is often the only result.

Unfortunately getting a glider into a bin back assuming you have survived a plunge into Loch Leven is a tad awkward and social isolation of a different kind.

The King of stalls is the tip stall followed by a spin. The first time I tried, it was scary. My instructor, a lady of an indeterminate age said I'll stall the glider then hit right rudder. Sounds fine, however a few seconds later I found myself, in the front seat of course, heading vertically down towards Loch Leven. At a low starting height, a high downward approach speed and yes, being at the front with barely a metre of fuselage in front of my a*se, it didn't look good as Loch Leven approached at an alarming speed. WTF I thought. However, my erstwhile instructor levelled the wings and pulled back into level flight without as much as blink. Wow I thought. "Your turn" she said. S**t!

First thought was I can put this off till next week, then WTF Loch Leven is four metres deep, they will be able to find us by the 16 metres of glider sticking up from the water. So, pull up to stall, stick flops like maybe not. Slam the rudder over and off we go, Loch Leven fills my view again, correct the spin and pull up. Now flying blissfully towards Kinross. Sh*t this is easy. "Gain a couple of hundred feet and go again" says 'she who must be obeyed'. I am your man I think, adrenalin racing as I heave back and slam the rudder over. Big dipper time.....

What Goes Up Must Come

Landing. There is no way back from being unable to maintain lift. So, it's back to the runway or a field which you should have identified in your 'eventualities review' before you took off, with the certain knowledge that a flat and green field seen from 2,000 feet is more likely to be bumpy and rocky at 50 feet. This is going to sound

ridiculous, and it is, but some unnamed members of my group failed to realise that gliding is at the end of the day an exercise in gently falling out of the sky and increase in speed generally means a faster decent. By its nature landing is a one shot go. Get it wrong and it's not pretty. The old adage, if the runway looks as if it's coming towards you, you are in overshoot mode. Similarly, if it looks as if it's receding you will likely end up in the field before you reach the runway. Your target landing spot should stay in the same place. Back to granny and eggs.

Naturally your air brakes are your height control as you approach the strip but these must be used with care. Open full and you will descend faster than Eddie the Eagle. Too little and you will have a long walk back. On and off - only if you enjoy a bouncy ball experience. First few times are buttock clenching, knowing there is no going back once you have committed to landing. But again, as with our models and as Jim always says "keep it flying and let it settle". Easy peasy

The Ups and Downs (Short List)

Ups

- Flying is superb.
- A slow relaxing experience with the ability to introduce some relatively safe drama.
- Cheap way into full size.

Downs

- Very weather dependent
- Difficult to gain height with the local topography (short flights and you see a lot of Loch Leven).
- You have to be patient and reasonably fit as there is a lot of pushing gliders about.

Gliding Video <https://www.youtube.com/watch?v=X8bDGnyZcNM>

Kit of a Kit *by Alan Veitch*

A vast number of us build planes in our sheds, workshops and garages. There's others that say "I'm no good at building from scratch, I just get ARTF models. I prefer flying to building". But just look at even the best ARTF models now, some of them are harder to assemble than a kit! I know my latest venture was, it took me over 5 hours to locate the pre-drilled holes in the wing to attach the struts to, because they couldn't be seen through the covering. Admittedly a lot of that was putting the wings on and off several times to find where they could be. The instructions of most of the models seem to detail lots on how to put on the decals, but omit lots of technical details about things like how to attach the wings.

I ask you to imagine how daunting it would be if you ordered a kit and it arrived in a tube 12 inches in diameter and 10 feet long and was unloaded on a pallet truck, or crane from the back of a wagon. Well that is how many of our models started life, and they are still built in garages and workshops all over the world. We have all seen, and many of us have owned models of commercially produced full sized planes, from Cessna 180s to Beechcraft Bonanza's, and even the 'odd' Spitfires, P51 Mustangs and the like. These full-sized planes are produced in factories mainly using preformed parts, in fact the different parts may even be produced in different countries and brought together for assembly. Sounds like an ARTF doesn't it?

But there are others that the full-sized plane started life in that 10 foot tube, and were all built in someone's garage or workshop. Every one of them (in America, Australia and South Africa anyway) had to be 51% built by the individual not the company that supplied the kit. Some of the easier to build kits come with holes pre-drilled, or composite parts pre-moulded, but you still have to fulfil the 51% rule if you don't want to register the plane as a commercial one.

