



Newsletter

No.14: February 2021

CAA New Drone and Model Aircraft Rules 18 December 2020

On 31 December 2020 the UK moves to a new set of rules for unmanned aircraft. For many people the basic rules on their day-to-day flying won't change but there are some important amendments that users need to be aware of.

The key elements of always keeping your drone/aircraft in sight, not flying above 120m (400ft) and staying clear of airfield restricted areas (unless you have specific permission to use them) remain unchanged.

The new rules focus on the risk of the flight, based on the weight and type of the drone/aircraft, and where it is being flown, to decide what you can do and whether you need a CAA authorisation for your flying.

This is a change from what we have currently where many of the requirements for needing permission are based on whether you are being paid to fly your drone/aircraft, or if it has a camera fitted to it.

The new laws set out three categories of flying, and you must always operate within one of these.

Open - 'basic flying' which does not require an authorisation from the CAA;

Specific- more complex operations, which require an operational authorisation;

Certified- complex operations, which require the use of a certified UAS, operator, and a licenced remote pilot.

You can find details of these and other updates at www.caa.co.uk/drones

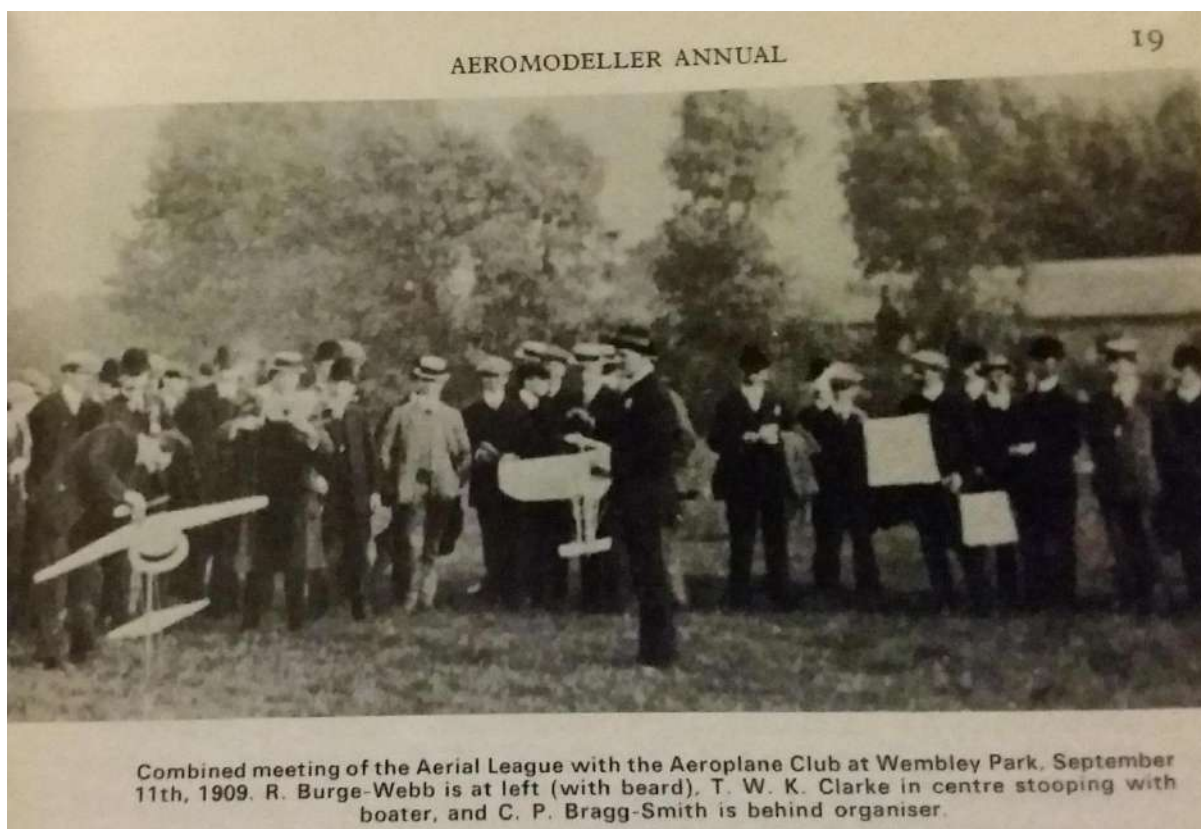
As well as being changed in the UK, the same new rules are also being introduced to EU countries so there will now be very similar rules across most of Europe.

