Newsletter

No.46: November 2025

Welcome to your Newsletter

In this issue: more entertaining, in depth and informative articles from members and the date of the next AGM.

Please let me know of anything you would like to see included in forthcoming newsletters. All feedback and contributions are welcomed. Remember to play your part and if anything, interesting (or even better, funny) happens whilst you are visiting the flying field then drop me an email (with pictures) for the Activities at the Field section.

Members are particularly interested in how you got into the hobby, what planes you have owned, technical expertise etc...

Send any newsletter related matters and articles to me at: neilgrayson@sky.com

NB: The next newsletter will be February 2026 as I will be taking a Christmas break. Submit articles or anything of interest at any time.

Membership

Currently we have around 48 members.

Contacting the Committee

An email address has been created for members to contact the Committee about Club matters. If you have any questions, suggestions or general comments, then please send them to the following email address:

KRMFCcommittee@gmail.com

Club's WhatsApp Group

If you want to be added to the club's WhatsApp group, please email Neil Grayson with your mobile telephone number and he will get the Administrator, Douglas Fulton to add you to the group. It is used for general chat, advice and to coordinate visits to the flying field.

KRMFC AGM

It is AGM time again! If you want to help steer the club into the coming year, come along and have your say. It is the ideal time to get members' opinions and ideas and to meet as a club to discuss what you want for 2026.

Flying Field Layout – Latest

There have been no more complaints from the dog-park for a year now (only two before that) so well done everyone! The current committee thinking is to simply migrate the runway further west – the grass field has been strimmed to the west fence (thanks Charles!) so the total length of over 120m will be from the windsock/stile to the west fence. You may have already noticed the starting benches moved west too, and the pilot boxes will soon follow. Further discussion (including best place for helicopter - spots) will be at the upcoming AGM.

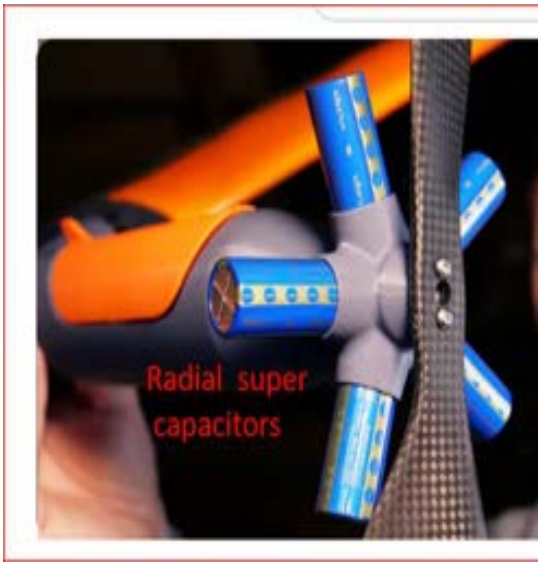
Bob Livingston – Former Chair of KRMFC

Bob still lives in Kinross, although it's quite a few years since he was an active flyer. He decided to empty his loft and found quite a few models, plus all his collection of old engines, balsa and ply etc. The club has been happy to help him to get these sold. Some have been directly bought by the club (we have plenty of balsa, covering-film and old engines still to sell, for not much money) and a new club-trainer Wot4. We might even see Bob as a visitor again; he seemed quite keen to chat when he visited us at the Seaplanes in August and again at the sale day last week.

Super Capacitors & Coreless Motors *by Ian McLuckie*

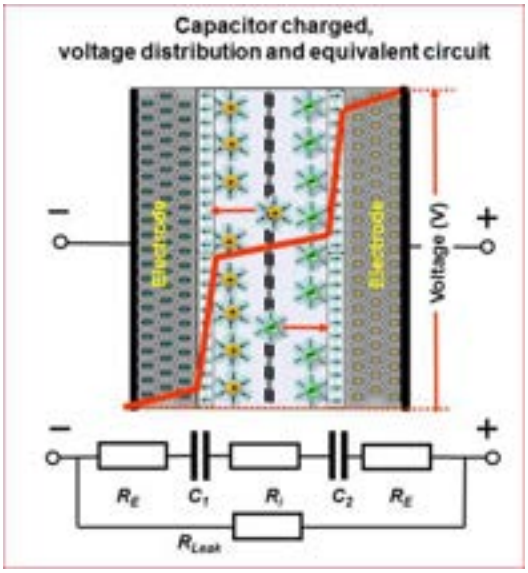
I went along to the inaugural Kinross indoor flying meeting to see how it all works, and what was possible. It was all new to me. There were a variety of models and some very successful flights, and of course lots of bumps and crashes. Not unlike a typical day at the field, I suppose.

Looking through the internet and catalogues etc. I came across a small electrically powered model that might be suitable for indoor flying, but it had NO battery. Free flight is not for me. I thought they might be using solar cells but there's not enough lumens from the ceiling lights in the sports hall to turn a propeller. It's bright, but not that bright.



Further enquiries found that it used a capacitor instead of a battery to power the motor. What was that all about? Capacitors are ubiquitous electronic components, not raw power suppliers, ***or are they*****?** For me a capacitor used to be called a 'condenser' and was little more than two sheets of silver foil with a sheet of paper between them, rolled up and put in a tube with two wires sticking out. A positive and negative wire for electrolytic capacitors, and many other variations.

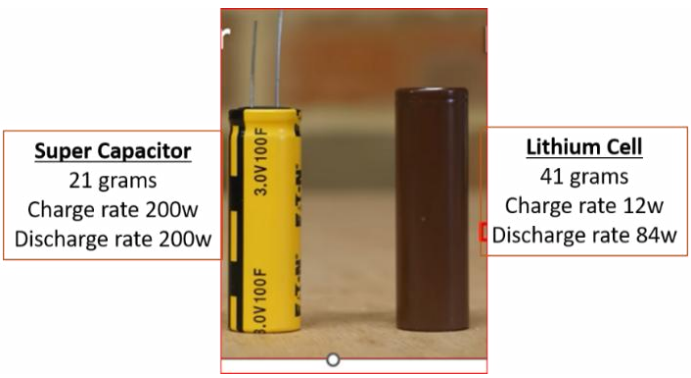
Then I discovered the '***super capacitor".*** Rather than struggling to paraphrase a definition from the internet, I extracted the following: -



"A supercapacitor (SC), also called an ultracapacitor, is a high-capacity capacitor, with a capacitance value much higher than solid-state capacitors but with lower voltage limits. It bridges the gap between electrolytic capacitors and rechargeable batteries.

They can have 10 to 100 times more energy per unit mass or energy per unit volume than electrolytic capacitors".