Why should that interest me I hear you say,

Well if you are like me, and happy to putt putt around the sky at near stall speed, not doing aerobatics it probably won't interest you. You can go on flying models of commercially produced full sized planes like Cessna's and Beavers. With the odd warbird thrown in.

But if you do hanker after a good sport plane, why not build a kit of a kit, or even an ARTF of a kit plane. Here are a few you might try, and it might surprise you to learn that they are all models of actual kit planes.

Pitts Special S1. One of the most famous aeroplanes in history, and has probably performed at more air shows than any other type of aerobatic aircraft. This distinctive, diminutive little biplane was created in 1945 by Curtis Pitts, a self-taught engineer with military aircraft inspection experience gained during World War Two. Helped by his friend Phil Quigley, they took a bit under a year building the biplane. Curtis flew the 55-hp Pitts Special for the first time without an airworthy certification. Thus, was born one of the most famous aircraft types in all of aviation history... the Pitts Special S1. More than any other type of plane, the Pitts Special is synonymous with aerobatics.



For out and out performance on a low-dollar output, the Pitts still has the highest grin-per-dollar ratio. The entire aeroplane, excluding engine, wheels, etc. can be shipped in a mailing tube a foot in diameter and ten feet long. All the parts in that tube would run to about \$7,500 including the flying wires, covering material, etc. This is an aeroplane a creative scrounger can build and get flying for around \$15,000 start to finish. It is, however, a labour-intensive aeroplane, if doing it all yourself. However, not one single part is even remotely difficult to build.

Bowers Fly Baby. Also available in 2 seat variant. Though not designed by Bowers



Christen Eagle Frank Christensen originally worked for Curtis Pitts and left to develop his own home builds. The Eagle II is marketed in kit form for homebuilding. It is a small aircraft of conventional configuration.



Vans RV4 Richard Van Grunsven designed the RV-4 in the mid-1970s as a two-seat development of the single-seat RV-3. The RV-4 prototype first flew in August 1979. Pictures of the model and the full size.



Rutans Long EZ. An unusual design which has proved very popular. The majority of the model versions are electric. Singer-songwriter and actor John Denver died when his Long EZ crashed on October 12, 1997, just off the coast at Pacific Grove, California



To name but a few, but if I were you, I'd start panicking and clear up your garage if your model turns up in a tube a foot in diameter and 10 foot long!!

A Blast from the Past



Weekend 7th & 8th March 2015

It's not often that the weather man gets it 100% right, this weekend however he got it spot on. Saturday saw only 3 club members show face. The wind was very strong and refuge was sought in the club hut. Big Tony Campbell was first to arrive. Tony very selfishly sat in his car waiting for Billy and Tom to arrive so that THEY could open the club hut and THEY could put the kettle on.....Noted!!

Tom had brought along his new heli for a test flight but opted to fly a different one given the strength of the wind.

Hut locked up and everyone headed for home around 2 o'clock.

Sunday saw the winds drop slightly but still fairly strong. Good enough for a few to fly though. Tom had his new Heli flying well. Phil was also on the sticks giving his Heli a good run.

The posts that mark the road in have been removed and placed under cover to allow them to dry out, they will be painted white and put back in for next weekend along with some new rope.

Styk Kane, decided it was time to go back to basics and he asked if he could use the club trainer? Not a problem. After a fuel and a charge, Styk had a few take off attempts before the hand launch was decided to be the best option (that's right, Boomerang Trainers can be hand launched).

After a few circuits Styk decided to try some fancy 3D manoeuvres. It is with a heavy heart I have to report that the club trainer is no more. George Robertson and Billy

trudged through the farmers field to retrieve Jim's mess, strip it down and give it a good send off at the burn pit.

The good news is.....we have a new trainer, kindly donated by the Chairman who won it at a raffle last year at the Glenrothes Club. This will be put in the container once the temperature rises a bit more and is there for anyone that would like to use it.

The week ahead sees the first of some planed upgrades at KRMFC. Out will come the old fence that runs from the transmitter hut towards the site entrance. This fence as most of you will know has become fairly rotten and the posts are held up with.....posts.

In its place will go a brand new fence, this will be much higher. For two reasons, firstly to stop people climbing over and damaging it, secondly to give parked cars much more protection, and I suppose make the site look smarter.

Let's hope the coming weeks see a change in the weather to our benefit and we can all get some serious flying done.

The Committee

Good health to you all

KEEP WELL The Committee