Early Flight *by Alan Veitch*

Well, I know it is the beginning of a new year, but I don't mean going to the field at sunrise for a couple of circuits with a foamie. That was last year. Mankind has had all sorts of ideas about how people could fly. Notable people like Leonardo da Vinci even did drawings of flying machines, but they never got around to building them.

However, a British gent in 1799 actually created the first practical design for flight as we know it, with a fixed wing, and with separate mechanisms for thrust and lift. Sir George Cayley, unlike others before him followed through with his ideas by building the flying machine from his design and flew it as a glider carrying his coachman. Unfortunately, the engine had not been invented to make it fly under power. I mention him, not just because without his contribution the Wright brothers may not have made their achievement when they did, but more importantly, Sir George came from, did his experiments and his first manned flight in Scarborough, not far from where both Mike H and I are from.

It will come as no surprise to those of you that have looked at the start of aviation that our sport is older than the full-sized powered flight of the Wright brothers; after all they started by experimenting with models long before trying to fly themselves using lots of the ideas from Sir



George Cayley in their plane.

Back to the real story. In 1908 many people became interested in rubber powered flight. Things moved fast back then, there mustn't have been as many procrastinators back then in the sport. The

first models tended to be scaled down copies of the full-sized ones, most of which disappointed their constructors in not being able to fly. Then simple canard models with a single propeller appeared. These did manage to fly, hand launched for short distances, but more often than not the rubber motor gave them no more than a prolonged glide. Since the extreme torque of the propeller had to be compensated by trimming when the prop stopped, they just spun to the ground.

Early in 1909 the first British Aero Show was held at Olympia. There was a model section and it attracted 86 exhibits. Unfortunately, it is doubtful whether more than a handful were capable of flight.



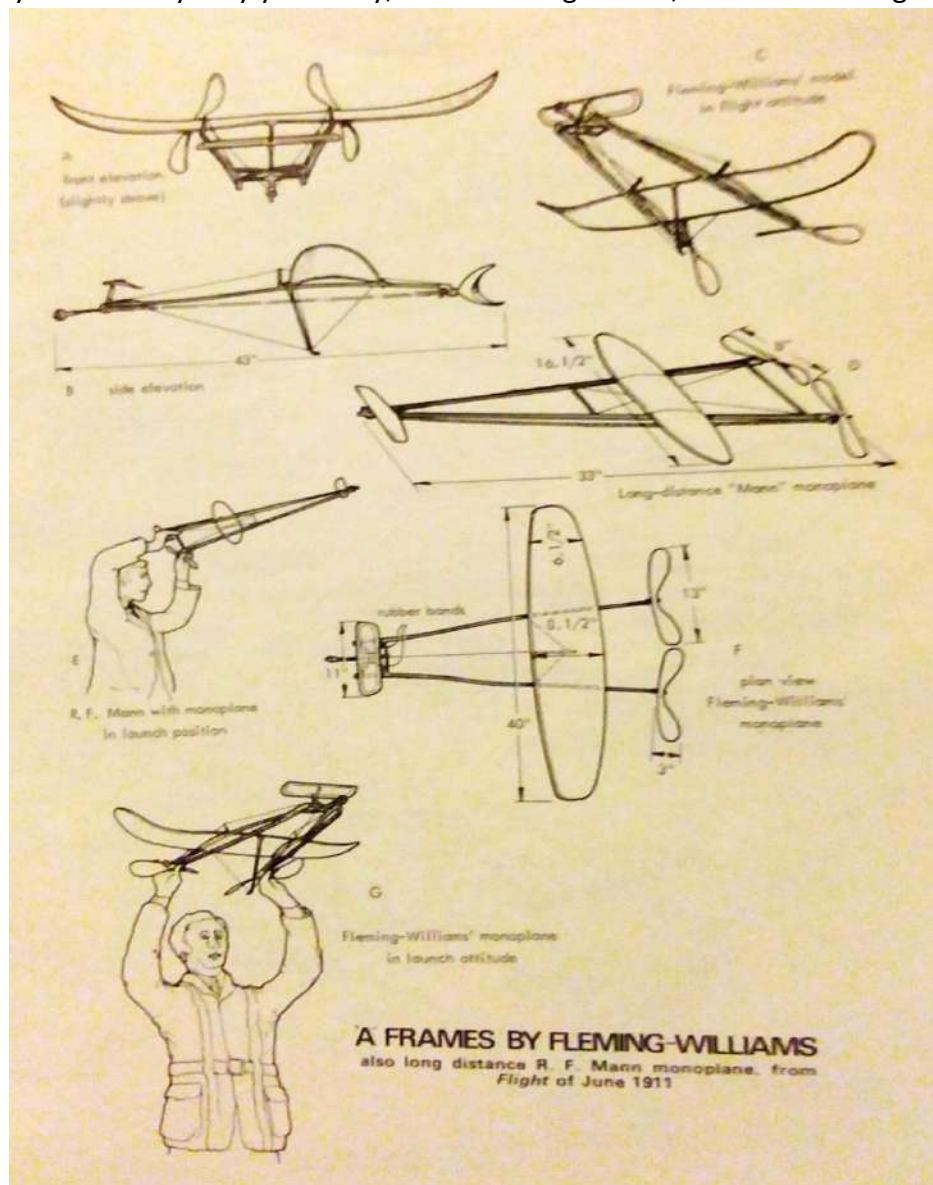
On July 25th 1909 Louis Bleriot flew over the channel. This event really fired the enthusiasm of many to build models. It was in September 1909 that the first big model meeting was organised by the Aerial League and the Aeroplane Club at Wembley. There were 4 classes of competition. The contest consisted of separate flights for distance, steering and height. W.G. Aston flew over 100 yards, which was the longest flight recorded. Later he was to become well known for his articles on models and full sized aeroplanes with excellent drawings. Interesting to note that just like Leonardo da Vinci many of the successful modellers were artists, not engineers. It was at this meeting that the famous twin pusher appeared, which went on to dominate powered models for more than a decade. This model type was produced commercially and sold by Gamage's.