Their chemical construction is very complicated typically using graphene, carbon nanotubes, and sophisticated oxides. I was also surprised as to how ubiquitous they are. They seem to be employed in small electronic apparatus through to heavy industrial and transport applications. New 'robots' seem to be full of them.

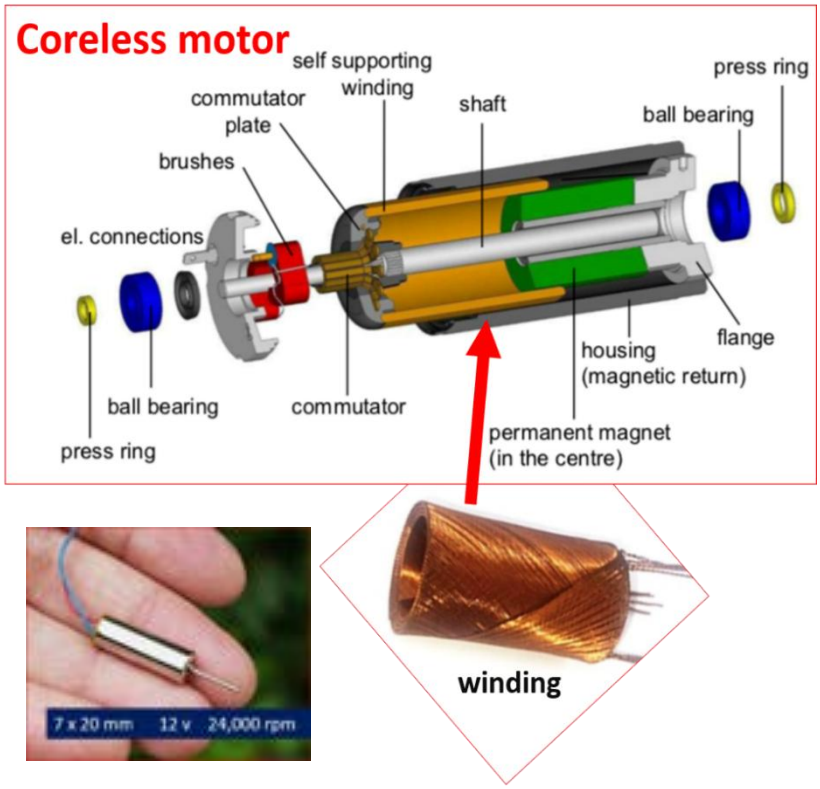


But what can they do for us? Surely, they cannot replace our fearsome LiPos.

Well, for our rc-aero world, it looks like you can charge a 10 Farad supercapacitor in a minute or so, connect it to a motor, and you are 'off to the races'. Great, but, with what power and for how long?

Apparently with 10 Farads a small 12” (300 mm) model might fly for up to a minute, and a few minutes with 40 Farads. Not bad for indoor flying.

The super capacitor discharges linearly so as soon as the model takes-off the motor starts to slow down in accordance with the voltage drop across the capacitor. To charge up, you can use two AA alkaline batteries, keeping the voltage peak to about 2.7 volts. That is what I hear on the grapevine. Great for small models, but there is the question of power for a receiver etc.



Then there was another surprise. Some Club Members were using electric **brushed coreless motors**. Other terms for coreless DC motors include “air core,” “slotless,” and “ironless.”

I thought I had better find out about them.

Apparently, they have no iron core, the windings are in a cylinder and are effectively a low inertia rotating component. They are wound in a kind of honeycomb to make a self-supporting hollow cylinder. The windings are held together with epoxy. That’s a surprise! The stator is made of a rare earth magnet and sits inside the coreless rotor. Apparently first thought off in the 1930s but I can see no evidence of production, probably because super-magnets were not available.

According to the literature they are the ‘bee’s knees’ in terms of performance, weight, acceleration, and a whole host of parameters. However, and there is always an ‘*however.*’ Motor sizes are, typically, only in the range of 6 mm to 75 mm with power ratings of generally 250 watts or less. So, there are real limitations. Besides, with rpm potential of over 30,000 you might need a reduction gearbox.

They say these designs are a good solution for small battery-powered devices because they draw an extremely low current at no-load conditions: just the job for a small model aeroplane.

Before you ‘WhatsApp’ me to tell me that I have not mentioned ‘***brushless*’ coreless motors**, I now mention them. They seem to be superior to their brushed cousins but need a complex ‘driver PCB’ and they are not cheap. You will find them in cameras and medical equipment etc. **Coreless servos** are also available but, again, it’s all down to cost.

So, a super capacitor and a coreless motor would appear to make a very good combination for a small indoor model.

If the above is new to you and you want to find out more, why not go along to the Club’s indoor flying evenings, held on the first Thursday of every month. It’s good fun.

For those of us new to ‘coreless’ here is a YouTube video to help. - *“* ***Make A Rc Plane With a Coreless Motor | DIY Rc Mini Twin Timber*** *by 3JWings”*

PS If you’re wondering what a Farad is, good luck with this……*Capacitance is the ability of a body to store an electrical charge. The International System of Units says it is equivalent to 1 coulomb per volt. It is named after Michael Faraday. In SI base units 1 Farad = 1* $kg^{-1} \cdot m^{-2} \cdot s^4 \cdot A^2$.

What's in my Transmitter – Part 3 *by Kev Scott*

Recap

In the past couple of articles, we have covered the electronics inside your Tx. In this article we will cover how the programs get in there, and in particular we will talk about the differences between assemblers, compilers and interpreters - these are programs that take what is inside a programmer's head (let's not look too closely though!) and convert it into programs that run on your Tx.

To explain what the differences are between these, I will start with a little history lesson.

The Good Olde Days - Assembler

When I started working in electronics in the early eighties, the first thing I worked on was the HP 3789B, there is a picture of it alongside. This was for testing American telephone systems. In its day, I think it sold for about $60k (£125k in today's money) but you can now buy it on eBay for around £300!

The reason I mention this is one of the boards inside that I was responsible for designing took the ones and zeros from the telephone network and had to count the wrong 'uns. A microcontroller was used for that, and it was called an Intel 8051; I have shown a picture of it alongside. The numbers it had to deal with were coming in at 8kHz, and there was no chance to relax, this device just had to deal with them in time, every time, and this is called real-time programming. If you hear this term, do be aware that doesn't necessarily mean fast, it just means predictable (that kind of sums me up as well!).

Intel 8051

Because every instruction time counted, and I had 125 millionths of second (125µs) to deal with the data, I had to write the program in assembler code. Assembler code is the lowest level of programming, just up from hexadecimal numbers. The sort of code I would write would look like the example alongside. The good thing about this approach is I was able to count each instruction and know how long it would take to run and could see if I was still in my 125µs budget. The downside is your lack of friends.

Assembler, just as painful as it looks but NASA landed men on the moon with similar!

```
$MOD51
$TITLE(EXAMP02.ASM)
$DATE(JUN-04-22)
$PAGEWIDTH(132)
$OBJECT(EXAMP02.HEX);
;
VALUE    EQU  0AAH        ; The value to set all the external data ram.
;
         ORG  0800H       ; The user external rom starts at 0x0800.
;
         MOV  DPTR,#0000H ; Initially set the data pointer to 0x0000.
LABEL03: MOV  R1,DPH      ; Determine if the DPTR is 0xFFFF to exit the main loop.
         MOV  R2,DPL
         MOV  A,R1        ; This is some logic to determine when the DPTR is 0xFFFF.
         ANL  A,R2        ; "A" will be 0xFF only if DPTR is 0xFFFF.
         CPL  A           ; "A" will be 0x00 if DPTR is 0xFFFF.
         JNZ  LABEL01     ; Jump if not completed setting all of the RAM.
         SJMP LABEL02     ; Jump to the Monitor if completed setting all the RAM.
LABEL01: MOV  A,#VALUE    ; Set "A" to the VALUE to be placed in the ram.
         MOVX @DPTR,A     ; Load the VALUE in "A" to the External Data Ram.
         INC  DPTR        ; Increment the data pointer.
         SJMP LABEL03     ; Go back to the beginning of the main loop.
                          ;
                          ; Jump back to the beginning of the Monitor Program.
LABEL02: LJMP 0000H
         END
```

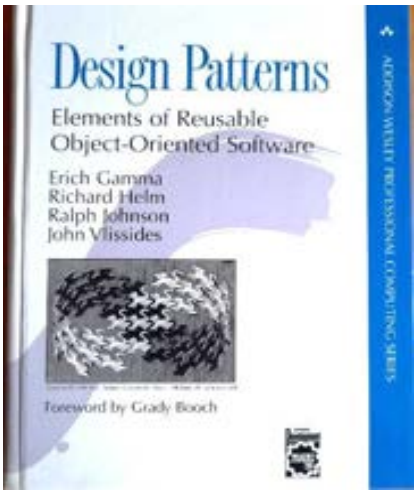
Moving to a Higher Level of Consciousness, Man

When you have a little bit more (computing) time on your hands, you can move up to a more "sophisticated" way of telling your microcontroller what to do, and this is by using a high-level language. For microcontrollers, this is often done with C or C++ (there are lots of other languages as well). The C programming language has been around since 1972 and was developed at Bell Labs. I used to write in C myself, and we always used to talk about writing it in K & R style, which is named after Kernigan and Ritchie, who wrote the original book on it – we all had a copy on our desk, and I still have mine yet!

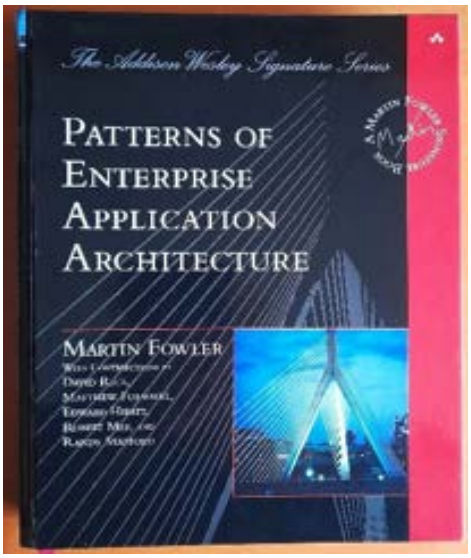
```
main()
{
    printf("hello, world\n");
}
```

Whilst the example here looks very straightforward, the code can start to get much more complex quite quickly. Note that I don't know (unlike the previous example) how long this is going to take to run – what you have done is traded off understanding for a detailed knowledge of the execution time – as things get more and more complicated, that is a necessary trade-off.

In more recent times, C++ came along and as the name suggests, this is C on steroids. In particular, it introduced object-oriented programming, which is where you can hide some of the complexity; for example, you can program a widget that knows how to display itself and knows where it is on a screen, but once you have created it, you don't need to get involved with it further, the details are hidden within the object. This allowed a whole new level of discussion to take place; rather than talking about variables, or arrays or pointers, you can get to the stage where you talk about design patterns like Command, Mediator and Visitor (I appreciate these don't mean much in isolation, but just imagine a bunch or geeks talking to each other and each staring at their shoes using these terms and you will have the picture).



Pretty Patterns



Big Boys Patterns

Things even went further than that – rather than just talking about design patterns in general, engineers even started creating patterns specifically for talking about big databases and banking applications.

This level of abstraction (and higher-level thinking) continues to this day with things like AI, for example people discuss Large Language Models (LLM) but very few people know the details.

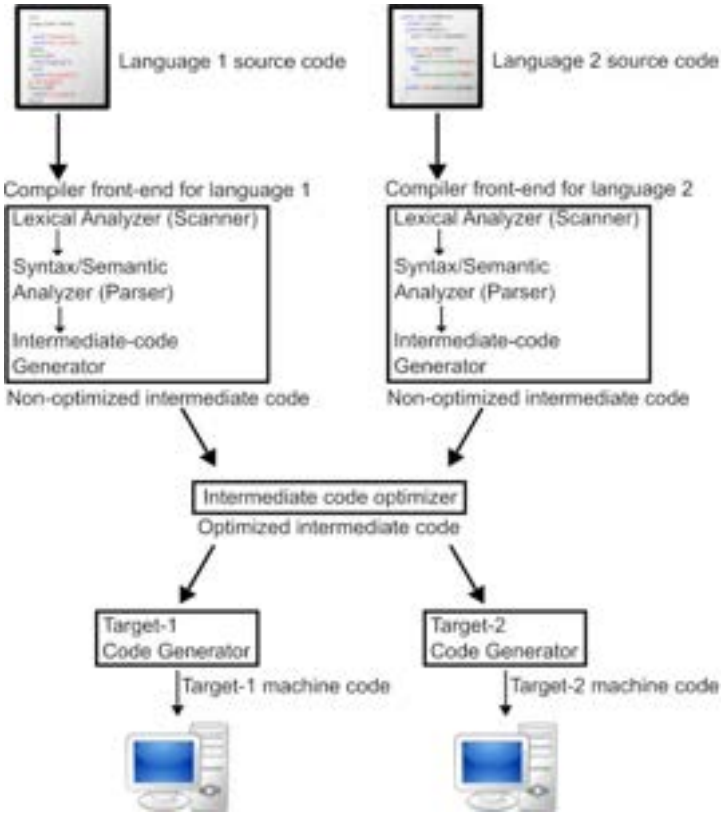
Burning this into your Tx – the Compiler

OK, so you have created your super Tx program that controls the plane. How do you go from these words on the screen of your computer to getting something that will run on the Tx. The answer is a compiler. This is a program that understands the language and runs through it and basically creates a half way house code that at this point doesn't care what microcontroller you have in your Tx. It would look a bit like the assembler code we saw earlier.