During the next year, 1910, the hobby grew dramatically. Various designs were tried out, but the bulk were twin pushers as these gave by far the best performances. The number of clubs increased and their reports appeared each week in *The Aero*, and *Flight* (price: 1d old penny). The Kite Flying Association which had been in existence since the beginning of 1909, decided to change its name to The Kite and Model Aeroplane Association (K&MAA). The other big club formed about this time was the Aero Models Association. Later in 1911 the K&MAA was appointed by the Royal Aero Club as the paramount body to govern model aeroplane activity in the UK.

I could go on as this type of stuff I find really interesting, but I know that it would bore the pants off some of you. So to end, just a couple of names from past modellers. Guys like L.H Slatter of the Blackheath Aero Club, who competed in the early years, became Air Vice Marshal Slatter. In the 1913 Aero Show at Olympia, 171 models were exhibited. Among these was a twin prop canard pusher by S. Camm, who was later to become famous as the designer of Hawker aircraft including the Hurricane.

When you are committed to write about the dim and distant past, how is it that so much that bubbled up in your memory only yesterday, such amusing stories, those interesting happenings, all



seem to fade into a meaningless jumble that could not possibly be of any importance to the most forgiving reader?

Members' Building Projects

SAB Goblin Kraken 700 *By Billy Wilkie*

Billy Wilkie sent in this excellent picture of his new helicopter which he bought during lockdown. The airframe was bought already assembled but he bought a conversion kit from Midland Helicopters to convert it to nitro. The engine is a YS120SR. The kit consisted of main frames, engine servo mounts and fan. (I like the box of chocolates on the sofa!).



D.B. Sport & Scale Ltd Rookie 68 *by Neil Grayson*

I have been looking for a while for a suitable model aeroplane for my small engines from the 1970s. I have 2 Cox 0.049 Babe Bees and a DC Dart 0.5cc diesel. Having stored my engines in the garage for a number of decades I was unsure if they would work. I took the plunge and bought some diesel fuel from Scoonies in Kirkcaldy and found to my surprise that the DC Dart started easily and ran smoothly. I will try the Babe Bees another time so as not to upset the neighbours too much.