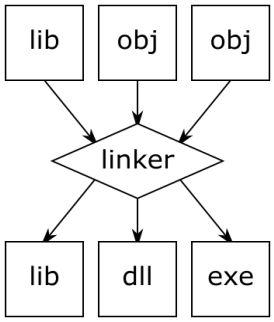
The final step is to look at the exact microcontroller you are going to use and generate machine code for that.

You will then have one very large file of ones and zeros that tell the microcontroller what to do, this is called an object file.

You usually don't have just one file though; in the code I was developing in the day, you might have had maybe 150 files and that didn't include the ones that dealt with the common parts of all the developments that were going on in the factory. The other complication was that each file would often call up functions in one of the other files. So, to stitch all of this together, you would then run a program called a linker which connected everything up and produced a full standalone executable file. Note that things can still go wrong at this stage, if you have mistyped the name of a function in another file you want to call, the linker will throw an error, even though the compiler was happy.



How your code is baked



The knitting part

If everything went well though, you would be in a programmers happy place and you would then transfer that to your Tx using an SD card or a USB cable (oww, fancy!).

So, what you have at the end of this is code that runs as fast as it can, and starts running the moment the Tx is turned on. The journey to get to that finished code might have taken longer than you had hoped for unfortunately, but the best things in life are worth waiting for!

There is another way of writing programs though, and that is called interpreted code.

Interpreted Code

Transmitters running OpenTx or EdgeTx (like Radiomaster ones) let you run LUA scripts. I covered this a bit in in the December 24 newsletter, see page 17. A script to all intents and purposes is a program like we have been discussing up to this point, but rather than getting compiled down to machine code like we previously covered, the lexical analyser and parser are already in the Tx, and they read each line of code and act on it at that time. The club website at krmfc.bmfa.club runs on WordPress and that uses an interpreted language as well called PHP, every time you open a page on the website, some of that code is run there and then has to work out what to show.

From a developer's point of view this has the good benefit that as you are typing the program in, you will get immediate feedback if you are doing something wrong. It has the downside that the code when it runs will be slower and that is why it is generally not used extensively in a real time system.

The following table shows the pros and cons of each.

Feature	Compiler	Interpreter
Translation	Translates the **entire program** into machine code **before** execution.	Translates and executes the code **line-by-line** at runtime.
Execution Speed	**Faster** execution because the code is pre-translated and often optimized.	**Slower** execution because translation occurs every time the program runs.
Error Handling/Debugging	Reports **all errors** collectively after the entire compilation process. Debugging can be harder as errors are not tied to runtime.	Reports an error and stops execution **immediately** upon encountering a problem. Makes **debugging easier** and faster during development.
Code Optimization	Performs **extensive optimization** during the compilation phase, resulting in more efficient machine code.	Performs **limited or no optimization** as it processes code on the fly.
Portability / Platform	**Less Portable.** Compiled machine code is typically **platform-dependent** and must be recompiled for different operating systems or architectures.	**More Portable.** The same source code can run on any platform that has the appropriate interpreter.
Development Cycle	**Slower** development cycle due to the time required for a full compilation after every change.	**Faster** development cycle as code can be run and tested immediately without a separate compilation step.
Examples	C, C++, Go, Swift	Python, JavaScript, Ruby, PHP

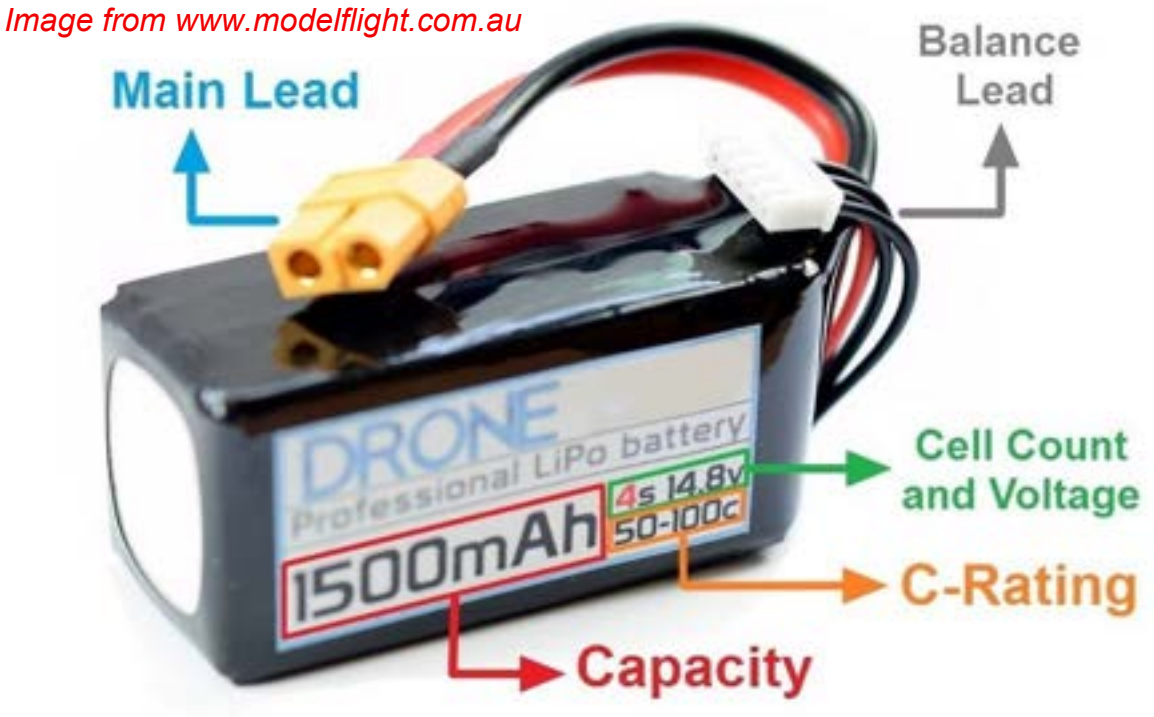
Acknowledgements:

- 8051 Image
  By Konstantin Lanzet (with permission) - CPU collection Konstantin Lanzet, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=4774266

Compiler flow diagram
By Surachit, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=2449795

A Simple Guide to LiPo Batteries *by Neil Grayson*

LiPo (**Lithium Polymer**) batteries have become the industry standard in radio control over the last 20 years or so. Electric planes all now use LiPo batteries as they are light, efficient and produce a lot of power. Understanding basic LiPo care and practices are important for every RC enthusiast. Understanding LiPo battery specs are something that many people find confusing; what is "C" rating, what does 3S mean, what happens if I increase my capacity or voltage are all very common questions. Well, have no fear, here is an explanation of what all those terms mean and what to look out for when you purchase your next LiPo.



Capacity is expressed on the battery in the form of milliamp hours (mAh). The higher the mAh the longer your electric aeroplane can stay in the air before you must land and recharge. Of course, the larger the capacity the heavier and bigger the battery so ensure that you check the centre of gravity hasn't shifted if you get a bigger battery.

Voltage is expressed in volts. If a LiPo battery has 2 cells, then it has a voltage of 7.4 volts and will give you 7,400 rpm from an electric motor. The more cells the higher the voltage and the higher the RPM. If you have a 1000Kv motor this means that the motor will give 1000 RPM per volt. Read the manual for the motor and ensure that you don't exceed the maximum voltage for the motor and ESC.

Voltage and cell setup is also important, and this is indicated with an 'S' number such as 2S, 3S or 4S. This means the number of cells in series. Each cell has a nominal voltage of 3.7 volts so a 2S LiPo would have 2 cells giving you 7.4 volts (3.7V x 2). A word of caution though as the nominal voltage is a 'mid' point in the voltage range. Each cell will charge to a maximum of 4.2 volts and when it is 'flat' it will be around 3 volts.

Burst C Rating/Continuous C Rating. These are the discharge ratings and refers to how fast the battery can be discharged without being damaged. There are two numbers that are referred to with the C rating: the Burst C Rating and the Continuous C Rating. The Burst C rating gives the maximum discharge rate for a 10 second window. The Continuous C rating is the power the battery can sustain over a longer period of time. To calculate this, use the formula C Rating x battery capacity in Amps. (1000mAh = 1 Amp). So, if the cell has a C rating of 30 and a capacity of 3200mAh (3.2 Amps), then the sum would be 30C x 3.2AH = 96 Amps. This would indicate that you would need an ESC around 80 Amps to give you some spare capacity.

To dispose of LiPo batteries in the UK, you must never put them in household bins and should instead take them to a dedicated recycling point. This can be a local household waste recycling centre, a participating retailer that offers in-store collection, or a community recycling point. Before disposing, you should discharge them as much as possible, certainly below 2V per cell and preferably to 1V per cell or below. A piece of tape should be put over the terminals to prevent accidental short circuits.

The retailer 4-Max suggest if any LiPo cells in a pack has been damaged then do NOT discharge the battery but put it in a plastic container with salty water for 2 weeks before disposal. However other sources state that salt water should not be used as it could provide a false voltage reading. Derek Grater has used salt water previously and had no issues. My suggestion would be to speak to Kev Scott about safely discharging any LiPo batteries that you intend disposing of.

As you can see it is very important to understand the battery specifications and getting the right battery for the right application. This will save you money and time and ensure that the battery doesn't overheat or have a limited life span. Remember, treat your LiPo batteries with respect and care and they will provide you with years of service.

Researching this article helped me greatly in understanding LiPo batteries and their specifications. If anyone's granny believes I have been teaching them to 'suck eggs', then I apologise.

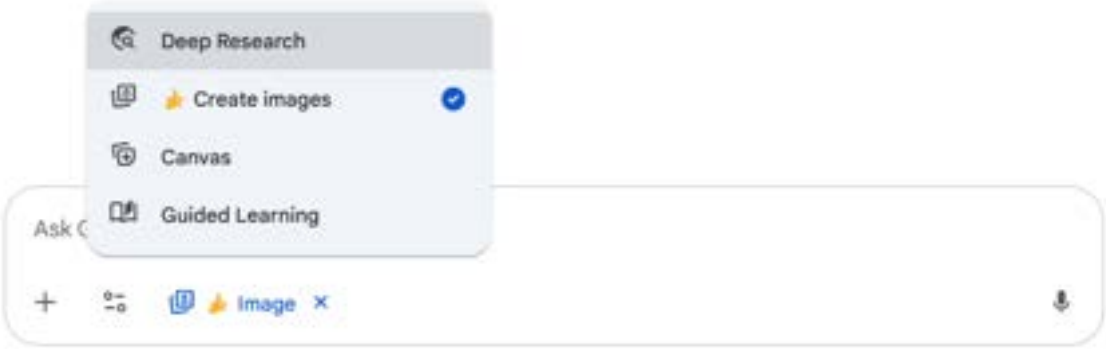
Using AI to Make Decals by Kev Scott

Artificial Intelligence (AI) is getting everywhere in our life; you can now get an AI powered toothbrush and even an AI powered vacuum cleaner – it comes with a crevice nozzle too which AI will tell you where to put!

You might be feeling overwhelmed with all of this and be asking yourself, “This is all good and well, but when is AI going to make my aeromodelling easier?”. Well, right here and now we are going to answer that question – we will use AI to make our planes look more individual by creating unique decals based on you entering your thoughts into a computer, wow cosmic man!!

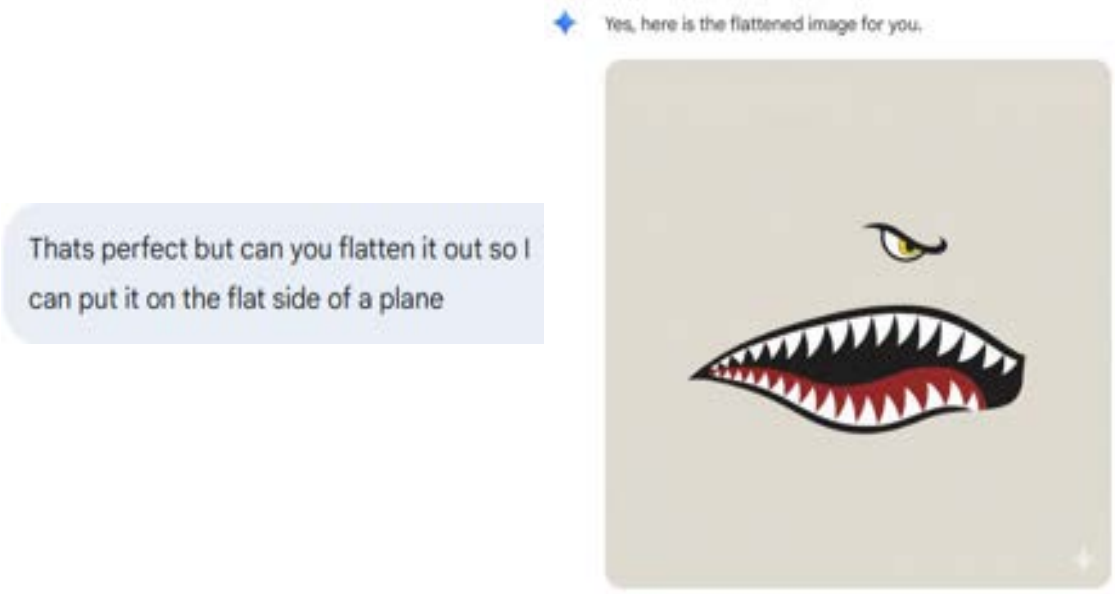
The example I am going to give below was done in Google Gemini – if you have a Google account this is probably the easiest one for you to use and it remembers your activity so you can go back later and tweak the answers you were getting. If you go to gemini.google.com you will be up and running.