I read online that the Rookie had been used in competitions in years past where a small engine was fitted with a small fuel tank which would be enough to take off and give it some height. Then the

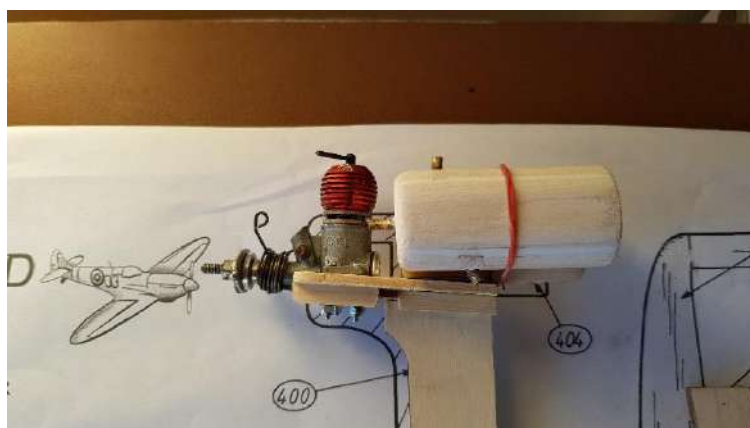
challenge was to keep it in the air as long as possible just using thermals and wind currents to keep it airborne. So, I thought perfect, that will do!

It was my birthday at the start of January so my family and in-laws all contributed to the cost of the Rookie (and the extra bits). As we are all locked down again with no flying taking place and diving holidays to the Indian Ocean not possible it seemed to be the perfect way to pass the time.

Once it arrived, I read through the instructions twice (yes I did!). There were some terms which I wasn't familiar with such as washout, tail end doublers and butt glued. The first two terms were easily explained by typing them into Google but I recommend that you don't search the internet for the third term unless you have a broad mind!



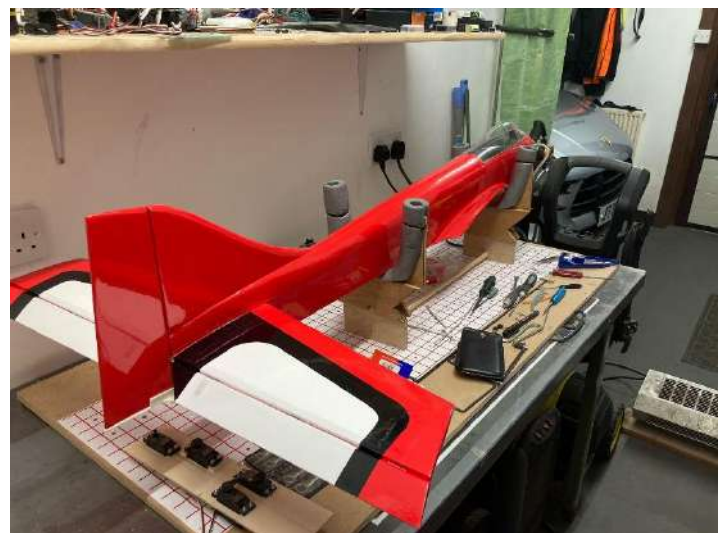
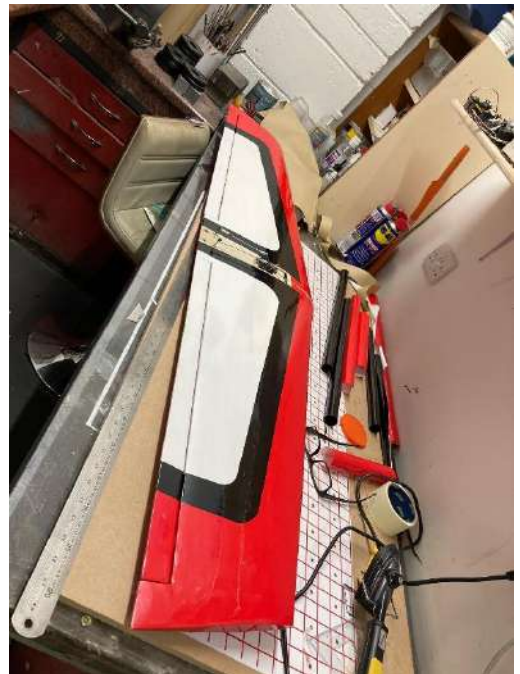
So far, the construction is going well. Luckily my wife has allowed me to use (my) kitchen table due to the cold weather instead of sending me to the garage. Being only the second model that I have built in over 40 years (I built a small rubber powered Tiger Moth recently) it has been a steep learning curve and I had forgotten how difficult it is to get everything square and straight, and how much sanding balsa wood makes you sneeze.