You type a discussion into the round box at the bottom of the screen, but before you do that, select “create images” from the slider icon. There are other modes as well, I leave you to research them yourself.



In my case, I wanted a shark’s mouth to put on the front of my foam board plane. It is important to make your request as specific as possible, so give as much detail as you can. Here is my request (on the left) along with what I got back (on the right):

As you can see it has understood my question and come back with a rather good response to it. As interesting as that is though, I now need something flat, but along the same lines that I can use. I therefore ask for the image to be modified:



The above discussion with Gemini took a total of two minutes! Having got this image, you can now download it and edit it in your favourite photo editor (I use GIMP) to get rid of the background and tweak it as you see fit.

Once you have an image you are happy with, print it onto some decal paper (I use this one, note you can get both white and transparent versions) and apply it to the side of your plane. Depending on how slippery the surface is, and if you are running an IC engine, you might want to apply some polyurethane varnish over the top.

A Poem, again using AI about flying a model glider:

A gentle toss, a whisper in the breeze, the silent glider takes to morning skies with ease.
No angry engine's thrum, no fuel's demand, just graceful grace, held lightly in my hand.

The little craft, like a feather, light and free, ascends on currents, meant only for me. My eyes ascend, a distant, watchful guide, As worries softly drift and slip aside.

It finds a thermal, rising, unseen stream, and spirals slow, within a waking dream. A silent ballet, high above the ground, No jarring note, no harsh or sudden sound.

The world shrinks down, a canvas, green and vast, My busy thoughts, unhurriedly surpassed. Each subtle drift, a moment to behold, A story whispered, ancient and untold.

No striving here, no fight against the air, just pure communion, light beyond compare.
The sunbeams catch its wings, a fleeting gleam, A quiet triumph, in a tranquil theme.

Then drifting home, as shadows start to crawl, A perfect landing, heeding nature's call.
The peace it brings, a balm for weary soul, makes every flight a journey to make whole.
Just me, the wind, and glider, high and far, Beneath the vastness of the morning sun.

Marc Connell's Compact Flight Box/Tool Carrier

Marc Connell has been designing his own basic flight box / tool carrier. He designed it around a standard 5L nitro bottle. It is still a work in progress but it's around 90% complete. The bars at the bottom haven't been cut yet as he is trying to find a way to put a shoulder strap around it.

The bars take the weight of carrying the bottle and you can use the handle of the bottle to carry everything as well. He has tried to make it as low profile as possible and so smaller than a traditional flight box. Marc's dad said he would be concerned about tools falling out of the boxes, so it has been changed slightly, and the tools are now only stored on one side (see the final picture).

If anyone is interested in something like this, they are free to contact him via his mobile No. 07774506668.

Fundriod Progress *by Kev Scott*

If there is one thing that I have a lot of in my life, it is foam board. I also aspire to be a fun flyer (and a fun guy, well one out of two ain't bad!).

You can therefore imagine my delight then when in the May 25 edition of RCM&E, I found a plan for Fundroid, which is a fun fly plane build mainly from foamboard. The building of this plane also improves the chances of my wife being able to get to the garage freezer, so it is win-win!

The designer, Mike Bell is also a fun fly champion having got third place overall in Class 3 and first place in the touch and go part of that competition, so I am standing on the shoulders of giants, what could possibly go wrong!

I have started on the design, having cut out the wing ribs and some tailplane sections with good progress expected over the next month.

I am making a small number of tweaks to the design.

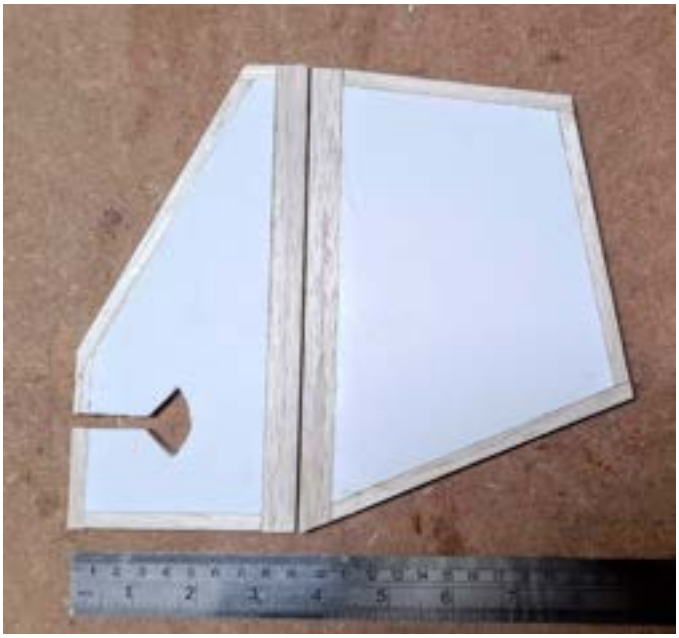
- It asks for a ¼" (6.3mm) square spruce lower spar, which is then spliced to balsa for the last 30% of the wing (towards the tips). That sounds like too much work, I am going to use a 6mm square pine spar from B&Q and extent it over the whole wing.
- The design has the wing being covered from the leading edge to the main spars with 3mm "depron", it is actually the B&Q equivalent. The rest of the ribs behind the main spar are meant to have cap strips added using the same depron then be open structure other than that and then covering to be added at a later stage. I am just going to completely cover the wing in the 3mm depron – it will move the CofG slightly further back and I may need to make some adjustment for that, but it will allow me a wider choice of covering options, like using coloured parcel tape or spray painting it.

Pictures of progress to date can be seen below. The control surfaces are all made from 5mm foam board with balsa around the edges to give it further rigidity. Because foam board is 5mm thick, standard 6.3mm balsa won't work so 5mm wide strips were cut from ¼" sheet as can be seen in the picture below.