I have bought 2 new servos, a receiver, a square triple 'A' NiMH 800mAh receiver battery and some transparent Oralight so I think I have everything I need to finish the Rookie. Hopefully the lockdown will be over soon and we can get back to flying!

Mantua Models Kosmo 3 *By Mike Hill*

Mike has been building a Kosmo 3 which is a remake of the famous Kosmo 3 Italian championship winning model 1974 – 1977. As he has mentioned on Facebook the instructions are only in Italian (Il fusolaga inizia a prendere forma) but hey, who needs instructions? The engine is an HB61. Covering complete, tanks installed. The servo tray is next to install along with coupling up the controls. The rudder is a pull/pull with cables and the elevator is a single push rod with individual connections. After that the receiver battery and switch will be installed. Another week or so and he should be able to start the engine. The maiden flight will be in a couple of months when allowed by Nicola.



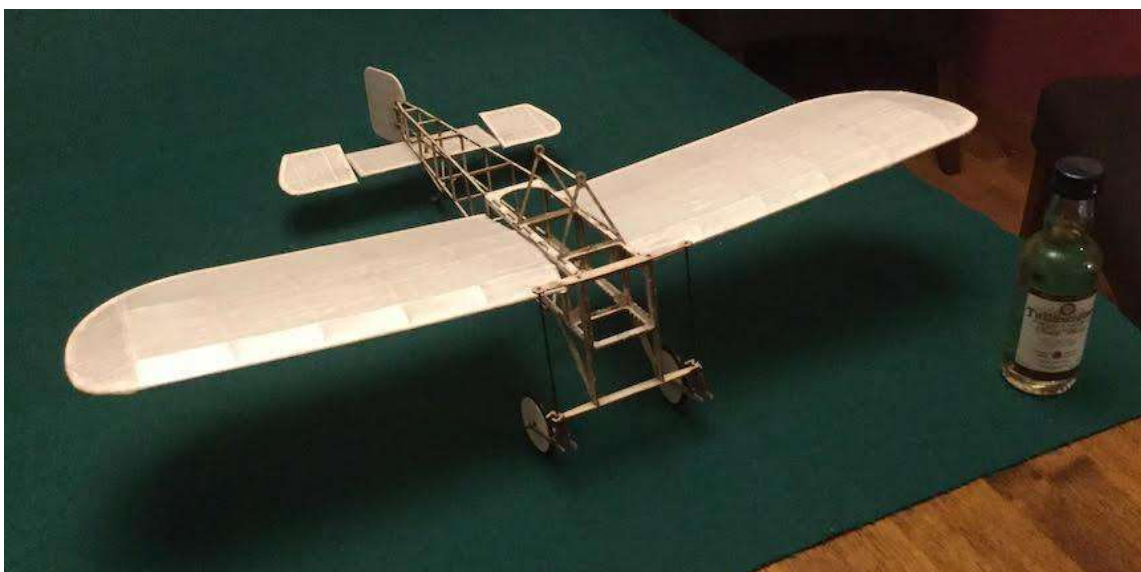


Tony Ray Bleriot XI *by Douglas Gilmour*

During the current lockdown, I decided to try my hand at a small model built from a laser cut kit. This is a Tony Ray Bleriot XI (the aircraft which first crossed the English Channel in 1909). The build is incredibly fiddly as the parts are so small but they fit together pretty well and super glue really comes into its own! The picture shows the almost completed airframe (the whisky is a standard miniature).

Now I just have to fit the radio gear and outrunner motor which is also incredibly fiddly. The combined receiver/5A brushless esc measures only 20x11mm and weighs 1.25g, amazing technology! Soldering the battery and motor wires to the rec/esc was an education in itself as I have not done any soldering for about 40 years!

I think the biggest problem might be to get the C of G far enough forward as the fuselage and tail are so long and the nose so short. I'll certainly be waiting for a very calm day for its maiden flight.



Activity at the Field – January 2021

Unfortunately, with the Covid-19 restrictions in place there wasn't any activity at the field. Let's hope we have a better 2021. All please keep in touch via the members WhatsApp group. If you want to be added to the group contact Alan V.

The committee wishes you all Good health

KEEP WELL

See you all soon