The foamboard is then cut to the required shapes and the balsa strips attached around the edges using UHU Por. Part of the tail assembly is shown below also. Rudder and vertical stabiliser will be joined using furry mylar hinges.

Hopefully this will be nearing completion by the next newsletter.

Stripped!



Vertical tail section, the slot is hidden inside the fuselage

For Sale

Ewen MacKenzie has two Piper cubs which would not need much work to get them airworthy. The covering is in excellent condition. The grey one is approximately 1.5m wingspan and is fitted with a four-stroke engine. The make and size is unknown, but it is estimated to be a .52. It has all servos, but the battery probably needs to be replaced, and you would have to fit your own receiver. He is looking for £80.

The yellow Piper Cub below is approximately 1.2m wingspan and is fitted with an electric motor and ESC. Again, this is fitted with servos, but you would need a 3S LiPo battery and receiver. He is looking for £60 for this model.

Activity at the Field – September, October

Saturday 6th September

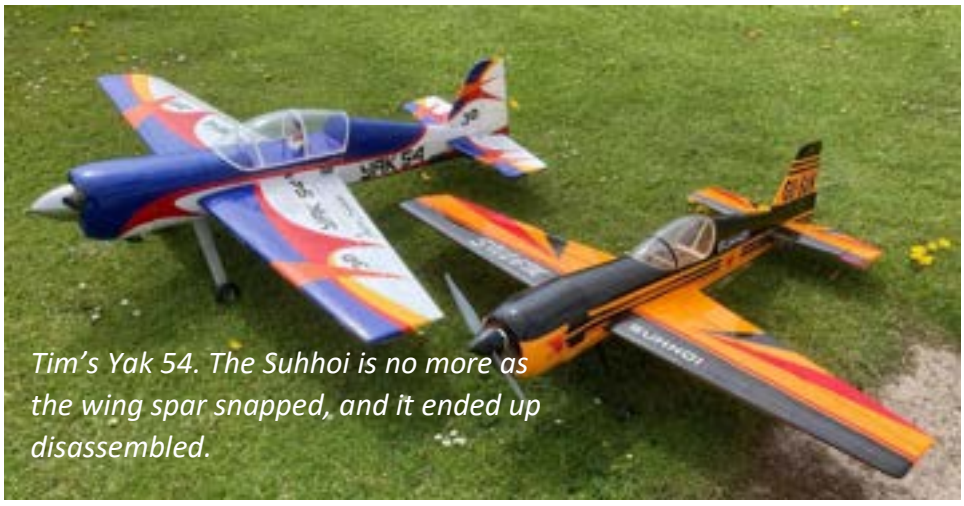
A lot of members on site at various times of the day. Richard, Charles, Tim, Hamza, Ian, with Dave Christie and Brain Barclay staying for the weekend, Brian in his campervan and Dave camping. The weather was overcast with the wind increasing during the day.

Neil Grayson spent all day trying to get the Enya on his Funfly working with help from Richard Blanski. Every time it went to idle it would stop. There were bubbles in the fuel tube but only when idling. Eventually it flew but the engine was too rich and after that it wouldn't run consistently. After a number of wasted hours, he checked the fuel tank, and the clunk was stuck!

Ian was going to fly his Super Scorpion but discovered that a pushrod had snapped.

Richard flew his large Yak and Red Arrows EDF jet.

Richard's Avantis V2 EDF



Tim's Yak 54. The Suhhoi is no more as the wing spar snapped, and it ended up disassembled.

Tuesday 9th September

Overcast with moderate crosswind coming from the south. Neil Grayson, Hamza, Mike Hill and Tim Knowles appeared as Neil was just leaving.

Neil tried the Enya on his Funfly again and discovered a hole in the carb tubing. It flew once but still very rich and the engine slowed and stopped on idle. The idling mixture adjusting screw didn't appear to do anything and eventually it was discovered that the idling mixture adjusting screw and the idling speed adjusting screw had been swapped round. The screws are now in their correct positions, and the engine runs well.

Neil flew his self-built Limbo Dancer. After completing a loop then a turn to the left it continued to turn left after seeming to lose reception and it came down into North field some distance away. It was collected by Neil and Hamza. The front end had come off, and the wings were snapped in half. It is thought that reception was lost as a wireless receiver is fitted and it sits on the battery which perhaps blocked the signal on a left-hand turn.

Neil's Limbo Dancer

Sunday 14th September

It was a busy day, with very light winds to start but increasing as the day went on. Rain started late in the afternoon.

Neil Grayson went electric today and flew his foamie Sky Islander 182 and his electric Rookie. Ian McLuckie was hoping to fly his expertly repaired Super Scorpion, but it stayed on the ground as he discovered that a servo had stopped working. Douglas Fulton came down in the rough after misjudging the runway and also suffered a broken servo.

Nial and his dad were at the field flying an electric foamie with big wheels similar to an Eflite Timber.

Tim appeared as usual later in the day to fly his large Glider.

Tuesday 23rd September - Sopwith Strutter Visit

One of Kev Scott's old bosses was on the team at the Aviation Preservation Society of Scotland where they built a full-size replica Sopwith 1 ½ Strutter and he and a few other old work colleagues got an invitation to go and see it at RAF Kirknewton in September. It was also covered by the BBC; you can see it at https://www.bbc.co.uk/news/articles/cd7gr93ww55o . Some pictures of it are shown below, the sepia picture is from 1918, just to set some context.

The engine is a Rotec modern engine and some of the electrics have been modernised to meet CAA regulations but other than that the plane has been built from the original plan. The 1 ½ by the way refers to the fact that there was one set of interplane struts and one set of cabanes (the ½).

Kev did explore the possibility of an aeromodellers visit to see the plane and the feedback was encouraging. If you are interested in seeing it, please let Kev know and if there is enough interest he will have a go at trying to set it up. The max number of visitors may have to be limited to 15.

Thursday 25th September

Kev Scott was at the field today on his own flying his Clouds Fly. He has been experimenting with a take-off mode and a flight mode as in flight it needs lots of down elevator. The idea is to have different trims for each mode. It largely works but he is still experimenting with it. The idea is that you flick a switch on the transmitter and over a second it moves from a horizontal elevator position to one that is pointing the nose down slightly.

Kev's Clouds Fly being adjusted

Thursday 2nd October

Indoor Flying Day There were fewer people attending this month than is usual but still a lot of the regulars. It was mainly mini helicopter and various drone flying but Mike Wardlaw had his foam SE5a in action again. Tim Knowles flew his Night Vapor and Hamza Abbas had a VTOL flying. Kev Scott was focussed on trying to fly his Blade 120SR helicopter, which is proving tricky, but he is getting there.

Hamza's X520 VTOL

Sunday 12th October

It was a foggy day to start but cleared about 13:30 and was sunny and quite warm. Small spiders were everywhere with everything including planes getting covered in webs. There were a lot of geese flying overhead and there was some concern that they may stop flying operations, but they kept clear of the runway and caused no problems. The sun later in the day became an issue due to the time of year.

Billy Wilkie had 2 large planes both powered with petrol engines which he flew very well. They looked very impressive in the air.

Billy's Large SBach

Billy's two large plane

Neil Grayson flew his Rookie glider 3 times but on the first flight early in the day it disappeared in the thick fog and only reappeared once it lost height.

Bill appeared briefly and flew his Bixler.

Ian McLuckie had a biplane which he had got from Mike but had converted it to electric. Charles flew it twice and after trimming it flew very well. Ian's Super Scorpion unfortunately had the propeller the wrong way round which burnt out the ESC and it is suspected, the receiver as well as there was a strong smell of burning.

Craig McViegh was very brave and flew a water plane from the grass, but it was wet anyway. He also flew a very fast, small EDF.

Brian Barclay and David Wilkie were there for the weekend with a large collection of planes. Both flew Ripmax Zephyrs and stayed in the air for a long time. Brian's is tatty now as he had an accident at Loch Leven, and his plane still has stains from the blue green algae.

Charles flew his giro copter.

Tim appeared later in the day with his large glider having come from Linlithgow from a competition which was cancelled due to fog.

Dougie, a potential member came for a look and took away a membership application form. Douglas Fulton was there for a chat but didn't fly.

Neil Gourlay was there but wasn't flying, he had some extremely large planes which belonged to his dad in his van and members were keen to have a look.

Wednesday 15th October

Kev Scott has been trying to get his home-made High Hopes 3 undercarriage working but it is still not working correctly with it twisting easily and hard to steer. He tried it at Balbedie on the 14th Oct (Traitor!) and KRMFC on the 15th and 22nd October. The picture below is in his back garden and has the original version of front wheel on it, that was later changed to a 2 ½ inch one. The height was initially too low as well and it was strimming the grass! He is currently working on another variant of the front undercarriage, with the main undercarriage working fine.

Kev's High Hopes with Undercarriage

Sunday 26th October

It was decided to move the planned maintenance and 'Bring & Buy' to this Sunday as the previous Sunday 19th was very wet and windy. Unfortunately, the new date turned out to be almost as bad!

Despite the poor weather the 'Bring & Buy' went very well with a lot of equipment and some planes changing hands. Bob Livingston's balsa, engines and odds and ends disappeared quickly with the balsa being the most popular with the traditional builders. Brian Barclay cleared out his wallet and had to go to the cashpoint again at one point! Bob and Marc Connell both have a large collection to rehome (see previous emails) also see above for details about Ewen MacKenzie's two Piper Cubs.

Due to the inclement weather it wasn't possible to do any of the maintenance required around the flying field so another date will be decided once the weather improves.

Bob Livingston himself turned up for a chat and to see how the club was getting on. He has given up the hobby now, but he will no doubt visit the club occasionally.

Web Links and Shops

Some useful links below. If you can suggest any other shops or websites, please send me the details.

Al's Hobbies - https://alshobbies.co.uk/ Located in Milton Keynes. Often appears at model shows

Elite Models - www.elitemodelsonline.co.uk Located in Sittingbourne, Kent. 30 years' experience.

TJD Models - www.tjdmodels.com – Located in Dartford, Kent. Largest model shop in the South East.

Model Shop Leeds - www.modelshopleeds.co.uk/ Excellent stock but mixed reports, ask Tim!

Wheelspin Models - wheelspinmodels.co.uk. Free postage for orders over £100

Sussex Model Centre - www.sussex-model-centre.co.uk

The Vintage Model Company - www.vintagemodelcompany.com

Kings Lynn Model Shop - www.kingslynnmodelshop.co.uk

Scoonies - www.scoonie-hobbies.co.uk. Don't bother with the website. Visit the shop in Kirkcaldy.
87 St Clair St, Kirkcaldy KY1 2NW. Tel No: 01592 651792

Dens Model Supplies - www.densmodelsupplies.co.uk. Excellent for spares for vintage Cox engines.

WestonUK – www.westonuk.co.uk Good value fuel in large quantities. Over 20 Litres (4 Gallons) gives you free postage. Disappeared briefly on line but it is now back!

ACCU – www.accu.co.uk. Excellent for bolts, screws and washers. Will take requests for bespoke items.

RCM&E - RCM&E Home Page. The website of the best aeromodelling magazine. If you have a question the forum is bound to have an answer.

RC Thoughts - https://www.rc-thoughts.com/ Finnish website of Tero Salminen. Phoenix Simulator Downloads and updates.

RC World - www.rcworld.co.uk. Located in South Wales between Cardiff and Newport. Stock values on each product are displayed which reflect what are physically in stock, not held at a supplier's warehouse.

Carbon Copy - Carbon Copy (carboncopyuk.com). Located in Stevenage. A wide selection of Carbon and Fibreglass parts. Ideal for undercarriages, cowlings and canopies.

Just Engines - https://www.justengines.co.uk/. Located in Shaftesbury, Dorset. A wide range of engines and spares. If you can't find what you want on the website send them an email or call.

SLEC Manufacturing (Sun Lane Engineer Company) - SLEC UK Ltd. A good range of accessories but also a large range of balsa and hardwoods. Also available is a laser cutting and CNC milling service.

Component Shop - Home page (componentshop.co.uk). Based in North Wales. A great range of batteries, leads and electronics.

Flight Plan Models - Flight Plan Models Online UK. Based in Tamworth. Bespoke RC Plane Accessories. I find them a little overpriced but they have interesting stuff.

4-Max – [4-Max Home](). The Fixed Wing Electric Flight Specialists. They will advise you what electric motor to use when converting from IC to electric.

Here's a link to the glider field weather station data at Portmoak gliding club which is just a few miles east of our field. It gives a lot of information. ***Portmoak Weather Station***

Events for 2026

Loch Leven Community Campus Indoor Flying

Muirs, Kinross, KY13 8FQ - large sports hall

First Thursday Each Month 8:30pm – 9:30pm


Cumbernauld
Model Flying club
Helicopter Fly-In
Sat-Sun 4th-5th July 2026
Fliers from all clubs welcome
Pod & Boom and Scale Helicopters
Camping & Caravans from Friday afternoon
If staying on site please contact Jim Barr
jbarr341@gmail.com or 07532 750597
Refreshments available, lunchtime both days
Toilet available on site